

# ArcGIS Engine Developer Kit 9.1 System Requirements

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This PDF contains system requirements information, including hardware requirements, best performance configurations, and limitations, for ArcGIS Engine Developer Kit 9.1.

- [Linux-Intel Red Hat Enterprise Linux AS/ES/WS 3.0](#)
  - [Linux-Intel SUSE Linux Enterprise Server 9](#)
  - [PC-Intel Windows 2000 Professional](#)
  - [PC-Intel Windows XP Professional Edition, Home Edition](#)
  - [Sun Solaris 10 \(SPARC\)](#)
  - [Sun Solaris 8 \(SPARC\)](#)
  - [Sun Solaris 9 \(SPARC\)](#)
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## ArcGIS Engine Developer Kit 9.1 on Linux-Intel Red Hat Enterprise Linux AS/ES/WS 3.0

|                               |                                       |
|-------------------------------|---------------------------------------|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1       |
| <i>Platform:</i>              | Linux-Intel                           |
| <i>Operating System:</i>      | Red Hat Enterprise Linux AS/ES/WS 3.0 |
| <i>Service Packs/Patches:</i> | Update 2 or higher                    |
| <i>Shipping/Release Date:</i> | May 18, 2005                          |

### Hardware Requirements

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#### **CPU Speed:**

1.0 GHz recommended or higher

#### **Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

#### **Display Properties:**

24 bit color depth

**Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

**Swap Space:**

256 MB minimum, 512 MB recommended

(Swap Space is minimum required for a single user.)

**Window System:**

X-Windows/Common Desktop Environment

**Disk Space:**

Typical - 1.57 GB, Complete - 1.75 GB

**Architecture:**

x86 architecture (32-bit)

**Notes:****Additional Requirements:**

- Red Hat Linux AS/ES/WS 3.0 Kernel version 2.4.21 or higher
- X-Windows/Common Desktop Environment
- J2SDK 1.4.2\_06 for Java development
- OpenGL XFree86-Mesa-libGL, version 4.2.0-8 (Red Hat distribution contains the XFree86 package which emulates OpenGL.)
- GNU C Library (glibc) version 2.3.3

**ESRI supports and recommends the following integrated development environments****for Java:**

- Eclipse v 3.0 or 3.0.1
- JBuilder X
- NetBeans 3.6

**The supported and recommended Linux C++ compiler is GCC 3.2****Video Drivers:**

- Mesa is the supported video driver.
- 24-bit color depth enabled
- Using hardware based graphics accelerators can improve dynamic 2D and 3D rendering

performance, however all video cards may not work.

- If using hardware accelerators for ArcGIS Globecontrol and ArcReader 3D, make sure your graphics card is compliant with at minimum OpenGL 1.3, and be sure to use the latest available driver.

### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

### **Best Performance Configuration**

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#### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

### **Limitations**

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#### **Platform: Limitations for RedHat Linux Enterprise AS/ES/WS 3.0**

- not supported if the operating system (binary) has been modified
- not supported on a developer's release of the operating system
- The Linux patches will be supported as long as the patches are from RedHat without any modification to the latest kernel/glibc version.

## ArcGIS Engine Developer Kit 9.1 on Linux-Intel SUSE Linux Enterprise Server 9

|                               |                                 |
|-------------------------------|---------------------------------|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1 |
| <i>Platform:</i>              | Linux-Intel                     |
| <i>Operating System:</i>      | SUSE Linux Enterprise Server 9  |
| <i>Shipping/Release Date:</i> | May 18, 2005                    |

### Hardware Requirements

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#### **CPU Speed:**

1.0 GHz recommended or higher

#### **Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

#### **Display Properties:**

24 bit color depth

#### **Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

#### **Swap Space:**

256 MB minimum, 512 MB recommended

(Swap Space is minimum required for a single user.)

#### **Window System:**

X-Windows/Common Desktop Environment

#### **Disk Space:**

Typical - 1.57 GB, Complete - 1.75 GB

#### **Architecture:**

x86 architecture (32-bit)

#### **Notes:**

#### **Additional Requirements:**

- SUSE 9 Kernel version 2.6.5 or higher
- X-Windows/Common Desktop Environment
- 24-bit color depth enabled

- J2SDK 1.4.2\_06 for Java development
- OpenGL XFree86-Mesa version 4.3.99
- GNU C Library (glibc) version 2.3.3
- Xvfb (This is a hardware-independent Xserver, which can be installed from XFree86-Xvfb-4.3.99.902-43.22.i586.rpm that comes with SuSE 9 install CD.)

