

# ArcGIS Engine 9.3/9.3.1 System Requirements

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## Supported Operating Systems

Supported Operating System	Minimum Version	Maximum Version	ArcGIS Engine Runtime	Engine SDK for Cross Platform C++	Engine SDK for Microsoft Visual Basic 6	Engine SDK for Microsoft Visual C++	Engine SDK for the Java Platform	Engine SDK for Microsoft .NET Framework	Requirements and Limitations
Red Hat Enterprise Linux AS/ES/WS 4.0 (32-bit)	update 4 or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Red Hat Linux Requirements</a>
Red Hat Enterprise Linux AS/ES/WS 4.0 (64-bit) with ArcGIS 9.3 SP1	update 4 or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Red Hat Linux Requirements</a>
Red Hat Enterprise Linux AS/ES/WS 5.0 (32-bit) with ArcGIS 9.3 SP1	base release or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Red Hat Linux Requirements</a>
Red Hat Enterprise Linux AS/ES/WS 5.0 (64-bit) with	base release or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Red Hat Linux Requirements</a>

ArcGIS 9.3.1									
SUSE Linux Enterprise Server 10 (32-bit)	Service Pack 2 or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">SUSE Linux Requirements</a>
SUSE Linux Enterprise Server 10 (64-bit) with ArcGIS 9.3.1	Service Pack 2 or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">SUSE Linux Requirements</a>
Sun Solaris 9 SPARC	Maintenance Update 3		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Sun Solaris Requirements</a>
Sun Solaris 10 SPARC	Maintenance Update 4 (8/07) or higher		Supported	Supported	Not Supported	Not Supported	Supported	Not Supported	<a href="#">Sun Solaris Requirements</a>
Windows 2003 (32-bit) Server Standard, Enterprise, Datacenter	SP1	SP2	Supported	Supported	Supported	Supported	Supported	Supported	
Windows 2003 (64-bit (EM64T)) Server Standard, Enterprise, Datacenter	SP1	SP2	Supported	Supported	Supported	Supported	Supported	Supported	<a href="#">64-bit processors support</a> 
Windows 2008 (32-bit) Server Standard, Enterprise, Datacenter		SP2	Supported	Supported	Not Supported	Supported	Supported	Supported	
Windows 2008 (64-bit (EM64T)) Server Standard, Enterprise, Datacenter		SP2	Supported	Supported	Not Supported	Supported	Supported	Supported	<a href="#">64-bit processors support</a> 

Windows 2008 R2 (64-bit (EM64T)) Server Standard, Enterprise, Datacenter			Supported	Supported	Not Supported	Supported	Supported	Supported	<a href="#">64-bit processors support</a> 
Windows 7 (32-bit) Ultimate, Enterprise, Professional, Home Premium			Supported	Supported	Not Supported	Supported	Supported	Supported	<a href="#">Windows 7 limitation</a> 
Windows 7 (64-bit (EM64T)) Ultimate, Enterprise, Professional, Home Premium			Supported	Supported	Not Supported	Supported	Supported	Supported	<a href="#">Windows 7 limitation</a> 
Windows Vista (32-bit) Ultimate, Enterprise, Business, Home Premium	SP2	SP2	Supported	Supported	Supported	Supported	Supported	Supported	<a href="#">Vista Limitations</a> 
Windows Vista (64-bit (EM64T)) Ultimate, Enterprise, Business, Home Premium	SP2	SP2	Supported	Supported	Supported	Supported	Supported	Supported	<a href="#">64-bit processors support</a>  <a href="#">Vista Limitations</a> 
Windows XP (32-bit) Professional Edition, Home Edition	SP3	SP3	Supported	Supported	Supported	Supported	Supported	Supported	
Windows XP (64-bit (EM64T)) Professional Edition, Home Edition	SP2	SP2	Supported	Supported	Supported	Supported	Supported	Supported	<a href="#">64-bit processors support</a> 

