



## System Requirements for Carmenta Engine 5.15

## **CARMENTA ENGINE FOR WINDOWS**

Operating Systems:

Windows 10 (64-bit).

Windows 11

Graphics device requirements for hardware acceleration:

Using OpenGL rendering requires a device supporting OpenGL 1.1.

The Plot Extension requires OpenGL 1.5.

Using GlobeView, TerrainWarningOverlay, BlendModes, Effects, and RadarVideoLayer requires OpenGL 3.0.

Using DirectX rendering requires a device supporting DirectX 9.1.

Using the radar video layer and the camera project overlay requires a device supporting DirectX 11.

Using effects on overlays requires a device supporting DirectX 11.

Language and framework requirements:

.NET Framework API: .NET Framework 4.0 or later.

.NET Standard API: .NET Framework 4.61 or later, or .NET Core 2.0 or later, or .NET 5.0 or later.

Java API: Java 8 or later.

C++ API: Visual Studio 2013 or later. When using Qt or Qt Quick, Qt version 5.9 or later should be used.

Integrated Development Environments:

Support is provided for Microsoft Visual Studio 2013, 2015, 2017 and 2019 (C++ and C#).

Other C++ IDEs that use the Microsoft C++ compiler (MSVC) can also be used.

Java developers can use NetBeans or Eclipse.

## CARMENTA ENGINE FOR ANDROID

Supported Devices:

Android devices running Android version 6.0 or above and have an ARMv8 compatible 64-bit CPU or an x86-64 compatible 64-bit CPU.

Graphics device requirements for hardware acceleration:

Using OpenGL rendering requires a device with full support for OpenGL ES 2.0.

Using GlobeView, TerrainWarningOverlay, BlendModes, Effects, and RadarVideoLayer requires a device with full support for OpenGL ES 3.0. Note that not all OpenGL ES 3.0 implementations support these features; Carmenta Support can provide an up-to-date list of Android devices which have been tested and verified to work well.

Integrated Development Environments:

Support is provided for Android Studio for Java projects and Visual Studio 2019 or later for .NET projects.

## **CARMENTA ENGINE FOR LINUX**

Operating Systems:

Ubuntu 18.04 LTS and 20.04 LTS.

Red Hat Enterprise Linux 7 and 8.

SUSE Linux Enterprise 15.

On Linux x86-64 and ARMv8 compatible 64-bit CPUs are supported.

The DwgDxf module requires the GNU Standard C++ Library version 7 or later to be installed on Red Hat 7.

Graphics device requirements for hardware acceleration: Using OpenGL rendering requires a device supporting OpenGL 1.1 and GLX 1.3.

When using OpenGL ES on Linux, the device needs to support OpenGL ES 3.0 or later.

The Plot Extension requires OpenGL 1.5.

Using GlobeView, TerrainWarningOverlay, BlendModes, Effects, and RadarVideoLayer requires OpenGL 3.0.

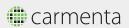
Language requirements:

Java API: Java 8 or later.

C++ API: GCC 4.8.1 or later. When using Qt or Qt Quick, Qt version 5.9 or later should be used.

.NET Standard API: .NET Core 2.0 or later, or .NET 5.0 or





For further information, please contact us: +46 31 775 57 00, info@carmenta.com carmenta.com