# **opentext**™

# Fortify Software

Software Version: 24.2.0

# System Requirements

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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 July 24, 2024. 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 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 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 Fortify Community:

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## **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 1: July 25,	Updated:
2024	<ul> <li>Fortify ScanCentral DAST sensor requirements to clarify required version of .NET SDK Core Runtime (see "Fortify ScanCentral DAST Sensor" on page 14)</li> </ul>
	<ul> <li>Added Fortify Audit Assistant to the list of Fortify Software Security Center integrations (see "Service Integrations for Fortify Software Security Center" on page 29)</li> </ul>
	<ul> <li>Embedded OpenJDK/JRE to version 17.0.11 included in Fortify Static Code Analyzer version 24.2.1 (see "Software Requirements" on page 30)</li> </ul>
	<ul> <li>Xcode version support included in Fortify Static Code Analyzer version 24.2.1 (see "Build Tools" on page 40)</li> </ul>
	<ul> <li>Added support for MSBuild 17.10 (see "Build Tools" on page 40 and "Client Languages and Build Tools" on page 22)</li> </ul>
	<ul> <li>Incorporated changes available with Fortify Software Security Content 2024 Update 2 (see "Libraries, Frameworks, and Technologies" on page 33)</li> </ul>
	Removed:
	Docker Enterprise from LIM Docker requirements.

## Introduction

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

- OpenText<sup>™</sup> Fortify License and Infrastructure Manager
- OpenText<sup>™</sup> Fortify ScanCentral DAST
- OpenText<sup>™</sup> Fortify ScanCentral SAST
- OpenText<sup>™</sup> Fortify Software Security Center Server
- OpenText<sup>™</sup> Fortify Static Code Analyzer
- OpenText<sup>™</sup> Fortify Static Code Analyzer Applications and Tools
- OpenText<sup>™</sup> Fortify WebInspect
- OpenText™ Fortify WebInspect Agent
- OpenText<sup>™</sup> Fortify WebInspect Enterprise

## **Software Delivery**

Fortify Software is delivered electronically. See "Acquiring Fortify Software" on page 65 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 product 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	ASP.NET Core Runtime 8.0.2 Hosting Bundle	
Browser	All modern browsers and versions	

## LIM on Docker Requirements

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

Software	Version
Red Hat Universal Base Image (UBI)	8. <i>x</i> 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  $OpenText^{\mathsf{TM}}$  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 8.0
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-	2022	Recommended  No scan database limit; SQL Server must use Mixed Mode.
		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 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 25.

#### 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 48.

#### Classic Fortify WebInspect Installation Option

For hardware and software requirements for this option, see "WebInspect Hardware Requirements" on page 45 and "WebInspect Software Requirements" on page 46. Additionally, if you plan to conduct Postman scans, see "Support for Postman" on page 47.

**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 8.x.x.

## 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	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			Host port mapping is customizable to the container port.
DAST Sensor Service			
Fortify Software Security Center DAST Global 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.
DAST Sensor Service			
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	ТСР	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	НТТР	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.

#### Kafka Required Connections

When Kafka is configured, Fortify Software Security Center publishes messages to Kafka using the list of servers in the stream.kafka.bootstrapServers specified in the app.properties for Fortify Software Security Center. Fortify ScanCentral DAST consumes messages from Kafka using the list of servers listed in the SSCSettings.KafkaSettings.BootstrapServers in the settings file used to configure Fortify ScanCentral DAST.

## Fortify ScanCentral DAST Browsers

For Fortify ScanCentral DAST browser requirements, see "Browsers" on page 27 for Fortify Software Security Center.

## Event-based Web Macro Recorder (Standalone)

By default, the Event-based Web Macro Recorder is installed as part of the Fortify WebInspect toolkit when Fortify WebInspect is installed on Windows. However, Fortify ScanCentral DAST allows you to download a Windows or Mac version of the Event-based Web Macro Recorder and install it as a standalone tool.

#### **Hardware Requirements**

We recommend that you install the standalone Event-based Web Macro Recorder on a system that conforms to the supported components listed in the following table.

