

Fortify Software

Software Version: 23.2.0

System Requirements

Document Release Date: Revision 3: April 4, 2024

Software Release Date: December 2023

Legal Notices

Open Text Corporation

275 Frank Tompa Drive, Waterloo, Ontario, Canada, N2L 0A1

Copyright Notice

Copyright 2001 - 2024 Open Text.

The only warranties for products and services of Open Text and its affiliates and licensors (“Open Text”) are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Open Text shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Trademark Notices

“OpenText” and other Open Text trademarks and service marks are the property of Open Text or its affiliates. All other trademarks or service marks are the property of their respective owners.

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 04, 2024. To check for recent updates or to verify that you are using the most recent edition of a document, go to:

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

Contents

Preface	7
Contacting Fortify Customer Support	7
For More Information	7
About the Documentation Set	7
Fortify Product Feature Videos	7
Change Log	8
Introduction	9
Software Delivery	9
Software Licenses	9
Fortify License and Infrastructure Manager Requirements	9
Hardware Requirements	10
Software Requirements	10
LIM on Docker Requirements	11
Fortify ScanCentral DAST Requirements	11
Architectural Best Practices	11
Fortify ScanCentral DAST Configuration Tool CLI	11
Software Requirements	12
Hardware Requirements	12
Fortify ScanCentral DAST Database Requirements	12
Database Recommendations	13
Important Recommendation About Disk I/O	13
Fortify ScanCentral DAST Core Components VM	13
Software Requirements	14
Hardware Requirements	14
Fortify ScanCentral DAST Sensor	14
Fortify WebInspect on Docker Option	14
Classic Fortify WebInspect Installation Option	14
Fortify Connect Client on Fortify ScanCentral DAST	15
Fortify ScanCentral DAST Ports and Protocols	15
DAST API Required Connections	15
DAST Global Service Required Connections	16
DAST Sensor Required Connections	16
DAST Utility Service Required Connections	17
Fortify Connect Server Required Connections	17

Fortify ScanCentral DAST Browsers	17
Standalone Web Macro Recorder Requirements	18
Running as Administrator	18
Software Integrations for Fortify ScanCentral DAST	18
Fortify ScanCentral SAST Requirements	18
Fortify ScanCentral SAST Controller Requirements	18
Fortify ScanCentral SAST Controller Hardware Requirements	18
Fortify ScanCentral SAST Controller Platforms and Architectures	19
Fortify ScanCentral SAST Controller Application Server	19
Fortify ScanCentral SAST Client and Sensor Requirements	19
Fortify ScanCentral SAST Client and Sensor Hardware Requirements	19
Sensor Disk Space Requirements	20
Fortify ScanCentral SAST Client and Sensor Software Requirements	20
Fortify ScanCentral SAST Client and Sensor Languages and Build Tools	20
Languages	20
Build Tools	21
Fortify Software Security Center Server Requirements	21
Hardware Requirements	22
Database Hardware Requirements	22
Database Performance Metrics for Minimum and Recommended Hardware Requirements	22
Platforms and Architectures	23
Application Servers	23
Fortify Software Security Center Database	23
Deploying to a Kubernetes Cluster (Optional Deployment Strategy)	25
Kubernetes Cluster Requirements	25
Locally-Installed Tools Required	25
Additional Requirements	25
Browsers	26
Authentication Systems	26
Single Sign-On (SSO)	26
BIRT Reporting	27
(Linux only) Installing Required Fonts	27
(Non-GUI Linux only) Installing Required Libraries	27
Service Integrations for Fortify Software Security Center	27
Fortify Static Code Analyzer Requirements	27
Hardware Requirements	28
Software Requirements	28

Platforms and Architectures	29
Languages	29
Libraries, Frameworks, and Technologies	31
Build Tools	38
Compilers	39
Fortify Software Security Content	39
Fortify Static Code Analyzer Applications and Tools Requirements	39
Hardware Requirements	39
Software Requirements	40
Platforms and Architectures	40
Service Integrations for Fortify Applications and Tools	40
Secure Code Plugins	41
Single Sign-On (SSO)	42
BIRT Reports	42
Fortify WebInspect Requirements	43
WebInspect Hardware Requirements	43
WebInspect Software Requirements	44
Support for Postman	45
Notes on SQL Server Editions	45
WebInspect on Docker	46
Notes on Image Databases	46
Hardware Requirements	46
Fortify WebInspect Ports and Protocols	47
Required Connections	47
Optional Connections	48
Connections for Tools	50
WebInspect Software Development Kit (SDK)	51
Software Integrations for Fortify WebInspect	51
Fortify WebInspect Agent Requirements	51
Platforms and Architectures	51
Java Runtime Environments	52
Java Application Servers	52
.NET Frameworks	52
IIS for Windows Server	52
Fortify WebInspect Enterprise Requirements	53
Installation and Upgrade Requirements	53
Integrations for Fortify WebInspect Enterprise	53
Fortify WebInspect Enterprise Database	53

- Fortify WebInspect Enterprise Hardware Requirements 54
- Fortify WebInspect Enterprise Software Requirements 54
- Administrative Console Requirements 55
 - Hardware Requirements 55
 - Software Requirements 55
- Fortify WebInspect Enterprise Ports and Protocols 56
 - Required Connections 56
 - Optional Connections 57
 - Connections for Tools 59
- Fortify WebInspect Enterprise Sensor 59
- Fortify WebInspect Enterprise Notes and Limitations 59
- Fortify Project Results (FPR) File Compatibility 60
- Virtual Machine Support 60
- Technologies no Longer Supported in this Release 61
- Technologies to Lose Support in the Next Release 61
- Acquiring Fortify Software 62
 - Verifying Software Downloads 67
 - Preparing Your System for Digital Signatory Verification 67
- Assistive Technologies (Section 508) 68
- Send Documentation Feedback 69

Preface

Contacting Fortify Customer Support

Visit the Support website to:

- Manage licenses and entitlements
- Create and manage technical assistance requests
- Browse documentation and knowledge articles
- Download software
- Explore the Community

<https://www.microfocus.com/support>

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 OpenText Product Documentation website:

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

To be notified of documentation updates between releases, subscribe to Fortify Product Announcements on the OpenText 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.

