

1 System.Enum Class

```
4 [ILASM]
5 .class public abstract serializable Enum extends
6 System.ValueType implements System.IComparable,
7 System.IFormattable
8
9 [C#]
10 public abstract class Enum: ValueType, IComparable,
    IFormattable
```

11 Assembly Info:

- 12 • Name: mscorlib
- 13 • Public Key: [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 14 • Version: 1.0.x.x
- 15 • Attributes:
 - 16 ○ CLSCompliantAttribute(true)

17 Implements:

- 18 • System.IComparable
- 19 • System.IFormattable

20 Summary

22 Provides support for all enumeration types. Serves as the base class
23 for all enumeration types.

24 Inherits From: System.ValueType

26 Library: BCL

28 Description

29 A **System.Enum** is a distinct type with named constant members.
30 Each enumeration type has a corresponding integral type called the
31 *underlying type* of the enumeration type. This underlying type is
32 required to be a system supplied integer type that is large enough to
33 represent all values defined in the enumeration. A **System.Enum**
34 declaration is allowed to explicitly declare any integral type other than
35 **System.Char** as an underlying type. This includes **System.Byte**,
36 **System.SByte**, **System.Int16**, **System.Int32**, **System.Int64**,
37 **System.UInt16**, **System.UInt32**, and **System.UInt64**. A
38 **System.Enum** declaration that does not explicitly declare an
39 underlying type has an underlying type of **System.Int32**.

41 **System.Enum** derives from **System.ValueType** but is not a value

1 type. Programming languages typically provide syntax to declare sets
2 of a specified enumeration type consisting of named constants and
3 their values.
4

5 It is possible to treat instances of a **System.Enum** as bit fields
6 containing multiple values. For more information, see
7 **System.FlagsAttribute**.
8

9 [*Note:* **System.Enum** provides methods to compare instances of
10 enumeration types, convert the value of an instance to its
11 **System.String** representation, convert the **System.String**
12 representation of a number to an instance of the enumeration type,
13 and create an instance of a specified enumeration and value.]

14

1 Enum.CompareTo(System.Object) Method

```
2 [ILASM]  
3 .method public final hidebysig virtual int32  
4 CompareTo(object target)  
  
5 [C#]  
6 public int CompareTo(object target)
```

7 Summary

8 Returns the sort order of the current instance compared to the
9 specified **System.Object**.

10 Parameters

Parameter	Description
<i>target</i>	An object to compare the current instance to.

14 Return Value

16 A **System.Int32** containing a value that reflects the sort order of the
17 current instance as compared to *target*. The following table defines the
18 conditions under which the returned value is a negative number, zero,
19 or a positive number.

Return Value	Description
Any negative integer	The value of the current instance is less than the value of <i>target</i> .
Zero	The value of the current instance is equal to the value of <i>target</i> .
Any positive integer	The value of the current instance is greater than the value of <i>target</i> , or <i>target</i> is null .

21 Description

22 [Note: This method is implemented to support the
23 **System.IComparable** interface.]

24 Exceptions

Exception	Condition
System.ArgumentException	<i>target</i> and the current instance are not of the same

1
2
3

	enumeration type.
--	-------------------

1 Enum.Equals(System.Object) Method

```
2 [ILASM]  
3 .method public hidebysig virtual bool Equals(object obj)  
4 [C#]  
5 public override bool Equals(object obj)
```

6 Summary

7 Determines whether the current instance and the specified
8 **System.Object** represent the same type and value.

9 Parameters

10
11

Parameter	Description
<i>obj</i>	An object to compare the current instance to.

12
13
14

Return Value

15 **true** if *obj* is of the same enumeration type and represents the same
16 value as the current instance; otherwise, **false**.

17 Description

18 [Note: This method overrides **System.Object.Equals**.]
19

1 Enum.Format(System.Type, 2 System.Object, System.String) Method

```
3 [ILASM]  
4 .method public hidebysig static string Format(class  
5 System.Type enumType, object value, string format)  
  
6 [C#]  
7 public static string Format(Type enumType, object value,  
8 string format)
```

9 Summary

10 Converts the specified element of the specified enumeration type to its
11 **System.String** representation using the specified format.

12 Parameters

13
14

Parameter	Description
<i>enumType</i>	A System.Type that specifies the type of the enumeration of which <i>value</i> is a member.
<i>value</i>	The enumeration element to be converted.
<i>format</i>	A System.String that specifies the output format to use.

