Foglight® 5.9.x

System Requirements and Platform Support Guide

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Legend

WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.

CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

IMPORTANT NOTE, **NOTE**, **TIP**, **MOBILE**, or **VIDEO:** An information icon indicates supporting information.

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Hardware requirements and guidelines

This *System Requirements and Platform Support Guide* contains information on the hardware requirements and supported platforms for this release of Foglight®. Please review the information in this guide before installing Foglight.

This guide is intended for Foglight system administrators. The first topic lists the system requirements for the Management Server and database repository for 32-bit and 64-bit platforms. The next topic lists the platforms supported for the Management Server, database repository, and the Agent Manager, as well as validated web browsers and PDF viewer.

IMPORTANT: Foglight discontinued support for the following operating systems starting with Foglight 5.9.4 release: 32-bit Windows, 32-bit Linux, Solaris SPARC64, and Solaris x86-64. If you are still using these platforms and need further assistance, contact Quest Support.

- About hardware requirements
- Single-tier hardware requirements
- Multi-tier hardware requirements
- Agent Manager resource requirements

This topic lists the hardware requirements (CPU, RAM, and disk storage) for 64-bit installations of the Foglight Management Server and the database repository.

About hardware requirements

The hardware needed to run Foglight can vary widely depending on several factors, including:

- The number and type of agents that are being used
- The persistence and data-rollup policies
- Agent configuration settings

You should not consider doing a production implementation without conducting a proper scoping and sizing exercise with a qualified Quest Software Inc. representative. You can arrange for a sizing analysis by contacting your Quest Software Inc. Sales Representative. At a minimum, you are required to provide hardware matching the specifications in this topic.

Server components and tiers

Each Foglight® Management Server installation consists of two components:

- The Foglight Management Server
- The Foglight Database Repository

Setting up Foglight to run both of its components on the same machine is known as a *single-tier* installation. Using separate machines for each component is known as a *multi-tier* installation. Whichever configuration you choose,

each component requires its own specifically-dedicated resources. To help facilitate sizing, the resources required to support each component are listed separately.

Single-tier hardware requirements

To install Foglight in a single-tier configuration, you must have hardware capable of running both the Management Server (JVM) and database repository together. The requirements are listed below.

Table 1. Server and database (64-bit platforms)

CPU	4-way 2.4 GHz 64-bit CPUs—one of the following: • 1 quad core • 2 dual core • 4 single core
RAM	12 GB in total: • 6 GB for Management Server (4 GB for Heap, 2 GB for Java Virtual Machine) • 4 GB for database repository • 2 GB for operating system
Storage	If using built-in embedded database repository: • 120 GB, 10000 RPM hard disk or better If using external database repository: • For Management Server: 40 GB, 7200 RPM hard disk or better • For Database Repository: 80 GB, 10000 RPM hard disk or better

Multi-tier hardware requirements

To install Foglight® in a multi-tier configuration, you must have separate hardware for each of the Management Server (JVM) and database repository. The requirements are listed below.

Table 2. Management Server (64-bit platforms)

CPU	2-way 2.4 GHz 64-bit CPUs—one of the following: • 1 dual core • 2 single core
RAM	8 GB in total: • 6 GB for Management Server (4 GB for Heap, 2 GB for Java Virtual Machine) 2 GB for operating system
Storage	40 GB, 7200 RPM hard disk or better

Table 3. Database Repository (32-bit and 64-bit Platforms)

	32-bit	64-bit
CPU	2-way 2.4 GHz CPUs—one of the following: • 1 dual core • 2 single core	

Table 3. Database Repository (32-bit and 64-bit Platforms)

RAM	3 GB in total: • 2 GB for database repository • 1 GB for operating system	6 GB in total: • 4 GB for database repository • 2 GB for operating system
Storage	• 80 GB, 10000 RPM hard disk or better	

Agent Manager resource requirements

Foglight® Agent Manager uses minimal system resources, whether running on a monitored host or monitoring remotely. The amount used depends on a variety of factors including the number of agents running on the monitored host, the amount of data being collected, and whether the Management Server is running.