Document Revision	Changes
Revision 3: April 4, 2024	Updated: <ul style="list-style-type: none">• Incorporated changes available with Fortify Software Security Content 2024 Update 1 (see "Libraries, Frameworks, and Technologies" on page 31)• Xcode and swiftc version support (see "Build Tools" on page 38 and "Compilers" on page 39)
Revision 2: January 31, 2024	Updated: <ul style="list-style-type: none">• Fortify Static Code Analyzer gcc and g++ compiler support (see "Compilers" on page 39)
Revision 1: January 4, 2024	Updated: <ul style="list-style-type: none">• Incorporated changes available with Fortify Software Security Content 2023 Update 4 (see "Libraries, Frameworks, and Technologies" on page 31)• Xcode, swiftc, and Clang version support (see "Build Tools" on page 38, "Compilers" on page 39, and "Technologies to Lose Support in the Next Release" on page 61)

Introduction

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

- [OpenText™ Fortify License and Infrastructure Manager](#)
- [OpenText™ Fortify ScanCentral DAST](#)
- [OpenText™ Fortify ScanCentral SAST](#)
- [OpenText™ Fortify Software Security Center Server](#)
- [OpenText™ Fortify Static Code Analyzer](#)
- [OpenText™ Fortify Static Code Analyzer Applications and Tools](#)
- [OpenText™ Fortify WebInspect](#)
- [OpenText™ Fortify WebInspect Agent](#)
- [OpenText™ Fortify WebInspect Enterprise](#)

Software Delivery

Fortify Software is delivered electronically. See "[Acquiring Fortify Software](#)" on page 62 for more information.

Software Licenses

Fortify Software products require a license. For Fortify ScanCentral DAST, Fortify Static Code Analyzer, Fortify WebInspect, and 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 Software Licenses and Downloads (SLD) portal (<https://sld.microfocus.com>). Use the credentials that Customer Support has provided for access.

Note: Using Fortify License and Infrastructure Manager (LIM) to manage concurrent licenses for Fortify Static Code Analyzer requires LIM version 21.2.0 or later.

Fortify License and Infrastructure Manager Requirements

This section describes the hardware and software requirements for 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.

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. Beta or pre-release versions of operating systems, service packs, and required third-party components are not supported.

Package	Versions	Notes
Windows Server	Windows Server 2019	
	Windows Server 2022	
Web Server	IIS 8.5	Recommended
	IIS 7.5, 8.0, 10	
.NET Platform	.NET Framework 4.8	
	ASP.NET 4.8	
Browser	All modern browsers and versions	

LIM on Docker Requirements

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

Software	Version
Docker Enterprise	18.09 or later
Windows	Windows Server 2019
Red Hat Universal Base Image (UBI)	8.x x86_64

Fortify ScanCentral DAST Requirements

Before you install 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

The Fortify ScanCentral DAST core components are available as Docker images only. The Fortify WebInspect sensor is either a Docker image or a Windows computer with both Fortify WebInspect and the Fortify ScanCentral DAST sensor service installed.

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

- Run the DAST API, DAST Global Service, DAST Utility Service, and Fortify License and Infrastructure Manager (LIM) Docker containers on the same VM or on separate VMs.
- Do not run 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 *OpenText™ Fortify ScanCentral DAST Configuration and Usage Guide*.

Fortify ScanCentral DAST Configuration Tool CLI

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

Software Requirements

The Fortify ScanCentral DAST Configuration Tool CLI 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 6.0
Red Hat Enterprise Linux (RHEL)	8.x x86_64

Hardware Requirements

Fortify recommends that you use the Fortify ScanCentral DAST Configuration Tool CLI 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 supports the databases listed in the following table.

Package	Versions	Notes
SQL Server (English-language version only)	SQL Server 2022	Recommended No scan database limit; SQL Server must use Mixed Mode.
	SQL Server 2019	No scan database limit; SQL Server must use Mixed Mode.
	Azure SQL Server	Using Azure SQL Server outside the Azure infrastructure may cause poor performance for Fortify ScanCentral DAST. Fortify recommends using Azure SQL Server with Fortify ScanCentral DAST inside the Azure infrastructure only.

Package	Versions	Notes
	Amazon RDS for SQL Server	
PostgreSQL	PostgreSQL 15 or later	
	Azure PostgreSQL	
	Amazon RDS for PostgreSQL	

Database Recommendations

Fortify recommends that you configure the database server on a separate machine from either 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](#).

Important Recommendation About Disk I/O

Disk I/O encompasses the input/output operations on a physical disk. If you are reading data from a file, the processor must wait for the file to be read (the same applies to writing data to a file). Fortify ScanCentral DAST is a high I/O-intensive application, which affects performance. Make sure that your disk subsystem provides low read/write latency. Fortify recommends that you monitor disk I/O as the database grows.

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
Red Hat Enterprise Linux (RHEL)	8.x x86_64

Follow Docker recommendations for the Docker engine version to use for these versions of Windows and Red Hat images.

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 46](#).

Classic Fortify WebInspect Installation Option

For hardware and software requirements for this option, see ["WebInspect Hardware Requirements" on page 43](#) and ["WebInspect Software Requirements" on page 44](#). Additionally, if you plan to conduct Postman scans, see ["Support for Postman" on page 45](#).

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 7.0.0 or later.

Fortify Connect Client on Fortify ScanCentral DAST

The Fortify Connect client executable runs on and works with the software packages listed in the following table.

Software	Versions
ASP.NET Core Runtime	7.0
OpenSSH Client	7.6 or later

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.

Endpoint	Port	Protocol	Notes
Fortify Software Security Center DAST Global Service DAST Sensor Service	80	HTTP	If SSL is not configured, the port on the host running the container is forwarded to port 80 on the container. 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, Azure SQL Server, or	1433	TCP	This is the default SQL Server port.

Endpoint	Port	Protocol	Notes
Amazon RDS for SQL Server			
PostgreSQL, Azure PostgreSQL, or Amazon RDS for PostgreSQL	5432	TCP	This is the default PostgreSQL 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, Azure SQL Server, or Amazon RDS for SQL Server	1433	TCP	This is the default SQL Server port.
PostgreSQL, Azure PostgreSQL, or Amazon RDS for PostgreSQL	5432	TCP	This is the default PostgreSQL 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.

Endpoint	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, Azure SQL Server, or Amazon RDS for SQL Server	1433	TCP	This is the default SQL Server port.
PostgreSQL, Azure PostgreSQL, or Amazon RDS for PostgreSQL	5432	TCP	This is the default PostgreSQL port.

Fortify Connect Server Required Connections

The DAST API, DAST Global Service, DAST Utility Service, and DAST Scanner Service (when running in remote mode) access the internal host and internal port that are specified in the "FortifyConnectServerSettings" when configuring your ScanCentral DAST environment.

Fortify ScanCentral DAST Browsers

For Fortify ScanCentral DAST browser requirements, see ["Browsers" on page 26](#) for Fortify Software Security Center.

