# Micro Focus Fortify Software

Software Version: 21.2.0

# **System Requirements**

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## **Documentation Updates**

The title page of this document contains the following identifying information:

- Software Version number
- Document Release Date, which changes each time the document is updated
- Software Release Date, which indicates the release date of this version of the software

This document was produced on April 01, 2022. To check for recent updates or to verify that you are using the most recent edition of a document, go to:

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## **Preface**

## **Contacting Micro Focus Fortify Customer Support**

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## For More Information

For more information about Fortify software products:

https://www.microfocus.com/cyberres/application-security

## About the Documentation Set

The Fortify Software documentation set contains installation, user, and deployment guides for all Fortify Software products and components. In addition, you will find technical notes and release notes that describe new features, known issues, and last-minute updates. You can access the latest versions of these documents from the following Micro Focus Product Documentation website:

https://www.microfocus.com/support/documentation

To be notified of documentation updates between releases, subscribe to Fortify Product Announcements on the Micro Focus Community:

https://community.microfocus.com/cyberres/fortify/w/fortify-product-announcements

# **Fortify Product Feature Videos**

You can find videos that highlight Fortify products and features on the Fortify Unplugged YouTube channel:

https://www.youtube.com/c/FortifyUnplugged

# **Change Log**

The following table lists revisions made to this document.

<b>Document Revision</b>	Changes	
Revision 4: April 1, 2022	<ul> <li>"Libraries, Frameworks, and Technologies" on page 14 - Incorporated changes included in Micro Focus Fortify Software Security Content 2022 Update 1</li> </ul>	
Revision 3: February 4, 2022	<ul> <li>"Build Tools" on page 17 and "Compilers" on page 18 - New supported versions of xcodebuild and swiftc that are available with Micro Focus Fortify Static Code Analyzer version 21.2.3.</li> </ul>	
Revision 2: January 19, 2022	<ul> <li>"Libraries, Frameworks, and Technologies" on page 14 - Incorporated changes included in Fortify Software Security Content 2021 Update 4</li> <li>"Software Requirements" on page 54 - Added .NET Framework 4.7 and ASP.NET 4.7 to LIM software requirements</li> </ul>	
Revision 1: December 1, 2021	<ul> <li>"Build Tools" on page 17 and "Compilers" on page 18 - New supported versions of xcodebuild, Clang, and swiftc that are available with Micro Focus Fortify Static Code Analyzer version 21.2.1.</li> </ul>	

## Introduction

This document provides the details about the environments and products that Micro Focus supports for this version of Micro Focus Fortify Software, which includes:

- Micro Focus Fortify Static Code Analyzer and Fortify Static Code Analyzer Tools (Micro Focus Fortify Audit Workbench and Secure Code Plugins)
- Micro Focus Fortify Software Security Center Server
- Micro Focus Fortify ScanCentral SAST
- Micro Focus Fortify ScanCentral DAST
- Micro Focus Fortify Weblnspect Agent
- Micro Focus Fortify WebInspect
- Micro Focus Fortify WebInspect Enterprise
- Micro Focus Fortify License and Infrastructure Manager

## **Software Delivery**

Micro Focus Fortify Software is delivered only electronically. It is not available on disc. See "Acquiring Fortify Software" on page 58 for more information.

#### **Software Licenses**

Micro Focus Fortify Software products require a license.

For Micro Focus Fortify Static Code Analyzer, Micro Focus Fortify ScanCentral DAST, Micro Focus Fortify WebInspect, and Micro Focus Fortify WebInspect Enterprise, you will receive an email with instructions for how to activate your product.

For all other Fortify Software products described in this document (including Fortify Static Code Analyzer and Secure Code Plugins), you must download the Fortify license file for your purchase from the Micro Focus Software Licenses and Downloads (SLD) portal (https://sld.microfocus.com). Use the credentials that Micro Focus Fortify Customer Support has provided for access.

# Fortify Static Code Analyzer Requirements

This section describes the system requirements for Micro Focus Fortify Static Code Analyzer, and the Fortify Static Code Analyzer Tools (including the Secure Code Plugins).

## **Hardware Requirements**

Fortify recommends that you install Micro Focus Fortify Static Code Analyzer on a high-end processor with at least 16 GB of RAM. If you plan to scan dynamic languages such as JavaScript, TypeScript,

Python, PHP, or Ruby, Fortify recommends that you have 32 GB of RAM. If your software is complex, you might require more RAM. See the content about improving performance in the *Micro Focus Fortify Static Code Analyzer User Guide* for more information.

Increasing the number of processor cores and increasing memory both result in faster processing.

## **Software Requirements**

Micro Focus Fortify Static Code Analyzer requires Java 11. The Fortify Static Code Analyzer and Applications installation includes an embedded OpenJDK/JRE version 11.0.10.

Translating .NET and Visual Studio C/C++ projects requires the Windows operating system and .NET Framework 4.7.2 or later.

Translating applications that use the Blazor web framework requires the installation of Visual Studio 2019.

#### Platforms and Architectures

Micro Focus Fortify Static Code Analyzer supports the platforms and architectures listed in the following table.

Operating System	Platforms / Versions	
Windows	Windows 8.1, 10	
	Windows Server 2016	
	Windows Server 2019	
	Windows Server 2022	
Linux	CentOS Linux 7.x (7.6 and later)	
	CentOS Linux 8.x (8.2 and later)	
	Red Hat Enterprise Linux 7.x (7.2 and later)	
	Red Hat Enterprise Linux 8.x (8.2 and later)	
	SUSE Linux Enterprise Server 12, 15	
	Ubuntu 20.04.1 LTS	
macOS	10.15, 11	
AIX	7.1	
Solaris SPARC	11.3	
Solaris x64	11.4	

Fortify Static Code Analyzer Tools (including Secure Code Plugins) support the platforms and architectures listed in the following table.

Operating System	Platforms / Versions
Windows	8.1, 10
Linux	Red Hat Enterprise Linux 7.x, 8
	SUSE Linux Enterprise Server 12, 15
macOS	10.15, 11

## Languages

Micro Focus Fortify Static Code Analyzer supports the programming languages listed in the following table.

Language / Framework	Versions
.NET	5.0
.NET Framework	2.0-4.8
.NET Core	2.0-3.1
ABAP/BSP	Note: Fortify ABAP Extractor is supported on a system running SAP release 7.02, SP level 0006.
ActionScript	3.0
Apex	36
C#	5, 6, 7, 8, 9
C/C++	C11, C++11, C++14, C++17 (see "Compilers" on page 18)
Classic ASP (with VBScript)	2.0, 3.0

Language / Framework	Versions			
COBOL	IBM Enterprise COBOL for z/OS 6.1 (and earlier) with CICS, IMS, DB2, and IBM MQ			
	Micro Focus Visual COBOL 6.0			
	<b>Note:</b> COBOL translation requires that Microsoft Visual C++ 2017 Redistributable (x86) be installed on the system. This is not a requirement for Legacy COBOL Translation.			
ColdFusion	8, 9, 10			
Go	1.12, 1.13, 1.14, 1.15, 1.16, 1.17			
	<b>Note:</b> Fortify Static Code Analyzer supports scanning Go code on Windows and Linux.			
HTML	5 and earlier			
Java (including Android)	7, 8, 9, 10, 11, 12, 13, 14			
JavaScript	ECMAScript 2015–2021			
JSON	ECMA-404			
JSP	1.2, 2.1			
Kotlin	1.3.50, 1.4.20, 1.5.30			
MXML (Flex)	4			
Objective-C/C++	2.0 (see "Compilers" on page 18)			
PHP	7.3, 7.4, 8.0			
PL/SQL	8.1.6			
Python	2.6, 2.7, 3.x (3.9 and earlier)			
Ruby	1.9.3			

Language / Framework	Versions			
Scala	2.11, 2.12, 2.13			
	<b>Note:</b> Scanning Scala code requires the Scala Fortify compiler plugin available in the Maven Central Repository.			
Swift	5 (see "Compilers" on page 18 for supported swiftc versions)			
T-SQL	SQL Server 2005, 2008, 2012			
TypeScript	2.8, 3.x, 4.0, 4.1, 4.2, 4.3			
VBScript	2.0, 5.0			
Visual Basic (VB.NET)	11, 14, 15.x, 16.0			
Visual Basic	6.0			
XML	1.0			
YAML	1.2			

## Libraries, Frameworks, and Technologies

Micro Focus Fortify Static Code Analyzer supports the libraries, frameworks, and technologies listed in this section with dedicated Fortify Secure Coding Rulepacks and vulnerability coverage beyond core supported languages.

