

1 System.ArrayTypeMismatchException

2 Class

```
3  
4  
5 [ILASM]  
6 .class public serializable ArrayTypeMismatchException  
7 extends System.SystemException  
8  
9 [C#]  
10 public class ArrayTypeMismatchException: SystemException
```

10 Assembly Info:

- 11 • *Name:* mscorlib
- 12 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 13 • *Version:* 1.0.x.x
- 14 • *Attributes:*
 - 15 ○ CLSCompliantAttribute(true)

16 Summary

17
18 Represents the error that occurs when an attempt is made to store an
19 element of the wrong type in an array.

20 Inherits From: System.SystemException

21
22 **Library:** BCL

23
24 **Thread Safety:** All public static members of this type are safe for multithreaded
25 operations. No instance members are guaranteed to be thread safe.

27 Description

28 **System.ArrayTypeMismatchException** is thrown when the system
29 cannot convert the element to the type declared for the array. [*Note:*
30 This exception will not be thrown if the element can be converted to
31 the type declared for the array. For example, an element of type
32 **System.Byte** can be stored in an array declared to store
33 **System.Int32** values, but an element of type **System.String** cannot
34 be stored in a **System.Int32** array because conversion between these
35 types is not supported.]

36
37 [*Note:* This exception is thrown by the **System.Array.Copy** method if
38 a widening conversion cannot be performed on the operand to convert
39 it to the array type.

40
41 It is generally unnecessary for applications to throw this exception.
42

1 The following IL instructions throw
2 **System.ArrayTypeMismatchException**:

- 3 • ldelem.<type>
- 4 • ldelema
- 5 • stelem.<type>
- 6]

7 **Example**

8

9 The following example demonstrates an error that causes the system
10 to throw a **System.ArrayTypeMismatchException** exception.

11
12

[C#]

```
13 using System;  
14 class ArrayTypeMismatchExample {  
15     public static void Main() {  
16         string[] array1={"hello","world"};  
17         int[] array2 = {1,2};  
18         try {  
19             Array.Copy(array1,array2,2);  
20         }  
21         catch (ArrayTypeMismatchException e) {  
22             Console.WriteLine("Error: {0}",e);  
23         }  
24     }  
25 }  
26
```

27 The output is

28

29 Error: System.ArrayTypeMismatchException: Source array type
30 cannot be assigned to destination array type.

31

32

33 at System.Array.Copy(Array sourceArray, Int32 sourceIndex,
34 Array destinationArray, Int32 destinationIndex, Int32
35 length)

```
1
2
3   at System.Array.Copy(Array sourceArray, Array
4   destinationArray, Int32 length)
5
6
7   at ArrayTypeMismatchExample.Main()
8
9
```

1 ArrayTypeMismatchException()

2 Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor()  
5 [C#]  
6 public ArrayTypeMismatchException()
```

7 Summary

8 Constructs and initializes a new instance of the
9 **System.ArrayTypeMismatchException** class.

10 Description

11 This constructor initializes the
12 **System.ArrayTypeMismatchException.Message** property of the
13 new instance to a system-supplied message that describes the error,
14 such as "Source array type cannot be assigned to destination array
15 type." This message takes into account the current system culture.
16

17 The **System.ArrayTypeMismatchException.InnerException**
18 property is initialized to **null**.

19

1 ArrayTypeMismatchException(System.String) Constructor

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

8 Summary

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

11 Parameters

12
13

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.

14
15

15 Description

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

24

1 ArrayTypeMismatchException(System.String, System.Exception) Constructor

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

9 Summary

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

12 Parameters

13
14

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> .

15
16

16 Description

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

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

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