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	Version
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
Fortify Software Security Center	23.2.0
Kubernetes on Azure	1.19 or later

Fortify ScanCentral SAST Requirements

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

Fortify ScanCentral SAST Controller Requirements

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

Fortify ScanCentral SAST 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	$\langle \text{num_jobs_per_day} \rangle \times (\langle \text{size_avg_MBS} \rangle + \langle \text{size_avg_FPR} \rangle + \langle \text{size_avg_SCA_log} \rangle) \times \langle \text{number_days_data_is_persisted} \rangle$
Remote translation and scan	$\langle \text{num_jobs_per_day} \rangle \times (\langle \text{size_avg_archived_project_with_dependencies} \rangle + \langle \text{size_avg_FPR} \rangle + \langle \text{size_avg_SCA_log} \rangle) \times \langle \text{num_days_data_is_persisted} \rangle$

By default, data is persisted for seven days.

Fortify ScanCentral SAST 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 Server 2022
Linux	Red Hat Enterprise Linux 7.x, 8, 9 SUSE Linux Enterprise Server 15

Fortify ScanCentral SAST Controller Application Server

The Fortify ScanCentral SAST Controller installation includes the supported Apache Tomcat version 9.0.x that runs on JRE 11.

Fortify ScanCentral SAST Client and Sensor Requirements

This section describes the requirements for the Fortify ScanCentral SAST clients and sensors.

Fortify ScanCentral SAST Client and Sensor Hardware Requirements

Fortify ScanCentral SAST clients and sensors run on any Windows and Linux system that Fortify Static Code Analyzer supports. Fortify ScanCentral SAST clients and sensors are installed on build machines that run Fortify Static Code Analyzer. See ["Fortify Static Code Analyzer Requirements" on page 27](#) for hardware, platform, and architecture requirements.

Sensor Disk Space Requirements

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

Intended Use	Equation
Remote scan only	$\langle num_of_scans \rangle \times (\langle size_avg_MBS \rangle + \langle size_avg_FPR \rangle + \langle size_avg_SCA_log \rangle) \times \langle num_days_data_is_persisted \rangle$
Remote translation and scan	$\langle num_jobs_per_day \rangle \times (\langle size_avg_archived_project_with_dependencies \rangle + \langle size_avg_project_with_dependencies \rangle + \langle size_avg_FPR \rangle + \langle size_avg_SCA_log \rangle) \times \langle number_days_data_is_persisted \rangle$

By default, data is persisted for seven days.

Fortify ScanCentral SAST Client and Sensor Software Requirements

Fortify ScanCentral SAST clients and sensors are installed on build machines that run Fortify Static Code Analyzer. In addition to the requirements for specific project types listed in ["Software Requirements" on page 28](#) for Fortify Static Code Analyzer, the following requirements must be met for Fortify ScanCentral SAST clients:

- Standalone clients require Java 11 or later.
- Packaging of .NET projects on a Linux system requires .NET 5.0 or later.

Fortify ScanCentral SAST Client and Sensor Languages and Build Tools

Fortify ScanCentral SAST supports offloading both the translation and scan phases of code analysis for the languages and build tools described in this section.

Languages

Fortify ScanCentral SAST supports offloading translation and scanning to sensors for the following languages. See ["Languages" on page 29](#) for specific supported versions.

- .NET applications in C# and Visual Basic (VB.NET) (.NET Core, .NET Standard, ASP.NET)
See ["Software Requirements" on page 28](#) for Fortify Static Code Analyzer's specific requirements for .NET applications.
- ABAP
- Apex
- Classic ASP
- COBOL
- ColdFusion

- Dockerfiles
- Go
- Java
- JavaScript
- Kotlin

Kotlin support requires using the `-bt gradle` option for Android projects that use the Android plugin.

- PHP
- PL/SQL
- Python
- Ruby
- T-SQL
- TypeScript
- Visual Basic 6.0

Build Tools

For offloading translation and scanning, Fortify ScanCentral SAST clients support the build tools listed in the following table.

Build Tool	Versions
dotnet	6.0, 7.0, 8.0
Gradle	5.0–8.3
Maven	3.5.x, 3.6.x, 3.8.x, 3.9.x
MSBuild	14.0, 15.x, 16.x, 17.0–17.8

Fortify Software Security Center Server Requirements

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

Hardware Requirements

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

Server	Component	Minimum Required	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:

- $\langle num_issues \rangle$ represents the total number of issues in the system
- $\langle size_of_artifacts \rangle$ represents the total size in KB of all uploaded artifacts and analysis 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

Database	Issues per Hour Minimum Configuration	Issues per Hour Recommended Configuration
Oracle	231,392	3,020,950
SQL Server	725,028	3,625,140

Platforms and Architectures

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

Operating System	Versions
Windows	Server 2016 Server 2019 Server 2022
Linux	Red Hat Enterprise Linux 7.x, 8, 9 SUSE Linux Enterprise Server 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

Fortify Software Security Center supports Apache Tomcat version 9.0.x for the following JDK versions:

- Oracle JDK 17
- Red Hat OpenJDK 17
- SUSE OpenJDK 17
- Zulu OpenJDK 17 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

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

Caution! Fortify Software Security Center does not support MySQL or Oracle in the cloud.

Important! Disk I/O encompasses the input/output operations on a physical disk. If you are reading data from a file on a disk, the processor must wait for the file to be read (the same applies to writing data to a file). Fortify Software Security Center is a high I/O-intensive application, which affects performance. Make sure that your disk subsystem provides low read/write latency. Fortify recommends that you monitor disk I/O as the database grows.

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

Database	Versions	Collation / Character Sets	Driver
MySQL	8.0 (Community Edition)	latin1_general_cs and utf8_bin	The driver is included in the Fortify Software Security Center WAR file.
Oracle	12c Release 2 19c (18.3)	AL32UTF8 for all languages WE8MSWIN1252 for US English	
SQL Server	2017 2019 2022 Amazon RDS for SQL Server Azure SQL Database	SQL_Latin1_General_CP1_CS_AS	

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. Professional Services can assist you with this process.

Deploying to a Kubernetes Cluster (Optional Deployment Strategy)

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

Kubernetes Cluster Requirements

The following are the *minimum* requirements for the default installation:

- Kubernetes versions 1.26, 1.27, or 1.28
- Kubernetes Persistent Volumes with optional support for Pod security context fsGroup option (fsGroup support is required for using a non-default container user ID.)
- Kubernetes LoadBalancer Service type (recommended)
- 28 GB of available RAM and 8 CPUs on a single Kubernetes node
- 4 GiB of storage for persistent volume

Locally-Installed Tools Required

- A kubectl command-line tool
Fortify recommends that you use the same kubectl command-line tool version as the Kubernetes cluster version, or follow the Kubernetes version skew policy (see <https://kubernetes.io/releases/version-skew-policy>).
- Helm command-line tool, versions 3.11 or 3.12
To determine which Helm command-line tool version matches your Kubernetes cluster version, see the Helm Version Support Policy (https://helm.sh/docs/topics/version_skew).
- (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 the Fortify Docker repository, contact mfi-fortifydocker@opentext.com with your first name, your last name, and your Docker ID. 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 (see the *OpenText™ Fortify Software Security Center User Guide* for details)

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
- 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	116 or later
Microsoft Edge	114 or later
Mozilla Firefox	116 or later
Safari	14 or later

Authentication Systems

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 Authentication Service (CAS) SSO
- HTTP Headers SSO (Oracle SSO, CA SSO)
- SAML 2.0 SSO
- SPNEGO/Kerberos SSO
- X.509 SSO

BIRT Reporting

Fortify Software Security Center custom reports support BIRT Report Designer version 4.13.0.

