

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 00]
- *Version:* 2.0.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 CIL instructions throw `System.InvalidCastException`:

- `castclass`
- `refanyval`
- `unbox`

1]

2 **Example**

3

4 The following example demonstrates an error that causes a
5 `System.InvalidCastException` exception.

6

7 [C#]

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

21

22 The output is

23

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

27

InvalidCastException() Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor()  
  
[C#]  
public InvalidCastException()
```

Summary

Constructs and initializes a new instance of the `System.InvalidCastException` class.

Description

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

The `System.InvalidCastException.InnerException` property is initialized to null.

InvalidCastException(System.String) Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor(string message)  
  
[C#]  
public InvalidCastException(string message)
```

Summary

Constructs and initializes a new instance of the `System.InvalidCastException` class.

Parameters

| Parameter | Description |
|----------------|---|
| <i>message</i> | A <code>System.String</code> 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.InvalidCastException.Message` property of the new instance using *message*. If *message* is null, the `System.InvalidCastException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments. The `System.InvalidCastException.InnerException` property is initialized to null.

InvalidCastException(System.String, System.Exception) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message, class
System.Exception innerException)

[C#]
public InvalidCastException(string message, Exception innerException)
```

Summary

Constructs and initializes a new instance of the `System.InvalidCastException` class.

Parameters

| Parameter | Description |
|-----------------------|---|
| <i>message</i> | A <code>System.String</code> 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 <code>System.Exception</code> 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> . |

Description

This constructor initializes the `System.InvalidCastException.Message` property of the new instance using *message*, and the `System.InvalidCastException.InnerException` property using *innerException*. If *message* is null, the `System.InvalidCastException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

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