15
16
17

16 Return Value

18 The **System.String** representation of the value of the enumeration
19 element.

20 Description

21 For cross-platform portability, the only valid values for *format* are:

Format	Description
"G" or "g"	If <i>value</i> is equal to a defined value of <i>enumType</i> , returns the element name defined for <i>value</i> . If the System.FlagsAttribute attribute is set on the System.Enum declaration and <i>value</i> is a built-in integer type and is equal to a summation of enumeration elements, the return value contains the element names in an unspecified order, separated by commas (e.g. "Red, Yellow"). Otherwise, <i>value</i> is returned in decimal format.
"X" or "x"	Returns <i>value</i> in hexadecimal format, without a leading 0x. The value is padded with leading zeroes to ensure the returned value is at least eight digits in length.
"F" or "f"	Behaves identically to "G". except the FlagsAttribute is not required to be

"f"	present on the System.Enum declaration.
"D" or "d"	Returns <i>value</i> in decimal format with no leading zeroes.

1

2 Exceptions

3

4

Exception	Condition
System.ArgumentNullException	<i>enumType</i> , <i>value</i> or <i>format</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Enum . -or- <i>value</i> is neither of type <i>enumType</i> nor does it have the same underlying type as <i>enumType</i> .
System.FormatException	<i>format</i> contains an invalid value.

5

6 Example

7

8

The following example demonstrates formatting enumeration values.

9

10

[C#]

11

```
using System;
```

12

```
public enum Signs {
```

13

```
    Stop = 1,
```

14

```
    Yield = 2,
```

15

```
    Merge = 4
```

16

```
};
```

17

```
[Flags]
```

18

```
public enum Lights {
```

19

```
    Red = 1,
```

20

```
    Yellow = 2,
```

21

```
    Green = 4
```

22

```
};
```

23

```
public class EnumCompTo {
```

24

```
    public static void Main() {
```

25

```
        Console.WriteLine(Signs.Format(typeof(Signs),
```

26

```
Signs.Merge, "d"));
```

27

```
        Console.WriteLine(Signs.Format(typeof(Signs), 7, "g"));
```

28

```
        Console.WriteLine(Lights.Format(typeof(Lights),
```

29

```
Lights.Yellow, "x"));
```

30

```
        Console.WriteLine(Lights.Format(typeof(Lights), 7,
```

31

```
"g"));
```

32

```
    }
```

33

```
}
```

34

```
1 The output is
2
3 4
4
5
6 7
7
8
9 00000002
10
11
12 Red, Yellow, Green
13
```

14

1 Enum.GetHashCode() Method

```
2 [ILASM]  
3 .method public hidebysig virtual int32 GetHashCode()  
4 [C#]  
5 public override int GetHashCode()
```

6 Summary

7 Generates a hash code for the current instance.

8 Return Value

9

10 A **System.Int32** containing a hash code for the current instance.

11 Description

12 The algorithm used to generate the hash code is unspecified.

13

14 [*Note:* This method overrides **System.Object.GetHashCode.**]

15

1 Enum.GetName(System.Type, 2 System.Object) Method

```
3 [ILASM]  
4 .method public hidebysig static string GetName(class  
5 System.Type enumType, object value)  
  
6 [C#]  
7 public static string GetName(Type enumType, object value)
```

8 Summary

9 Retrieves the name of the constant of the specified enumeration type
10 that has the specified value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	A System.Type that specifies the type of the enumeration.
<i>value</i>	A System.Object that contains the integral value or the name of an enumeration constant.

14
15
16

15 Return Value

17 A **System.String** containing the name of the enumerated constant in
18 *enumType* whose *value* is *value*, or a null reference if no such constant
19 is found.

20 Exceptions

21
22

Exception	Condition
System.ArgumentNullException	<i>enumType</i> or <i>value</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum . -or- <i>value</i> is neither of type <i>enumType</i> nor does it have the same underlying type as <i>enumType</i> .

