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Language

# Type.GetTypeFromCLSID Method

Reference

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## Definition

Namespace: [System](#)

Assembly: System.Runtime.dll

Gets the type associated with the specified class identifier (CLSID).

## Overloads

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<a href="#">GetTypeFromCLSID(Guid)</a>	Gets the type associated with the specified class identifier (CLSID).
<a href="#">GetTypeFromCLSID(Guid, Boolean)</a>	Gets the type associated with the specified class identifier (CLSID), specifying whether to throw an exception if an error occurs while loading the type.
<a href="#">GetTypeFromCLSID(Guid, String)</a>	Gets the type associated with the specified class identifier (CLSID) from the specified server.
<a href="#">GetTypeFromCLSID(Guid, String, Boolean)</a>	Gets the type associated with the specified class identifier (CLSID) from the specified server, specifying whether to throw an exception if an error occurs while loading the type.

## GetTypeFromCLSID(Guid)

Source: [Type.cs](#) 

Gets the type associated with the specified class identifier (CLSID).

```
public:  
    static Type ^ GetTypeFromCLSID(Guid clsid);
```

```
[System.Runtime.Versioning.SupportedOSPlatform("windows")  
public static Type? GetTypeFromCLSID (Guid clsid);
```

```
[<System.Runtime.Versioning.SupportedOSPlatform("windows"  
static member GetTypeFromCLSID : Guid -> Type
```

```
Public Shared Function GetTypeFromCLSID (clsid As  
Guid) As Type
```

## Parameters

**clsid** [Guid](#)

The CLSID of the type to get.

## Returns

[Type](#)

[System.\\_\\_ComObject](#) regardless of whether the CLSID is valid.

Attributes [SupportedOSPlatformAttribute](#)

## Examples

The following example uses the CLSID of the Microsoft Word [Application object](#) to retrieve a COM type that represents the Microsoft Word application. It then instantiates the type by calling the [Activator.CreateInstance](#) method, and closes it by calling the [Application.Quit](#) method.

```
using System;
using System.Reflection;
using System.Runtime.InteropServices;

public class Example
{
    private const string WORD_CLSID = "{000209FF-0000-0000-0000-000000000000}";

    public static void Main()
    {
        // Start an instance of the Word application.
        var word = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID));
        Console.WriteLine("Instantiated Type object from CLSID {0}", WORD_CLSID);
        Object wordObj = Activator.CreateInstance(word);
        Console.WriteLine("Instantiated {0}", wordObj.GetType().FullName);

        // Close Word.
        word.InvokeMember("Quit", BindingFlags.InvokeMethod, null, wordObj, new object[] { 0, 0, false });
    }
}

// The example displays the following output:
//      Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
//      Instantiated Microsoft.Office.Interop.Word.ApplicationClass
```

```
open System
open System.Reflection

let [<Literal>] WORD_CLSID = "{000209FF-0000-0000-0000-000000000000}"

// Start an instance of the Word application.
let word = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID)
```

```
printfn $"Instantiated Type object from CLSID {WORD_CLSID}"
let wordObj = Activator.CreateInstance word
printfn $"Instantiated {wordObj.GetType().FullName}"

// Close Word.
word.InvokeMember("Quit", BindingFlags.InvokeMethod, null, wordObj, New Object() { 0, 0, False })
// The example displays the following output:
//     Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
//     Instantiated Microsoft.Office.Interop.Word.Application
```

```
Imports System.Reflection
Imports System.Runtime.InteropServices

Module Example
    Private Const WORD_CLSID As String = "{000209FF-0000-0000-0000-000000000000}"

    Public Sub Main()
        ' Start an instance of the Word application.
        Dim word As Type = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID))
        Console.WriteLine("Instantiated Type object from CLSID {0}", WORD_CLSID)
        Dim wordObj As Object = Activator.CreateInstance(word)
        Console.WriteLine("Instantiated {0}", wordObj.GetType().FullName)

        ' Close Word.
        word.InvokeMember("Quit", BindingFlags.InvokeMethod, null, wordObj, New Object() { 0, 0, False })
    End Sub
End Module

' The example displays the following output:
'     Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
'     Instantiated Microsoft.Office.Interop.Word.Application
```

## Remarks

The [GetTypeFromCLSID](#) method supports late-bound access to unmanaged COM objects from .NET Framework apps when you know the COM object's class identifier (CLSID). The class identifier for COM classes is defined in the HKEY\_CLASSES\_ROOT\CLSID key

of the registry. You can retrieve the value of the [IsCOMObject](#) property to determine whether the type returned by this method is a COM object.