## Hardware Requirements

	ArcGIS Engine on Windows	ArcGIS Engine on Red Hat Linux	ArcGIS Engine on SUSE Linux	ArcGIS Engine on Solaris
<b>CPU Speed</b>	1.6 GHz recommended or higher	1.6 GHz recommended or higher	1.6 GHz recommended or higher	1.6 GHz recommended or higher
<b>Processor</b>	x86 Intel Core Duo, Pentium 4 or Xeon Processors See <a href="#">Dual or dual-core support policy</a> 	x86 Intel Core Duo, Pentium 4 or Xeon Processors See <a href="#">Dual or dual-core support policy</a> 	x86 Intel Core Duo, Pentium 4 or Xeon Processors See <a href="#">Dual or dual-core support policy</a> 	UltraSPARC II, IIi, IIe minimum
<b>Memory/RAM</b>	1 GB minimum, 2 GB recommended or higher	1 GB minimum, 2 GB recommended or higher	1 GB minimum, 2 GB recommended or higher	1 GB minimum, 2 GB recommended or higher
<b>Display Properties</b>	24 bit color depth	24 bit color depth	24 bit color depth	24 bit color depth
<b>Screen Resolution</b>	1024 x 768 recommended or higher at Normal size (96dpi)	1024 x 768 recommended or higher at Normal size (96dpi)	1024 x 768 recommended or higher at Normal size (96dpi)	1024 x 768 recommended or higher at Normal size (96dpi)
<b>Swap Space</b>	Determined by the operating system, 500 MB minimum.	Determined by the operating system, 500 MB minimum.	Determined by the operating system, 500 MB minimum.	Determined by the operating system, 500 MB minimum.
<b>Video/Graphics Adapter</b>	<a href="#">Check your computer's ability to run ArcGIS 3D Analyst - ArcGlobe</a>  24-bit capable graphics accelerator  An OpenGL	24-bit capable graphics accelerator  NVIDIA driver version 96.39 (May, 2007) and up, ATI driver version 8.29.6 (Oct., 2006) and up and Mesa are the supported video drivers.	24-bit capable graphics accelerator  NVIDIA driver version 96.39 (May, 2007) and up, ATI driver version 8.29.6 (Oct., 2006) and up and Mesa are the supported video drivers.	24-bit capable graphics accelerator.  XVR-500 (or higher) graphics card required for 3D support  NVIDIA driver version 96.39 (May, 2007) and up, ATI

	<p>1.3 or higher compliant video card is required, with at least 32 MB of video memory, however 64 MB of video memory or higher is recommended.</p> <p>Using hardware-based graphics acceleration can improve dynamic 2D and 3D rendering performance; however, all video cards and drivers may not work optimally. If using the ArcGIS GlobeControl or Dynamic Display mode, make sure your graphics card is compliant with a minimum OpenGL 1.3, and be sure to use the latest available driver from the video card's manufacturer.</p> <p>OpenGL version 1.3</p>	<p>Using hardware-based graphics acceleration can improve dynamic 2D and 3D rendering performance; however, all video cards and drivers may not work optimally. If using the ArcGIS GlobeControl or Dynamic Display mode, make sure your graphics card is compliant with a minimum OpenGL 1.3, and be sure to use the latest available driver from the video card's manufacturer.</p> <p>OpenGL version 1.3 runtime environment minimum.</p>	<p>Using hardware-based graphics acceleration can improve dynamic 2D and 3D rendering performance; however, all video cards and drivers may not work optimally. If using the ArcGIS GlobeControl or Dynamic Display mode, make sure your graphics card is compliant with a minimum OpenGL 1.3, and be sure to use the latest available driver from the video card's manufacturer.</p> <p>OpenGL version 1.3 runtime environment minimum.</p> <p>Patch for Xserver Xvfb. This is a hardware-independent Xserver, which emulates OpenGL 1.3 or higher and can be installed from XFree86-Xvfb-4.3.99.902-43.22.i586.rpm, which comes with the SuSE Linux SLES 10 install CD.</p>	<p>driver version 8.29.6 (Oct., 2006) and up and Mesa are the supported video drivers.</p> <p>Using hardware-based graphics acceleration can improve dynamic 2D and 3D rendering performance; however, all video cards and drivers may not work optimally. If using the ArcGIS GlobeControl or Dynamic Display mode, make sure your graphics card is compliant with a minimum OpenGL 1.3, and be sure to use the latest available driver from the video card's manufacturer.</p> <p>OpenGL version 1.3 runtime environment minimum.</p> <p>The following patches are recommended for Solaris 10:</p> <ul style="list-style-type: none"> <li>• 113886-29 patch for OpenGL</li> <li>• 113887-29 patch for</li> </ul>
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	runtime environment minimum.			OpenGL
<b>Window System</b>	Not Applicable	X- Windows/Common Desktop Environment or Java Desktop System	X- Windows/Common Desktop Environment or Java Desktop System	X- Windows/Common Desktop Environment or Java Desktop System
<b>Media Player</b>	DVD-ROM drive is required to install the application.	DVD-ROM drive is required to install the application.	DVD-ROM drive is required to install the application.	DVD-ROM drive is required to install the application.