23
24
25

24 Example

1 The following example demonstrates the **System.Enum.GetName**
2 method.

```
3  
4 [C#  
  
5 using System;  
6 public enum Signs {  
7     Stop = 1,  
8     Yield = 2,  
9     Merge = 4  
10 };  
11 public class EnumCompTo {  
12     public static void Main() {  
13         Console.Write("The name of the constant with the value 4  
14 is: ");  
15         Console.WriteLine("{0}.", Signs.GetName(typeof(Signs),  
16 4));  
17         Console.Write("The name of the constant with the value  
18 Stop is: ");  
19         Console.WriteLine("{0}.", Signs.GetName(typeof(Signs),  
20 Signs.Stop));  
21     }  
22 }
```

23 The output is

24
25 The name of the constant with the value 4 is: Merge.
26

27
28 The name of the constant with the value Stop is: Stop.
29

30

1 Enum.GetNames(System.Type) Method

```
2 [ILASM]  
3 .method public hidebysig static class System.String[]  
4 GetNames(class System.Type enumType)  
  
5 [C#]  
6 public static string[] GetNames(Type enumType)
```

7 Summary

8 Returns a zero-based, one-dimensional **System.String** array that
9 contains the names of the constants of the specified enumeration type.

10 Parameters

Parameter	Description
<i>enumType</i>	A System.Type that specifies the type of an enumeration.

14 Return Value

16 A **System.String** vector of the names of the constants in *enumType*.
17 The elements of the vector are sorted by the values of the enumerated
18 constants.

19 Exceptions

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

23 Example

25 The following example demonstrates the **System.Enum.GetNames**
26 method.

```
27 [C#]  
28  
29 using System;  
30  
31 public enum Colors {  
32     Red,  
33     White,
```

```
1         Blue
2     };
3
4     public class enumGetNames {
5
6         public static void Main() {
7             int i = 0;
8             String[] strAry = Colors.GetNames(typeof(Colors));
9             foreach (String str in strAry) {
10                Console.Write("The value indexed '{0}' ", i++);
11                Console.WriteLine("is {0}.", str);
12            }
13        }
14    }
```

15 The output is

16
17 The value indexed '0' is Red.

18
19
20 The value indexed '1' is White.

21
22
23 The value indexed '2' is Blue.

24

25

1 Enum.GetUnderlyingType(System.Type)

2 Method

```
3 [ILASM]  
4 .method public hidebysig static class System.Type  
5 GetUnderlyingType(class System.Type enumType)  
  
6 [C#]  
7 public static Type GetUnderlyingType(Type enumType)
```

8 Summary

9 Returns the underlying type of the specified enumeration type.

10 Parameters

11
12

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.

13
14
15

14 Return Value

16 A **System.Type** instance that describes the underlying type of
17 *enumType*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not an enumeration type.

21
22
23

22 Example

24 The following example demonstrates the
25 **System.Enum.GetUnderlyingType** method.

26
27

```
[C#]  
  
28 using System;  
29 public enum Colors {  
30     Red,  
31     White,  
32     Blue  
33 }
```

```
1 public class EnumUnderlyingTypeTest {
2     public static void Main() {
3         Type t = Colors.GetUnderlyingType(typeof(Colors));
4         Console.WriteLine("The underlying type of Colors is
5 {0}.", t.ToString());
6     }
7 }
```

8 The output is

9
10 The underlying type of Colors is System.Int32.

11

12

1 Enum.GetValues(System.Type) Method

```
2 [ILASM]  
3 .method public hidebysig static class System.Array  
4 GetValues(class System.Type enumType)  
5  
6 [C#]  
7 public static Array GetValues(Type enumType)
```

7 Summary

8 Returns a zero-based, one-dimensional array of the values of the
9 constants of the specified enumeration type.

10 Parameters

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.

14 Return Value

16 A vector of the enumeration type specified by *enumType* containing
17 the values of the constants in *enumType*. The elements of the array
18 are sorted by the values of the enumeration constants.

19 Exceptions

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not an enumeration type.

23 Example

25 The following example demonstrates the **System.Enum.GetValues**
26 method.

```
27 [C#]  
28  
29 using System;  
30 public enum Colors {  
31     Red = 1,  
32     White = 2,  
33     Blue = 4  
34 }
```

```
1 public class enumGetValues {
2     public static void Main() {
3         Array valueAry = Enum.GetValues(typeof(Colors));
4         foreach (int i in valueAry) {
5             Console.WriteLine("The value of element {0} is
6 {1}",
7             Enum.Format(typeof(Colors), i, "g"),i);
8         }
9     }
10 }
```

11 The output is

12 The value of element Red is 1.

13
14 The value of element White is 2.

15
16 The value of element Blue is 4.

