

IBM WebSphere Custom Environment

Highlights

- ***Provides production-level runtime environment for the deployment of deeply embedded applications***
- ***Allows engineers control over runtime environment***
- ***Available on over 35 reference platform implementations***

IBM delivers custom solutions

In order for Original Device Manufacturers (ODMs) to stay ahead of the wireless game, the competitive edge depends on getting a fast start to launch value-added features that create new sources of revenue for Service Providers. IBM WebSphere Custom Environment is a complete runtime environment for the deployment of embedded applications to realtime control systems and other deep embedded devices. This technology is tailored to customers who desire control over their applications to meet memory and speed design specifications. WebSphere Custom Environment delivers a production-level runtime environment for embedded applications that adheres to the fundamentals of embedded systems development: flexible, fast, small and smart.

Device management

WebSphere Custom Environment supports the Open Services Gateway initiative (OSGi). WebSphere Custom Environment, in conjunction with IBM Services Management Framework (SMF), delivers a product-level implementation of the OSGi, proven on internet appliances, automotive telematics subsystems and industrial service gateways.

Optimized environment

At the core of WebSphere Custom Environment Version 5.5 is the IBM J9™ Virtual Machine. J9 has been optimized for each of the supported reference platforms; critical when every byte of memory is tracked and the need for application performance is paramount.

For developers and engineers who require a J2ME® Java Powered™ platform for cellular telephones, PDAs, Set Top Boxes or gaming devices, WebSphere Micro Environment should be selected.

Memory and speed

WebSphere Custom Environment was designed with the constraints of limited memory availability and processing power in mind. By building the virtual machine to perform under the constraints of very small, embedded devices, the underlying architecture easily scales to deliver performance and footprint capabilities needed for the next generation of service gateways and vehicle telematics systems.

WebSphere Custom Environment V5.5—Platform Coverage

Platforms	Xtreme	Core	Configurations Gateway & Gateway+	Max & RTE	AWT
The following platforms are available for evaluation purposes. For development or commercial deployment use please contact IBM (pvcsales@us.ibm.com) for availability dates and pricing.					
Linux/x86 ^{§JA}	Y	Y	Y	Y	Y
Windows®/x86 ^{§JA}	Y	Y	Y	Y	Y
AIX®/PowerPC ^{JA}	Y	Y	Y	Y	
Linux/ARM ^{JA}	Y	Y	Y	Y	Y
Palm OS/68K	Y				
PocketPC/ARM ^{JA}	Y	Y	Y	Y	Y
Solaris/Sparc	Y	Y	Y	Y	

Preview Platforms

The following platforms are available for evaluation purposes. For development or commercial deployment use please contact the referenced partner for availability dates and pricing.

MontaVista Linux/MIPS	Y	Y	Y	Y	
MontaVista Linux/x86 ^{JA}	Y	Y	Y	Y	Y
MontaVista Linux/ARM ^{JA}	Y	Y	Y	Y	Y
MontaVista Linux/PowerPC ^{JA}	Y	Y	Y	Y	Y
MontaVista Linux/SH4	Y	Y	Y	Y	
QNX/x86 ^{JA}	Y	Y	Y	Y	Y
QNX/Arm	Y	Y	Y	Y	Y
QNX/MIPS	Y	Y	Y	Y	Y
QNX/PowerPC ^{JA}	Y	Y	Y	Y	Y
QNX/SH4	Y	Y	Y	Y	Y

Legend

- JA** Indicates that the platform has a JIT and/or AOT option.
- §** Indicates a development host platform.
- Y** Indicates the configuration is available.

For engineers who need to know every line of code that is deployed to their device, WebSphere Custom Environment offers the maximum flexibility and the ultimate control over the resources used. The class libraries included in WebSphere Custom Environment (Xtreme, Core, Gateway, and Max) provide the engineer with superior flexibility.

Native interfacing

WebSphere Custom Environment supports the Java Native Interface (JNI), which can allow you to directly access native (non-Java) application interfaces, device drivers and Operating System (OS) functions. This provides maximum flexibility for engineers to select the peripheral devices (point-of-sale, barcode scanners, USB devices, etc.) for industry specific applications.

Partner platforms

WebSphere Custom Environment is available for over 35 reference platform implementations such as QNX®, MontaVista™, Linux, OSE, ITRON, PocketPC, and Palm OS®. With support for the market-leading processors such as the Xscale™, StrongARM™, X86, PowerPC®, 68K, ARM™, MIPS, and SuperH™, WebSphere Custom Environment provides seamless integration with legacy enterprise applications, allowing extension of e-business models.

For more information

To learn more about IBM pervasive computing software solutions visit **ibm.com/pvc** or call your local IBM representative.



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