#### Java

	Apache Spring	IBM MQ	OpenCSV	Spring Data JPA
Ajanta	Security (Acegi)	IBM WebSphere	Oracle Application	Spring Data MongoDB
Amazon Web Services	Apache Struts	Jackson	Development Framework (ADF)	Spring Data Redis
(AWS) SDK	Apache Tapestry	Java Annotations	Oracle BC4J	Spring HATEOAS
Apache Axiom	Apache Tomcat	Java Excel API	Oracle JDBC	Spring JMS
Apache Axis	Apache Torque	JavaMail	Oracle OA Framework	Spring JMX
Apache Beehive NetUI	Apache Util	JAX-RS	Oracle tcDataSet	Spring Messaging
Apache Catalina	Apache Velocity	JAXB		Spring Security
Apache Cocoon	Apache Wicket	Jaxen	Oracle XML Developer Kit (XDK)	Spring Webflow
Apache Commons	Apache Xalan	JBoss	OWASP Enterprise	Spring WebSockets
Apache ECS	Apache Xerces	JDesktop	Security API (ESAPI)	Spring WS
Apache Hadoop	ATG Dynamo	JDOM	OWASP HTML	Stripes
•	Azure SDK	Jetty	Sanitizer	Sun JavaServer Faces
HttpComponents	Castor	JGroups	OWASP Java Encoder	(JSF)
Apache Jasper	Display Tag	json-simple	Plexus Archiver	Tungsten
Apache Log4j	Dom4j	JTidy Servlet	Realm	Weblogic
Apache Lucene	GDS AntiXSS	JXTA	Restlet	WebSocket
Apache MyFaces	Google Android	JYaml	SAP Web Dynpro	XStream
Apache OGNL	Google Cloud Platform		Saxon	YamlBeans
Apache ORO	Google Web Toolkit	Liferay Portal	SnakeYAML	ZeroTurnaround ZIP
Apache POI	Gson	MongoDB	Spring and Spring	Zip4J
Apache SLF4J	Hibernate	Mozilla Rhino	MVC	
Apache Slide	iBatis	MyBatis	Spring Boot	
		Netscape LDAP API	Spring Data Commons	

#### Scala

Akka HTTP Scala Slick

Scala Play

#### .NET

.NET Framework, .NET Azure SDK Microsoft Npgsql Sybase ASE ADO.NET Core, and .NET **ApplicationBlocks** Data Provider Castle ActiveRecord Open XML SDK Standard Microsoft My Xamarin CsvHelper Oracle Data Provider .NET WebSockets Framework for .NET Xamarin Forms Dapper ADO.NET Entity Microsoft Practices **OWASP AntiSamy** YamlDotNet DB2 .NET Provider Framework **Enterprise Library** Saxon **ADODB** DotNetZip Microsoft Web **SharePoint Services Protection Library Amazon Web Services** fastJSON SharpCompress (AWS) SDK MongoDB IBM Informix .NET Provider SharpZipLib ASP.NET MVC MySql .Net Connector Json.NET SQLite .NET Provider ASP.NET SignalR NHibernate ASP.NET Web API Log4Net NLog SubSonic

#### C

ActiveDirectory LDAP CURL Library MySQL OpenSSL Sun RPC

Apple System Logging GLib Netscape LDAP POSIX Threads WinAPI

(ASL) JNI ODBC SQLite

#### C++

Boost Smart Pointers STL MFC WMI

#### **SQL**

Oracle ModPLSQL

#### **PHP**

ADOdb PHP Debug PHP OpenSSL PHP Smarty PHP Mcrypt Advanced PHP PHP DOM PHP Mhash PHP PostgreSQL PHP XML Debugging PHP Extension PHP Mysql PHP Reflection PHP XMLReader CakePHP PHP Hash PHP OCI8 PHP SimpleXML PHP Zend

#### JavaScript/TypeScript/HTML5

AngulariOS JavaScript BridgeNode.js Azure StorageReact RouterUnderscore.jsExpress JSjQueryNode.js CoreSAPUI5/OpenUI5HelmetJS-YAMLReactSequelize

#### **Python**

\_mysql Django memcache-client pylibmc six

aiopg httplib2 MySQLdb PyMongo Twisted Mail

psycopg2 urllib3 **Amazon Web Services** Jinja2 **PyYAML** (AWS) Lambda libxml2 pycrypto requests WebKit **Azure Functions** 

lxml pycurl simplejson

Graphene

#### Ruby

SQLite MySQL Thor

Rack pg

#### **Objective-C**

SBJson **AFNetworking** Apple CoreFoundation Apple Apple LocalAuthentication WatchConnectivity Apple AddressBook Apple CoreLocation SFHFKeychainUtils Apple WatchKit Apple MessageUI Apple AppKit Apple CoreServices SSZipArchive Apple Security Apple WebKit Apple CFNetwork ZipArchive Apple CoreTelephony **Apple Social** Hpple **ZipUtilities** Apple ClockKit Apple Foundation Apple UIKit Objective-Zip Apple CommonCrypto Apple HealthKit ZipZap

Realm

**Swift** 

Apple CoreData

Alamofire Apple CoreFoundation Apple WatchKit ZipArchive Apple MessageUI Apple AddressBook Apple CoreLocation **Apple Security** Apple WebKit **ZIPFoundation ZipUtilities** Apple CFNetwork Apple Foundation **Apple Social** Realm Apple ClockKit Apple HealthKit Apple UIKit **SQLite** ZipZap

Apple CommonCrypto SSZipArchive Apple Apple

LocalAuthentication WatchConnectivity Apple CoreData Zip

#### **COBOL**

Auditor Micro Focus **POSIX** COBOL Run-time CICS SQL System DLI MQ

#### Go

GORM

logrus

## Configuration

.NET Configuration	Docker Configuration	Java Apache Struts	Java OWASP	Oracle Application
Adobe Flex	(Dockerfiles)	Java Apache Tomcat	AntiSamy	Development
(ActionScript)	Google Android	Configuration	Java Spring and Spring	Framework (ADF)
Configuration	Configuration	Java Blaze DS	MVC	PHP Configuration
Ajax Frameworks	iOS Property List	Java Hibernate	Java Spring Boot	PHP WordPress
Amazon Web Service	J2EE Configuration	Configuration	Java Spring Mail	Silverlight
(AWS)	Java Apache Axis	Java iBatis	Java Spring Security	Configuration
Ansible	Java Apache Log4j	Configuration	Java Spring	WS-SecurityPolicy
Azure Resource	Configuration	Java IBM WebSphere	WebSockets	XML Schema
Manager (ARM)	Java Apache Spring	Java MyBatis	Java Weblogic	
Build Management	Security (Acegi)	Configuration	Kubernetes	

#### Universal

Regular Expression (Regex)

## **Build Tools**

Micro Focus Fortify Static Code Analyzer supports the build tools listed in the following table.

<b>Build Tool</b>	Versions	Notes
Ant	1.10.x and earlier	
Bamboo	(see the Atlassian Marketplace for supported versions)	The Fortify App for Bamboo is available from the Atlassian Marketplace.

<b>Build Tool</b>	Versions	Notes
Gradle	7.2.x and earlier	The Fortify Static Code Analyzer Gradle build integration supports the following language/platform combinations:  • Java/Windows, Linux, and macOS  • Kotlin/Windows and Linux  • C/Linux  • C++/Linux
Jenkins	(see the Jenkins Plugin Index for supported versions)	The Fortify Jenkins plugin is available from the Jenkins Plugins Index.
Maven	3.0.5, 3.5.x, 3.6.x, 3.8.x	
MSBuild	15.x, 16.4, 16.6, 16.8, 16.9, 16.10, 16.11	
Xcodebuild	12, 12.0.1, 12.1, 12.2, 12.3, 12.4, 12.5, 12.5.1, 13, 13.1, 13.2, 13.2.1	

# Compilers

Micro Focus Fortify Static Code Analyzer supports the compilers listed in the following table.

Compiler	Versions	Operating Systems
gcc	GNU gcc 4.9, 5.x	Windows, Linux, macOS, AIX, Solaris
	GNU gcc 10.2.1	Windows, Linux, macOS
g++	GNU g++ 4.9, 5.x	Windows, Linux, macOS, AIX, Solaris
	GNU g++ 10.2.1	Windows, Linux, macOS
OpenJDK javac	9, 10, 11, 12, 13, 14	Windows, Linux, macOS
	9, 10, 11, 12, 13	AIX, Solaris
Oracle javac	7, 8, 9	Windows, Linux, macOS

Compiler	Versions	Operating Systems
cl (MSVC)	2017, 2019	Windows
Clang	12.0.0, 12.0.5, 13.0.0 <sup>1</sup>	macOS
Swiftc	5.3, 5.3.1, 5.3.2, 5.4, 5.4.2, 5.5, 5.5.1, 5.5.2 <sup>1</sup>	macOS

 $<sup>^1</sup>$ Fortify Static Code Analyzer supports applications built in the following Xcode versions: 12, 12.0.1, 12.1, 12.2, 12.3, 12.4, 12.5, 12.5.1, 13, 13.1, 13.2, 13.2.1.

# **Secure Code Plugins**

The following table lists the supported integrated development environments (IDE) for the Micro Focus Fortify Secure Code Plugins.

Plugin / Extension	IDEs and Versions	Notes
Fortify Eclipse Plugins (Complete and Remediation)	Eclipse 2020-x, 2021-x	
Fortify Analysis Plugin	Android Studio 2020.x (4.x) IntelliJ IDEA 2020.x, 2021.x	
Fortify Remediation Plugin	Android Studio 2020.x (4.x) IntelliJ IDEA 2020.x, 2021.1 PyCharm 2020.x, 2021.1 WebStorm 2020.x, 2021.1	
Fortify Visual Studio Extension	Visual Studio 2017 Community, Professional, and Enterprise Visual Studio 2019 Community, Professional, and Enterprise	For supported MSBuild versions, see "Build Tools" on page 17.
Security Assistant Plugin for Eclipse	Eclipse 2020-x, 2021-x	

Plugin / Extension	IDEs and Versions	Notes
Security Assistant Plugin for IntelliJ IDEA	(see the JetBrains Marketplace for supported versions)	Security Assistant Plugin for IntelliJ IDEA is available from the JetBrains Marketplace.
Security Assistant Extension for Visual Studio	(see the Visual Studio Marketplace for supported versions)	Security Assistant Extension for Visual Studio is available from the Visual Studio Marketplace.