Component	Requirement	Notes
Processor	Intel x86	Windows
	Apple silicon	macOS
RAM	16 GB	
Hard disk	1 TB	

## Windows Version Software Requirements

The Windows version of the Event-based 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

#### **Mac Version Software Requirements**

The Mac version of the Event-based Web Macro Recorder tool runs on and works with the software packages listed in the following table.

Package	Versions
Operating System	macOS 14

#### Running as Administrator

The standalone Web Macro Recorder tool requires administrative privileges for proper operation of all features. Refer to the Windows or macOS 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	24.2.0
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.

## **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
	Server 2022
Linux	Red Hat Enterprise Linux 7.x, 8, 9
	SUSE Linux Enterprise Server 15

#### **Controller Application Server**

The Fortify ScanCentral SAST Controller installation includes the supported Apache Tomcat version 10.1.x that runs on JRE 17.

## Fortify ScanCentral SAST Client and Sensor Requirements

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

#### 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 embedded clients and sensors are installed on build machines that run Fortify Static Code Analyzer. See "Fortify Static Code Analyzer Requirements" on page 29 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	<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.

#### **Client and Sensor Software Requirements**

Fortify ScanCentral SAST embedded clients and sensors are installed on build machines that run Fortify Static Code Analyzer.

#### Clients

In addition to the requirements for specific project types listed in "Software Requirements" on page 30 for Fortify Static Code Analyzer, the following requirements must be met for Fortify ScanCentral SAST clients:

- Standalone clients require Java 17 or later.
- Packaging of .NET projects requires the software listed in the following table.

Operating System	Software
Windows	.NET Framework 4.8 or later .NET runtime 6.0
Linux	.NET runtime 6.0

#### Sensors

The following table lists sensor software requirements for remote translation of specific project types.

Language	Software	Operating Systems
.NET applications	.NET SDK 8.0	Windows, Linux

Language	Software	Operating Systems
.NET web applications	.NET Framework 4.8 or later	Windows
	.NET SDK 8.0	
COBOL	Not applicable	Windows

#### **Client Languages and Build Tools**

Fortify ScanCentral SAST supports remote translation and scan for the languages and build tools described in this section.

#### Languages

Fortify ScanCentral SAST clients support generating packages with sources and dependencies for remote translation on sensors for the following languages. See "Languages" on page 31 for specific supported versions.

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

  See "Software Requirements" on page 30 for the specific Fortify Static Code Analyzer requirements for .NET applications.
- ABAP
- Apex
- Classic ASP
- COBOL
- ColdFusion
- Dockerfiles
- Go
- Java
- JavaScript
- Kotlin

Kotlin support requires use of 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**

Fortify ScanCentral SAST clients support the build tools listed in the following table.

<b>Build Tool</b>	Versions
dotnet	6.0-8.0
Gradle	5.0-8.6
Maven	3.5.x, 3.6.x, 3.8.x, 3.9.x
MSBuild	14.0, 15.x, 16.x, 17.0-17.10

# 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:

((<num\_issues>\*30 KB) + <size\_of\_artifacts>) ÷ 1,000,000

#### where:

- <num\_issues> represents the total number of issues in the system
- <size\_of\_artifacts> 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
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 is not tested on all Linux variants, most distributions are not known to have issues.

## **Application Server**

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.

**Important!** Fortify does not support the installation of any third-party performance monitoring agents on the Tomcat instance that is hosting Fortify Software Security Center.

## Fortify Software Security Center Database

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

#### **Important!**

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

Database	Versions	Collation / Character Sets	Driver
Oracle	12c Release 2 19c (19.3)	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	

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 1.28 or 1.29
- Kubernetes Persistent Volumes with optional support for Pod security context fsGroup option (fsGroup support is required to use 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 Version Skew Policy on the Kubernetes website.
- Helm command-line tool versions 3.12, 3.13, or 3.14
   To determine which Helm command-line tool version matches your Kubernetes cluster version, see the Helm Version Support Policy on the Helm website.
- (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 mfifortifydocker@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 license file

#### **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 Reports**

Fortify Software Security Center custom reports support BIRT Report Designer version 4.14.0.

