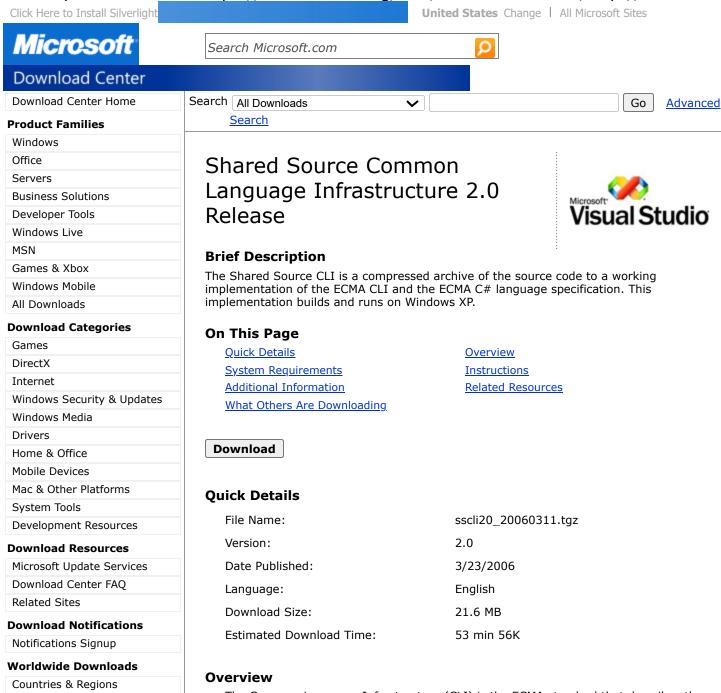
The Wayback Machine - https://web.archive.org/web/20100523072748/http://www.micr...



The Common Language Infrastructure (CLI) is the ECMA standard that describes the core of the .NET Framework world. The Shared Source CLI is a compressed archive of the source code to a working implementation of the ECMA CLI and the ECMA C# language specification.

The current release builds and runs on Windows XP only. It is released under a shared source initiative. Please see the accompanying <u>license</u>.

The Shared Source CLI goes beyond the printed specification of the ECMA standards, providing a working implementation for CLI developers to explore and understand. It will be of interest to academics and researchers wishing to teach and explore modern programming language concepts, and to .NET developers interested in how the technology works.

#### **Features**

The Shared Source CLI archive contains the following technologies in source code form:

- An implementation of the runtime for the Common Language Infrastructure (ECMA-335).
- Compilers that work with the Shared Source CLI for C# (ECMA-334) and JScript.

- Development tools for working with the Shared Source CLI such as assembler/disassemblers (ilasm, ildasm), a debugger (cordbg), metadata introspection (metainfo), and other utilities.
- The Platform Adaptation Layer (PAL) used to port the Shared Source CLI from Windows XP to other platforms.
- Build environment tools (nmake, build, and others).
- Test suites used to verify the implementation.
- A rich set of sample code and tools for working with the Shared Source CLI.

#### New in this Release

- Full support for Generics.
- New C# 2.0 features like Anonymous Methods, Anonymous Delegates and Generics
- BCL additions.
- Lightweight Code Generation (LCG).
- Stub-based dispatch.
- · Numerous bug fixes.

#### What can I do with the Shared Source CLI?

There is a wealth of programming language technology in the Shared Source CLI. It is likely to be of interest to a wide audience, including:

- Developers interested in the internal workings of the .NET Framework can explore this implementation of the CLI to see how garbage collection works, JIT compilation and verification is handled, security protocols implemented, and the organization of frameworks and virtual object systems.
- Teachers and researchers doing work with advanced compiler technology. Research projects into language extensions, JIT optimizations, and modern garbage collection all have a basis in the Shared Source CLI. Modern compiler courses can be based on the C# or JScript languages implemented on the CLI.
- People developing their own CLI implementations will find the Shared Source CLI an indispensable guide and adjunct to the ECMA standards.

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# **System Requirements**

• Supported Operating Systems: Windows XP Service Pack 2

On Windows you will need:

- Windows XP SP2.
- · Microsoft Visual Studio .NET 2005.
- Perl 5.8.7 (available from http://aspn.activestate.com/ASPN/Downloads/ActivePerl/.)
- Archiving utility of choice—WinZip or other.
- 256 MB of memory.
- One gigabyte of free disk space.

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### **Instructions**

### Download

The archive is a compressed tarball. <u>Download</u> it and then uncompress and extract it using the appropriate tools on your system.

### Support

While Technical Support is not provided for the Shared Source Common Language Infrastructure, there are several newsgroups where discussion with your peers can take

#### place:

- The Microsoft Shared Source CLI newsgroup.
- A Shared Source CLI moderated discussion list has been created by the University of Pisa at: <a href="https://mailserver.di.unipi.it/mailman/listinfo/dotnet-sscli">https://mailserver.di.unipi.it/mailman/listinfo/dotnet-sscli</a>.
- A Shared Source CLI discussion group exists at DevelopMentor. To subscribe, either go to <a href="http://discuss.develop.com">http://discuss.develop.com</a> and join the list, or send an email from the account you'll be posting with to: <a href="listserv@discuss.develop.com">listserv@discuss.develop.com</a>, with a message body of: <a href="mailto:subscribe">subscribe</a> dotnet-rotor.

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#### **Additional Information**

- Shared Source Common Language Infrastructure 1.0
- Microsoft Research has a web site dedicated to <u>research projects using the</u> Shared Source CLI.
- The <u>original MSDN article</u> by David Stutz.
- O'Reilly Network has a number of articles on the Shared Source CLI (codenamed Rotor) at: <a href="http://www.oreillynet.com/dotnet">http://www.oreillynet.com/dotnet</a>.
- ECMA is the official publication site for ECMA-334 (The C# Language Specification) and ECMA-335 (The Common Language Infrastructure). Please see: <a href="ECMA-334"><u>ECMA-334</u></a> and <a href="ECMA-335"><u>ECMA-335</u></a>.
- For more information on Microsoft's Shared Source initiatives, including the Shared Source CLI, please see: <a href="http://www.microsoft.com/sharedsource">http://www.microsoft.com/sharedsource</a>.

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#### **Related Resources**

- 1. Microsoft Shared Source CLI Newsgroup
- 2. Home Page for Microsoft Shared Source Initiative

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## What Others Are Downloading

Others who downloaded **Shared Source Common Language Infrastructure 2.0 Release** also downloaded:

- 1. Shared Source Common Language Infrastructure 1.0 Release
- 2. Microsoft .NET Framework Version 2.0 Redistributable Package (x86)
- 3. Microsoft .NET Framework 4 (Web Installer)
- 4. Shared Source Common Language Infrastructure; Beta 1 Release
- 5. CLR Profiler for the .NET Framework 2.0

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