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What is CLR?

MSIL (Microsoft Intermediate Language) is an intermediate language created from a compiler that matches CLS standards, but it cannot be executed. Thus, MSIL should be run on a virtual machine, and this virtual machine called Common Language Runtime (CLR).

What is CTS?

Common type system is a rich type system built into the CLR. It represents the data type commonly used in .NET.

What is CLS?

CLS is the abbreviation of the Common Languages System. .NET is promoted as a language-independent framework, which implies that development can take place in different compliant language, but how to use different languages in the same framework because each language has different data types and data sizes. So, it needs to have specifications for each language, called Common Language System. All of the languages that match the standards, it can be used with each other.

What is MSIL?

How can we create applications which match CLS? The compiler should match CLS specifications. After that, the compiler will compile your source code to another language, called Microsoft Intermediate Language (MSIL). All of the different languages, such as C#, VB, convert to intermedia language, so, they become the same standard.

What is JIT?

JIT is an abbreviation of just in time. It means each function is compiled just before execution.

What is GAC?

Global Assembly Cache is different from local metadata in your project or application. GAC shares for many applications on your computer.

What is the managed code?

Code that targets the CLR is referred to as managed code. Simply speaking, all programs run on CLR or run in .NET framework called managed code. Such as C#.NET is managed code, but C# is unmanaged code.

What is a garbage collector? Who manage it?

CLR provides some services, such as Common type system, garbage collection, exception handling, thread, etc. Garbage collector will automatically clean up unused objects and buffers.