CAUTION: This section is intended to provide general information that is applicable to most Foglight installations. You should not consider doing a production implementation without conducting a proper scoping and sizing exercise with a qualified Quest representative.

The following table lists the system resources typically used by the Agent Manager while it is running.

Table 4. Agent Manager: Typical resource requirements

CPU Usage	• Varies greatly by cartridge/agent, the amount of data being collected, and the complexity of the technology being monitored • Average is 4.8% CPU utilization
RAM	• Varies greatly by cartridge/agent, the complexity of the technology being monitored, and Agent Manager configuration • Agent Manager base memory requirement is 256 MB. Additional memory may be required depending on the deployed agent types and instances. **Example agent package requirements** Foglight for Infrastructure — 12 MB on deployment and 4 MB for each agent instance. Foglight for VMware — 2560 MB on deployment.
Storage	May use up to 1 GB of hard disk for installation, operation, and temporary data storage

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Supported platforms

This chapter lists the platforms supported for the Foglight® Management Server and database repository, for the Foglight Agent Manager, and for the Operating System cartridge. It also lists the requirements for other software used with Foglight.

- Supported platforms for the Management Server
- Supported external databases
- Supported platforms for the Agent Manager
- Validated web browsers
- Validated web browsers
- Supported PDF report viewer

Supported platforms for the Management Server

The Foglight® Management Server is supported on the platforms listed in the following table. These platforms have passed quality assurance testing with Foglight.

IMPORTANT: Foglight discontinued support for the following operating systems starting with 5.9.4 Foglight release: 32-bit Windows, 32-bit Linux, Solaris SPARC64, and Solaris 86-64. If you are still using these platforms and need further assistance, contact Quest Support.

- Foglight is a multi-threaded software application running in a Java Virtual Machine (JVM). It runs on, and takes advantage of, MultiThreading and HyperThreading (also known as Simultaneous MultiThreading) enabled environments.
- Unless you are running the installer in console mode, verify that you have an X Window System™ environment prior to installing Foglight on UNIX® platforms.

Table 5. Management Server platforms (64-bit platforms)

Operating System	Version
CentOS Linux® [a]	5.x
	6.x
	7.x
Microsoft® Windows®	Server 2008 R2
	Server 2012
	Server 2012 R2
	Server 2016
	Server 2019
	10

Table 5. Management Server platforms (64-bit platforms)

Operating System	Version
Novell® SUSE Linux® Enterprise Server [a]	11
	12.x
	15.x
Oracle Linux® [a]	5.x
	6.x
	7.x
Red Hat® Enterprise Linux® [a]	AP/Server 5.x
	6.x
	7.x
Ubuntu® Linux®	12.04.x LTS
	14.04.x LTS
	16.04.x LTS
	18.04 x LTS

a. On 64-bit RPM-based Linux platforms, the 32-bit version of *libgcc*.rpm* must be installed for the installer and Management Server to run. On 64-bit Ubuntu, the *ia32-libs* package must be installed.

Final platform support notice

The following operating system is not supported in this release:

- Microsoft® Windows Server® 2003

Support for the following operating system will be discontinued in an upcoming Foglight® release. This platform is supported in this release. We hope this notice of planned support changes helps you plan your upgrades.

- Novell® SUSE Linux Enterprise Server 10

Supported external databases

Foglight® Management Server requires a database repository. You have the option of using either the embedded PostgreSQL® database included with Foglight®, or an external PostgreSQL, Oracle®, SQL Server®, or MySQL™ database. The embedded database is included with the Management Server and it follows the same lifecycle, it stops and starts with the server. If you use an external database, you are responsible for its procurement, installation, and management. Using an external database may improve the Management Server performance.