17
18
19
20

21

1 Enum.IsDefined(System.Type, 2 System.Object) Method

```
3 [ILASM]  
4 .method public hidebysig static bool IsDefined(class  
5 System.Type enumType, object value)  
  
6 [C#]  
7 public static bool IsDefined(Type enumType, object value)
```

8 Summary

9 Returns a **System.Boolean** indicating whether a constant with the
10 specified value exists in the specified enumeration type.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	A System.Type that describes an enumeration.
<i>value</i>	The constant or value being searched for in <i>enumType</i> .

14
15
16

15 Return Value

17 **true** if a constant in the enumeration described by *enumType* has a
18 value equal to *value*; otherwise, **false**.

19 Exceptions

20
21

Exception	Condition
System.ArgumentNullException	<i>enumType</i> or <i>value</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not an enumeration type.
	-or- The type of <i>value</i> is not an <i>enumType</i> or an underlying type of <i>enumType</i> .

22
23
24

23 Example

25 The following example demonstrates the **System.Enum.IsDefined**
26 method.

```
1
2     [C#]
3
4     using System;
5     public enum Colors {
6         Red = 1,
7         White = 2,
8         Blue = 4
9     }
10    public class enumIsDefined {
11        public static void Main() {
12            Console.Write("It is {0} ",
13                Enum.IsDefined(typeof(Colors), 1));
14            Console.WriteLine("that '1' is defined in 'Colors'.");
15            Console.Write("It is {0} ",
16                Enum.IsDefined(typeof(Colors), 3));
17            Console.WriteLine("that '3' is defined in 'Colors'.");
18        }
19    }
20
```

19 The output is

20
21 It is True that '1' is defined in 'Colors'.

22
23

24 It is False that '3' is defined in 'Colors'.

25

26

1 Enum.Parse(System.Type, System.String)

2 Method

```
3 [ILASM]  
4 .method public hidebysig static object Parse(class  
5 System.Type enumType, string value)  
  
6 [C#]  
7 public static object Parse(Type enumType, string value)
```

8 Summary

9 Converts the specified **System.String** representation of one or more
10 enumerated constants of a specified enumeration type to an
11 equivalent enumerated object.

12 Parameters

13
14

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	A System.String containing one or more names or a single numeric value to convert. If the string contains more than one name, each name is required to be separated by a comma (','),. The names are parsed in a case-sensitive manner. The names or number can be surrounded by any amount of white space.

15
16
17

Return Value

18 A **System.Object** of type *enumType* whose values are represented by
19 *value*.

20 Description

21 This version of **System.Enum.Parse** is equivalent to
22 **System.Enum.Parse** (*enumType*, *value*, **false**).

23 Exceptions

24
25

Exception	Condition
System.ArgumentNullException	<i>enumType</i> or <i>value</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum . -or-

	<p><i>value</i> is either equal to System.String.Empty or contains only white space.</p> <p>-or-</p> <p><i>value</i> represents one or more names, and at least one name represented by <i>value</i> is not of type <i>enumType</i>.</p>
--	---

1

2 **Example**

3

4 The following example demonstrates the **System.Enum.Parse**
5 method.

6

7

[C#]

8

using System;

9

public enum Colors {

10

Red = 1,

11

Blue = 2

12

}

13

public class enumTest {

14

public static void Main() {

15

object o = Enum.Parse(typeof (Colors), "Red, Blue");

16

Type oType = o.GetType();

17

Console.WriteLine("The type of the object returned is

18

{0}", oType.ToString());

19

Array values = Enum.GetValues(oType);

20

foreach (Colors c in values) {

21

Console.WriteLine(Enum.Format(oType, c, "D"));

22

}

23

}

24

}

25

The output is

26

The type of the object returned is Colors

27

28

29

30

1

31

32

1
2
3

2

1 Enum.Parse(System.Type, System.String, 2 System.Boolean) Method

```
3 [ILASM]  
4 .method public hidebysig static object Parse(class  
5 System.Type enumType, string value, bool ignoreCase)  
  
6 [C#]  
7 public static object Parse(Type enumType, string value,  
8 bool ignoreCase)
```

9 Summary

10 Converts the specified **System.String** representation of one or more
11 enumerated constants of a specified enumeration type to an
12 equivalent enumerated object. This method behaves in a case-
13 sensitive or insensitive manner according to the specified
14 **System.Boolean**.

15 Parameters

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	A System.String containing one or more names or a single numeric value to convert. If the string contains more than one name, each name is required to be separated by a comma (','),. The names or number can be surrounded by any amount of white space.
<i>ignoreCase</i>	A System.Boolean value. Specify true to have names in <i>value</i> parsed in a case-insensitive manner. Specify false to have names parsed in a case-sensitive manner.