### Disk Space Requirements

	<b>ArcGIS Engine on Windows</b>	<b>ArcGIS Engine on Red Hat Linux</b>	<b>ArcGIS Engine on SUSE Linux</b>	<b>ArcGIS Engine on Solaris</b>
<b>ArcGIS Engine Runtime</b>	852 MB	471 MB	471 MB	480 MB
<b>ArcGIS Engine SDK for Cross Platform C++</b>	396 MB	348 MB	348 MB	346 MB
<b>ArcGIS Engine SDK for Microsoft Visual Basic 6</b>	369 MB	Not Applicable	Not Applicable	Not Applicable
<b>ArcGIS Engine SDK for Microsoft Visual C++</b>	409 MB	Not Applicable	Not Applicable	Not Applicable
<b>ArcGIS Engine SDK for the Java Platform</b>	603 MB	515 MB	515 MB	500 MB
<b>ArcGIS Engine SDK for the Microsoft .NET Framework</b>	534 MB	Not Applicable	Not Applicable	Not Applicable

<b>All ArcGIS Engine Products</b>	<p>In addition, up to 50 MB of disk space maybe needed in the Windows System directory (typically C:\Windows\System32). You can view the disk space requirement for each of the 9.3 components in the Setup program.</p>			
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## Software Requirements

- **Python Requirement for Geoprocessing:**  
Several ArcGIS geoprocessing tools, such as Multiple Ring Buffer, use the Python scripting language and require that Python is installed. If the ArcGIS Desktop, Engine or Server setups do not find Python 2.5.1 on the target computer, it will install Python 2.5.1 plus Numerical Python 1.0.3 during a typical or complete installation. You may choose a Custom installation to unselect the Python feature to avoid installing this feature. See the install guide for additional information concerning Python.
- **ArcGIS Engine on Windows**
  - Optional [.NET Framework 2.0 Requirement](#)
  - **Internet Explorer Requirement:**
    - Some features of ArcGIS Engine Runtime on Windows require a minimum installation of Microsoft Internet Explorer Version 7.0 or 8.0. If you do not have an installation of Microsoft Internet Explorer Version 7.0/8.0, you must obtain and install it prior to installing ArcGIS Engine Runtime.
- **ArcGIS Engine on Unix/Linux**
  - **Web Browser Requirement:**
    - The Java Help System of ArcGIS Engine SDK for the Java platform requires a minimum installation of the latest version of Firefox or Mozilla. If you do not have an installation of Firefox or Mozilla, it is recommended you obtain and install it prior to installing ArcGIS Engine SDK for the Java platform.
- **Microsoft WinHelp patch for Windows 7 and Windows Vista:**  
The following Microsoft patch is recommended, but not required, when using ArcGIS Desktop, ArcInfo Workstation, ArcGIS Engine or ArcReader on Microsoft Vista or Windows 7. ArcGIS Desktop, ArcInfo Workstation, ArcGIS Engine and ArcReader provide pop-up context sensitive help topics for tools, commands and dialogs delivered using WinHlp32. WinHlp32 won't function on Windows 7 and Windows Vista without this patch. Here is Microsoft KnowledgeBase article [917607](#)  about this patch, which also contains links so you can download the patch. If you access pop-up context sensitive help without this patch being present, you'll get a message from Windows prompting you to download the patch. For best usability we recommend installing the patch at the time

you install ArcGIS. For additional information, please refer to ESRI KnowledgeBase article [32530](#).

## Developer Solutions (SDK) Requirements

ArcGIS Engine SDK	Supported and Recommended IDE(s)	SDK Requirements	Runtime Requirements
ArcGIS Engine SDK for Cross Platform C++	<ul style="list-style-type: none"> <li>▪ <b>Sun Solaris</b> The following patches are recommended for Forte/Developer Kit installs:               <ul style="list-style-type: none"> <li>* Forte 6 (Sun Workshop 6 Update 2)</li> <li>* 111678-07 Patch for Forte Developer 6 update 2, C++ F77, F95</li> <li>* 111685-05 Patch for Forte Developer 6 update 2, C++ Compiler</li> <li>* 109607-01 /usr/include/iso/stdlib_iso.h patch</li> <li>* Sun ONE Studio 8 Compiler (Sun C++ 5.5)</li> </ul> </li> <li>- <b>Microsoft Windows</b> <ul style="list-style-type: none"> <li>* Microsoft Visual Studio 2005 (C++) Standard, Professional, or Team Editions</li> <li><b>NOTE:</b> For Vista, Visual Studio 2005 Service Pack 1 with Visual Studio 2005 Service Pack 1 Update for Windows Vista is required.</li> <li>* Microsoft Visual Studio 2008 (C++) Standard, Professional, or Team Editions (with or without Service Pack 1)</li> </ul> </li> </ul>	ArcGIS Engine Runtime is required to run samples as well as use of many of the tools.	<a href="#">Microsoft Windows .NET Framework 2.0 Requirement</a>
ArcGIS Engine SDK for Microsoft Visual Basic 6	<ul style="list-style-type: none"> <li>• Visual Basic 6 SP3 or later</li> </ul>	ArcGIS Engine Runtime is required to run samples as well as use of many of the tools.	
ArcGIS Engine SDK for Visual C++	<ul style="list-style-type: none"> <li>• Microsoft Visual Studio 2005 (C++) Standard, Professional, or Team Editions</li> <li><b>NOTE:</b> For Vista, Visual Studio 2005</li> </ul>	ArcGIS Engine Runtime is required to run samples as well	

Service Pack 1 with Visual Studio 2005 Service Pack 1 Update for Windows Vista is required.

as use of many of the tools.