#### (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 the DejaVu Fonts website.

#### (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
	<b>Note:</b> Only basic user password authentication is supported.	арріісаме
	Azure DevOps Server	2019 2020
	Bugzilla	5.0.x
	Jira Software Server	8.13 9.10
	Jira Software Cloud	Not applicable
Dynamic assessments	Fortify ScanCentral DAST	24.2.0
	Fortify WebInspect Enterprise	23.2.x
Issue Auditing	OpenText™ Fortify Audit Assistant	Not applicable
	OpenText™ Fortify Audit Assistant on Premises	23.2.0 or later

## 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  $OpenText^{TM}$  Fortify Static Code Analyzer User Guide for recommendations.

## **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	13, 14		
AIX	7.1		
	<b>Important!</b> You must have the IBM XL C/C++ for AIX 16.1 Runtime environment package installed.		

## **Software Requirements**

Fortify Static Code Analyzer requires Java 17. The Fortify Static Code Analyzer installation includes an embedded OpenJDK/JRE version 17.0.11.

To use Fortify Static Code Analyzer, you must have Read and Write permissions for the Fortify Static Code Analyzer installation directory.

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

Language	Software	Operating Systems	
Visual Studio, MSBuild, or .NET projects	.NET Framework 4.8 or later (MSBuild only)	Windows	
	.NET runtime 6.0 (MSBuild only) .NET SDK 8.0	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)	Windows	
	<b>Note:</b> This is not a requirement for legacy COBOL analysis.		
Scala	Scala Fortify compiler plugin is available in the Maven Central Repository	All	

## Languages

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

Language / Framework	Versions
.NET (Core)	2.0-8.0
.NET Framework	2.0-4.8
ABAP/BSP	6
ActionScript	3.0

Language / Framework	Versions
Apex	55–60
Bicep	0.12.x-0.15.31
C#	5–12
С	C11, C17, C23 (see "Compilers" on page 41)
C++	C++11, C++14, C++17, C++20 (see "Compilers" on page 41)
Classic ASP (with VBScript)	2.0, 3.0
COBOL	IBM Enterprise COBOL for z/OS 6.1–6.3 (CICS, IMS, DB2, and IBM MQ)
	Visual COBOL 6.0–8.0
ColdFusion	8–10
Dart	2.12-3.1
Docker (Dockerfiles)	any
Flutter	2.0-3.13
Go	1.12-1.22
HCL	2.0
	<b>Note:</b> HCL language support is specific to Terraform and supported cloud provider Infrastructure as Code (IaC) configurations.
HTML	5 or earlier
Java (including Android)	7–21
JavaScript	ECMAScript 2015–2023
JSON	ECMA-404
JSP	1.2-2.1

Language / Framework	Versions
Kotlin	1.3-1.9
MXML (Flex)	4
Objective-C/C++	2.0 (see "Compilers" on page 41)
PHP	7.3-8.3
PL/SQL	8.1.6
Python	2.6-2.7, 3.0-3.12
Ruby	1.x
Scala	2.11-2.13, 3.3-3.4
Solidity	0.4.12-0.8.21
Swift	5.0–5.10 (see "Compilers" on page 41 for supported swiftc versions)
T-SQL	SQL Server 2005, 2008, 2012
TypeScript	3.6-5.2
VBScript	2.0, 5.0
Visual Basic (VB.NET)	15.0–16.9
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

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

#### 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 Slick
Scala Play	

#### .NET

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

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

## JavaScript/TypeScript/HTML5

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

## Python

aiopg	Google Cloud	lxml	Paramiko	requests
Amazon Web Services	Graphene	memcache-client	psycopg2	simplejson
(AWS) Lambda	gRPC	_mysql	pycrypto	six
Amazon SageMaker	httplib2	MySQL	PyCryptodome	TensorFlow
Anthropic Claude	Jinja2	Connector/Python	pycurl	Twisted Mail
Azure Functions	LangChain	MySQLdb	pylibmc	urllib3
Django	libxml2	OpenAl	PyMongo	WebKit
Flask		oslo.config	PyYAML	

