

System.Runtime.InteropServices.UnmanagedType 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]
- *Version:* 1.0.x.x
- *Attributes:*
 - CLSCompliantAttribute(true)

Summary

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

Inherits From: System.Enum

Library: RuntimeInfrastructure

1 UnmanagedType.Bool Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType Bool = 2  
  
5 [C#]  
6 Bool = 2
```

7 Summary

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

10

1 UnmanagedType.ByValArray Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType ByValArray =  
5 30  
  
6 [C#]  
7 ByValArray = 30
```

8 Summary

9 Specifies an array of fixed size. This unmanaged type is valid only for
10 an array in a structure.

11 When
12 **System.Runtime.InteropServices.MarshalAsAttribute.Value** is
13 set to **ByValArray**, the
14 **System.Runtime.InteropServices.MarshalAsAttribute.SizeConst**
15 field is required to contain the number of elements in the array.
16

17

1 UnmanagedType.CustomMarshaler Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType  
5 CustomMarshaler = 44  
  
6 [C#]  
7 CustomMarshaler = 44
```

8 Summary

9 Specifies the custom marshaler class when used with
10 **System.Runtime.InteropServices.MarshalAsAttribute.MarshalTy**
11 **pe** or
12 **System.Runtime.InteropServices.MarshalAsAttribute.MarshalTy**
13 **peRef**.

14

1 UnmanagedType.FunctionPtr Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType FunctionPtr =  
5 38  
  
6 [C#]  
7 FunctionPtr = 38
```

8 Summary

9 Specifies a function pointer.

10

1 UnmanagedType.I1 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType I1 = 3  
  
5 [C#]  
6 I1 = 3
```

7 Summary

8 Specifies a 1-byte signed integer.

9

1 UnmanagedType.I2 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType I2 = 5  
  
5 [C#]  
6 I2 = 5
```

7 Summary

8 Specifies a 2-byte signed integer.

9

1 **UnmanagedType.I4 Field**

```
2        [ILASM]  
3        .field public static literal valuetype  
4        System.Runtime.InteropServices.UnmanagedType I4 = 7  
  
5        [C#]  
6        I4 = 7
```

7 **Summary**

8 Specifies a 4-byte signed integer.

9

1 UnmanagedType.I8 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType I8 = 9  
  
5 [C#]  
6 I8 = 9
```

7 Summary

8 Specifies an 8-byte signed integer.

9

1 UnmanagedType.LPArray Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType LPArray = 42  
  
5 [C#]  
6 LPArray = 42
```

7 Summary

8 Specifies a C style array. When marshaling from managed to
9 unmanaged, the length of the array is determined by the length of the
10 managed array. When marshaling from unmanaged to managed, the
11 length of the array is determined from the
12 **System.Runtime.InteropServices.MarshalAsAttribute.SizeConst**
13 and the
14 **System.Runtime.InteropServices.MarshalAsAttribute.SizeParamIndex** fields.
15
16

1 UnmanagedType.LPStr Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType LPStr = 20  
  
5 [C#]  
6 LPStr = 20
```

7 Summary

8 Specifies a pointer to an ANSI character string.

9

1 UnmanagedType.LPCTSTR Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType LPCTSTR = 22  
  
5 [C#]  
6 LPCTSTR = 22
```

7 Summary

8 Specifies a pointer to the preferred character string representation for
9 the current platform.

10
11 [Note: A type library exported with an **LPCTSTR** on an ANSI platform
12 will have a different size than one exported on a Unicode platform.]

13

1 UnmanagedType.LPWStr Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType LPWStr = 21  
  
5 [C#]  
6 LPWStr = 21
```

7 Summary

8 Specifies a pointer to a Unicode character string.

9

1 **UnmanagedType.R4 Field**

```
2        [ILASM]  
3        .field public static literal valuetype  
4        System.Runtime.InteropServices.UnmanagedType R4 = 11  
  
5        [C#]  
6        R4 = 11
```

7 **Summary**

8 Specifies a 4-byte floating-point number.

9

1 **UnmanagedType.R8 Field**

```
2        [ILASM]  
3        .field public static literal valuetype  
4        System.Runtime.InteropServices.UnmanagedType R8 = 12  
  
5        [C#]  
6        R8 = 12
```

7 **Summary**

8 Specifies an 8-byte floating-point number.

9

1 UnmanagedType.Struct Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType Struct = 27  
  
5 [C#]  
6 Struct = 27
```

7 Summary

8 A C-style structure, used to marshal managed formatted classes and
9 value types.

10

1 **UnmanagedType.SysInt** Field

```
2        [ILASM]  
3        .field public static literal valuetype  
4        System.Runtime.InteropServices.UnmanagedType SysInt = 31  
  
5        [C#]  
6        SysInt = 31
```

7 **Summary**

8 Specifies an implementation-sized signed integer.

9

1 **UnmanagedType.SysUInt** Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType SysUInt = 32  
  
5 [C#]  
6 SysUInt = 32
```

7 **Summary**

8 Specifies an implementation-sized unsigned integer.

9

1 UnmanagedType.TBStr Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType TBStr = 36  
  
5 [C#]  
6 TBStr = 36
```

7 Summary

8 Specifies a pointer to the preferred BSTR representation for the
9 current platform - Unicode or SBCS.

10

1 UnmanagedType.U1 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType U1 = 4  
  
5 [C#]  
6 U1 = 4
```

7 Summary

8 Specifies a 1-byte unsigned integer.

9
10 [Note: **System.Runtime.InteropServices.UnmanagedType.U1** can
11 be used to marshal a **System.Char** parameter as an ANSI character.]

12

1 UnmanagedType.U2 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType U2 = 6  
  
5 [C#]  
6 U2 = 6
```

7 Summary

8 Specifies a 2-byte unsigned integer.

9
10 [Note: **System.Runtime.InteropServices.UnmanagedType.U2** can
11 be used to marshal a **System.Char** parameter as a Unicode
12 character.]

13

1 UnmanagedType.U4 Field

```
2 [ILASM]  
3 .field public static literal valuetype  
4 System.Runtime.InteropServices.UnmanagedType U4 = 8  
  
5 [C#]  
6 U4 = 8
```

7 Summary

8 Specifies a 4-byte unsigned integer.

9

1 **UnmanagedType.U8 Field**

```
2        [ILASM]  
3        .field public static literal valuetype  
4        System.Runtime.InteropServices.UnmanagedType U8 = 10  
  
5        [C#]  
6        U8 = 10
```

7 **Summary**

8 Specifies an 8-byte unsigned integer.

9