#### Single Sign-On (SSO)

Fortify Audit Workbench, the Eclipse Complete plugin, and the Fortify Visual Studio Extension support the following SSO methods to connect with Fortify Software Security Center:

- SPNEGO/Kerberos SSO Supported on Windows only.
- X.509 SSO

**Note:** Fortify Audit Workbench and the Secure Code Plugins can use token-based authentication with Fortify Software Security Center, which removes the requirement to configure SSO directly.

## Service Integrations for Fortify Static Code Analyzer Tools

The following table lists the supported service integrations for Micro Focus Fortify Audit Workbench and the Fortify Secure Code Plugins.

Service	Versions	Supported Tools
Micro Focus Application Lifecycle Management (ALM)/ Quality Center Enterprise (QC)	12.50	Audit Workbench, Eclipse Plugin
Azure DevOps Server	2019, 2020	Audit Workbench, Eclipse Plugin, Visual Studio Extension
Azure DevOps	n/a	Audit Workbench, Eclipse Plugin
<b>Note:</b> Only basic user password authentication is supported.		
Bugzilla	5.0.x	Audit Workbench, Eclipse Plugin, Visual

Service	Versions	Supported Tools
		Studio Extension
Jira	7.13 and later, 8.x	Audit Workbench, Eclipse Plugin
Jira Cloud	n/a	Audit Workbench, Eclipse Plugin
Fortify Software Security Center Bug Tracker	21.2.0	Audit Workbench, Eclipse Plugin, Visual Studio Extension

## **Fortify Software Security Content**

Micro Focus Fortify Secure Coding Rulepacks are backward compatible with all supported Fortify Software versions. This ensures that Rulepack updates do not break any working Fortify Software installation.

## **BIRT Reports**

To generate BIRT reports on a Linux system from the Secure Code Plugins or the BIRTReportGenerator utility, you must install the fontconfig library, DejaVu Sans fonts, and DejaVu serif fonts on the server.

# Fortify Software Security Center Server Requirements

This section describes the system requirements for the Micro Focus Fortify Software Security Center server.

## **Hardware Requirements**

Micro Focus Fortify Software Security Center requires the hardware specifications listed in the following table.

	Component	Minimum	Recommended
Application server	Java heap size	4 GB	24 GB
Database server	Processor	Quad-core	Eight-core
	RAM	8 GB	64 GB

#### **Database Hardware Requirements**

Fortify recommends an eight-core processor with 64 GB of RAM for the Fortify Software Security Center database. Using less than this recommendation can impact Fortify Software Security Center performance.

Use the following formula to estimate the size (in GB) of the Fortify Software Security Center database disk space:

 $((\langle num\_issues \rangle^*30 \text{ KB}) + \langle size\_of\_artifacts \rangle) \div 1,000,000$ 

#### where:

- <num\_issues> is the total number of issues in the system
- <size\_of\_artifacts> is the total size in KB of all uploaded artifacts and scan results

**Note:** This formula produces only a rough estimate for database disk space allocation. Do not use it to estimate disk space requirements for long-term projects. Disk requirements for Fortify Software Security Center databases increases in proportion to the number of projects, scans, and issues in the system.

# Database Performance Metrics for Minimum and Recommended Hardware Requirements

The following table shows performance metrics (number of issues discovered per hour) for Fortify Software Security Center configured with the minimum and the recommended hardware requirements.

Database	Issues per Hour Minimum Configuration	Issues per Hour Recommended Configuration
MySQL	362,514	2,589,385
Oracle	231,392	3,020,950
SQL Server	725,028	3,625,140

## Platforms and Architectures

Micro Focus Fortify Software Security Center supports the platforms and architectures listed in the following table.

Operating System	Versions
Windows	Server 2016
	Server 2019
Linux	Red Hat Enterprise Linux 7.x, 8
	SUSE Linux Enterprise Server 12, 15

**Note:** Although Fortify Software Security Center has not been tested on all Linux variants, most distributions are not known to have issues.

## **Application Servers**

Micro Focus Fortify Software Security Center supports Apache Tomcat version 9.x for the following JDK versions:

- Red Hat OpenJDK 11
- SUSE OpenJDK 11
- Oracle JDK 11
- Zulu OpenJDK 11 from Azul

Fortify only supports the deployment of a single Fortify Software Security Center instance. Furthermore, that instance must not be behind a load balancer.

## Fortify Software Security Center Database

Micro Focus Fortify Software Security Center requires that all database schema collations are case-sensitive.

Fortify Software Security Center supports the databases listed in the following table.

Database	Versions	Collation / Character Sets	Driver
MySQL	8.0 (Community Edition)	utf8_bin latin1_general_cs / latin1	The driver is included in the Fortify Software Security Center WAR file.  MariaDB Connector/J 2.7.3  Driver class: org.mariadb.jdbc.driver
Oracle	12c Release 2 19c (18.3)	AL32UTF8 for all languages WE8MSWIN1252 for US English	The Oracle Database 21c JDBC driver is included in the Fortify Software Security Center WAR file.  Driver class: oracle.jdbc.OracleDriver  JAR file: ojdbc11.jar (for Java 11) version 21.1.0.0
SQL Server	2017 2019	SQL_Latin1_ General_CP1_CS_ AS	The Microsoft JDBC Driver 9.2 for SQL Server is included in the Fortify Software Security Center WAR file.  Driver class: com.microsoft.sqlserver:mssql-jdbc: 9.2.1.jre11

**Note:** Fortify does not support the direct conversion from one database server type to another, such as converting from MySQL to Oracle. To do this, you must use the Server API to move data from your current Fortify Software Security Center instance to a new Fortify Software Security Center instance that uses the database server type you want to use going forward. Micro Focus Professional Services can assist you with this process.

# Deploying Fortify Software Security Center to a Kubernetes Cluster (Optional Deployment Strategy)

If you plan to deploy Micro Focus Fortify Software Security Center on a Kubernetes cluster, you must make sure that the following requirements are met.

#### **Kubernetes Requirements**

- Versions 1.18–1.21
- Persistent volume support
- A load balancer service (Recommended)
- At least 7 GB of RAM and 1 CPU on a single node (with default configuration)

#### Locally-Installed Tools Required

- Maximum usage: 28 GB of RAM and 8 CPUs on a single node (with default configuration)
- 4 GiB of storage for persistent volume (with default configuration)
- A kubectl command-line tool (Recommended) Use the same version as the Kubernetes cluster version (1.18–1.21)
- Helm command-line tool, versions 3.2–3.7
- Air-gapped installation only (Recommended) A Docker client and server installation (any version)

#### **Additional Requirements**

- Kubeconfig file for the Kubernetes cluster
- Docker Hub account with access to Fortify Software Security Center images

**Note:** If you need access to Fortify Docker Organization on Docker Hub, contact FortifyDocker@microfocus.com with your first name, your last name, and your Docker account name. Micro Focus Fortify will then give you access to the Fortify Docker organization that contains the Fortify Software Security Center images.

- DNS name for the Fortify Software Security Center web application (address used to access the service)
- Java keystore for setting up HTTPS (For details, see the *Micro Focus Fortify Software Security Center User Guide*) The keystore must contain a CA certificate and a server certificate for the Fortify Software Security Center DNS name with an associated private key.
  - Keystore password
  - Private key password

- An installed Oracle, SQL Server, or MySQL for the database server
  - Database server host name
  - Name of the Fortify Software Security Center database
  - Username and password for an account that has permission to manage the Fortify Software Security Center schema and data
- Fortify Software Security Center license

## **Browsers**

Fortify recommends that you use one of the browsers listed in the following table and a screen resolution of 1400 x 800.

Browser	Version
Google Chrome	90 or later
Microsoft Edge	90 or later
Mozilla Firefox	88 or later
Safari	14 or later

## **Authentication Systems**

Micro Focus Fortify Software Security Center supports the following directory services:

• LDAP: LDAP 3 compatible

**Important!** Although Fortify supports the use of multiple LDAP servers, it does not support the use of multiple LDAP servers behind a load balancer unless they are exact copies.

• Windows Active Directory Service

#### Single Sign-On (SSO)

Fortify Software Security Center supports:

- Central Authorization Server (CAS) SSO
- HTTP Headers SSO (Oracle SSO, CA SSO)
- SAML 2.0 SSO
- SPNEGO/Kerberos SSO
- X.509 SSO

## **BIRT Reporting**

Micro Focus Fortify Software Security Center custom reports support Business Intelligence and Reporting Technology (BIRT) Designer version 4.7.

(Linux with OpenJDK only) Installing Required Fonts

If your Micro Focus Fortify Software Security Center server is installed on a Linux system, and you are running OpenJDK, you must install the fontconfig library, DejaVu Sans fonts, and DejaVu serif fonts on the server to enable users to successfully generate reports. Otherwise, report generation will fail. If you need to, you can download these fonts from https://github.com/dejavu-fonts/dejavu-fonts.

## Service Integrations for Fortify Software Security Center

Micro Focus Fortify Software Security Center supports the service integrations listed in the following table.

Service	Application	Versions
Bug tracking	Bugzilla	5.0.x
	Micro Focus Application Lifecycle Management (ALM)/ Quality Center Enterprise (QC)	12.50
	Jira	7.13 and later, 8.x
	Jira Cloud	n/a
	Azure DevOps Server	2019, 2020
	Azure DevOps	n/a
	<b>Note:</b> Only basic user password authentication is supported.	
Authentication	Active Directory	2008, 2012
Dynamic assessments	Micro Focus Fortify Weblnspect Enterprise	21.2.0

# Fortify ScanCentral SAST Requirements

Micro Focus Fortify ScanCentral SAST has three major components: a ScanCentral Controller, ScanCentral clients, and ScanCentral sensors.

