

SUSE® Linux Enterprise Mono® Extension

Frequently Asked Questions

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What is the SUSE Linux Enterprise Mono Extension?

SUSE Linux Enterprise Mono Extension, a .NET application framework, enables organizations to run their Microsoft .NET-based server applications on Linux. Based on Mono—an open source, cross-platform .NET application framework—and run in conjunction with SUSE Linux Enterprise Server. It allows IT organizations to easily port .NET-based applications from Windows to Linux without a major investment in rewriting code. With this offering, corporate and ISV developers can develop new Linux and cross-platform applications using .NET while getting product updates, security and bug fixes and award-winning Novell support.

Is SUSE Linux Enterprise Mono Extension included with a SUSE Linux Enterprise Server subscription?

No. SUSE Linux Enterprise Mono Extension is sold as an add-on to SUSE Linux Enterprise Server and inherits the level of support already included in the underlying subscription. By purchasing a subscription to SUSE Linux Enterprise Mono Extension, you obtain a support subscription that includes maintenance updates, security and bug fixes, free product upgrades and access to award-winning Novell support. The price for a one-year subscription to SUSE Linux Enterprise Mono Extension for x86 and x86_64 is \$200. For more information on purchasing a subscription to SUSE Linux Enterprise Mono Extension, visit our Web site on www.novell.com/products/mono

How does SUSE Linux Enterprise Mono Extension benefit customers?

SUSE Linux Enterprise Mono Extension addresses the challenges that IT organizations face in terms of increasing scalability and performance, while at the same time reducing cost and complexity around their .NET application environment. IT organizations that rely on the .NET framework face several limitations that prevent them from achieving maximum flexibility, scalability and performance. Because .NET only runs on Windows*, customers cannot choose the operating system on which they develop, test and deploy their .NET applications or make maximum use of available hardware. And corporate or ISV developers who want to port .NET-based applications to run on other operating systems face considerable time and investment to do so.

SUSE Linux Enterprise Mono Extension delivers all the performance, scalability and hardware support of the SUSE Linux Enterprise platform to the .NET application environment, giving IT organizations and developers more flexibility and choice than ever. This offering also allows SUSE Linux Enterprise to support more workloads than any other enterprise Linux platform, delivering unmatched customer value. With SUSE Linux Enterprise Mono Extension, organizations can increase performance, scalability and productivity by leveraging existing .NET resources to run applications on the operating system and hardware of their choice.

What is .NET? What is Mono? How are the two technologies different?

.NET is a software framework that is available with Microsoft Windows operating systems. It includes a large library of solutions to common programming problems and a virtual machine that manages the execution of programs written specifically for the framework. The .NET Framework is a Microsoft offering and is intended to be used by most new applications created for the Windows platform.

Mono is an open source, cross-platform .NET application framework sponsored by Novell. Mono mirrors the .NET framework and development stack, providing the following elements:

- Mono is an implementation of the Framework Class Libraries and Base Class Libraries that are available with the .NET Framework
- Mono provides the tools necessary to develop .NET applications, including an implementation of the C# compiler
- Mono is a binary-compatible implementation of the .NET runtime (the compiled code that runs on top of the OS), which allows many .NET applications to run on Mono without having to recompile code

With which version of Microsoft .NET is this version of Mono compatible?

The latest version of Mono (version 2.4) includes a .NET compatible runtime, which is compatible with the desktop and server components of version 2.0 of the Microsoft .NET Framework, as well as portions of version 3.5 of the .NET Framework, including C# 3.0 and LINQ. This includes many libraries that provide support for ASP.NET, ADO.NET and many other .NET Framework components, as well as many new APIs that provide additional functionality for developers targeting Mono and Linux.

Does SUSE Linux Enterprise Mono Extension replace the Mono technology that is included with the SUSE Linux Enterprise distribution?

