System.MethodAccessException Class

```
[ILASM]
.class public serializable MethodAccessException extends
System.MemberAccessException

[C#]
public class MethodAccessException: MemberAccessException
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 1.0.x.x
- *Attributes:*
  - CLSCompliantAttribute(true)

Summary

Represents the error that occurs when there is an attempt to access a method outside the scope in which access is permitted.

Inherits From: System.MemberAccessException

Library: RuntimeInfrastructure

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:* This exception is thrown when the access level of a method in a class library is changed, and one or more assemblies referencing the library have not been recompiled. This exception is also thrown when an attempt to invoke a method via reflection fails because the caller does not have the required permissions.]

Example

The following example demonstrates a scenario under which **System.MethodAccessException** is thrown.

The following code contains a class with a public method (MyMethod). This class is compiled into a class library.

[C#]

```
using System;
namespace TestNameSpace
{
 public class Class1
 {
   public Class1()
   {
     Console.WriteLine ("Constructing with public
method.");
   }
   public void MyMethod ()
   {
     Console.WriteLine ("Calling MyMethod.");
   }
 }
}
```

The following code references the class library above, and accesses TestNameSpace.Class1.MyMethod. This code is compiled into an application.

[C#]

```
using System;
using TestNameSpace;
class AppTest
{
 public static void Main()
 {
   Class1 test = new Class1();
   test.MyMethod();
 }
}
```

The output of the application is

```
Constructing with public method.


Calling MyMethod.
```

The code for the class library is changed and recompiled so that TestNameSpace.Class1.MyMethod is no longer public. The following code changes MyMethod from public to private.

[C#]

```
using System;
namespace TestNameSpace
{
 public class Class1
 {
   public Class1()
   {
     Console.WriteLine ("Constructing with private
method.");
   }
   private void MyMethod ()
   {
     Console.WriteLine ("Calling MyMethod.");
   }
 }
}
```

When the application is executed again without being recompiled, the output is

```
Unhandled Exception: System.MethodAccessException:
TestNameSpace.Class1.MyMethod()


at AppTest.Main()
```

MethodAccessException() Constructor

[ILASM]
```
public rtspecialname specialname instance void .ctor()
```

[C#]
```
public MethodAccessException()
```

Summary

Constructs and initializes a new instance of the **System.MethodAccessException** class.

Description

This constructor initializes the **System.MethodAccessException.Message** property of the new instance to a system-supplied message that describes the error, such as "Attempt to access the method failed." This message takes into account the current system culture.

The **System.MethodAccessException.InnerException** property of the new instance is initialized to **null**.

MethodAccessException(System.String) Constructor

```
[ILASM]
public rtspecialname specialname instance void .ctor(string
message)

[C#]
public MethodAccessException(string message)
```

Summary

Constructs and initializes a new instance of the **System.MethodAccessException** class with a specified error message.

Parameters

Parameter	Description
message	A **System.String** that describes the error. The content of *message* 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.MethodAccessException.Message** property of the new instance using *message*. If *message* is **null**, the **System.MethodAccessException.Message** property is initialized to the system-supplied message provided by the constructor that takes no arguments.

The **System.MethodAccessException.InnerException** property of the new instance is initialized to **null**.

MethodAccessException(System.String, System.Exception) Constructor

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

[C#]
public MethodAccessException(string message, Exception
inner)
```

Summary

Constructs and initializes a new instance of the **System.MethodAccessException** class with a specified error message and a reference to the inner exception that is the cause of the current exception.

Parameters

Parameter	Description
message	A **System.String** that describes the error. The content of *message* 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.
inner	An instance of **System.Exception** that is the cause of the current exception. If *inner* is not a **null** reference, the current exception was raised in a catch block handling *inner*.

Description

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

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