## Fortify ScanCentral SAST Application Server

Micro Focus Fortify ScanCentral SAST supports Apache Tomcat version 9.x for Java 11.

## Fortify ScanCentral SAST Controller Requirements

This section describes the hardware and platform requirements for the Fortify ScanCentral SAST Controller.

#### **Controller Hardware Requirements**

Fortify recommends that you install the Fortify ScanCentral SAST Controller on a high-end 64-bit processor running at 2 GHz with at least 8 GB of RAM.

To estimate the amount of disk space required on the machine that runs the Fortify ScanCentral SAST Controller, use one of the following equations:

Intended Use	Equation
Remote scan only	<pre><num_jobs_per_day> x (<size_avg_mbs> + <size_avg_fpr> + <size_avg_sca_ log="">) x <number_days_data_is_persisted></number_days_data_is_persisted></size_avg_sca_></size_avg_fpr></size_avg_mbs></num_jobs_per_day></pre>
Remote translation and scan	<pre><num_jobs_per_day> x (<size_avg_archived_project_with_dependencies> + <size_ avg_FPR&gt; + <size_avg_sca_log>) x <num_days_data_is_persisted></num_days_data_is_persisted></size_avg_sca_log></size_ </size_avg_archived_project_with_dependencies></num_jobs_per_day></pre>

By default, data is persisted for seven days.

#### **Controller Platforms and Architectures**

The Fortify ScanCentral SAST Controller supports the platforms and architectures listed in the following table.

Operating System	Versions
Windows	Server 2016
	Server 2019
Linux	Red Hat Enterprise Linux 7.x, 8
	SUSE Linux Enterprise Server 12, 15

# Fortify ScanCentral SAST Client and Sensor Hardware Requirements

Fortify ScanCentral SAST clients and sensors run on any machine that supports Micro Focus Fortify Static Code Analyzer. Because ScanCentral SAST clients and sensors are installed on build machines running Micro Focus Fortify Static Code Analyzer, the hardware requirements are met.

See "Fortify Static Code Analyzer Requirements" on page 9 for hardware, software, and platform and architecture requirements.

#### Sensor Disk Space Requirements

To estimate the amount of disk space required on the machine that runs a ScanCentral sensor, use one of the following equations:

Intended Use	Equation
Remote scan only	<pre><num_of_scans> x (<size_avg_mbs> + <size_avg_fpr> + <size_avg_sca_log>) x <num_days_data_is_persisted></num_days_data_is_persisted></size_avg_sca_log></size_avg_fpr></size_avg_mbs></num_of_scans></pre>
Remote translation and scan	<pre><num_jobs_per_day> x (<size_avg_archived_project_with_dependencies> + <size_ avg_project_with_dependencies=""> + <size_avg_fpr> + <size_avg_sca_log>) x <number_days_data_is_persisted></number_days_data_is_persisted></size_avg_sca_log></size_avg_fpr></size_></size_avg_archived_project_with_dependencies></num_jobs_per_day></pre>

By default, data is persisted for seven days.

## Languages and Build Tools for Fortify ScanCentral SAST Sensor Project Translation

Micro Focus Fortify ScanCentral SAST supports offloading project translation to ScanCentral SAST sensors for the following languages and build tools.

#### Languages

Fortify ScanCentral SAST supports offloading project translation to ScanCentral sensors for the following languages. See "Languages" on page 11 for specific supported versions.

• .NET applications in C# and Visual Basic (VB.NET) (.NET Core, .NET Standard, ASP.NET)

**Note:** Packaging of .NET applications is supported only on Windows systems.

**Note:** Translation of .NET applications require .NET Framework version 4.7.2 or later.

- ABAP
- Apex
- Classic ASP
- ColdFusion
- Go
- Java
- JavaScript
- PHP
- PL/SQL
- Python
- Ruby
- T-SQL
- TypeScript
- Visual Basic 6.0

#### **Build Tools**

Fortify ScanCentral SAST supports the build tools listed in the following table.

<b>Build Tool</b>	Versions
Gradle	5.0 – 7.2
Maven	3.x
MSBuild	15.x, 16.4, 16.6, 16.8, 16.9, 16.10, 16.11

# Fortify ScanCentral DAST Requirements

Before you install Micro Focus Fortify ScanCentral DAST, make sure that your system meets the requirements described in this section. Fortify does not support beta or pre-release versions of operating systems, service packs, or required third-party components.

## **Architectural Best Practices**

Follow these best practice guidelines when you install Fortify ScanCentral DAST:

- Install the DAST API, DAST Global Service, DAST Utility Service, and Fortify License and Infrastructure Manager (LIM) on the same VM or on separate VMs.
- Do not install the Fortify WebInspect sensor (container or classic installation) on the same VM as any of the other DAST components.

For more information about the Fortify ScanCentral DAST components, see the *Micro Focus Fortify ScanCentral DAST Configuration and Usage Guide*.

## Fortify ScanCentral DAST Configuration Tool

This topic describes the software and hardware requirements for the machine on which the configuration tool runs to configure settings for the Fortify ScanCentral DAST components.

#### **Software Requirements**

The Fortify ScanCentral DAST Configuration Tool runs on and works with the software packages listed in the following table.

Package	Versions
Windows	Windows 10
	Windows Server 2019
.NET Platform	.NET SDK Core Runtime 5.0.202

#### Hardware Requirements

Fortify recommends that you use the Fortify ScanCentral DAST Configuration Tool on a system that conforms to the supported components listed in the following table.

Component	Requirement	Notes
RAM	2+ GB	Recommended
	1 GB	Minimum

## Fortify ScanCentral DAST Database Requirements

Fortify ScanCentral DAST requires the database server listed in the following table.

Package	Versions	Notes
SQL Server	SQL Server 2019	No scan database limit
(English-language version only)		

#### **Database Recommendations**

Fortify recommends that you configure the database server on a separate machine from either Micro Focus Fortify Software Security Center or any other Fortify ScanCentral DAST components.

The Fortify ScanCentral DAST SQL database requires case-insensitive collation.

**Important!** This is opposite the requirement for Fortify Software Security Center databases as described in "Fortify Software Security Center Database" on page 23.

## Fortify ScanCentral DAST Core Components VM

This topic describes the hardware and software requirements to run the DAST API, DAST Global Service, and DAST Utility Service containers.

#### **Software Requirements**

The DAST API, DAST Global Service, and DAST Utility Service containers run on and work with the software packages listed in the following table.

Software	Versions
Windows	Windows Server 2019

Software	Versions
Docker	18.09 or later

#### **Hardware Requirements**

Fortify recommends that you use the DAST API, DAST Global Service, and DAST Utility Service containers on a system that conforms to the supported components listed in the following table.

Component	Requirement
RAM	32 GB
Processor	8 Core

## Fortify ScanCentral DAST Sensor

The following options are available for a Fortify ScanCentral DAST sensor:

- Use the Fortify WebInspect on Docker image in a container
- Use a classic Fortify WebInspect installation with the Fortify ScanCentral DAST sensor service

### Fortify WebInspect on Docker Option

For system requirements for this option, see "WebInspect on Docker" on page 41.

#### Classic Fortify WebInspect Installation Option

For hardware and software requirements for this option, see "WebInspect Hardware Requirements" on page 38 and "WebInspect Software Requirements" on page 39. Additionally, if you plan to conduct Postman scans, see "Support for Postman" on page 40.

**Important!** When running a Fortify ScanCentral DAST sensor outside of a container, such as a sensor service on the same machine as a classic Fortify WebInspect installation, you must install the .NET SDK Core Runtime 5.0.202.

## Fortify ScanCentral DAST Ports and Protocols

This section describes the ports and protocols that the Fortify ScanCentral DAST components use to make required and optional connections.

#### **DAST API Required Connections**

The following table lists the ports and protocols that the DAST API container uses for required connections.

Endpoints	Port	Protocol	Notes
Fortify Software Security Center	80	HTTP	If SSL is not configured, the port on the host running the container is forwarded to port 80 on the container.
DAST Global Service DAST Sensor Service			Host port mapping is customizable to the container port.
Fortify Software Security Center DAST Global Service DAST Sensor Service	443	HTTPS	If SSL is configured, the port on the host running the container is forwarded to port 443 on the container.  Host port mapping is customizable to container port.
SQL Server	1433	ТСР	This is the default SQL Server port.

## **DAST Global Service Required Connections**

The DAST Global Service does not expose any ports.

The following table lists the ports and protocols that the DAST Global Service container uses for required connections.

Endpoint	Port	Protocol	Notes
SQL Server	1433	ТСР	This is the default SQL Server port.

#### **DAST Sensor Required Connections**

The DAST sensor does not expose any ports.

The DAST sensor communicates with the DAST API over the port that is exposed on the host running the DAST API container.

## **DAST Utility Service Required Connections**

The following table lists the ports and protocols that the DAST Utility Service container uses for required connections.

Endpoints	Port	Protocol	Notes
DAST API	5000	HTTP	If SSL is not configured, the port on the host running the container is forwarded to port 5000 on the container.  Host port mapping is customizable to the container port.
DAST API	5001	HTTPS	If SSL is configured, the port on the host running the container is forwarded to port 5001 on the container.  Host port mapping is customizable to container port.
SQL Server	1433	TCP	This is the default SQL Server port.

# Fortify ScanCentral DAST Browsers

Fortify recommends that you use one of the browsers listed in the following table and a screen resolution of  $1400 \times 800$ .

