Standalone Machine Agent Requirements and Supported Environments

On this page:

This topic lists the application environments and versions supported by the Standalone Machine Agent. Environments or versions that are not listed are not supported. For general information about AppDynamics support, see Supported Environments - 4.4.

Standalone Machine Agent Supported Platforms

Supported platforms and environments for the Standalone Machine Agent are dependent on which metric data collection extension is being used. This depends on the machine's OS. See Machine Agent Metric Collection for details.

JRE Requirements

The Standalone Machine Agent requires a Java Virtual Machine. JRE 1.8 or higher is required. Downloads for many of the supported OSs include Oracle JRE 1.8. The Standalone Machine Agent should work with most, if not all, of the JVMs supported by the Java Agent that are JRE 1.8 or higher. However, it is extensively tested only for the Oracle JDK and OpenJDK.

Note the following about the available Machine Agent downloads:

- For tested platforms listed in the following table, AppDynamics recommends using the bundled version of the 4.4 Standalone Machine Agent.
- To run the Machine Agent on other platforms (such as AIX or HP-UX), use the unbundled Machine Agent ZIP without the JRE. The agent host must have JRE 1.8 installed.
- If you are using a 64-bit Operating System, use only a 64-bit JRE.

> ⓘ A 64-bit long has a maximum and minimum value of 9223372036854775807 and -9223372036854775808, respectively, whereas a 32-bit long has a maximum and minimum value of 2147483647 and -2147483648, respectively. To handle large values for metrics, run the Machine Agent using a 64-bit JDK.

Bash Requirements
Linux and Solaris agents require Bash 3.1 or higher.

Supported Environments

Tested Platforms

OS	Architecture	Versions	Kernel Version
Linux / CentOS	x86 (32-bit)	6 (*64-bit only*)	2.6 and higher
	x64 (64-bit)	7	

Linux / Debian	x86 (32-bit)	7, 8	2.6 and higher
	x64 (64-bit)	9 (*64-bit only*)	
Linux / openSUSE	x64 (64-bit)	42.1	2.6 and higher
Linux / SUSE Linux Enterprise	x64 (64-bit)	12	2.6 and higher
Linux / Ubuntu	x86 (32-bit)	14, 15, 16	2.6 and higher
	x64 (64-bit)	17 (*64-bit only*)	
Solaris	x64 (64-bit)	10, 11	N/A
Solaris	SPARC (64-bit)	10, 11	N/A
SUSE Linux Enterprise	x64 (64-bit)	12	2.6 and higher
Windows	x86 (32-bit)	Windows Server 2008 SP2	N/A
	x64 (64-bit)	Windows Server 2012 R2	

Other Platforms

Other operating systems and versions that are supported by JRE 1.8 should also work, but are not fully tested by AppDynamics.

- Oracle JRE 1.8
- IBM SDK, Java Technology Edition, Version 8
- HP JDK/JRE 8

You should be able to run the Bundled version of the Standalone Machine Agent on machines based on Power Architecture processors, including PowerPC processors, but Server Visibility is not supported on these platforms.

Hardware and Sizing Requirements

Agent: 1 additional GB of RAM.

Controller: Although we recommend that the AppDynamics Controller be installed on a dedicated server, in some cases the Standalone Machine Agent can co-exist with the Controller on the same system. A Controller with more than 250 nodes must run on a dedicated machine. The exact number of Machine Agents that can be supported depends on whether other agents are reporting to the same controller and whether the Machine Agents have Server Visibility enabled or not (more metrics are generated under Server Visibility). For more information, see Controller System Requirements.

JVM Memory Requirements

The lightweight Standalone Machine Agent consumes minimal resources of your computer.

AppDynamics recommends the following additional Heap and PermGen space to accommodate the agent:

- Maximum heap size (-Xmx): 100 MB
- Maximum PermGen heap size (-XX:MaxPermSize): 20 MB

Extension Considerations

The exact CPU or memory overhead added by the agent can vary depending on the extensions used and whether the extensions are Java or not. Java extensions will need more heap space; the amount required depends on how the extension is coded. If you start adding extensions, increase the maximum heap space (to 256 MB or 512 MB) to be safe. You may need to increase the size of the initial memory allocation as well. Monitor the memory consumption of the agent to ensure that there are sufficient resources allocated to it. You can also enable Garbage Collection logging on the JVM to help tune the heap size for the extensions being used. There are many resources on the Internet with advice on tuning Java memory management.

Example settings for increasing the initial heap size:

Linux and Unix systems: <machine_agent_home>/bin/machine-agent -Xms64m

Windows: cscript <machine_agent_home>\machine-agent.vbs -Xms64m