(Linux only) Installing Required Fonts

To generate BIRT reports on a Linux system from Fortify Software Security Center, you must install the fontconfig library, DejaVu Sans fonts, and DejaVu Serif fonts on the server. If you need to, you can download these fonts from <https://github.com/dejavu-fonts/dejavu-fonts>.

(Non-GUI Linux only) Installing Required Libraries

To generate reports on a non-GUI Linux system, you must install the GTK and X Window System (X11) libraries.

Service Integrations for Fortify Software Security Center

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

Service	Application	Versions
Bug tracking	OpenText™ ALM Quality Center	12.50
	Azure DevOps	Not applicable
	Note: Only basic user password authentication is supported.	
	Azure DevOps Server	2019, 2020
	Bugzilla	5.0.x
	Jira Software Server	8.13, 9.10
	Jira Software Cloud	Not applicable
Dynamic assessments	Fortify WebInspect Enterprise	23.2.x
	Fortify ScanCentral DAST	23.2.x

Fortify Static Code Analyzer Requirements

This section describes the system requirements for Fortify Static Code Analyzer.

Hardware Requirements

Fortify recommends that you install Fortify Static Code Analyzer on a high-end processor with the hardware requirements described in the following table.

RAM	Processor	Programming Language to Analyze
16 GB	Quad-core	Non-dynamic languages
32 GB	Eight-core	Dynamic languages such as JavaScript, TypeScript, Python, PHP, and Ruby

Increasing the number of processor cores and RAM both result in faster processing. If your software is complex, you might require more RAM or processors. See the information about improving performance in the *OpenText™ Fortify Static Code Analyzer User Guide* for recommendations.

Software Requirements

Fortify Static Code Analyzer requires Java 17. The Fortify Static Code Analyzer installation includes an embedded OpenJDK/JRE version 17.0.7.

The following table lists software requirements for analysis of specific project types.

Language	Requirement	Operating System
Visual Studio, MSBuild, or .NET projects	.NET Framework 4.8 or later	Windows
	.NET Runtime 6.0	Windows Linux
ABAP/BSP	Fortify ABAP Extractor is supported on a system running SAP release 7.02, SP level 0006.	
Bicep	.NET Runtime 6.0	Windows Linux
COBOL	Microsoft Visual C++ 2017 Redistributable (x86) Note: This is not a requirement for legacy COBOL analysis.	Windows
Scala	Scala Fortify compiler plugin is available in the Maven Central Repository	All

Platforms and Architectures

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

Operating System	Platforms / Versions
Windows	Windows 10, 11 Windows Server 2019, 2022
Linux	CentOS Linux 7.x (7.6 or later) Red Hat Enterprise Linux 7.x (7.2 or later), 8.x (8.2 or later), 9.x SUSE Linux Enterprise Server 15 Ubuntu 20.04.1 LTS, 22.04.1 LTS
macOS	12, 13
AIX	7.1 Important! You must have the IBM XL C/C++ for AIX 16.1 Runtime environment package installed.

Languages

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

Language / Framework	Versions
.NET	5.0, 6.0, 7.0, 8.0
.NET Core	2.0–3.1
.NET Framework	2.0–4.8
ABAP/BSP	6
ActionScript	3.0
Apex	55–58
Bicep	0.12.x–0.15.x

Language / Framework	Versions
C#	5, 6, 7, 8, 9, 10, 11, 12
C	C11, C17 (see "Compilers" on page 39)
C++	C++11, C++14, C++17, C++20 (see "Compilers" on page 39)
Classic ASP (with VBScript)	2.0, 3.0
COBOL	IBM Enterprise COBOL for z/OS 6.1 (or earlier), 6.2, and 6.3 with CICS, IMS, DB2, and IBM MQ Visual COBOL 6.0, 7.0, 8.0
ColdFusion	8, 9, 10
Dart	2.x (2.12 and later), 3.0
Docker (Dockerfiles)	any
Flutter	2.0–3.3
Go	1.12–1.20 Note: Fortify Static Code Analyzer supports analyzing Go code on Windows and Linux.
HCL	2.0 Note: HCL language support is specific to Terraform and supported cloud provider Infrastructure as Code (IaC) configurations.
HTML	5 or earlier
Java (including Android)	7–17
JavaScript	ECMAScript 2015–2023
JSON	ECMA-404
JSP	1.2, 2.1

Language / Framework	Versions
Kotlin	1.3–1.8
MXML (Flex)	4
Objective-C/C++	2.0 (see "Compilers" on page 39)
PHP	7.3, 7.4, 8.0, 8.1, 8.2
PL/SQL	8.1.6
Python	2.6, 2.7, 3.0–3.12
Ruby	1.9.3
Scala	2.11, 2.12, 2.13
Solidity	0.4.12–0.8.21
Swift	5–5.9 (see "Compilers" on page 39 for supported swiftc versions)
T-SQL	SQL Server 2005, 2008, 2012
TypeScript	2.8, 3.x, 4.x, 5.0
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

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

Adobe Flex Blaze DS

Apache Slide

iBatis

Mozilla Rhino

Spring MVC

System Requirements

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

Kotlin

Kotlin support includes all libraries covered for Java and the following Kotlin libraries.

Kotlin standard library

Scala

Scala support includes all libraries covered for Java and the following Scala libraries.