**ESRI supports and recommends the following integrated development environments for Java:**

- Eclipse v 3.0 or 3.0.1
- JBuilder X
- NetBeans 3.6

**The supported and recommended Linux C++ compiler is GCC 3.2**

## **Best Performance Configuration**

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### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

## **Limitations**

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### **Platform: Limitations for SUSE Linux Enterprise Server 9**

- not supported if the operating system (binary) has been modified
- not supported on a developer's release of the operating system
- The linux patches will be supported as long as the patches are from SUSE without any modification to the latest kernel/glibc version.

## ArcGIS Engine Developer Kit 9.1 on PC-Intel Windows 2000 Professional

|                               |                                 |
|-------------------------------|---------------------------------|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1 |
| <i>Platform:</i>              | PC-Intel                        |
| <i>Operating System:</i>      | Windows 2000 Professional       |
| <i>Service Packs/Patches:</i> | SP 4                            |
| <i>Shipping/Release Date:</i> | May 18, 2005                    |

### Hardware Requirements

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**CPU Speed:**

1.0 GHz recommended or higher

**Processor:**

Intel Pentium or Intel Xeon Processors

**Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

**Display Properties:**

24 bit color depth

**Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

**Swap Space:**

300 MB minimum

**Disk Space:**

Typical 532 MB NTFS, Complete 1.31 GB NTFS

**Disk Space Requirements:**

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 9.1 components in the Setup program.

**Notes:**

## **OPERATING SYSTEM REQUIREMENTS**

### **Internet Explorer Requirements**

- Some features of ArcGIS Engine Developer Kit 9.1 require a minimum installation of Microsoft Internet Explorer Version 6.0 or 7.0. If you do not have an installation of Microsoft Internet Explorer Version 6.0/7.0, you must obtain and install it prior to installing ArcGIS Engine Runtime. (Please also see [IE7 Limitations](#))

### **Additional Requirements for 3D Engine Runtime extension**

- CPU Speed: 1.5 GHz recommended or higher.  
- Video Card: An OpenGL 1.2 or above compliant video card is required, with at least 32 MB of video memory; however 64 MB of video memory is recommended.

### **Additional Software and Development Requirements**

- .Net Framework 1.1 is required to install the .NET feature of the ArcGIS Engine Developer Kit.  
- J2SDK 1.4.2\_xx is required for Java development.

### **ESRI supports and recommends the following integrated development environments for ArcGIS Engine Developer Kit:**

- COM

Visual Basic for Applications

Visual Basic 6 sp3 or later

Visual C++ 6 sp3 or later

Visual C++ (Visual Studio .Net 2003)

-.Net

C# (Visual Studio .Net 2003 with .NET Framework 1.1 or 1.1 Service Pack 1)

VB.Net (Visual Studio .Net 2003 with .NET Framework 1.1 or 1.1 Service Pack 1)

- Java

Eclipse v 3.0 or 3.0.1

JBuilder X

NetBeans 3.6

- C++ Compilers (Windows)

Visual C++ sp3 or later

Visual C++ (VS.Net 2003)

## **Best Performance Configuration**

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### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

## **Limitations**

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### **Platform: IE7 Limitations**

You cannot see inset maps in the directions window until you right-click on the box with the red X to bring up the context menu and then click on "Show Picture."

## ArcGIS Engine Developer Kit 9.1 on PC-Intel Windows XP Professional Edition, Home Edition

|                               |   |
|-------------------------------|---|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1                     |
| <i>Platform:</i>              | PC-Intel  |
| <i>Operating System:</i>      | Windows XP Professional Edition, Home Edition       |
| <i>Service Packs/Patches:</i> | SP 1<br>SP2 (refer to <a href="#">Limitations</a> ) |
| <i>Shipping/Release Date:</i> | May 18, 2005  |

### Hardware Requirements

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#### **CPU Speed:**

1.0 GHz recommended or higher

#### **Processor:**

Intel Pentium or Intel Xeon Processors

#### **Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

#### **Display Properties:**

24 bit color depth

#### **Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

#### **Swap Space:**

300 MB minimum

#### **Disk Space:**

Typical 532 MB NTFS, Complete 1.31 GB NTFS

#### **Disk Space Requirements:**

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 9.1 components in the Setup program.