18 19 Return Value

21 A **System.Object** of type *enumType* whose values are represented by
22 *value*.

23 Exceptions

Exception	Condition
System.ArgumentNullException	<i>enumType</i> or <i>value</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

	<p>-or-</p> <p><i>value</i> is either equal to System.String.Empty or contains only white space.</p> <p>-or-</p> <p><i>value</i> represents one or more names, and at least one name represented by <i>value</i> is not of type <i>enumType</i>.</p>
--	---

1

2 **Example**

3

4 For an example that demonstrates parsing strings containing
5 enumeration values, see **System.Enum.Parse(System.Type,**
6 **System.String)**.

7

1 Enum.ToObject(System.Type, 2 System.Object) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, object value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, object value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	The System.Type of the enumeration.
<i>value</i>	The value to set.

14
15
16

15 Return Value

17 An enumeration object of type *enumType* whose value is *value*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

21
22
23

1 Enum.ToObject(System.Type, 2 System.SByte) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, int8 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, sbyte value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.SByte** value.

11 Type Attributes:

- 12 • CLSCompliantAttribute(false)

13 Parameters

14
15

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.SByte value to set.

16
17
18

Return Value

19 An enumeration object of type *enumType* whose value is *value*.

20 Description

21 This member is not CLS-compliant. For a CLS-compliant alternative,
22 use **System.Enum.ToObject(System.Type, System.Int16)**.

23 Exceptions

24
25

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

26
27
28

1 Enum.ToObject(System.Type, 2 System.Int16) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, int16 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, short value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.Int16** value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.Int16 value to set.

14
15
16

15 Return Value

17 An enumeration object of type *enumType* whose value is *value*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

21
22
23

1 Enum.ToObject(System.Type, 2 System.Int32) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, int32 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, int value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.Int32** value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.Int32 value to set.

14
15
16

15 Return Value

17 An enumeration object of type *enumType* whose value is *value*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

21
22
23

1 Enum.ToObject(System.Type, 2 System.Byte) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, unsigned int8 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, byte value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.Byte** value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.Byte value to set.

14
15
16

15 Return Value

17 An enumeration object of type *enumType* whose value is *value*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

21
22
23

1 Enum.ToObject(System.Type, 2 System.UInt16) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, unsigned int16 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, ushort value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.UInt16** value.

11 Type Attributes:

- 12 • CLSCompliantAttribute(false)

13 Parameters

14
15

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.UInt16 value to set.

16
17
18

17 Return Value

19 An enumeration object of type *enumType* whose value is *value*.

20 Description

21 This member is not CLS-compliant. For a CLS-compliant alternative,
22 use **System.Enum.ToObject(System.Type, System.Int32)**.

23 Exceptions

24
25

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

26
27
28

1 Enum.ToObject(System.Type, 2 System.UInt32) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, unsigned int32 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, uint value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.UInt32** value.

11 Type Attributes:

- 12 • CLSCompliantAttribute(false)

13 Parameters

14
15

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.UInt32 value to set.

16
17
18

Return Value

19 An enumeration object of type *enumType* whose value is *value*.

20 Description

21 This member is not CLS-compliant. For a CLS-compliant alternative,
22 use **System.Enum.ToObject(System.Type, System.Int64)**.

23 Exceptions

24
25

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

26
27
28

1 Enum.ToObject(System.Type, 2 System.Int64) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, int64 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, long value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.Int64** value.

11 Parameters

12
13

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.Int64 value to set.

14
15
16

15 Return Value

17 An enumeration object of type *enumType* whose value is *value*.

18 Exceptions

19
20

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

21
22
23

1 Enum.ToObject(System.Type, 2 System.UInt64) Method

```
3 [ILASM]  
4 .method public hidebysig static object ToObject(class  
5 System.Type enumType, unsigned int64 value)  
  
6 [C#]  
7 public static object ToObject(Type enumType, ulong value)
```

8 Summary

9 Returns an instance of the specified enumeration type set to the
10 specified **System.UInt64** value.

11 Type Attributes:

- 12 • CLSCompliantAttribute(false)

13 Parameters

14
15

Parameter	Description
<i>enumType</i>	The System.Type of an enumeration.
<i>value</i>	The System.UInt64 value to set.