Akka HTTP
Scala Play
Scala Slick

.NET

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

C

ActiveDirectory LDAP	CURL Library	MySQL	OpenSSL	Sun RPC
Apple System Logging (ASL)	GLib	Netscape LDAP	POSIX Threads	WinAPI
	JNI	ODBC	SQLite	

C++

Boost Smart Pointers	STL
MFC	WMI

SQL

Oracle ModPLSQL

PHP

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

JavaScript/TypeScript/HTML5

Angular	GraphQL.js	JS-YAML	React	SAPUI5/OpenUI5
Apollo Server	Handlebars	Mustache	React Native	Sequelize
Bluebird	Helmet	Node.js Azure Storage	React Native Async Storage	Underscore.js
child-process-promise	iOS JavaScript Bridge	Node.js Core	React Router	Vue
Express	jQuery			

Python

aiopg	Graphene	memcache-client	psycpg2	requests
Amazon Web Services (AWS) Lambda	gRPC	_mysql	pycrypto	simplejson
Amazon SageMaker	httplib2	MySQL Connector/Python	PyCryptodome	six
Azure Functions	Jinja2	MySQLdb	pycurl	Twisted Mail
Django	LangChain	OpenAI	pylibmc	urllib3
Flask	libxml2	oslo.config	PyMongo	WebKit
Google Cloud	lxml		PyYAML	

Ruby

MySQL	Rack	Thor
pg	SQLite	

Objective-C

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

Swift

Alamofire	Apple CoreFoundation	Apple MessageUI	Apple WatchKit	Zip
Apple AddressBook	Apple CoreLocation	Apple Security	Apple WebKit	ZipArchive
Apple CFNetwork	Apple Foundation	Apple Social	Hpple	ZIPFoundation
Apple ClockKit	Apple HealthKit	Apple SwiftUI	Realm	ZipUtilities
Apple CommonCrypto	Apple	Apple UIKit	SQLite	ZipZap
Apple CoreData	LocalAuthentication	Apple WatchConnectivity	SSZipArchive	

COBOL

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

Go

- GORM
- logrus
- gRPC

Configuration

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

Infrastructure as Code: Amazon Web Services

API Gateway	Database Migration Service (DMS)	ElastiCache	Lightsail	Rekognition
AppSync	DocumentDB	EMR	Location Service	Route 53
Athena	DynamoDB	FinSpace	Mainframe Modernization	SageMaker
Aurora	EC2	FSx	Managed Streaming for Apache Kafka (MSK)	Secrets Manager
Backup	Elastic Block Store (EBS)	Global Accelerator	MemoryDB for Redis	Simple Notification Service (SNS)
Batch	Elastic Container Registry (ECR)	Glue	MQ	Simple Queue Service (SQS)
Certificate Manager	Elastic Container Service (ECS)	GuardDuty	Neptune	Simple Storage Service (S3)
CloudFormation	Elastic File System (EFS)	Identity and Access Management (IAM)	OpenSearch Service	Timestream
CloudFront	Elastic Kubernetes Service (EKS)	Image Builder	Quantum Ledger Database (QLDB)	Transfer Family
CloudTrail	Elastic Load Balancing (ELB)	Key Management Service (KMS)	RDS	VPC
CloudWatch		Kinesis	Redshift	WorkSpaces Family
CodeStar		Kinesis Video Streams		
Cognito				
Config				

Infrastructure as Code: Microsoft Azure

App Service	Batch	Database for MySQL	IoT Hub	SignalR Service
Automation	Blob Storage	Database for PostgreSQL	Key Vault	Site Recovery
Azure Active Directory Domain Services	Cache for Redis	Databricks	Logic Apps	Spring Apps
Azure Health Data Services	Cognitive Search	Defender for Cloud	Media Services	SQL
Azure Kubernetes Service (AKS)	Container Registry	Event Hubs	Monitor	Storage Accounts
	Cosmos DB	Front Door	NetApp Files	Virtual Machine Scale Sets
	Database for MariaDB	IoT Central	Policy	Virtual Machines
			Portal	Web PubSub

Infrastructure as Code: Google Cloud

Apigee API Management	Cloud DNS	Cloud Spanner	Filestore	Identity and Access Management (IAM)
App Engine	Cloud Functions	Cloud SQL	Google Cloud Platform	Media CDN
BigQuery	Cloud Key Management	Cloud Storage	Google Kubernetes Engine (GKE)	Pub/Sub
Cloud Bigtable	Cloud Load Balancing	Compute Engine		Secret Manager
	Cloud Logging			

Secrets

.netrc	Defined	HashiCorp (Terraform, Vault)	New Relic	Sendbird
1Password	DES	Heroku	npm	SendGrid
Actually Good Encryption (AGE)	DigitalOcean	HexChat	NuGet	Sentry
Adafruit	Docker	HubSpot	Okta	SHA1
Adobe	Doppler	Intercom	OpenVPN	SHA256
Airtable	Droneci	Java	Password in comment	SHA512
Algolia	Dropbox	JFrog (Artifactory)	Password in connection string	Shippo
Alibaba (Aliyun)	Duffel	JSON Web Token	PowerShell script	Shopify
Amazon (AWS, MWS)	Dynatrace	KDE Wallet (Kwallet)	Password in URI	Sidekiq
Apple (macOS)	EasyPost	KeePass	Password Safe	Slack
Apache HTTP	Encryption key	Kraken	PayPal (Braintree)	SonarQube
Asana	Etsy	Kucoin	Pidgin	Square
Atlassian	Facebook	LaunchDarkly	Plaid	Squarespace
Authress	Fastly	Linear	Planetscale	StackHawk
Basic access authentication	Finicity	LinkedIn	PostgreSQL	Stripe
bcrypt	Finnhub	Lob	Postman	Sumologic
Beamer	Flickr	Mailchimp	Prefect	Telegram
Bearer token	Flutterwave	Mailgun	Pulumi	Travis
Bitbucket	Frame.io	Mapbox	PuTTY	Trello
Bittrex	Freshbooks	Mattermost	PyPI	Twilio
Brevo (Sendinblue)	Git	MD5	RapidAPI	Twitch
Clojars	GitHub	MessageBird	Readme	Twitter
Code Climate	GitLab	Microsoft (Azure App Storage, Cosmos DB, Functions and Bitlocker, PowerShell, RDP, VBScript)	RSA Security	Typeform
Codecov	Gitter	Microsoft (Outlook)	Ruby (Ruby on Rails, RubyGems)	Yandex
Coinbase	GNOME	Mutt	Sauce Labs	Zendesk
Confluent	GNU (Bash)	MySQL	Secret key	
Contentful	GoCardless	Netlify	Secure Shell Protocol (SSH)	
Databricks	Google (API, Google Cloud, OAuth)			
Datadog	Grafana			

Build Tools

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

Build Tool	Versions	Notes						
Ant	1.10.x or earlier							
dotnet	6.0, 7.0, 8.0							
Gradle	5.0–7.4.x, 7.6, 8.0.2, 8.1, 8.3	Fortify Static Code Analyzer Gradle integration supports the following language and platform combinations: <table border="1" data-bbox="760 747 1409 957"> <tbody> <tr> <td>Java</td> <td>Windows, Linux, macOS</td> </tr> <tr> <td>Kotlin</td> <td>Windows, Linux</td> </tr> <tr> <td>C, C++</td> <td>Linux</td> </tr> </tbody> </table>	Java	Windows, Linux, macOS	Kotlin	Windows, Linux	C, C++	Linux
	Java	Windows, Linux, macOS						
Kotlin	Windows, Linux							
C, C++	Linux							
	5.6.4 - 8.3.x	Fortify Static Code Analyzer Gradle Plugin supports the following language and platform combinations: <table border="1" data-bbox="760 1094 1409 1230"> <tbody> <tr> <td>Java</td> <td>Windows, Linux</td> </tr> <tr> <td>Kotlin</td> <td>Windows, Linux</td> </tr> </tbody> </table>	Java	Windows, Linux	Kotlin	Windows, Linux		
Java	Windows, Linux							
Kotlin	Windows, Linux							
Maven	3.0.5, 3.5.x, 3.6.x, 3.8.x, 3.9.x							
MSBuild	14.0, 15.x, 16.x, 17.0–17.8	MSBuild integration is supported on Windows and Linux						
xcodebuild	14, 14.0.1, 14.1, 14.2, 14.3, 14.3.1, 15, 15.0.1, 15.1, 15.2							

