System.Runtime.InteropServices.Unmanaged Type Enum

```
[ILAsm]
.class public sealed serializable UnmanagedType extends System.Enum


[C#]
public enum UnmanagedType
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
  - CLSCompliantAttribute(true)

Summary

Identifies how parameters or fields are to be marshaled to unmanaged code.

Inherits From: System.Enum

Library: RuntimeInfrastructure

Description

This type provides a set of values that identify the native types that are supported by the CLI. Each native type is encoded by a different value. All encoding values in the range 0-63, inclusive, are reserved for backward compatibility with existing implementations of the CLI. Values in the range 64-127 are reserved for future use in this and related Standards.

UnmanagedType.Bool Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType Bool = 2


[C#]
Bool = 2
```

Summary

Specifies a 4-byte Boolean value where `true` is denoted by all non-zero values and `false` is denoted by zero.

UnmanagedType.CustomMarshaler Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType CustomMarshaler = 44


[C#]
CustomMarshaler = 44
```

Summary

Specifies the custom marshaler class when used with
System.Runtime.InteropServices.MarshalAsAttribute.MarshalType or
System.Runtime.InteropServices.MarshalAsAttribute.MarshalTypeRef.

UnmanagedType.FunctionPtr Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType FunctionPtr = 38

[C#]
FunctionPtr = 38
```

Summary

Specifies a function pointer.

UnmanagedType.I1 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType I1 = 3


[C#]
I1 = 3
```

Summary

Specifies a 1-byte signed integer.

UnmanagedType.I2 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType I2 = 5


[C#]
I2 = 5
```

Summary

Specifies a 2-byte signed integer.

UnmanagedType.I4 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType I4 = 7


[C#]
I4 = 7
```

Summary

Specifies a 4-byte signed integer.

UnmanagedType.I8 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType I8 = 9


[C#]
I8 = 9
```

Summary

Specifies an 8-byte signed integer.

UnmanagedType.LPArray Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType LPArray = 42


[C#]
LPArray = 42
```

Summary

Specifies a C-style array. When marshaling from managed to unmanaged, the length of the array is determined by the length of the managed array. When marshaling from unmanaged to managed, the length of the array is determined from the `System.Runtime.InteropServices.MarshalAsAttribute.SizeConst` and `System.Runtime.InteropServices.MarshalAsAttribute.SizeParamIndex` fields.

UnmanagedType.LPStr Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType LPStr = 20


[C#]
LPStr = 20
```

Summary

Specifies a pointer to an ANSI character string.

UnmanagedType.LPWStr Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType LPWStr = 21


[C#]
LPWStr = 21
```

Summary

Specifies a pointer to a Unicode character string.

UnmanagedType.R4 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType R4 = 11


[C#]
R4 = 11
```

Summary

Specifies a 4-byte floating-point number.

UnmanagedType.R8 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType R8 = 12


[C#]
R8 = 12
```

Summary

Specifies an 8-byte floating-point number.

UnmanagedType.SysInt Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType SysInt = 31


[C#]
SysInt = 31
```

Summary

Specifies an implementation-specific sized signed integer.

UnmanagedType.SysUInt Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType SysUInt = 32


[C#]
SysUInt = 32
```

Summary

Specifies an implementation-specific sized unsigned integer.

UnmanagedType.U1 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType U1 = 4


[C#]
U1 = 4
```

Summary

Specifies a 1-byte unsigned integer.

[*Note:* System.Runtime.InteropServices.UnmanagedType.U1 can be used to marshal a
System.Char parameter as an ANSI character.]

UnmanagedType.U2 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType U2 = 6


[C#]
U2 = 6
```

Summary

Specifies a 2-byte unsigned integer.

[*Note:* System.Runtime.InteropServices.UnmanagedType.U2 can be used to marshal a System.Char parameter as a Unicode character.]

UnmanagedType.U4 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType U4 = 8


[C#]
U4 = 8
```

Summary

Specifies a 4-byte unsigned integer.

UnmanagedType.U8 Field

```
[ILAsm]
.field public static literal valuetype
System.Runtime.InteropServices.UnmanagedType U8 = 10


[C#]
U8 = 10
```

Summary

Specifies an 8-byte unsigned integer.