#### **Notes:**

## **OPERATING SYSTEM REQUIREMENTS**

### **Internet Explorer Requirements**

- Some features of ArcGIS Engine Developer Kit 9.1 require a minimum installation of Microsoft Internet Explorer Version 6.0 or 7.0. If you do not have an installation of Microsoft Internet Explorer Version 6.0/7.0, you must obtain and install it prior to installing ArcGIS Engine Runtime. (Please also see [IE7 Limitations](#))

### **Additional Requirements for 3D Engine Runtime extension**

- CPU Speed: 1.5 GHz recommended or higher.  
- Video Card: An OpenGL 1.2 or above compliant video card is required, with at least 32 MB of video memory; however 64 MB of video memory is recommended.

### **Additional Software and Development Requirements**

- .Net Framework 1.1 is required to install the .NET feature of the ArcGIS Engine Developer Kit.  
- J2SDK 1.4.2\_xx is required for Java development.

### **ESRI supports and recommends the following integrated development environments for ArcGIS Engine Developer Kit:**

- COM

Visual Basic for Applications

Visual Basic 6 sp3 or later

Visual C++ 6 sp3 or later

Visual C++ (Visual Studio .Net 2003)

-.Net

C# (Visual Studio .Net 2003 with .NET Framework 1.1 or 1.1 Service Pack 1)

VB.Net (Visual Studio .Net 2003 with .NET Framework 1.1 or 1.1 Service Pack 1)

- Java

Eclipse v 3.0 or 3.0.1

JBuilder X

NetBeans 3.6

- C++ Compilers (Windows)

Visual C++ sp3 or later

Visual C++ (VS.Net 2003)

## **Best Performance Configuration**

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### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

## **Limitations**

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### **Platform: ArcGIS Engine Developer Kit 9.1 on Windows XP is certified with limitations.**

- Refer to ESRI Knowledge Base Article [FAQ:Issues with Windows XP Service Pack 2, Service Pack 3 and ArcGIS 9.x products](#) for details.

### **IE7 Limitations**

You cannot see inset maps in the directions window until you right-click on the box with the red X to bring up the context menu and then click on "Show Picture."

## ArcGIS Engine Developer Kit 9.1 on Sun Solaris 10 (SPARC)

|                               |                                 |
|-------------------------------|---------------------------------|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1 |
| <i>Platform:</i>              | Sun                             |
| <i>Operating System:</i>      | Solaris 10 (SPARC)              |
| <i>Service Packs/Patches:</i> | See <a href="#">Notes</a>       |
| <i>Shipping/Release Date:</i> | May 18, 2005                    |

### Hardware Requirements

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**CPU Speed:**

400 MHz minimum

**Processor:**

UltraSPARC II, IIi, IIe minimum

**Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

**Display Properties:**

24 bit color depth

**Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

**Window System:**

X-Windows/Common Desktop Environment

**Disk Space:**

Typical - 1.69 GB, Complete - 1.85 GB

**Architecture:**

Sun Solaris version 9

**Notes:**

**When running in a 64-bit Solaris SPARC environment, ArcGIS Engine-related products operate as 32-bit applications.**

**The following patches are recommended for Solaris 10 installs:**

**Additional Requirements:**

- X-Windows/Common Desktop Environment
- 24-bit capable graphics accelerator
- OpenGL version 1.3 runtime environment
- 113886-29 patch for OpenGL
- 113887-29 patch for OpenGL
- Forte 6 (Sun Workshop 6 Update 2) for C++ development
- J2SDK 1.4.2\_06 for Java development

**ESRI supports and recommends the following development environments for Java and ArcGIS Engine Developer Kit:**

- Eclipse v 3.0 or 3.0.1
- JBuilder X
- NetBeans 3.6
- The supported and recommend Sun C++ compiler for Solaris is WorkShop 6 Update 2

## **Best Performance Configuration**

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### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

## **Limitations**

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**Platform:** Installing this product on the Solaris version 10 operating system will display a warning message,

***"[product\_name] Setup has detected that your system may not meet system requirements. If system requirements are not satisfied, [product\_name] may not install correctly.***

**This error can safely be ignored.** Verify that there are no other failure messages in the MWSysReq.log file.

Refer to ESRI Knowledge Base Article [Error: Installation of ESRI products show a status of FAILED when checking the system requirements on the Solaris 10 platform](#) for more information.