Compilers

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

Compiler	Versions	Operating Systems
gcc	GNU gcc 6.x–10.4, 11, 12	Windows, Linux, macOS
	GNU gcc 4.9, 5.x	Windows, Linux, macOS, AIX
g++	GNU g++ 6.x–10.4, 11, 12	Windows, Linux, macOS
	GNU g++ 4.9, 5.x	Windows, Linux, macOS, AIX
OpenJDK javac	9, 10, 11, 12, 13, 14, 17	Windows, Linux, macOS, AIX
Oracle javac	7, 8, 9	Windows, Linux, macOS
cl (MSVC)	2015, 2017, 2019, 2022	Windows
Clang	14.0.0, 14.0.3, 15.0.0	macOS
Swiftc	5.7, 5.7.1, 5.8, 5.8.1, 5.9, 5.9.2 ¹	macOS

¹Fortify Static Code Analyzer supports applications built in the following Xcode versions: 14, 14.0.1, 14.1, 14.2, 14.3, 14.3.1, 15, 15.0.1, 15.1, 15.2.

Fortify Software Security Content

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.

Fortify Static Code Analyzer Applications and Tools Requirements

This section describes the system requirements for Fortify Static Code Analyzer applications and tools.

Hardware Requirements

Fortify Static Code Analyzer applications and tools require a system with at least 8 GB of RAM. In addition, Fortify Static Code Analyzer applications used to perform code analysis have the same hardware requirements as Fortify Static Code Analyzer (see ["Hardware Requirements" on page 28](#)).

Software Requirements

Fortify Static Code Analyzer applications and tools require Java 17. The Fortify Applications and Tools installation includes an embedded OpenJDK/JRE version 17.0.7.

To run Fortify Audit Workbench, Fortify Custom Rules Editor, or Fortify Scan Wizard remotely from a local server, you must use a remote desktop connection such as Virtual Network Computing (VNC) or Windows Remote Desktop Connection. Do not use X Window System (X11) forwarding to access these Fortify Static Code Analyzer applications from a remote server.

Platforms and Architectures

Fortify Static Code Analyzer applications and tools support the platforms and architectures listed in the following table.

Operating System	Platforms / Versions
Windows	10, 11
Linux	Red Hat Enterprise Linux 7.x, 8 SUSE Linux Enterprise Server 15 <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Important! Fortify Audit Workbench, Fortify Custom Rules Editor, and Fortify Scan Wizard require GTK version 3.22 or later. Some platform versions include this requirement such as Red Hat Enterprise Linux 7.4 and later.</p> </div>
macOS	12, 13

Service Integrations for Fortify Applications and Tools

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

Service	Versions	Supported Applications
ALM Quality Center	12.50	Fortify Audit Workbench Fortify Plugin for Eclipse

Service	Versions	Supported Applications
Azure DevOps Server	2019, 2020	Fortify Audit Workbench Fortify Plugin for Eclipse Fortify Extension for Visual Studio
Azure DevOps Note: Only basic user password authentication is supported.	Not applicable	Fortify Audit Workbench Fortify Plugin for Eclipse
Bugzilla	5.0.x	Fortify Audit Workbench Fortify Plugin for Eclipse Fortify Extension for Visual Studio
Jira Software Server	8.13, 9.10	Fortify Audit Workbench Fortify Plugin for Eclipse
Jira Software Cloud	Not applicable	Fortify Audit Workbench Fortify Plugin for Eclipse
Fortify Software Security Center Bug Tracker	23.2.0	Fortify Audit Workbench Fortify Plugin for Eclipse Fortify Extension for Visual Studio

Secure Code Plugins

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

Secure Code Plugin	IDE	Versions	Notes
Fortify Plugin for Eclipse	Eclipse	2021-x, 2022-x	

Secure Code Plugin	IDE	Versions	Notes
		2023-03, 2023-06, 2023-09	
Fortify Analysis Plugin for IntelliJ IDEA and Android Studio	IntelliJ IDEA	2021.x 2022.x 2023.1, 2023.2	
	Android Studio	2021.x 2022.1, 2022.2, 2022.3	
Fortify Extension for Visual Studio	Visual Studio	2017 2019 2022	Visual Studio Community, Professional, and Enterprise editions for Windows are supported. For supported MSBuild versions, see "Build Tools" on page 38 .

Single Sign-On (SSO)

Fortify Audit Workbench, the Fortify Plugin for Eclipse, and the Fortify Extension for Visual Studio support X.509 SSO to connect with Fortify Software Security Center.

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.

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.

To run the BIRTReportGenerator utility in a Linux Docker container, you must have the X Window System (X11) libraries installed in the image. The X11 libraries provide the graphical user interface API that BIRT requires for data visualization.

Red Hat Enterprise and CentOS Example:

```
yum -y install xorg-x11-xauth xorg-x11-fonts-* xorg-x11-utils
```

Ubuntu Example:

```
apt-get install x11-apps
```

Fortify WebInspect Requirements

Before you install 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 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

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 11	This version is required for conducting scans of gRPC APIs.
	Windows Server 2019	
	Windows Server 2022	
.NET Platform	.NET Framework 4.8	
SQL Server (English-language versions only)	SQL Server 2019	Recommended No scan database limit
	SQL Server 2022	No scan database limit
	Azure SQL Server	Using Azure SQL Server outside the Azure infrastructure may cause poor performance for Fortify WebInspect. Fortify recommends using Azure SQL Server with Fortify WebInspect inside the Azure infrastructure only.
SQL Server Express (English-language versions only)	SQL Server 2019 Express	Recommended 10 GB scan database limit
	SQL Server 2022 Express	10 GB scan database limit
Portable Document Format	Adobe Acrobat Reader 11	Recommended
	Adobe Acrobat Reader	Minimum

Package	Versions	Notes
	8.1.2	

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 <https://www.npmjs.com/package/newman>.

