ArcGIS Engine Developer Kit 9.1 System Requirements

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
- Sun Solaris 10 (SPARC)
- Sun Solaris 8 (SPARC)
- Sun Solaris 9 (SPARC)

ArcGIS Engine Developer Kit 9.1 on Linux-Intel Red Hat Enterprise Linux AS/ES/WS 3.0

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

Hardware Requirements

**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**

**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**

**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

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<tr>
<td>Platform:</td>
<td>Linux-Intel</td>
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<tr>
<td>Operating System:</td>
<td>SUSE Linux Enterprise Server 9</td>
</tr>
<tr>
<td>Shipping/Release Date:</td>
<td>May 18, 2005</td>
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</tbody>
</table>

**Hardware Requirements**

**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

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

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**

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<thead>
<tr>
<th>Product:</th>
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<tr>
<td>Platform:</td>
<td>PC-Intel</td>
</tr>
<tr>
<td>Operating System:</td>
<td>Windows 2000 Professional</td>
</tr>
<tr>
<td>Service Packs/Patches:</td>
<td>SP 4</td>
</tr>
<tr>
<td>Shipping/Release Date:</td>
<td>May 18, 2005</td>
</tr>
</tbody>
</table>

**Hardware Requirements**

**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

  .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

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

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."

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<tr>
<th>Product:</th>
<th>ArcGIS Engine Developer Kit 9.1</th>
</tr>
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<tbody>
<tr>
<td>Platform:</td>
<td>PC-Intel</td>
</tr>
</tbody>
</table>
| Service Packs/Patches: | SP 1  
|                   | SP2 (refer to Limitations)                               |
| Shipping/Release Date: | May 18, 2005                                             |

**Hardware Requirements**

**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)

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ESRI supports and recommends the following integrated development environments for ArcGIS Engine Developer Kit:
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  Visual Basic for Applications
  Visual Basic 6 sp3 or later
  Visual C++ 6 sp3 or later
- .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

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
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)

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<thead>
<tr>
<th>Product:</th>
<th>ArcGIS Engine Developer Kit 9.1</th>
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<tr>
<td>Platform:</td>
<td>Sun</td>
</tr>
<tr>
<td>Operating System:</td>
<td>Solaris 10 (SPARC)</td>
</tr>
<tr>
<td>Service Packs/Patches:</td>
<td>See Notes</td>
</tr>
<tr>
<td>Shipping/Release Date:</td>
<td>May 18, 2005</td>
</tr>
</tbody>
</table>

**Hardware Requirements**

**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++ complier for Solaris is WorkShop 6 Update 2

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.

Limitations

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)

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

**Hardware Requirements**

**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

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.

Limitations

Platform: Limitations for Solaris 8 SunOS 5.8
The following patch revisions will not work with the C++ API:
- 109147-17
**ArcGIS Engine Developer Kit 9.1 on Sun Solaris 9 (SPARC)**

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<td>Platform:</td>
<td>Sun</td>
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<tr>
<td>Operating System:</td>
<td>Solaris 9 (SPARC)</td>
</tr>
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<td>Service Packs/Patches:</td>
<td>(Details under Notes)</td>
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**Hardware Requirements**

**CPU Speed:**
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**Processor:**
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**Memory/RAM:**
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**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
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- The supported and recommend Sun C++ compiler for Solaris is WorkShop 6 Update 2

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