NOTE: For databases that have different editions, only the editions intended or licensed for production use are supported for use with Foglight. “Express” or “Lite” editions may be used to test Foglight, but should not be used in a production deployment.

Table 6. Supported external databases

Database	Supported Versions
PostgreSQL®	• 9.4.x, 9.5.x, 9.6.x, and 10.x
MySQL™	• 5.1.45 or later on 5.1.x branch
	• 5.5.20 or later on 5.5.x branch
	• 5.6.18 or later on 5.6.x branch
	• 5.7.9 or later on 5.7.x branch

Table 6. Supported external databases

Database	Supported Versions
Oracle	• 9i R2 (9.2.x branch) • 10g R2 (10.2.x branch) • 11g R1 (11.1.x branch) • 11g R2 (11.2.x branch) • 12c R1 (version 12.1.x branch) • 12c R2 (version 12.2.x branch) • 18c (version 12.2.0.2)
SQL Server[a]	• SQL Server 2005 (version 9.00.1399.06 or later) • SQL Server 2008 (version 10.0.1600 or later) • SQL Server 2008 R2 • SQL Server 2012 • SQL Server 2014 • SQL Server 2016 • SQL Server 2017

a. Foglight Database Repository can configure SQL Server Always On Availability Group for high availability on the back-end database. This only applies to SQL Server 2012 and above.

You can run your external database on any operating system supported by your database vendor, but Quest only provides support for external database issues that can be reproduced on one of the operating systems (32- or 64-bit) listed in the following table.

Table 7. Supported operating system versions

Operating System	Version
HP-UX	11i v3
IBM® AIX®	5.3
Microsoft® Windows®	Server 2008 R2
	Server 2012
	Server 2012 R2
	Server 2016
	Server 2019
	10
Oracle Solaris®	10 (Update 8)
	11
Red Hat® Enterprise Linux®	6.x
	7.x

Supported platforms for the Agent Manager

The following table lists the platforms that are supported for the Foglight® Agent Manager (FglAM).

Table 8. Supported Agent Manager platforms

Operating System	Version	OS Architecture	Valid Installer(s)
CentOS Linux®	5.x 6.x 7.x 8.x	IA-32	*fglam-<ver>-linux-ia32.bin*
		x86-64	*fglam-<ver>-linux-ia32.bin*[a] *fglam-<ver>-linux-x86_64.bin*
HP-UX	11i v2 11i v3	Itanium	*fglam-<ver>-hpux-ia64.bin*
IBM® AIX®[b]	6.1 7.1 7.2	POWER	*fglam-<ver>-aix-powerpc.bin*[a, c]
Microsoft® Windows®	Vista (SP1 or above) 7 (Professional or above) 8 (Pro, Enterprise) 8.1 10	IA-32	*fglam-<ver>-windows-ia32.exe*
		x86-64	*fglam-<ver>-windows-ia32.exe*[a] *fglam-<ver>-windows-x86_64.exe*
	Server 2008	IA-32	*fglam-<ver>-windows-ia32.exe*
		x86-64	*fglam-<ver>-windows-ia32.exe*[a] *fglam-<ver>-windows-x86_64.exe*
	Server 2008 R2 Server 2012 Server 2012 R2 Server 2016 Server 2019	x86-64	*fglam-<ver>-windows-x86_64.exe*
Novell® SUSE Linux® Enterprise Server	10 11 12 12.x 15 15.x	IA-32	*fglam-<ver>-linux-ia32.bin*
		x86-64	*fglam-<ver>-linux-ia32.bin*[a] *fglam-<ver>-linux-x86_64.bin*
Oracle® Linux®	5.x 6.x 7.x 8.x	x86-64	*fglam-<ver>-linux-ia32.bin*[a] *fglam-<ver>-linux-x86_64.bin*
Oracle Solaris®	10 (including Zones)[d]	x86-64	*fglam-<ver>-solaris-x86_64.bin*
		SPARC	*fglam-<ver>-solaris-sparc.bin*[a, b]
	11 (including Zones)[c]	x86-64	*fglam-<ver>-solaris-x86_64.bin*
		SPARC	*fglam-<ver>-solaris-sparc.bin*[e]

