

1 System.InvalidCastException Class

```
2 [ILAsm]  
3 .class public serializable InvalidCastException extends  
4 System.SystemException  
  
5 [C#]  
6 public class InvalidCastException: SystemException
```

7 Assembly Info:

- 8 • *Name:* mscorlib
- 9 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 10 • *Version:* 2.0.x.x
- 11 • *Attributes:*
 - 12 ○ CLSCompliantAttribute(true)

13 Summary

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

16 Inherits From: System.SystemException

17

18 **Library:** BCL

19

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

22

23 Description

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

26

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

30

31 The following CIL instructions throw System.InvalidCastException:

- 32 • castclass
- 33 • refanyval
- 34 • unbox

35]

36 Example

1 The following example demonstrates an error that causes a
2 System.InvalidCastException exception.

3
4 [C#]

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

18
19 The output is

```
20
21 Caught: System.InvalidCastException: Specified cast is not valid.
22     at InvalidCastExample.Main()
23
```

24

1 InvalidCastException() Constructor

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

6 Summary

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

8 Description

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

13
14 The `System.InvalidCastException.InnerException` property is initialized to `null`.

15

1 InvalidCastException(System.String) 2 Constructor

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

7 Summary

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

9 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.

10

11 Description

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

17

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

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

8 Summary

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

10 Parameters

Parameter	Description
<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.
<i>innerException</i>	An instance of System.Exception 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> .

11 12 Description

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

18
19 [Note: For information on inner exceptions, see System.Exception.InnerException.]
20
21

22