Browser	Version
Google Chrome	90 or later
Microsoft Edge	90 or later
Mozilla Firefox	88 or later
Safari	14 or later

## Standalone Web Macro Recorder Requirements

Fortify ScanCentral DAST allows you to download and use a standalone version of the Web Macro Recorder tool. The Web Macro Recorder tool runs on and works with the software packages listed in the following table.

Package	Versions
Windows	Windows 10
	Windows Server 2019

#### Running as Administrator

The standalone Web Macro Recorder tool requires administrative privileges for proper operation of all features. Refer to the Windows operating system documentation for instructions on changing the privilege level to run the Web Macro Recorder tool as an administrator.

## Software Integrations for Fortify ScanCentral DAST

The following table lists products that you can integrate with Fortify ScanCentral DAST.

Product	Versions
Micro Focus Fortify Software Security Center	21.2.0
Kubernetes on Azure (for scan scaling support)	1.19 or later

# Fortify WebInspect Agent Requirements

Micro Focus Fortify WebInspect Agent technology is delivered for production application logging and protection .

## **Platforms and Architectures**

Fortify WebInspect Agent supports 32-bit and 64-bit applications written in Java 5, 6, 7, 8, and 10.

#### **Java Runtime Environments**

Fortify WebInspect Agent supports the Java runtime environments listed in the following table.

JRE	Major Versions
IBM J9	5 (SR10 and later)
	6 (SR6 and later)
Oracle HotSpot	5, 6, 7, 8
Oracle JRockit	5, 6 (R27.6 and later)

**Note:** The Java agent is supported on Windows, Linux, and Unix.

## **Java Application Servers**

Fortify WebInspect Agent supports the Java application servers listed in the following table.

Application Server	Versions
Apache Tomcat	6.0, 7.0, 8.0, 9.0
IBM WebSphere	7.0, 8.0, 8.5, 8.5.5
Oracle WebLogic	10.0, 10.3, 11g, 11gR1, 12c
Red Hat JBoss Enterprise Application Platform	7.3.0 and earlier
Jetty	9.3
WildFly	20.0.1 and earlier

#### .NET Frameworks

Fortify WebInspect Agent supports .NET Framework versions 2.0, 3.0, 3.5, 4.0, and 4.5–4.8.

# **IIS for Windows Server**

Fortify WebInspect Agent supports Internet Information Services (IIS) versions 6.0, 7.0, 7.5, 8, 8.5, and 10.0.

# Fortify WebInspect Requirements

Before you install Micro Focus Fortify WebInspect, make sure that your system meets the requirements described in this section. Fortify does not support beta or pre-release versions of operating systems, service packs, or required third-party components.

## **WebInspect Hardware Requirements**

Fortify recommends that you install Micro Focus Fortify WebInspect on a system that conforms to the supported components listed in the following table.

Component	Requirement	Notes
Processor	2.5 GHz quad- core or faster	Complex applications might benefit from additional cores.
RAM	16 GB	Complex applications might benefit from additional memory.  Fortify recommends 32 GB of memory to scan with single-page application (SPA) support.
Hard disk	40 GB	Using SQL Express and storing scans locally requires additional disk space per scan.
Display	1280 x 1024	

# **WebInspect Software Requirements**

Micro Focus Fortify WebInspect runs on and works with the software packages listed in the following table.

Package	Versions	Notes		
Windows	Windows 10	Recommended		
		Important! Not all builds of Windows 10 support .NET Framework 4.8. Refer to Microsoft's website to identify Windows 10 builds that support .NET Framework 4.8.		
	Windows 8.1			
	Windows Server 2016			
	Windows Server 2019			
.NET Platform	.NET Framework 4.8			
SQL Server	SQL Server 2019	Recommended		
(English-language versions only)		No scan database limit		
versions only)	SQL Server 2017	No scan database limit		
	SQL Server 2016 SP2	No scan database limit		
SQL Server Express	SQL Server 2019	Recommended		
(English-language versions only)	Express	10 GB scan database limit		
versions only)	SQL Server 2017 Express	10 GB scan database limit		
	SQL Server 2016 Express SP2	10 GB scan database limit		
Browser	Internet Explorer 11	Recommended		
	Internet Explorer 10			

Package	Versions	Notes
Portable Document Format	Adobe Acrobat Reader 11	Recommended
	Adobe Acrobat Reader 8.1.2	Minimum

#### Support for Postman

A Postman collection version 2.0 or 2.1 is required to conduct scans in Fortify WebInspect.

Additionally, you must install the following third-party software on the machine where Fortify WebInspect is installed:

• Newman command-line collection runner 4.5.1 or later

**Important!** You must install Newman globally rather than locally. You can do this by adding a -g option to the installation command, as follows:

```
npm install -g newman
```

When you install Newman, a path variable for Newman is automatically added to the user variables. The path variable is similar to the following:

```
<directory_path>\AppData\Roaming\npm
```

You must manually add the same Newman path variable to the system environment variables. Ensure that the variable is in both the user variables and system environment variables before proceeding.

System variables are read only when the machine boots, so after manually adding the path variable, you must restart your machine. See your Windows documentation for specific instructions on how to add a system environment variable.

Node.js and the included Node Package Manager (NPM)

**Note:** Install the Node.js version that is required for the version of Newman that you install. For more information, see <a href="https://www.npmjs.com/package/newman">https://www.npmjs.com/package/newman</a>.

#### **Notes on SQL Server Editions**

When using the Express edition of SQL Server:

- Scan data must not exceed the database size limit. If you require a larger database or you need to share your scan data, use the full version of SQL Server.
- During the installation you might want to enable "Hide advanced installation options." Accept all
  default settings. Micro Focus Fortify WebInspect requires that the default instance is named
  SQLEXPRESS.

When using the full edition of SQL Server:

- You can install the full version of SQL Server on the local host or nearby (co-located). You can
  configure this option in Fortify WebInspect Application Settings (Edit > Application Settings >
  Database).
- The account specified for the database connection must also be a database owner (DBO) for the named database. However, the account does not require sysadmin (SA) privileges for the database server. If the database administrator (DBA) did not generate the database for the specified user, then the account must also have the permission to create a database and to manipulate the security permissions. The DBA can rescind these permissions after Fortify WebInspect sets up the database, but the account must remain a DBO for that database.

## WebInspect on Docker

Fortify WebInspect on Docker has the software requirements listed in the following table.

Package	Versions	Notes
Docker Enterprise	18.09 or later	
Windows	Windows Server 2019	This Windows version supports the process isolation runtime mode.

#### **Hardware Requirements**

Fortify recommends that you install Micro Focus Fortify WebInspect on Docker on a host that conforms to the supported components listed in the following table and configure the container to use these resources. Fortify does not support beta or pre-release versions of operating systems, service packs, and required third-party components.

Component	Requirement	Notes
Processor	2.5 GHz quad- core or faster	Complex applications might benefit from additional cores.
RAM	16 GB	Complex applications might benefit from additional memory.  Fortify recommends 32 GB of memory to scan with single-page application (SPA) support.
Hard disk	40 GB	Using SQL Express and storing scans locally requires additional disk space per scan.

## Fortify WebInspect Ports and Protocols

This section describes the ports and protocols Micro Focus Fortify WebInspect uses to make required and optional connections.

#### **Required Connections**

The following table lists the ports and protocols Micro Focus Fortify WebInspect uses to make required connections.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect to target host	Target host	Scan target host	Any	НТТР	Fortify WebInspect must connect to the web application or web service to be scanned.
Fortify WebInspect to SQL database	SQL Server Express or SQL Server Standard/Enterprise	SQLEXPRESS service on localhost or SQL TCP service locally installed or remote host	1433	SQL TCP	Used to maintain the scan data and to generate reports within the Fortify WebInspect application.
Fortify WebInspect to Certificate Revocation List (CRL)	Verisign CRL	http://crl.verisign.com/ pca3.crl or http://csc3-2004- crl.verisign.com/ CSC3-2004.crl	80	НТТР	Offline installations of Fortify WebInspect or Fortify WebInspect Enterprise require you to manually download and apply the CRL from Verisign. Fortify WebInspect products prompt for these lists from Windows and their absence can cause problems with the application. A one-time download is sufficient, however Fortify recommends that you download the CRL as part of regular maintenance.