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. 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
Windows	Windows Server 2019	The Windows version supports the process isolation runtime mode.
Red Hat Universal Base Image (UBI)	8.x x86_64	The Linux version supports conducting scans of gRPC APIs.

Follow Docker recommendations for the Docker engine version to use for these versions of Windows and Red Hat images.

Notes on Image Databases

SQL Server Express is the default database for the Fortify WebInspect images. There is a 10 GB scan database limit.

Hardware Requirements

Fortify recommends that you install 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 Fortify WebInspect uses to make required and optional connections.

Required Connections

The following table lists the ports and protocols 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	HTTP	Fortify WebInspect must connect to the web application or web service to be scanned.
Fortify WebInspect to SQL database	SQL Server Express, SQL Server Standard/Enterprise, or Azure SQL Server	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.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect to Certificate Revocation List (CRL)	Sectigo CRL	http://crl.sectigo.com/SectigoPublicCodeSigningCAR36.crl	80	HTTP	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 Fortify WebInspect uses to make optional connections.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
Fortify WebInspect to Fortify License activation server	Remote Fortify Licensing Service	https://licenseservice.fortify.microfocus.com	443	HTTPS over SSL	For one-time activation of a Fortify WebInspect Named User license. You may optionally use the following: <ul style="list-style-type: none"> An offline activation process instead of using this direct connection Upstream proxy with authentication instead of a direct connection

Direction	Endpoint	URL or Details	Port	Protocol	Notes
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 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 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 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	HTTP	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.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
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 ALM Quality Center	ALM Quality Center server	User-specified ALM Quality Center server	Server-specified	HTTP or HTTPS over SSL	Permits submission of findings as defects to the ALM Quality Center bug tracker.

Connections for Tools

The following table lists the ports and protocols that the 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)

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 Fortify WebInspect.

Product	Versions
Fortify WebInspect Enterprise	23.2.0
OpenText™ ALM Quality Center	11.5, 12.01, 12.21, 12.53
<p>Note: You must also install the ALM Quality Center Connectivity tool to connect Fortify WebInspect to ALM Quality Center.</p>	
Fortify Software Security Center	23.2.0
OpenText™ Unified Functional Testing (UFT) One	11.5

Fortify WebInspect Agent Requirements

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 or later) 6 (SR6 or later)
Oracle HotSpot	5, 6, 7, 8
Oracle JRockit	5, 6 (R27.6 or 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 or earlier
Jetty	9.3
WildFly	20.0.1 or 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 Enterprise Requirements

Before you install 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 Fortify WebInspect Enterprise 22.2.0 to Fortify WebInspect Enterprise 23.2.0. You cannot upgrade directly from any other versions of Fortify WebInspect Enterprise. For detailed information about upgrades, see the *OpenText™ Fortify WebInspect Enterprise Installation and Implementation Guide*.

Integration with 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 23.2.0 before you install a new instance of Fortify WebInspect Enterprise or upgrade from Fortify WebInspect Enterprise 22.2.0. 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 Fortify WebInspect Enterprise with the following components:

- Fortify WebInspect sensors 23.2.0
- Fortify WebInspect Agent 23.2.0

Fortify WebInspect Enterprise Database

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

Fortify WebInspect Enterprise Hardware Requirements

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

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

Fortify WebInspect Enterprise Software Requirements

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	
.NET Platform	.NET Framework 4.8	
Web Server	IIS 10	Recommended
	IIS 7.5, 8.0, 8.5	
SQL Server (English-language versions only)	SQL Server 2019	Recommended No scan database limit
	SQL Server 2017	No scan database limit
	SQL Server 2016 SP2	No scan database limit
Browser	All modern browsers and versions	

Administrative Console Requirements

This section describes the hardware and software requirements for the 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
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 Fortify WebInspect Enterprise uses to make required and optional connections.

Required Connections

The following table lists the ports and protocols 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.
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. 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.

Direction	Endpoint	URL or Details	Port	Protocol	Notes
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 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	<p>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:</p> <ul style="list-style-type: none"> • An offline activation process instead of using this direct connection • Upstream proxy with authentication instead of a direct Internet connection <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Important! If you use the offline activation process, then you must also use the offline SmartUpdate process. For more information, see the <i>OpenText™ Fortify WebInspect Enterprise User Guide</i> or the WebInspect Enterprise Administrative Console help.</p> </div>

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	<p>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.</p> <p>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.</p>
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 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 Fortify WebInspect Enterprise sensor is a Fortify WebInspect sensor that runs scans on behalf of Fortify WebInspect Enterprise. See "[Fortify WebInspect Requirements](#)" on page 43 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 Fortify Software Security Center to only one instance of 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 Project Results (FPR) File Compatibility

Earlier versions of Fortify Software products cannot open and read FPR files generated by later versions of Fortify Software products. For example, Fortify Audit Workbench 22.2.0 cannot read 23.2.0 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 23.2.0 can open and read version 22.2.0 FPR files.

The FPR file version is 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 23.2.0 also has the version 23.2.0.
- The FPR version is the same as the version of the Fortify Software Security Center server or Fortify Applications and Tools 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 22.2.0 FPR with a version 23.2.0 FPR, the resulting FPR has the version 23.2.0.

You can only open 23.2.0 FPR files with Fortify Software Security Center or Fortify Static Code Analyzer applications and tools versions 23.2.0 or later.

Caution Regarding Uploading FPR Files 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 22.2.0 cannot open and read a 23.2.0 FPR.

Virtual Machine Support

You can run 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 performance degradation.

Technologies no Longer Supported in this Release

The following technologies are no longer supported in Fortify Software:

- Integrated Development Environments (Fortify Secure Code Plugins):
 - Eclipse 2020-x
 - IntelliJ IDEA 2020.x
 - Android Studio 2020.x
- Kubernetes Cluster Deployment (Fortify Software Security Center):
 - Kubernetes 1.23–1.25
 - Helm 3.9–3.10
- Build Tools:
 - xcodebuild 13, 13.1
- Compilers:
 - Swiftc 5.5, 5.5.1

Technologies to Lose Support in the Next Release

The technologies listed in this topic are scheduled for deprecation in the next 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.
- Build Tools:
 - xcodebuild 13.2, 13.2.1, 13.3, 13.3.1, 13.4, 13.4.1
- Compilers:
 - swiftc 5.5.2, 5.6, 5.6.1
 - Clang 13.0.0, 13.1.6
- Integrated Development Environments (Fortify Secure Code Plugins):
 - Eclipse 2021-x
 - IntelliJ IDEA 2021.x

- Kubernetes Cluster Deployment (Fortify Software Security Center):
 - Kubernetes 1.26, 1.27
 - Helm 3.11