[.NET Framework 2.0 Requirement](#)

- Microsoft Visual Studio 2008 (C++) Standard, Professional, or Team Editions (with or without Service Pack 1)

### All Platforms

Developer IDE plug-ins are provided with ArcGIS Engine Java SDK which offer an enhanced developer experience through templates, code snippets and project wizards and are supported in the IDE's listed below: (**NOTE: Visual beans users must manually install Visual Editor.**)

ArcGIS Engine SDK for the Java Platform

- **ArcGIS 9.3:**
  - \* Eclipse (Non-visual beans)
    1. Europa Eclipse IDE for Java EE Developers Europa (based on Eclipse 3.3)
    2. Europa Eclipse IDE for Java Developers Europa (based on Eclipse 3.3)\* Eclipse (Visual Beans)
    3. Europa Eclipse IDE for Java EE Developers (based on Eclipse 3.3)
    4. Europa Eclipse IDE for Java Developers (based on Eclipse 3.3)
    5. Callisto Eclipse for Java and Web Developers (based on Eclipse 3.2)

ArcGIS Engine Runtime is required to run samples as well as use of many of the tools.

Java Development Kit (JDK) version 5 update 13 (32-bit) or Java Development Kit (JDK) version 6 (32-bit) is required.

Java Runtime Environment (JRE) version 5 update 13 (32-bit) or Java Runtime Environment (JRE) version 6 (32-bit) is required.

#### - ArcGIS 9.3.1:

\* Eclipse (Non-visual beans)

6. Ganymede Eclipse IDE for

- Java EE Developers (based on Eclipse 3.4)
- 7. Ganymede Eclipse IDE for Java Developers (based on Eclipse 3.4)
- 8. Europa Eclipse IDE for Java EE Developers (based on Eclipse 3.3)
- 9. Europa Eclipse IDE for Java Developers (based on Eclipse 3.3)\* Eclipse (Visual Beans)
- 10. Ganymede Eclipse IDE for Java EE Developers (based on Eclipse 3.4)
- 11. Ganymede Eclipse IDE for Java Developers (based on Eclipse 3.4)
- 12. Europa Eclipse IDE for Java EE Developers (based on Eclipse 3.3)
- 13. Europa Eclipse IDE for Java Developers (based on Eclipse 3.3)

- Microsoft Visual Studio 2005 Visual Basic Express
- Microsoft Visual Studio 2005 Visual C# Express
- Microsoft Visual Studio 2005 (C#, VB.NET) Standard, Professional, Team Editions  
*NOTE:* For Vista, Visual Studio 2005 Service Pack 1 with Visual Studio 2005 Service Pack 1 Update for Windows Vista is required.
- Microsoft Visual Studio 2008 Visual Basic Express (with or without Service Pack 1)
- Microsoft Visual Studio 2008 Visual

ArcGIS  
Engine SDK  
for the  
Microsoft  
.NET  
Framework

ArcGIS Engine  
Runtime is  
required to run  
samples as well  
as use of many of  
the tools.

[.NET Framework  
2.0 Requirement](#)

C# Express (with or without Service Pack 1)

- Microsoft Visual Studio 2008 (C#, VB.NET) Standard, Professional, Team Editions (with or without Service Pack 1)

### **Supported and Recommended Widget Toolkit(s) for ArcGIS Engine SDK for Cross Platform C++**

	<b>ArcGIS Engine on Windows</b>	<b>ArcGIS Engine on Red Hat Linux</b>	<b>ArcGIS Engine on SUSE Linux</b>	<b>ArcGIS Engine on Solaris</b>
<b>Motif</b>	Not Applicable	2.2.3	2.2.3	2.1.0
<b>GTK</b>	2.4.14	2.4.13	2.4.13	2.4.9
<b>QT3</b>	3.3.8	3.3.8	3.3.8	3.3.8
<b>QT4</b>	4.2.3	4.2.3	4.2.3	4.2.3
<b>WX</b>	2.8.7	2.8.7-GTK	2.8.7-GTK	2.8.7-GTK

**Note:** Only the Qt Commercial License is supported for ArcGIS Engine SDK for Cross Platform C++.