

1 System.ArgumentOutOfRangeException

2 Class

```
3  
4  
5 [ILASM]  
6 .class public serializable ArgumentOutOfRangeException  
7 extends System.ArgumentException  
8  
9 [C#]  
10 public class ArgumentOutOfRangeException: ArgumentException
```

10 Assembly Info:

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

16 Summary

17
18 Represents the error that occurs when an argument passed to a
19 method is invalid because it is outside the allowable range of values as
20 specified by the method.

21 Inherits From: System.ArgumentException

22
23 **Library:** BCL

24
25 **Thread Safety:** All public static members of this type are safe for multithreaded
26 operations. No instance members are guaranteed to be thread safe.

28 Description

29 [Note: **System.ArgumentOutOfRangeException** is thrown when a
30 method is invoked and at least one of the arguments passed to the
31 method is not **null** and does not contain a valid value.

32
33 **System.ArgumentOutOfRangeException** behaves identically to
34 **System.ArgumentException**. It is provided so that application code
35 can differentiate between exceptions caused by invalid arguments that
36 are not **null**, and exceptions caused by **null** arguments. For errors
37 caused by **null** arguments, see **System.ArgumentNullException**.]

38 Example

1 The following example demonstrates an error that causes the
2 **System.Array** class to throw a
3 **System.ArgumentOutOfRangeException** exception.

4
5 [C#]

```
6 using System;
7 class ArgOutOfRangeExceptionExample {
8     public static void Main() {
9         int[] array1 = {0,0};
10        int[] array2 = {0,0};
11        try {
12            Array.Copy(array1,array2,-1);
13        }
14        catch (ArgumentOutOfRangeException e) {
15            Console.WriteLine("Error: {0}",e);
16        }
17    }
18 }
19
```

20 The output is

21
22 Error: System.ArgumentOutOfRangeException: Non-negative
23 number required.

24
25
26 Parameter name: length

27
28
29 at System.Array.Copy(Array sourceArray, Int32 sourceIndex,
30 Array destinationArray, Int32 destinationIndex, Int32
31 length)

32
33
34 at ArgOutOfRangeExceptionExample.Main()
35

1 ArgumentOutOfRangeException()

2 Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor()  
5 [C#]  
6 public ArgumentOutOfRangeException()
```

7 Summary

8 Constructs and initializes a new instance of the
9 **System.ArgumentOutOfRangeException** class.

10 Description

11 This constructor initializes the
12 **System.ArgumentOutOfRangeException.Message** property of the
13 new instance to a system-supplied message that describes the error,
14 such as "Non-negative number required." This message takes into
15 account the current system culture.

16
17 The **System.ArgumentOutOfRangeException.ParamName** and
18 **System.ArgumentOutOfRangeException.ActualValue** properties
19 are initialized to **null**.

20

1 ArgumentOutOfRangeException(System.S 2 tring) Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 paramName)  
6 [C#]  
7 public ArgumentOutOfRangeException(string paramName)
```

8 Summary

9 Constructs and initializes a new instance of the
10 **System.ArgumentOutOfRangeException** class.

11 Parameters

12
13

Parameter	Description
<i>paramName</i>	A System.String that contains the name of the parameter that caused the current exception. The content of <i>paramName</i> is intended to be understood by humans.

14
15

15 Description

16 This constructor initializes the
17 **System.ArgumentOutOfRangeException.ParamName** property of
18 the new instance using *paramName*. The
19 **System.ArgumentOutOfRangeException.Message** property is
20 initialized to the system-supplied message provided by the constructor
21 that takes no arguments.

22
23
24

The **System.ArgumentOutOfRangeException.ActualValue**
property is initialized to **null**.

25

1 ArgumentOutOfRangeException(System.S 2 tring, System.String) Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 paramName, string message)  
  
6 [C#]  
7 public ArgumentOutOfRangeException(string paramName, string  
8 message)
```

9 Summary

10 Constructs and initializes a new instance of the
11 **System.ArgumentOutOfRangeException** class.

12 Parameters

13
14

Parameter	Description
<i>paramName</i>	A System.String that contains the name of the parameter that caused the current exception. The content of <i>paramName</i> is intended to be understood by humans.
<i>message</i>	A System.String that describes the error. The content of <i>message</i> is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.

15
16

Description

17 This constructor initializes the
18 **System.ArgumentOutOfRangeException.ParamName** property of
19 the new instance using *paramName*, and the
20 **System.ArgumentOutOfRangeException.Message** property using
21 *message*. If *message* is **null**, the
22 **System.ArgumentOutOfRangeException.Message** property is
23 initialized to the system-supplied message provided by the constructor
24 that takes no arguments.

25
26
27

The **System.ArgumentOutOfRangeException.ActualValue**
property is initialized to **null**.

28

ArgumentOutOfRangeException(System.String, System.Object, System.String) Constructor

```
[ILASM]  
public rtspecialname specialname instance void .ctor(string  
paramName, object actualValue, string message)  
  
[C#]  
public ArgumentOutOfRangeException(string paramName, object  
actualValue, string message)
```

Summary

Constructs and initializes a new instance of the **System.ArgumentOutOfRangeException** class.

Parameters

Parameter	Description
<i>paramName</i>	A System.String that contains the name of the parameter that caused the current exception. The content of <i>paramName</i> is intended to be understood by humans.
<i>actualValue</i>	The value of the argument that caused the current exception.
<i>message</i>	A System.String that describes the error. The content of <i>message</i> is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.

Description

This constructor initializes the **System.ArgumentOutOfRangeException.ParamName** property of the new instance using *paramName*, the **System.ArgumentOutOfRangeException.ActualValue** property using *actualValue*, and the **System.ArgumentOutOfRangeException.Message** property using *message*. If *message* is **null**, the **System.ArgumentOutOfRangeException.Message** property is initialized to the system-supplied message provided by the constructor that takes no arguments.

[*Note:* The *actualValue* parameter contains the invalid argument that was passed to the method. Use the **System.ArgumentOutOfRangeException.ParamName** property to retrieve the name of the parameter used to pass *actualValue*.]

1 ArgumentOutOfRangeException.ActualValue Property

```
3 [ILASM]  
4 .property object ActualValue { public hidebysig virtual  
5 specialname object get_ActualValue() }  
6  
7 [C#]  
8 public virtual object ActualValue { get; }
```

8 Summary

9 Gets the value of the parameter that caused the current exception.

10 Property Value

11

12 A **System.Object** that contains the value of the parameter that
13 caused the current exception, or **null** if no value was specified to the
14 constructor for the current instance.

15 Description

16 This property is read-only.

17 Behaviors

18 The **System.ArgumentOutOfRangeException.ActualValue**
19 property returns the same value as was passed into the constructor.

20 How and When to Override

21 Override the
22 **System.ArgumentOutOfRangeException.ActualValue** property to
23 customize the content or format of the value.

24 Usage

25 Use this property to retrieve the invalid argument.

26