Acquiring Fortify Software

Fortify Software is available as an electronic download. For instructions on how to download the software from the Software Licenses and Downloads (SLD) portal (<https://sld.microfocus.com>), 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_<version>_Windows.zip	<p>Fortify Static Code Analyzer package for Windows</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Static Code Analyzer installer, which includes the following components: <ul style="list-style-type: none"> • Fortify Static Code Analyzer • Fortify ScanCentral SAST client • Fortify Software Security Center fortifyclient utility • Fortify License and Infrastructure Manager installer • Fortify Static Code Analyzer Custom Rules Guide bundle • About Fortify Software Documentation <p>Note: Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.</p>
Fortify_SCA_<version>_Windows.zip.sig	Signature file for the Fortify Static Code Analyzer package for Windows
Fortify_SCA_<version>_Linux.tar.gz	<p>Fortify Static Code Analyzer package for Linux</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Static Code Analyzer installer, which includes the following components: <ul style="list-style-type: none"> • Fortify Static Code Analyzer

File Name	Description
	<ul style="list-style-type: none"> • Fortify ScanCentral SAST client • Fortify Static Code Analyzer Custom Rules Guide bundle • About Fortify Software Documentation <p>Note: Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.</p>
Fortify_SCA_<version>_Linux.tar.gz.sig	Signature file for Fortify Static Code Analyzer for Linux
Fortify_SCA_<version>_Mac.tar.gz	Fortify Static Code Analyzer package for macOS This package includes: <ul style="list-style-type: none"> • Fortify Static Code Analyzer installer • Fortify Static Code Analyzer Custom Rules Guide bundle • About Fortify Software Documentation <p>Note: Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.</p>
Fortify_SCA_<version>_Mac.tar.gz.sig	Signature file for the Fortify Static Code Analyzer package for macOS
Fortify_SCA_<version>_AIX.tar.gz	Fortify Static Code Analyzer for AIX This package includes: <ul style="list-style-type: none"> • Fortify Static Code Analyzer installer • Fortify Static Code Analyzer Custom Rules Guide bundle • About Fortify Software Documentation
Fortify_SCA_<version>_AIX.tar.gz.sig	Signature file for Fortify Static Code Analyzer for AIX
Fortify_SCA_Samples_<version>.zip	Code samples to help you learn to use Fortify Static Code Analyzer
Fortify_SCA_Samples_<version>.zip.sig	Signature file for Fortify Samples

File Name	Description
Fortify_Tools_<version>_Windows.zip	<p>Fortify Static Code Analyzer Applications and Tools package for Windows</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Applications and Tools installer, which includes the following components: <ul style="list-style-type: none"> • Fortify Audit Workbench • Fortify Custom Rules Editor • Fortify Plugin for Eclipse (Eclipse Complete Plugin) • Fortify Analysis Plugin for IntelliJ IDEA and Android Studio • Fortify Extension for Visual Studio • Fortify Scan Wizard • Fortify Security Assistant Plugin for Eclipse • About Fortify Software Documentation
Fortify_Tools_<version>_Windows.zip.sig	Signature file for the Fortify Applications and Tools package for Windows
Fortify_Tools_<version>_Linux.tar.gz	<p>Fortify Static Code Analyzer Applications and Tools package for Linux</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Applications and Tools installer, which includes the following components: <ul style="list-style-type: none"> • Fortify Audit Workbench • Fortify Custom Rules Editor • Fortify Plugin for Eclipse (Eclipse Complete Plugin) • Fortify Analysis Plugin for IntelliJ IDEA and Android Studio • Fortify Extension for Visual Studio • Fortify Scan Wizard • Fortify Security Assistant Plugin for Eclipse • About Fortify Software Documentation

File Name	Description
Fortify_Tools_<version>_Linux.tar.gz.sig	Signature file for Fortify Applications and Tools for Linux
Fortify_Tools_<version>_Mac.tar.gz	<p>Fortify Static Code Analyzer Applications and Tools package for macOS</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Applications and Tools installer, which includes the following components: <ul style="list-style-type: none"> • Fortify Audit Workbench • Fortify Custom Rules Editor • Fortify Plugin for Eclipse (Eclipse Complete Plugin) • Fortify Analysis Plugin for IntelliJ IDEA and Android Studio • Fortify Extension for Visual Studio • Fortify Scan Wizard • Fortify Security Assistant Plugin for Eclipse • About Fortify Software Documentation
Fortify_Tools_<version>_Mac.tar.gz.sig	Signature file for the Fortify Applications and Tools package for macOS
Fortify_SSC_Server_<version>.zip	<p>Fortify Software Security Center package</p> <p>This package includes:</p> <ul style="list-style-type: none"> • Fortify Software Security Center WAR file • Fortify seed bundles • About Fortify Software Documentation • ScanCentral_DAST_<version>.zip, which includes: <ul style="list-style-type: none"> • DAST.ConfigurationToolCLI.exe • scancentral-dast-config.tar (Docker container with the DAST.ConfigurationToolCLI.exe and SecureBase) • SampleSettingsFile.json • SampleSettingsFile.yaml

File Name	Description
	<ul style="list-style-type: none"> • ScanCentral DAST - Sensor Service.zip (sensor service and supporting bits) • appsettings.json (configures the sensor service) • Dynamic_Addons.zip (installers for optional FAST and Scan Scaling components) • About Fortify Software Documentation
Fortify_SSC_Server_<version>.zip.sig	Signature file for Fortify Software Security Center
Fortify_ScanCentral_Controller_<version>.zip	Fortify ScanCentral SAST Controller package This package includes: <ul style="list-style-type: none"> • Fortify ScanCentral SAST • ScanCentral standalone client • About Fortify Software Documentation
Fortify_ScanCentral_Controller_<version>.zip.sig	Signature file for Fortify ScanCentral SAST Controller
ScanCentral_DAST_<version>.zip.sig	Signature file for Fortify ScanCentral DAST
SecurityToolkit_<version>.zip	Fortify WebInspect Toolkit package for use with Fortify WebInspect Enterprise
WebInspect_64_<version>.zip	Fortify WebInspect 64-bit package This package includes: <ul style="list-style-type: none"> • Installer • About Fortify Software Documentation
WebInspect_Agent_<version>.zip	Fortify WebInspect Agent package

File Name	Description
WI_Enterprise_<version>.zip	<p>Fortify WebInspect Enterprise package</p> <p>This package includes the following components:</p> <ul style="list-style-type: none"> • Fortify WebInspect Enterprise server • Fortify WebInspect Enterprise Administrative Console • About Fortify Software Documentation

Verifying Software Downloads

This topic describes how to verify the digital signature of the signed file that you downloaded from the 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.
4. Download the OpenText 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>
```

Assistive Technologies (Section 508)

In accordance with section 508 of the Rehabilitation Act, 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.

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 Customer Support at <https://www.microfocus.com/support> 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 23.2.0)

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@opentext.com.

We appreciate your feedback!