

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`.]