

# 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:* 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`

]

## Example

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

[C#]

```
using System;
public class InvalidCastExample {
    public static void Main() {
        object obj = new Object();
        int i;
        try {
            i = (int) obj;
        }
        catch( InvalidCastException e ) {
            Console.WriteLine("Caught: {0}", e);
        }
    }
}
```

The output is

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

# 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`.]