No. SUSE Linux Enterprise Mono Extension runs side by side with the Mono technology that is included with SUSE Linux Enterprise. Applications that take advantage of the latest features of Mono can run with SUSE Linux Enterprise Mono Extension. Applications that are dependent on a specific version of Mono included with SUSE Linux Enterprise can continue to run with this version of Mono that originally came with the operating system.

How is SUSE Linux Enterprise Mono Extension different from the Mono technology included with SUSE Linux Enterprise?

SUSE Linux Enterprise includes some portions of Mono required by applications that ship with SUSE Linux Enterprise. However, this version of Mono is not built to be a platform for hosting ASP.NET and other .NET

server applications. Additionally, operating system requirements prevent this version of Mono from being easily upgraded to a newer version. SUSE Linux Enterprise Mono Extension not only runs a newer version of Mono with the latest .NET features, including ASP.NET 2.0, ASP.NET AJAX, and ASP.NET MVC, but it can also be safely upgraded as new .NET features become available in Mono.

Can Mono run binaries produced by Visual Studio?

Yes. While Mono includes tools and compilers for developing .NET applications on Linux, it is also compatible with many of the .NET developer tools available on Windows, including Microsoft* Visual Studio*, and features the Mono Migration Analyzer (MoMA), an analytical tool for .NET-to-Linux migrations that demonstrates Mono .NET API compatibility. Mono can run binaries produced by Visual Studio without the need for users to recompile.

With which Web server does SUSE Linux Enterprise Mono Extension work (i.e., Apache)?

SUSE Linux Enterprise Mono Extension supports serving ASP.NET Web sites and applications from Apache 2.2.

Which hardware is supported for SUSE Linux Enterprise Mono Extension?

The supported platforms for SUSE Linux Enterprise Mono Extension are:

- x86
- x86_64 (AMD64 and Intel EM64T)
- IBM System z (64-bit) (s390x)

What do I get when I purchase SUSE Linux Enterprise Mono Extension? How does the installation process work?

Upon purchase of SUSE Linux Enterprise Mono Extension, customers receive an ISO image, which can be installed with the add-ons option within YaST. Instructions on to install SUSE Linux Enterprise Mono Extension on SUSE Linux Enterprise Server 11 (x86_64) are as follows:

1. Go to <http://download.novell.com> to download SUSE Linux Enterprise Mono Extension ISO image
2. Run Yast2 as root
3. In the "Software" section, click "Add-On Products"
4. Click "Add"
5. Click to install from "Local ISO Image..."
6. Click "Next"
7. Click "Browse"
8. Browse to the ISO image
9. Click "Open"
10. Type in a repository name, like "Mono Extension"

11. Click "Next"
12. Agree to the license agreement
13. Click "Next"
14. Click "Ok" to start installing SUSE Linux Enterprise Mono Extension
15. Wait while SUSE Linux Enterprise Mono Extension is installed
16. Click "Ok" to close the Add-On Products installer
17. SUSE Linux Enterprise Mono Extension is installed!

Who is authorized to sell SUSE Linux Enterprise Mono Extension?

Customers can purchase SUSE Linux Enterprise Mono Extension from participating distributors and resellers and Novell direct channels.

Is SUSE Linux Enterprise Mono Extension available on other Linux distributions?

SUSE Linux Enterprise Mono Extension is only available to run on SUSE Linux Enterprise.

Under which type of license is SUSE Linux Enterprise Mono Extension distributed?

SUSE Linux Enterprise Mono Extension is distributed under the following open source licenses:

- The C# compiler which is dual-licensed under the MIT/X11 license and the GNU General Public License (<http://www.opensource.org/licenses/gpl-license.html>) (GPL)
- Tools released under the terms of the GNU General Public License (<http://www.opensource.org/licenses/gpl-license.html>) (GPL)
- Runtime libraries under the GNU Library GPL 2.0 (<http://www.gnu.org/copyleft/library.html> #TOC1) (LGPL 2.0)
- Class libraries released under the terms of the MIT X11 (<http://www.opensource.org/licenses/mit-license.html>) license

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