#### **Optional Connections**

The following table lists the ports and protocols Micro Focus Fortify WebInspect uses to make optional connections.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify	Remote Fortify	https://licenseservice.	443	HTTPS	For one-time activation of a
WebInspect to	Licensing	fortify.microfocus.com		over SSL	Fortify WebInspect Named
Fortify License	Service				User license. You may
activation					optionally use the following:
server					

Direction	Endpoint	URL or Details	Port	Protocol	Notes
					<ul> <li>An offline activation process instead of using this direct connection</li> <li>Upstream proxy with authentication instead of a direct connection</li> </ul>
Fortify WebInspect to SmartUpdate server	Remote SmartUpdate service	https://smartupdate. fortify.microfocus.com	443	HTTPS over SSL	Used to automatically update the Fortify WebInspect product. SmartUpdate is automatic when opening the product UI, but can be disabled and run manually. Can optionally use upstream proxy with authentication instead of a direct connection.
Fortify WebInspect to Fortify Support Channel server	Remote Fortify Support Channel service	https://supportchannel. fortify.microfocus.com	443	HTTPS over SSL	Used to retrieve product marketing messages and to upload Fortify WebInspect data or product suggestions to Micro Focus Fortify Customer Support. Message check is automatic when opening the product UI, but can be disabled and run manually. Can optionally use upstream proxy with authentication instead of a direct connection.
Fortify WebInspect to Fortify WebInspect Telemetry server	Remote Fortify WebInspect Telemetry and performance reporting service	Note: Accessing this URL in a browser does not display any content.	443	HTTPS over SSL	The Telemetry service provides an automated process for collecting and sending Fortify WebInspect usage information to Micro Focus. Our software developers use this information to help improve the product.
Fortify WebInspect to Fortify License and Infrastructure Manager (LIM)	Fortify WebInspect LIM (Local Licensing Service)	Lease Concurrent User license	443	Web services over SSL	Required for Fortify WebInspect client to lease and use a Concurrent User license maintained in a LIM license pool. You can detach the client license from LIM

Direction	Endpoint	URL or Details	Port	Protocol	Notes
					after activation to avoid a constant connection.
Fortify WebInspect API listener	Local machine API, or network IP address	http://localhost:8083/ webinspect/api	8083 or user- specified	НТТР	Use to activate a Fortify WebInspect API Windows Service. This opens a listening port on your machine, which you can use locally or remotely to generate scans and retrieve the results programmatically. This API can be SSL enabled, and supports Basic or Windows authentication.
Fortify WebInspect to Fortify WebInspect Enterprise	Fortify WebInspect Enterprise server	User-specified Fortify WebInspect server	443 or user- specified	HTTP or HTTPS over SSL	The Enterprise Server menu connects Fortify WebInspect as a client to the enterprise security solution to transfer findings and user role and permissions management.
Fortify WebInspect sensor service to Fortify WebInspect Enterprise	Fortify WebInspect Enterprise server	User-specified Fortify WebInspect server	443 or user- specified	HTTP or HTTPS over SSL	Separate from the Fortify WebInspect UI, you can configure the local installation as a remote scan engine for use by the enterprise security solution community. This is done through a Windows Service. This constitutes a different product from Fortify WebInspect desktop and is recommended to be run on its own, non-user-focused machine.
Browser to Fortify WebInspect	localhost	Manual Step-Mode Scan	Dynamic, 8081, or user- specified	HTTP or HTTPS over SSL	Fortify WebInspect serves as a web proxy to the browser, enabling manual testing of the target web server through Fortify WebInspect.
Fortify WebInspect to Quality Center Enterprise (ALM)	QC server	User-specified ALM server	Server- specified	HTTP or HTTPS over SSL	Permits submission of findings as defects to the ALM bug tracker.

#### **Connections for Tools**

The following table lists the ports and protocols that the Micro Focus Fortify WebInspect tools use to make connections.

Tool	Direction	Endpoint	Port	Protocol	Notes
Web Proxy	To target host	localhost	8080 or user- specified	HTTP or HTTPS over SSL	Intercepts and displays web traffic
Web Form Editor	To target host	localhost	Dynamic, 8100, or user- specified	HTTP or HTTPS over SSL	Intercepts web traffic and captures submitted forms
Login or Workflow Macro Recorders	To target host	localhost	Dynamic, 8081, or user- specified	HTTP or HTTPS over SSL	Records browser sessions for replay during scan
Web Discovery	Fortify WebInspect machine to targeted IP range	Target host network range	User- specified range	HTTP and HTTPS over SSL	Scanner for identifying rogue web applications hosted among the targeted scanned IP and port ranges Use to provide targets to Fortify WebInspect (manually)

# Fortify WebInspect Agent

For system requirements, see "Fortify WebInspect Agent Requirements" on page 36.

# WebInspect Software Development Kit (SDK)

The WebInspect SDK requires the following software:

- Visual Studio 2019 (version 16.9.0)
- .NET Framework 4.8

**Important!** Visual Studio Express versions do not support third-party extensions. Therefore, these versions do not meet the software requirements to use the WebInspect SDK.

## Software Integrations for Fortify WebInspect

The following table lists products that you can integrate with Micro Focus Fortify WebInspect.

Product	Versions	
Micro Focus Fortify WebInspect Enterprise	21.2.0	
Micro Focus Application Lifecycle Management (ALM)	11.5, 12.01, 12.21, 12.53	
<b>Note:</b> You must also install the ALM Connectivity tool to connect Fortify WebInspect to ALM.		
Micro Focus Fortify Software Security Center	21.2.0	
Micro Focus Unified Functional Testing	11.5	

# Fortify WebInspect Enterprise Requirements

Before you install Micro Focus Fortify WebInspect Enterprise, make sure that your systems meet the requirements described in this section. Fortify does not support beta or pre-release versions of operating systems, service packs, or required third-party components.

**Note:** Product versions that are not specifically listed in this document are not supported.

## Installation and Upgrade Requirements

You can upgrade directly from Micro Focus Fortify WebInspect Enterprise 21.1.0 to Fortify WebInspect Enterprise 21.2.0. You cannot upgrade directly from any other versions of Fortify WebInspect Enterprise. For detailed information about upgrades, see the *Micro Focus Fortify WebInspect Enterprise Installation and Implementation Guide*.

Integration with Micro Focus Fortify Software Security Center is optional. If you are integrating Fortify WebInspect Enterprise with Fortify Software Security Center, then you must install and run Fortify Software Security Center 21.2.0 before you install a new instance of Fortify WebInspect Enterprise or upgrade from Fortify WebInspect Enterprise 21.1.0. You can install Fortify Software Security Center and Fortify WebInspect Enterprise on the same or different machines. Using separate machines might improve performance.

## Integrations for Fortify WebInspect Enterprise

You can integrate Micro Focus Fortify WebInspect Enterprise with the following components:

- Micro Focus Fortify WebInspect sensors 21.2.0
- Micro Focus Fortify WebInspect Agent 21.2.0

#### Fortify WebInspect Enterprise Database

Fortify recommends that you configure the database server on a separate machine from either Micro Focus Fortify Software Security Center or Micro Focus Fortify WebInspect Enterprise.

The Fortify WebInspect Enterprise Server SQL database requires case-insensitive collation.

**Important!** This is opposite the requirement for Fortify Software Security Center databases as described in "Fortify Software Security Center Database" on page 23.

## WebInspect Enterprise Hardware Requirements

The following table lists the hardware requirements for the Micro Focus Fortify WebInspect Enterprise server.

Component	Requirement	Notes
Processor	3.0 GHz quad-core	
RAM	16 GB	
Hard disk	100+ GB	
Display	1920 x 1080	

## WebInspect Enterprise Software Requirements

Micro Focus Fortify WebInspect Enterprise server runs on and works with the software packages listed in the following table.

Package	Versions	Notes
Windows	Windows Server 2016	Recommended
	Windows Server 2019	

Package	Versions	Notes
.NET Platform	.NET Framework 4.8	
Web Server	IIS 10	Recommended
	IIS 7.5, 8.0, 8.5	
SQL Server	SQL Server 2019	Recommended
(English-language versions only)		No scan database limit
	SQL Server 2017	No scan database limit
	SQL Server 2016 SP2	No scan database limit
Browser	Mozilla Firefox 75 or later	Recommended
	Google Chrome 81 or later	
	Microsoft Edge 81 or later	
	Internet Explorer 11	

# **Administrative Console Requirements**

This section describes the hardware and software requirements for the Micro Focus Fortify WebInspect Enterprise Administrative Console.

You do not need to install the Fortify WebInspect Enterprise Administrative Console on the same machine as the Web Console of the Fortify WebInspect Enterprise server. The two consoles have different system requirements. In addition, you can install multiple Administrative Consoles on different machines connected to the same Fortify WebInspect Enterprise server.

## **Hardware Requirements**

The following table lists the hardware requirements for Fortify WebInspect Enterprise Administrative Console.

Component	Requirement	Notes
Processor	2.5 GHz dual-core	Minimum

Component	Requirement	Notes
RAM	4 GB	Minimum
Hard disk	2 GB	
Display	1980 x 1080	Recommended
	1280 x 1024	Minimum

#### **Software Requirements**

The Fortify WebInspect Enterprise Administrative Console runs on and works with the software packages listed in the following table.

Package	Versions	Notes
Windows	Windows 10	Recommended
	Windows 8.1	
	Windows Server 2016	
	Windows Server 2019	
.NET	.NET Framework 4.8	

# Fortify WebInspect Enterprise Ports and Protocols

This section describes the ports and protocols Micro Focus Fortify WebInspect Enterprise uses to make required and optional connections.

#### **Required Connections**

The following table lists the ports and protocols Micro Focus Fortify WebInspect Enterprise uses to make required connections.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect Enterprise Manager server to SQL database	SQL Server Standard/Enterprise	SQL TCP service on locally installed or remote host	1433 or user- specified	SQL TCP	Used to maintain the scan data and full Enterprise environment. Custom configurations of SQL Server are permitted, including port changes and encrypted communication.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect Enterprise Manager machine to Fortify Software Security Center server	Fortify Software Security Center server	User- specified Fortify Software Security Center server	8180 or user- specified	HTTP or HTTPS over SSL	As a modular add-on, Fortify WebInspect Enterprise requires a connection to its core Fortify Software Security Center server.
		cerner server			Note: This connection is required only if you integrate Fortify WebInspect Enterprise with Fortify Software Security Center.
Sensor machines to Fortify WebInspect Enterprise Manager server	Fortify WebInspect Enterprise server	User- specified Fortify WebInspect Enterprise server	443 or user- specified	HTTPS over SSL	Communication is two-way HTTP traffic, initiated in-bound by the Fortify WebInspect sensor machine.
Browser users to Fortify WebInspect Enterprise server UI	Fortify WebInspect Enterprise server	User- specified Fortify WebInspect Enterprise server	443 or user- specified	HTTPS over SSL	You can configure Fortify WebInspect Enterprise not to use SSL, but tests indicate that it might affect the product usability.
Browser user to Fortify Software Security Center UI	Fortify Software Security Center server	User- specified Fortify Software Security Center server	8180 or user- specified	HTTP or HTTPS over SSL	You can configure the Fortify Software Security Center server on any available port during installation.