Table 8. Supported Agent Manager platforms

Operating System	Version	OS Architecture	Valid Installer(s)
Red Hat® Enterprise Linux®	AP/Server 5.x	IA-32	*fglam-<ver>-linux-ia32.bin*
	6.x	x86-64	*fglam-<ver>-linux-ia32.bin*[a]
	7.x		*fglam-<ver>-linux-x86_64.bin*
	8.x		
Ubuntu® Linux	12.04.x LTS	x86-64	*fglam-<ver>-linux-x86_64.bin*
	14.04.x LTS		
	16.04.x LTS		
	18.04.x LTS		

a.Installer includes a 32-bit JRE, so the maximum heap size is limited to a 32-bit address space, even on a 64-bit operating system.

b.Before installing or upgrading the Agent Manager, ensure that the latest OS service packs are installed.

c.This platform will switch to a 64-bit JRE when support for 32-bit operating systems is removed (see Final platform support notice on page 12).

d.See the Support Policy on Virtualization on our support portal for important information on using Foglight in virtual environments on these platforms.

e.Installer includes a 32-bit JRE. While Solaris 11 only supports 64-bit SPARC hardware, the maximum heap size is still limited to a 32-bit address space. This platform will switch to a 64-bit JRE in a future release.

Operating system patch requirements for the JRE

Foglight™ requires a Java Runtime Environment (JRE) to run, both for the Management Server and for the Agent Manager that runs on monitored hosts.

Foglight installs the JREs it needs, but you must ensure that any machine that will run a component of Foglight has its operating system patched to the minimum patch level required to support this JRE. This release of Foglight uses the following Java versions:

Management Server: Java 8

Agent Manager: Java 8

Check with your operating system vendor for the latest operating system patches required to run this version of Java on your system. Foglight cannot check this during installation.

Final platform support notice

The following operating system is not supported in this release:

- Microsoft® Windows Server® 2003

Support for the following operating systems will be discontinued in an upcoming Foglight® release. These platforms are supported in this release. We hope this notice of planned support changes helps you plan your upgrades.

- Oracle® Linux® 4.x
- Novell® SUSE Linux Enterprise Server 10

Validated web browsers

The Foglight user interface is designed to work with standards-compliant Web browsers. The following table lists the Web browsers that is tested and validated for use with this release of Foglight.

Table 9. Validated web browsers

Browser Type	Version / Patch Level Validated
Internet Explorer®	11.239.18362.0
Microsoft® Edge	44.18362.1.0
Firefox®	65.0
Safari	12.1.2
Chrome™	75.0.3770.142

End of support notice

Support for Microsoft® Internet Explorer® 8, 9, and 10 is discontinued as of this Foglight release.

Microsoft ended the support for these versions on January 12, 2016. For more information, visit https://support.microsoft.com/en-us/lifecycle?p1=13418.

What about other browsers?

The Foglight user interface also works on recent releases of other standards-compliant Web browsers. This cannot be guaranteed because they have not been tested. If you are using a different browser and encounter a rendering or navigation problem, we recommend trying one of the validated browsers to see if that resolves your issue. Quest will only provide support for browser issues that can be reproduced on a validated browser.

The validation testing criteria used by Quest's Quality Assurance team is as follows:

- Browsers are tested on applicable operating systems including Windows® Server 2008, Windows Server 2012, Windows Vista, Windows 7, Windows 8, Windows 10, Red Hat® Desktop Linux®, Novell® SuSE Linux Enterprise Desktop, and Mac OS® X.
- The latest browser version or patch release available at the time of this Foglight release was used for testing. Newer browser versions will be validated as part of our next release.

Supported PDF report viewer

To view PDF reports in Foglight, Adobe Acrobat Reader version 7.0.9 (or later) is preferred.

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