## Ruby

MySQL	Rack	Thor
pg	SQLite	

## Objective-C

AFNetworking	Apple CoreFoundation	Apple	Apple	SBJson
Apple AddressBook	Apple CoreLocation	LocalAuthentication	WatchConnectivity	SFHFKeychainUtils
Apple AppKit	Apple CoreServices	Apple MessageUI	Apple WatchKit	SSZipArchive
Apple CFNetwork	Apple CoreTelephony	Apple Security	Apple WebKit	ZipArchive
Apple ClockKit	Apple Foundation	Apple Social	Hpple	ZipUtilities
Apple CommonCrypto	Apple HealthKit	Apple UIKit	Objective-Zip	ZipZap
,,	, tppie i leamine.		Realm	2.02.40
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	SQL
	System	
DLI	MQ	

#### Go

GORM logrus gRPC

## Configuration

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

#### Infrastructure as Code: Amazon Web Services

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

#### Infrastructure as Code: Microsoft Azure

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

#### Infrastructure as Code: Google Cloud

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

#### Secrets

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

# **Build Tools**

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

<b>Build Tool</b>	Versions	Notes	
Ant	1.10.x or earlier		
Bazel	6.4.0		
dotnet	6.0-8.0		
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 operating system combinations:	
		Language	Operating Systems
		Java	Windows, Linux, macOS
		Kotlin	Windows, Linux
		C, C++	Linux
	5.6.4 - 8.3.x	-	alyzer Gradle Plugin supports the d operating system combinations:
		Language	Operating Systems
		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- 17.10	MSBuild integration is supported on Windows and Linux	
xcodebuild	14.3, 14.3.1, 15, 15.0.1, 15.1, 15.2, 15.3, 15.4		

## **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, 13	Windows, Linux, macOS
	GNU gcc 4.9, 5.x	Windows, Linux, macOS, AIX
g++	GNU g++ 6.x-10.4, 11, 12, 13	Windows, Linux, macOS
	GNU g++ 4.9, 5.x	Windows, Linux, macOS, AIX
OpenJDK javac	9, 10, 11, 12, 13, 14, 17, 21	Windows, Linux, macOS, AIX
Oracle javac	7, 8, 9	Windows, Linux, macOS
cl (MSVC)	2015, 2017, 2019, 2022	Windows
Clang	14.0.3, 15.0.0	macOS
Swiftc	5.8, 5.8.1, 5.9, 5.9.2, 5.10 <sup>1</sup>	macOS

<sup>&</sup>lt;sup>1</sup>Fortify Static Code Analyzer supports applications built in the following Xcode versions: 14.3, 14.3.1, 15, 15.0.1, 15.1, 15.2, 15.3, 15.4.

## 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 30).

#### 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, 9  SUSE Linux Enterprise Server 15	
	<b>Important!</b> 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.	
macOS	13, 14	

## **Software Requirements**

Fortify Static Code Analyzer applications and tools require Java 17. The Fortify Applications and Tools installation includes an embedded OpenJDK/JRE version 17.0.10.

To use Fortify Static Code Analyzer applications and tools, you must have Read and Write permissions for the Fortify Applications and Tools installation directory.

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.

## 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	Fortify Audit Workbench
	2020	Fortify Plugin for Eclipse
		Fortify Extension for Visual Studio
Azure DevOps	Not applicable	Fortify Audit Workbench
<b>Note:</b> Only basic user password authentication is supported.		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	Fortify Audit Workbench
	9.10	Fortify Plugin for Eclipse
Jira Software Cloud	Not applicable	Fortify Audit Workbench
		Fortify Plugin for Eclipse
Fortify Software Security Center Bug	24.2.0	Fortify Audit Workbench
Tracker		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	2022-x 2023-x 2024-03	

Secure Code Plugin	IDE	Versions	Notes
Fortify Analysis Plugin for IntelliJ IDEA and Android Studio	IntelliJ IDEA	2022.2 2022.3 2023.x 2024.1	
	Android Studio	2022.x 2023.1 2023.2	
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 40.