## **Optional Connections**

The following table lists the ports and protocols Micro Focus Fortify WebInspect Enterprise uses to make optional connections.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect desktop machines to Fortify WebInspect Enterprise Manager server	Fortify WebInspect Enterprise server	User-specified Fortify WebInspect Enterprise server	443 or user- specified	HTTPS over SSL	Communication is two-way HTTP traffic, initiated in-bound by the Fortify WebInspect desktop machine.
Fortify WebInspect Enterprise Manager machine to Fortify License activation server	Fortify Licensing Service	https://licenseservice. fortify.microfocus.com	443	HTTPS over SSL	For one-time activation of the Fortify WebInspect Enterprise server license as well as periodic checks during an update. You may optionally use the following:  • An offline activation process instead of using this direct connection  • Upstream proxy with authentication instead of a direct Internet connection  Important! If you use the offline activation process, then you must also use the offline SmartUpdate process. For more information, see the Micro Focus Fortify WebInspect Enterprise User Guide or the WebInspect Enterprise Administrative Console help.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect Enterprise Manager machine to SmartUpdate server	SmartUpdate	https://smartupdate. fortify.microfocus.com	443	HTTPS over SSL	Used to acquire product updates as well as all connected clients (Fortify WebInspect sensors and Fortify WebInspect desktop). The administrator manually runs SmartUpdate, however Fortify recommends that you set up an automated schedule. New client releases are held in reserve until the Fortify WebInspect Enterprise administrator marks them as Approved, at which time they are automatically distributed from the Fortify WebInspect Enterprise Manager server. Can support the use of an upstream proxy with authentication instead of a direct Internet connection.  Important! Access to the SmartUpdate server also requires access to the licensing server. If you have restrictions on outgoing traffic, you must add both the SmartUpdate server and the licensing server to your allow list.
Fortify WebInspect Enterprise Manager machine to mail server	User's mail server	Email alerts	25 or user- specified	SMTP	Used for SMTP alerts for administration team. To enable mobile TXT alerts, you can use an SMTP-to-SMS gateway address.
Fortify WebInspect Enterprise Manager machine to SNMP Community	User's SNMP Community	SNMP alerts	162 or user- specified	SNMP	Used for SNMP alerts for administration team.

#### **Connections for Tools**

The following table lists the ports and protocols that the Micro Focus Fortify WebInspect Enterprise tools use to make connections.

Tool	Direction	Endpoint	Port	Protocol	Notes
Web Proxy	To target web application	localhost	8080 or user-specified	HTTP or HTTPS over SSL	Intercepts and displays web traffic
Web Form Editor	To target web application	localhost	Dynamic, 8100, or user-specified	HTTP or HTTPS over SSL	Intercepts web traffic and captures submitted forms
Login or Workflow Macro Recorders	To target web application	localhost	Dynamic, 8081, or user-specified	HTTP or HTTPS over SSL	Records browser sessions for replay during scan
Web Discovery	To targeted IP range	localhost	User-specified range	HTTP and HTTPS over SSL	Scanner for identifying rogue web applications hosted among the targeted scanned IP and port ranges  Use to provide targets to Fortify WebInspect (manually)

## Fortify WebInspect Enterprise Sensor

A Micro Focus Fortify WebInspect Enterprise sensor is a Micro Focus Fortify WebInspect sensor that runs scans on behalf of Fortify WebInspect Enterprise. See "Fortify WebInspect Requirements" on page 38 for more information.

To run a scan from Fortify WebInspect Enterprise, you must have at least one instance of Fortify WebInspect connected and configured as a sensor.

#### Fortify WebInspect Enterprise Notes and Limitations

- You can connect any instance of Micro Focus Fortify Software Security Center to only one instance
  of Micro Focus Fortify WebInspect Enterprise, and you can connect any instance of Fortify
  WebInspect Enterprise to only one instance of Fortify Software Security Center.
- For a Fortify WebInspect Enterprise environment to support Internet Protocol version 6 (IPv6), you must deploy the IPv6 protocol on each Fortify WebInspect Enterprise Administrative Console, each Fortify WebInspect Enterprise sensor, and the Fortify WebInspect Enterprise server.

# Fortify License and Infrastructure Manager Requirements

This section describes the hardware and software requirements for Micro Focus Fortify License and Infrastructure Manager (LIM).

## Hardware Requirements

Fortify recommends that you install the LIM on a system that conforms to the supported components listed in following table. Beta or pre-release versions of operating systems, service packs, and required third-party components are not supported.

Component	Requirement	Notes
Processor	2.5 GHz single-core or faster	Recommended
	1.5 GHz single-core	Minimum
RAM	2+ GB	Recommended
	1 GB	Minimum
Hard disk	50+ GB	Recommended
	20 GB	Minimum
Display	1280 x 1024	Recommended
	1024 x 768	Minimum

# **Software Requirements**

LIM runs on and works with the software packages listed in the following table.

Package	Versions	Notes
Windows Server	Windows Server 2016	
	Windows Server 2019	

Package	Versions	Notes
Web Server	IIS 8.5	Recommended
	IIS 7.5, 8.0, 10	
.NET Platform	.NET Framework 4.5, 4.6.1, 4.7	When configuring Roles and Features in Windows Server Manager, you might see .NET Framework 4.6 rather than 4.6.1 even though you have installed 4.6.1. You can confirm the installed version in the Command Prompt using the .\MSBuild.exe -version command in the following directory:  %windir%\Microsoft.NET\Framework\ <version></version>
	ASP.NET 4.5, 4.6, 4.7	
Browser	Internet Explorer 11	Recommended
	Mozilla Firefox 51.0	Recommended
	Mozilla Firefox 44.0, 47.0, 69.0	

# LIM on Docker Requirements

LIM on Docker has the requirements listed in the following table.

Software	Version
Windows	Windows Server 2019
Docker Enterprise	18.09 or later

# **Version Compatibility Matrix**

This section provides compatibility information for Micro Focus Fortify Software components.

## Fortify Software Component Compatibility

Micro Focus Fortify Software version 21.2.0 works with the component versions listed in the following table.

Component	Version
Micro Focus Fortify Software Security Center	21.2.0
Micro Focus Fortify Static Code Analyzer Tools (Micro Focus Fortify Audit Workbench, Fortify Secure Code Plugins, and Fortify Custom Rules Editor)	21.2.0
Micro Focus Fortify WebInspect Agent	21.2.0
Micro Focus Fortify WebInspect	21.2.0
Micro Focus Fortify WebInspect Enterprise	21.2.0

## **FPR File Compatibility**

Earlier versions of Micro Focus Fortify Software products cannot open and read FPR files generated by later versions of Fortify Software products. For example, Micro Focus Fortify Audit Workbench 19.1.0 cannot read 21.2.0 FPR files. However, later versions of Fortify Software products can open and read FPR files generated by earlier versions of Fortify Software products. For example, Fortify Audit Workbench version 21.2.0 can open and read version 19.1.0 FPR files.

FPR version numbers are determined as follows:

- The FPR version is the same as the version of the analyzer that initially generated it. For example, an FPR generated by Fortify Software version 21.2.0 also has the version number 21.2.0.
- The FPR version is the same as the version of the Micro Focus Fortify Software Security Center or Micro Focus Fortify Static Code Analyzer Tool used to change or audit the FPR.
- If you merge two FPRs, the resulting FPR has the version of the more recently generated FPR. For example, if you merge a version 19.1.0 FPR with a version 21.2.0 FPR, the resulting FPR has the version number 21.2.0.

You can only open 21.2.0 FPR files with Fortify Software Security Center or Fortify Static Code Analyzer Tools version 21.2.0 or later.

#### Caution Regarding Uploading FPRs to Fortify Software Security Center

Fortify Software Security Center keeps a project file that contains the latest scan results and audit information for each application. Fortify Audit Workbench and the Secure Code Plugins also use this project file for collaborative auditing.

Each time you upload an FPR to Fortify Software Security Center, it is merged with the existing project file. If the FPR has a later version number than the existing project file, the existing project file version changes to match the FPR. For Fortify Audit Workbench and the Secure Code Plugins to work with the updated FPR, they must be at least the same version as the FPR. For example, Fortify Audit Workbench 19.1.0 cannot open and read a 21.2.0 FPR.

# Virtual Machine Support

You can run Micro Focus Fortify Software products on an approved operating system in virtual machine environments. You must provide dedicated CPU and memory resources that meet the minimum hardware requirements. If you find issues that cannot be reproduced on the native environments with the recommended processing, memory, and disk resources, you must work with the provider of the virtual environment to resolve them.

**Note:** If you run Fortify Software products in a VM environment, Fortify strongly recommends that you have CPU and memory resources fully committed to the VM to avoid possible performance degradation.

# Technologies no Longer Supported in this Release

The following technologies and features are no longer supported in Fortify Software:

- Build Tools:
  - Xcodebuild 11.4.1, 11.5, 11.6, 11.7
- Compilers:
  - Clang 11.0.0 and 11.0.3
  - Swiftc 5.2.x
- Kubernetes Cluster Deployment (Fortify Software Security Center):
  - Kubernetes 1.16, 1.17
  - Helm 3.0, 3.1
- Language Support (Fortify Static Code Analyzer):
  - PHP 7.0, 7.1, and 7.2
- Operating Systems (Fortify Static Code Analyzer and Applications, Fortify Software Security Center, and Fortify ScanCentral SAST):
  - Red Hat Enterprise Linux version 6.x
- Platforms and Architectures:
  - Windows Server 2012 R2
  - macOS 10.14

## Technologies to Lose Support in the Next Release

The technologies listed in this topic are scheduled for deprecation in the next Micro Focus Fortify Software release.

