

# System.InvalidCastException Class

```
[ILASM]
.class public serializable InvalidCastException extends
System.SystemException

[C#]
public class InvalidCastException: SystemException
```

## 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

Represents the error that occurs when an explicit conversion (casting operation) fails because the source type cannot be converted to the destination type.

## Inherits From: System.SystemException

**Library:** BCL

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

## Description

[*Note:* For information on conversions supported by the system, see the **System.Convert** class.

For errors that occur when the destination type can store source type values, but is not large enough to store a specific source value, see **System.OverflowException** exception.

The following IL instructions throw **System.InvalidCastException**:

- castclass
- refanyval
- unbox

]

1 **Example**  
2

3 The following example demonstrates an error that causes a  
4 **System.InvalidCastException** exception.

5  
6 [C#]  
7 using System;  
8 public class InvalidCastExample {  
9 public static void Main() {  
10 object obj = new Object();  
11 int i;  
12 try {  
13 i = (int) obj;  
14 }  
15 catch(InvalidCastException e) {  
16 Console.WriteLine("Caught: {0}", e);  
17 }  
18 }  
19 }  
20

21 The output is

22  
23 Caught: System.InvalidCastException: Specified cast is not  
24 valid.  
25 at InvalidCastExample.Main()  
26  
27

# 1 InvalidCastException() Constructor

```
2 [ILASM]  
3 public rtsspecialname specialname instance void .ctor()  
4 [C#]  
5 public InvalidCastException()
```

## 6 Summary

7 Constructs and initializes a new instance of the  
8 **System.InvalidCastException** class.

## 9 Description

10 This constructor initializes the  
11 **System.InvalidCastException.Message** property of the new  
12 instance to a system-supplied message that describes the error, such  
13 as "Cannot cast from source type to destination type." This message  
14 takes into account the current system culture.

15  
16 The **System.InvalidCastException.InnerException** property is  
17 initialized to **null**.

18

# 1 InvalidCastException(System.String) 2 Constructor

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

## 8 Summary

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

## 11 Parameters

12  
13

Parameter	Description
<i>message</i>	A <b>System.String</b> 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.

14  
15

## 15 Description

16 This constructor initializes the  
17 **System.InvalidCastException.Message** property of the new  
18 instance using *message*. If *message* is **null**, the  
19 **System.InvalidCastException.Message** property is initialized to the  
20 system-supplied message provided by the constructor that takes no  
21 arguments. The **System.InvalidCastException.InnerException**  
22 property is initialized to **null**.

23

# 1 InvalidCastException(System.String, 2 System.Exception) Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 message, class System.Exception innerException)  
  
6 [C#]  
7 public InvalidCastException(string message, Exception  
8 innerException)
```

## 9 Summary

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

## 12 Parameters

13  
14

Parameter	Description
<i>message</i>	A <b>System.String</b> 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.
<i>innerException</i>	An instance of <b>System.Exception</b> that is the cause of the current exception. If <i>innerException</i> is non-null, then the current exception was raised in a catch block handling <i>innerException</i> .

15

## 16 Description

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

25

26 [Note: For information on inner exceptions, see  
27 **System.Exception.InnerException**.]

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