## ArcGIS Engine Developer Kit 9.1 on Sun Solaris 8 (SPARC)

|                               |  |
|-------------------------------|--|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1              |
| <i>Platform:</i>              | Sun  |
| <i>Operating System:</i>      | Solaris 8 (SPARC)                            |
| <i>Service Packs/Patches:</i> | (Details under <a href="#">Limitations</a> ) |
| <i>Shipping/Release Date:</i> | May 18, 2005                                 |

### Hardware Requirements

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**CPU Speed:**

400 MHz minimum

**Processor:**

UltraSPARC II, IIi, IIe minimum

**Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

**Display Properties:**

24 bit color depth

**Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

**Window System:**

X-Windows/Common Desktop Environment

**Disk Space:**

Typical - 1.69 GB, Complete - 1.85 GB

**Architecture:**

Sun Solaris version 8

**Notes:**

**When running in a 64-bit Solaris SPARC environment, ArcGIS Engine-related products operate as 32-bit applications.**

**The following patches are recommended for Solaris 8 installs:**

- 108131-17(or later) OpenGL libraries bug fixes (32-bit)
- 108434-13 Shared library patch for C++ run-time
- 108576-26 Expert3D IFB graphics patch (only for Expert3D)
- 108606-31 M64 graphics Patch (only for M64 Graphics)
- 108652-83 X11 6.4.1: Xsun patch
- 109147-21(or higher) Linker patch
- 109147-27 Correct dynamic load and unload of shared libraries

**The following patches are recommended for Forte/Developer Kit installs:**

- 111678-07 Patch for Forte Developer 6 update 2, C++ F77, F95
- 111685-05 Patch for Forte Developer 6 update 2 C++ compiler
- 109607-01 /usr/include/iso/stdlib\_iso.h patch

**Additional Requirements:**

- X-Windows/Common Desktop Environment
- 24-bit capable graphics accelerator
- OpenGL version 1.3 runtime environment
- Forte 6 (Sun Workshop 6 Update 2) for C++ development
- J2SDK 1.4.2\_06 for Java development

**ESRI supports and recommends the following development environments for Java and ArcGIS Engine Developer Kit:**

- Eclipse v 3.0 or 3.0.1
- JBuilder X
- NetBeans 3.6
- The supported and recommended Sun C++ compiler for Solaris is WorkShop 6 Update 2

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## **Best Performance Configuration**

### **System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).

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## **Limitations**

### **Platform: Limitations for Solaris 8 SunOS 5.8**

The following patch revisions **will not** work with the C++ API:

- 109147-17

- 109147-18
- 109147-19
- 109147-20

## ArcGIS Engine Developer Kit 9.1 on Sun Solaris 9 (SPARC)

|                               |  |
|-------------------------------|--|
| <i>Product:</i>               | ArcGIS Engine Developer Kit 9.1        |
| <i>Platform:</i>              | Sun                                    |
| <i>Operating System:</i>      | Solaris 9 (SPARC)                      |
| <i>Service Packs/Patches:</i> | (Details under <a href="#">Notes</a> ) |
| <i>Shipping/Release Date:</i> | May 18, 2005                           |

### Hardware Requirements

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**CPU Speed:**

400 MHz minimum

**Processor:**

UltraSPARC II, IIi, IIe minimum

**Memory/RAM:**

512 MB minimum, 1 GB recommended or higher

**Display Properties:**

24 bit color depth

**Screen Resolution:**

1024 x 768 recommended or higher at Normal size (96dpi)

**Window System:**

X-Windows/Common Desktop Environment

**Disk Space:**

Typical - 1.69 GB, Complete - 1.85 GB

**Architecture:**

Sun Solaris version 9

**Notes:**

**When running in a 64-bit Solaris SPARC environment, ArcGIS Engine-related products operate as 32-bit applications.**

**The following patches are recommended for Solaris 9 installs:**

Solaris Maintenance Update 3

- 112785-43 X11 6.4.1: Xsun patch

**Additional Requirements:**

- X-Windows/Common Desktop Environment
- 24-bit capable graphics accelerator
- OpenGL version 1.3 runtime environment
- Forte 6 (Sun Workshop 6 Update 2) for C++ development
- J2SDK 1.4.2\_06 for Java development

**ESRI supports and recommends the following development environments for Java and ArcGIS Engine Developer Kit:**

- Eclipse v 3.0 or 3.0.1
- JBuilder X
- NetBeans 3.6
- The supported and recommend Sun C++ compiler for Solaris is WorkShop 6 Update 2

**Best Performance Configuration**

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**System Design Strategies**

Recommended platform sizing and system configuration strategies are provided in the System Design Strategies technical reference document available at: [System Design Strategies](#).