#### 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.

Example for Red Hat Enterprise and CentOS:

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

Example for Ubuntu:

```
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	SQL Server 2019	Recommended
(English-language versions only)		No scan database limit
versions only)	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	SQL Server 2019	Recommended
(English-language	Express	10 GB scan database limit
versions only)	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 <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 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	НТТР	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	Sectigo CRL	http://crl.sectigo.com/ SectigoPublicCodeSigningCAR36.crl	80	НТТР	Offline installations of Fortify WebInspect or
List (CRL)					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:

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 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	Fortify WebInspect LIM	Lease Concurrent User license	443	Web services over SSL	Required for Fortify WebInspect client to lease and use a

Direction	Endpoint	URL or Details	Port	Protocol	Notes
and Infrastructure Manager (LIM)	(Local Licensing Service)				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	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

Direction	Endpoint	URL or Details	Port	Protocol	Notes
					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.
Fortify WebInspect to Debricked API	Debricked service	https://www.debricked.com/api/ https://www.debricked.com/select/	443	HTTPS over SSL	If enabled, provides Debricked Health Metrics and extends the local NVD to include the newest CVEs.

## **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	Target host network	User- specified	HTTP and HTTPS	Scanner for identifying rogue web applications hosted among the targeted

Tool	Direction	Endpoint	Port	Protocol	Notes
	targeted IP range	range	range	over SSL	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	
<b>Note:</b> You must also install the ALM Quality Center Connectivity tool to connect Fortify WebInspect to ALM Quality Center.		
Fortify Software Security Center	24.2.0	
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 Framework

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.

## Important Information About This Release

Fortify WebInspect Enterprise was not updated for the 24.2.0 release. However, Fortify WebInspect Enterprise 23.2.0 is compatible with Fortify Software Security Center 24.2.0 and the Fortify WebInspect 24.2.0 sensor.

# Integrations for Fortify WebInspect Enterprise

You can integrate Fortify WebInspect Enterprise with the following components:

- Fortify WebInspect sensors 24.2.0
- Fortify WebInspect Agent 24.2.0

## 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 25.

## 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	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
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.
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	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 OpenText™ 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 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 45 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

Fortify Software products support opening and uploading FPR files in adjacent releases. Fortify Software products can open and accept for upload:

- Older FPR files (within the Product Support Lifecycle policy)
   For example, Fortify Audit Workbench version 24.2.0 can open version 23.2.0 FPR files.
- FPR files that are one version later

For example, you can upload version 24.2.0 FPR files to Fortify Software Security Center version 23.2.0. Fortify Audit Workbench version 23.2.0 can open version 24.2.0 FPR files.

Fortify Software products do not support opening and uploading FPR files generated by later versions of Fortify Software products when the versions are more than one version apart. For example, uploading a version 24.2.0 FPR to Fortify Software Security Center version 23.1.0 and opening a version 23.1.0 FPR file in Fortify Audit Workbench is not supported.

Ideally, Fortify recommends that you keep your Fortify Software product versions synchronized so that you are working with FPR file versions that have the same version as your products.

