Ecma International
Rue du Rhône 114
CH-1204 Geneva
T/F +41 22 849 6000/01

C# and CLI Become More Powerful

Ecma improves the Existing Standards for C# and CLI by Publishing the Third Edition

FOR IMMEDIATE RELEASE

Geneva, 27 July 2005

In June 2005 the Ecma General Assembly approved the third edition of the standards for C# and CLI. With the first edition of the standards in 2002 and their adoption by ISO/IEC in 2003, the industry was given powerful tools to enable vendor-neutral development of Web services. Today, Ecma is keeping pace with the growing needs of the developer community by publishing the third edition.

New core features – The object-oriented programming language C# allows developers to easily build XML-based Web services with any language and on any platform. With the third edition, the standard has been substantially improved. It contains several new core features such as generics, nullable types and anonymous methods, which can simplify event handling.

More productive – At the same time, Ecma has improved the standard for CLI, in which applications written in multiple high-level languages can be executed in different system environments. The standard now includes first-class support for generics at both run-time and class level. Besides, a parallel Application Programming Interface (API) allows developers to more easily develop code to simultaneously run on multiple threads.

"Intel is committed to fostering open standards. Ecma's ratification of the CLI specification is proof that cooperation between companies, universities and individuals can produce a quality product," said **Wen-Hann Wang***, general manager of Intel's Managed Run-Time Division. "An open CLI standard helps encourage research and enablement to ensure the success of managed applications on standard computing platforms."*

David Patrick*, Novell's general manager of Linux, open source and platform services commented: "We are very pleased with the upgrades to the Ecma C# language specification as they show the evolution of a language which is adapting to the needs of modern applications."*

"Ecma's endorsement of the latest version of C# and CLI reaffirms Microsoft's ongoing commitment to open standards," said **Anders Hejlsberg***, distinguished engineer at Microsoft Corporation. "Microsoft is excited about making the advances in C# broadly available through Ecma standardization."*

Dr. Nigel Perry*, computer scientist, New Zealand, and convener of the Ecma C# technical committee commented: "C# is a standardized modern object-oriented language which is available across multiple platforms; complete releases for Windows, Linux and*

MacOS X are all expected by the end of this year, making it very attractive for both commercial projects and teaching."

"Ecma members have produced a quality, cohesive specification from a multitude of draft technologies, allowing for a more robust managed code experience," said **Joel Marcey**, Ecma CLI technical group convener and Intel software engineer.

Peter Sestoft, professor at IT University of Copenhagen, Denmark, noted: "The new functional language features such as generics, anonymous methods and iterators (stream generators) make C# a more expressive, safer and more convenient tool for the professional developer."

Dr. Nigel Perry, computer scientist, New Zealand, and convener of the Ecma C# technical committee commented: "The addition of generics, which enable efficient type-safe classes and methods which are specialized to operate over specific types, and the associated dynamic local (anonymous) methods greatly enhances the C# language for both industry and academia."

Jon Jagger, Jagger Software UK, current member and retired convener of TG2 commented: "The new features in C# 2.0 will help to make programming more productive for the serious programmer, and just as importantly, more enjoyable too."

About Ecma International

Since its inception in 1961, Ecma International (Ecma) has developed standards for Information and Communication Technology (ICT) and Consumer Electronics (CE). Ecma is a non-profit industry association of technology developers, vendors and users. Industry and other experts work together at Ecma to complete standards. Ecma submits its work for approval as ISO, ISO/IEC and ETSI standards and is the inventor and main practitioner of "fast tracking" of specifications through the standardisation process in global standards bodies such as the ISO. Publications can be downloaded free of charge from http://www.ecma-international.org/.

Contacts

Industry contact
Jan W. van den Beld
Ecma Secretary-General
jan@ecma-international.org

Press contact
Christa Rosatzin-Strobel
Ecma Media Relations
media@ecma-international.org