16
17
18

17 Return Value

19 An enumeration object of type *enumType* whose value is *value*.

20 Description

21 This member is not CLS-compliant. For a CLS-compliant alternative,
22 use **System.Enum.ToObject(System.Type, System.Int64)**.

23 Exceptions

24
25

Exception	Condition
System.ArgumentNullException	<i>enumType</i> is a null reference.
System.ArgumentException	<i>enumType</i> is not a System.Type that describes a System.Enum .

26
27
28

1 Enum.ToString(System.IFormatProvider)

2 Method

```
3 [ILASM]  
4 .method public final hidebysig virtual string  
5 ToString(class System.IFormatProvider provider)  
  
6 [C#]  
7 public string ToString(IFormatProvider provider)
```

8 Summary

9 Converts the name of the value of the current instance to its
10 equivalent **System.String** representation.

11 Parameters

12
13

Parameter	Description
<i>provider</i>	An object that implements the System.IFormatProvider interface or a null reference. The System.IFormatProvider is not used in the implementation of this method. [<i>Note:</i> There is no System.IFormatProvider that corresponds to a System.Enum object; therefore, <i>provider</i> is not utilized by this method, and any System.IFormatProvider may be passed as a parameter.]

14
15
16

15 Return Value

17 The **System.String** representation of the name of the value of the
18 current instance.

19 Description

20 This method is equivalent to the version of **System.Enum.ToString**
21 that takes no arguments.

22

1 Enum.ToString(System.String, 2 System.IFormatProvider) Method

```
3 [ILASM]  
4 .method public final hidebysig virtual string  
5 ToString(string format, class System.IFormatProvider  
6 provider)  
  
7 [C#]  
8 public string ToString(string format, IFormatProvider  
9 provider)
```

10 Summary

11 Converts the numeric value of the current instance to its equivalent
12 **System.String** representation using the specified format.

13 Parameters

14
15

Parameter	Description
<i>format</i>	A System.String that specifies the format to use when converting the current instance to a System.String . Specify one of the following values in upper or lower case: "G", "D", "X", or "F".
<i>provider</i>	An object that implements the System.IFormatProvider interface or a null reference. The System.IFormatProvider is not used in the implementation of this method. [Note: There is no System.IFormatProvider that corresponds to a System.Enum object; therefore, <i>provider</i> is not utilized by this method, and any System.IFormatProvider may be passed as a parameter.]

16
17
18

Return Value

19 The **System.String** representation of the value of the current instance
20 as specified by *format*.

21 Description

22 If *format* is a null reference or an empty string, the return value is
23 formatted using the general format specifier ("G").

24
25
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29

[Note: For details on the format specifiers used with an enumeration object, see **System.Enum.Format**.

This method is implemented to support the **System.IFormattable** interface.]

1 **Exceptions**

2

3

Exception	Condition
System.FormatException	<i>format</i> does not contain a valid format specifier.

4

5

6

1 Enum.ToString() Method

```
2 [ILASM]  
3 .method public hidebysig virtual string ToString()  
4 [C#]  
5 public override string ToString()
```

6 Summary

7 Converts the name of the value of the current instance to its
8 equivalent **System.String** representation.

9 Return Value

10

11 The **System.String** representation of the named constant specified by
12 the current instance.

13 Description

14 This version of **System.Enum.ToString** is equivalent to
15 **System.Enum.ToString** ("G", null).

16

17 This method returns the same value as **System.Enum.Format** with
18 the "g" or "G" format option.

19

20 An instance of an enumeration is set to a named constant value. This
21 method returns the name of the constant an instance is set to, not the
22 value itself.

23

1 Enum.ToString(System.String) Method

```
2 [ILASM]  
3 .method public hidebysig instance string ToString(string  
4 format)  
  
5 [C#]  
6 public string ToString(string format)
```

7 Summary

8 Converts the value of the current instance to its equivalent
9 **System.String** representation using the specified format.

10 Parameters

11
12

Parameter	Description
<i>format</i>	A System.String that specifies the format to use when converting the current instance to a System.String . Specify one of the following values in upper or lower case: "G", "D", "X", or "F".

13
14
15

14 Return Value

16 The **System.String** representation of the value of the current instance
17 as specified by *format*.

18 Description

19 If *format* is a null reference or an empty string, the return value is
20 formatted using the general format specifier ("G").

21
22
23

[Note: For details on the format specifiers used with an enumeration object, see **System.Enum.Format**.]

24 Exceptions

25
26

Exception	Condition
System.FormatException	<i>format</i> contains an invalid value.

27
28