The FPR file version is determined as follows:

- The FPR version is the same version of the analyzer that generated it. For example, an FPR generated by Fortify Static Code Analyzer version 24.2.0 also has version 24.2.0.
- The FPR version is the same version of Fortify Software Security Center or Fortify Applications and Tools that changed or audited 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 23.2.0 FPR with a version 24.2.0 FPR, the resulting FPR has the version 24.2.0.

#### Caution Regarding Uploading FPR Files to Fortify Software Security Center

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

Each time you upload an FPR to Fortify Software Security Center, it is merged with the existing FPR. If the FPR has a later version number than the existing FPR, the existing FPR version changes to match the newest 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:

- 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, 2022.1
  - Android Studio 2021.x
- Kubernetes Cluster Deployment (Fortify Software Security Center):
  - Kubernetes 1.26, 1.27
  - Helm 3.11
- Single Sign-On (Fortify Audit Workbench and Fortify Plugin for Eclipse):
  - SPNEGO/Kerberos SSO

# 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 14, 14.0.1, 14.1, 14.2
- Compilers:
  - swiftc 5.7, 5.7.1, 5.7.2
  - Clang 14.0.0
- Databases (Fortify Software Security Center):
  - Oracle version 12c Release 2
- Integrated Development Environments (Fortify Secure Code Plugins):
  - Eclipse 2022-x
  - IntelliJ IDEA 2022.x
  - Android Studio 2022.x
- Kubernetes Cluster Deployment (Fortify Software Security Center):
  - Kubernetes 1.28
  - Helm 3.12, 3.13
- Operating Systems (Fortify Software Security Center and Fortify ScanCentral SAST Controller):
  - Red Hat Enterprise Linux 7.x
- Service Integrations (Fortify Applications and Tools and Fortify Software Security Center):
  - Bugzilla
- Single Sign-On (Fortify Software Security Center):

The following SSO protocols will be removed in a future release:

- SPNEGO/Kerberos SSO
- Central Authentication Service (CAS) SSO

# **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_< <i>version</i> >_ Windows.zip	Fortify Static Code Analyzer package for Windows
g	This package includes:

File Name	Description		
	<ul> <li>Fortify Static Code Analyzer installer, which includes the following components:</li> <li>Fortify Static Code Analyzer</li> </ul>		
	Fortify ScanCentral SAST client		
	Fortify License and Infrastructure Manager installer		
	Fortify Static Code Analyzer Custom Rules Guide bundle		
	About Fortify Software Documentation		
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.		
Fortify_SCA_< <i>version</i> >_ Windows.zip.sig	Signature file for the Fortify Static Code Analyzer Windows package		
Fortify_SCA_ <version>_</version>	Fortify Static Code Analyzer package for Linux		
Linux.tar.gz	This package includes:		
	<ul> <li>Fortify Static Code Analyzer installer, which includes the following components:</li> </ul>		
	Fortify Static Code Analyzer		
	Fortify ScanCentral SAST client		
	Fortify Static Code Analyzer Custom Rules Guide bundle		
	About Fortify Software Documentation		
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.		
Fortify_SCA_< <i>version&gt;</i> _ Linux.tar.gz.sig	Signature file for the Fortify Static Code Analyzer Linux package		
Fortify_SCA_ <version>_</version>	Fortify Static Code Analyzer package for macOS		
Mac.tar.gz	This package includes:		
	Fortify Static Code Analyzer installer, which includes the following components:		
	Fortify Static Code Analyzer		

File Name	Description		
	Fortify ScanCentral SAST client		
	Fortify Static Code Analyzer Custom Rules Guide bundle		
	About Fortify Software Documentation		
	<b>Note:</b> Fortify Software Security Content (Rulepacks and external metadata) can be downloaded during the installation.		
Fortify_SCA_< <i>version&gt;</i> _ Mac.tar.gz.sig	Signature file for the Fortify Static Code Analyzer macOS package		
Fortify_SCA_ <version>_</version>	Fortify Static Code Analyzer package for AIX		
AIX.tar.gz	This package includes:		
	Fortify Static Code Analyzer installer		
	Fortify Static Code Analyzer Custom Rules Guide bundle		
	About Fortify Software Documentation		