**Note:** A deprecated technology is no longer recommended for use. Typically, the deprecated item will be removed from the product in a future release. When a technology is deprecated, Fortify recommends that you remove it from your workflow at your earliest convenience.

- Fortify Static Code Analyzer support for all Swift, Xcode, and Objective-C/C++ versions follows the deprecation path Apple Inc. adopts.
- Operating Systems (Fortify Static Code Analyzer and Applications)
  - Windows 8.1
  - macOS 10.15
- Build Tools (Fortify Static Code Analyzer)
  - Gradle versions prior to version 5.0
- Kubernetes Cluster Deployment (Fortify Software Security Center):
  - Kubernetes 1.18, 1.19
  - Helm 3.2-3.5
- Service Integrations
  - Jira 7.x, 8.0–8.12

# **Acquiring Fortify Software**

Micro Focus Fortify Software is available as an electronic download. For instructions on how to download the software from the Micro Focus Software Licenses and Downloads (SLD) portal (https://sld.microfocus.com/mysoftware/index), click **Contact Us / Self Help** to review the videos and the *Quick Start Guide*.

The following table lists the available packages and describes their contents.

File Name	Description
Fortify_SCA_and_Apps_ <version>_Windows.zip</version>	Fortify Static Code Analyzer and Applications package for Windows
	This package includes:
	Fortify Static Code Analyzer and Applications installer, which includes the following components:
	Fortify Static Code Analyzer

File Name	Description
	Fortify Audit Workbench
	Fortify Custom Rules Editor
	Fortify Plugin for Eclipse (Eclipse Complete Plugin)
	Fortify Analysis Plugin for IntelliJ and Android Studio
	Fortify Extension for Visual Studio
	Fortify Scan Wizard
	Sample projects
	Fortify License and Infrastructure Manager installer
	Fortify Remediation Plugin for Eclipse
	Fortify Security Assistant Plugin for Eclipse
	Fortify Remediation Plugin for JetBrains and Android Studio IDEs
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.
Fortify_SCA_and_Apps_ <version>_Windows.zip.sig</version>	Signature file for the Fortify Static Code Analyzer and Applications package for Windows
Fortify_SCA_and_Apps_ <version>_Linux.tar.gz</version>	Fortify Static Code Analyzer and Applications package for Linux  This package includes:
	Fortify Static Code Analyzer and Applications installer, which includes the following components:
	Fortify Static Code Analyzer
	Fortify Audit Workbench
	Fortify Custom Rules Editor
	Fortify Plugin for Eclipse (Eclipse Complete Plugin)
	Fortify Analysis Plugin for IntelliJ and Android Studio
	Fortify Scan Wizard
	Sample applications
	Fortify Remediation Plugin for Eclipse

File Name	Description
	Fortify Security Assistant Plugin for Eclipse
	Fortify Remediation Plugin for JetBrains and Android Studio IDEs
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.
Fortify_SCA_and_Apps_ <version>_Linux.tar.gz.sig</version>	Signature file for Fortify Static Code Analyzer for Linux
Fortify_SCA_and_Apps_ <version>_Mac.tar.gz</version>	Fortify Static Code Analyzer and Applications package for macOS  This package includes:
	Fortify Static Code Analyzer and Applications installer, which includes the following components:
	Fortify Static Code Analyzer
	Fortify Audit Workbench
	Fortify Custom Rules Editor (Eclipse Complete Plugin)
	Fortify Plugin for Eclipse
	Fortify Analysis Plugin for IntelliJ and Android Studio
	Fortify Scan Wizard
	Sample projects
	Fortify Remediation Plugin for Eclipse
	Fortify Security Assistant Plugin for Eclipse
	Fortify Remediation Plugin for JetBrains and Android Studio IDEs
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.
Fortify_SCA_and_Apps_ <version>_Mac.tar.gz.sig</version>	Signature file for the Fortify Static Code Analyzer and Applications package for macOS
Fortify_SCA_< <i>version&gt;</i> _ Solaris.tar.gz	Fortify Static Code Analyzer for Solaris
Fortify_SCA_ <version>_</version>	Signature file for Fortify Static Code Analyzer for Solaris

File Name	Description
Solaris.tar.gz.sig	
Fortify_SCA_< <i>version&gt;</i> _ AIX.tar.gz	Fortify Static Code Analyzer for AIX
Fortify_SCA_< <i>version&gt;</i> _ AIX.tar.gz.sig	Signature file for Fortify Static Code Analyzer for AIX
Fortify_SSC_Server_	Fortify Software Security Center package
<version>.zip</version>	This package includes:
	Fortify Software Security Center WAR file
	Fortify seed bundles
Fortify_SSC_Server_ <version>.zip.sig</version>	Signature file for Fortify Software Security Center
Fortify_ScanCentral_	Fortify ScanCentral SAST Controller package
Controller_ <version>.zip</version>	This package includes:
	Fortify ScanCentral SAST
	ScanCentral standalone client
Fortify_ScanCentral_ Controller_< <i>version&gt;</i> .zip.sig	Signature file for Fortify ScanCentral SAST Controller
ScanCentral_DAST_	Fortify ScanCentral DAST package
<version>.zip</version>	This package includes:
	Configuration Tool EXE
	Scanner service and supporting bits
	About Fortify Software Documentation (PDF)
ScanCentral_DAST_ <version>.zip.sig</version>	Signature file for Fortify ScanCentral DAST
SecurityToolkit_ < <i>version&gt;</i> .zip	Fortify WebInspect Toolkit package for use with Fortify WebInspect Enterprise
WebInspect_64_ <version>.zip</version>	Fortify WebInspect 64-bit package

File Name	Description
	This package includes:  Installer  About Fortify Software Documentation (PDF)
WebInspect_Agent_ <version>.zip</version>	Fortify WebInspect Agent package
WI_Enterprise_ <version>.zip</version>	Fortify WebInspect Enterprise package  This package includes the following components:  • Fortify WebInspect Enterprise server  • Fortify WebInspect Enterprise Administrative Console  • About Fortify Software Documentation (PDF)

## **About Verifying Software Downloads**

This topic describes how to verify the digital signature of the signed file that you downloaded from the Micro Focus Fortify Customer Support site. Verification ensures that the downloaded package has not been altered since it was signed and posted to the site. Before proceeding with verification, download the Fortify Software product files and their associated signature (\*.sig) files. You are not required to verify the package to use the software, but your organization might require it for security reasons.

#### Preparing Your System for Digital Signature Verification

**Note:** These instructions describe a third-party product and might not match the specific, supported version you are using. See your product documentation for the instructions for your version.

To prepare your system for electronic media verification:

- 1. Navigate to the GnuPG site (http://www.gnupg.org).
- 2. Download and install GnuPG Privacy Guard.
- 3. Generate a private key, as follows:
  - a. Run the following command (on a Windows system, run the command without the \$ prompt):
    - \$ gpg --gen-key
  - b. When prompted for key type, select DSA and Elgamal.
  - c. When prompted for a key size, select 2048.
  - d. When prompted for the length of time the key should be valid, select key does not expire.

- e. Answer the user identification questions and provide a passphrase to protect your private key.
- Download the Micro Focus GPG public keys (compressed tar file) from https://mysupport.microfocus.com/documents/10180/0/MF\_public\_keys.tar.gz.
- 5. Extract the public keys.
- 6. Import each downloaded key with GnuPG with the following command:

```
gpg --import <path_to_key>/<key_file>
```

#### **Verifying Software Downloads**

To verify that the signature file matches the downloaded software package:

- 1. Navigate to the directory where you stored the downloaded package and signature file.
- 2. Run the following command:

```
gpg --verify <file>.sig <filename>
For example:
```

```
gpg --verify Fortify_SSC_Server_21.2.0.zip.sig Fortify_SSC_Server_
21.2.0.zip
```

3. Examine the output to make sure that you receive verification that the software you downloaded is signed by Micro Focus Group Limited and is unaltered. Your output will include something similar to the following:

```
gpg: Signature made Fri, Oct 06, 2021 10:37:56 PM PDT using RSA key ID
AA71A9CF
gpg: Good signature from "Micro Focus Group Limited RS A2048 1"
```

**Note:** A warning message might indicate that the public key is not known to the system. You can ignore this warning or set up your environment to trust these public keys.

## **Assistive Technologies (Section 508)**

In accordance with section 508 of the Rehabilitation Act, Micro Focus Fortify Audit Workbench has been engineered to work with the JAWS screen reading software package from Freedom Scientific. JAWS provides text-to-speech support for use by the visually impaired. With JAWS, labels, text boxes, and other textual components can be read aloud, providing greater access to these technologies.

Micro Focus Fortify Software Security Center works well with the ChromeVox screen reader.

# Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email.

**Note:** If you are experiencing a technical issue with our product, do not email the documentation team. Instead, contact Micro Focus Fortify Customer Support at <a href="https://www.microfocus.com/support">https://www.microfocus.com/support</a> so they can assist you.

If an email client is configured on this computer, click the link above to contact the documentation team and an email window opens with the following information in the subject line:

#### Feedback on System Requirements (Fortify Software 21.2.0)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to fortifydocteam@microfocus.com.

We appreciate your feedback!