Fortify_SCA_< <i>version&gt;</i> _ AIX.tar.gz.sig	Signature file for the Fortify Static Code Analyzer AIX package		
Fortify_SCA_Samples_ <version>.zip</version>	Code samples to help you learn to use Fortify Static Code Analyzer		
Fortify_SCA_Samples_ <version>.zip.sig</version>	Signature file for Fortify Static Code Analyzer Samples		
Fortify_Tools_ <version>_ Windows.zip</version>	Fortify Static Code Analyzer Applications and Tools package for Windows		
	This package includes:		
	<ul> <li>Fortify Applications and Tools installer, which includes the following components:</li> </ul>		
	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		

File Name	Description		
	Fortify Scan Wizard		
	Fortify ScanCentral SAST client		
	Fortify Security Assistant Plugin for Eclipse		
	About Fortify Software Documentation		
Fortify_Tools_< <i>version&gt;</i> _ Windows.zip.sig	Signature file for the Fortify Applications and Tools Windows package		
Fortify_Tools_< <i>version&gt;</i> _ Linux.tar.gz	Fortify Static Code Analyzer Applications and Tools package for Linux		
	This package includes:		
	Fortify Applications and Tools installer, which includes the following components:		
	Fortify Audit Workbench		
	Fortify Custom Rules Editor		
	Fortify Plugin for Eclipse (Eclipse Complete Plugin)		
	Fortify Analysis Plugin for IntelliJ IDEA and Android Studio		
	Fortify Scan Wizard		
	Fortify ScanCentral SAST client		
	Fortify Security Assistant Plugin for Eclipse		
	About Fortify Software Documentation		
Fortify_Tools_< <i>version&gt;</i> _ Linux.tar.gz.sig	Signature file for the Fortify Applications and Tools Linux package		
Fortify_Tools_< <i>version&gt;</i> _ Mac.tar.gz	Fortify Static Code Analyzer Applications and Tools package for macOS		
	This package includes:		
	Fortify Applications and Tools installer, which includes the following components:		
	Fortify Audit Workbench		
	Fortify Custom Rules Editor		

File Name	Description		
	Fortify Plugin for Eclipse (Eclipse Complete Plugin)		
	Fortify Analysis Plugin for IntelliJ IDEA and Android Studio		
	Fortify Scan Wizard		
	Fortify ScanCentral SAST client		
	Fortify Security Assistant Plugin for Eclipse		
	About Fortify Software Documentation		
Fortify_Tools_< <i>version&gt;</i> _ Mac.tar.gz.sig	Signature file for the Fortify Applications and Tools macOS package		
Fortify_SSC_Server_	Fortify Software Security Center package		
<version>.zip</version>	This package includes:		
	Fortify Software Security Center WAR file		
	Fortify Software Security Center seed bundles		
	About Fortify Software Documentation		
Fortify_SSC_Server_ <version>.zip.sig</version>	Signature file for the Fortify Software Security Center package		
Fortify_ScanCentral_	Fortify ScanCentral SAST Controller package		
Controller_ <version>.zip</version>	This package includes:		
	Fortify ScanCentral SAST Controller		
	Fortify ScanCentral SAST client		
	About Fortify Software Documentation		
Fortify_ScanCentral_ Controller_< <i>version&gt;</i> .zip.sig	Signature file for the Fortify ScanCentral SAST Controller package		
ScanCentral_DAST_	Fortify ScanCentral DAST package		
<version>.zip</version>	This package includes:		
	DAST.ConfigurationToolCLI.exe		
	scancentral-dast-config.tar (Docker container with the		
	DAST.ConfigurationToolCLI.exe and SecureBase)		
	SampleSettingsFile.json		

File Name	Description		
	<ul> <li>SampleSettingsFile.yaml</li> <li>ScanCentral DAST - Sensor Service.zip (sensor service and supporting bits)</li> <li>appsettings.json (configures the sensor service)</li> <li>Dynamic_Addons.zip (installers for optional FAST and Scan Scaling components)</li> <li>About Fortify Software Documentation</li> </ul>		
ScanCentral_DAST_ <version>.zip.sig</version>	Signature file for the Fortify ScanCentral DAST package		
WebInspect_64_ <version>.zip</version>	Fortify WebInspect 64-bit package  This package includes:  Installer  About Fortify Software Documentation		
WebInspect_Agent_ <version>.zip</version>	Fortify WebInspect Agent package		

# **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:

# **Assistive Technologies (Section 508)**

In accordance with section 508 of the Rehabilitation Act, Fortify Audit Workbench is 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 <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 24.2.0)

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!