#### Tip

You can call the [GetTypeFromProgID](#) method for late-bound access to COM objects whose programmatic identifier (ProgID) you know.

Instantiating an unmanaged COM object from its CLSID is a two-step process:

1. Get a [Type](#) object that represents the `__ComObject` that corresponds to the CLSID by calling the [GetTypeFromCLSID](#) method.
2. Call the [Activator.CreateInstance\(Type\)](#) method to instantiate the COM object.

See the example for an illustration.

The [GetTypeFromCLSID\(Guid\)](#) overload ignores any exception that may occur when instantiating a [Type](#) object based on the `clsid` argument. Note that no exception is thrown if `clsid` is not found in the registry.

## Notes to Callers

This method is intended for use when working with COM objects, not with .NET Framework objects. All managed objects, including those that are visible to COM (that is, their [ComVisibleAttribute](#) attribute is `true`) have a GUID that is returned by the [GUID](#) property. Although the method returns a [Type](#) object that corresponds to the GUID for .NET Framework objects, you can't use

that [Type](#) object to create a type instance by calling the [CreateInstance\(Type\)](#) method, as the following example shows.

```
using System;
using System.Runtime.InteropServices;

[assembly:ComVisible(true)]

// Define two classes, and assign one an explicit GUID.
[GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")]
public class ExplicitGuid
{ }

public class NoExplicitGuid
{ }

public class Example
{
    public static void Main()
    {
        Type explicitType = typeof(ExplicitGuid);
        Guid explicitGuid = explicitType.GUID;

        // Get type of ExplicitGuid from its GUID.
        Type explicitCOM = Type.GetTypeFromCLSID(explicitGuid);
        Console.WriteLine("Created {0} type from CLSID {1}",
            explicitCOM.Name, explicitGuid);

        // Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
            explicitType.Name, explicitCOM.Name,
            explicitType.Equals(explicitCOM));

        // Instantiate an ExplicitGuid object.
        try {
            Object obj = Activator.CreateInstance(explicitCOM);
            Console.WriteLine("Instantiated a {0} object", obj);
        }
        catch (COMException e) {
            Console.WriteLine("COM Exception:\n{0}\n", e.Message);
        }

        Type notExplicit = typeof(NoExplicitGuid);
        Guid notExplicitGuid = notExplicit.GUID;
    }
}
```

```
// Get type of ExplicitGuid from its GUID.
Type notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGUID);
Console.WriteLine("Created {0} type from CLSID {1}",
    notExplicitCOM.Name, notExplicitCOM.Guid);

// Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}",
    notExplicit.Name, notExplicitCOM.Name,
    notExplicit.Equals(notExplicitCOM));

// Instantiate an ExplicitGuid object.
try {
    Object obj = Activator.CreateInstance(notExplicitCOM);
    Console.WriteLine("Instantiated a {0} object", obj);
}
catch (COMException e) {
    Console.WriteLine("COM Exception:\n{0}\n", e.Message);
}
}

// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to the
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//
//      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to the
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

```
open System
open System.Runtime.InteropServices
```

```
[<assembly: ComVisible true>]
do ()
```

```
// Define two classes, and assign one an explicit GUID.
```



```
[<Guid "d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4">]
type ExplicitGuid() = class end

type NoExplicitGuid() = class end

let explicitType = typeof<ExplicitGuid>
let explicitGuid = explicitType.GUID

// Get type of ExplicitGuid from its GUID.
let explicitCOM = Type.GetTypeFromCLSID explicitGuid
printfn $"Created {explicitCOM.Name} type from CLSID {explicitGuid}"

// Compare the two type objects.
printfn $"{explicitType.Name} and {explicitCOM.Name} equal: {explicitType == explicitCOM}"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance explicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"

let notExplicit = typeof<NoExplicitGuid>
let notExplicitGuid = notExplicit.GUID

// Get type of ExplicitGuid from its GUID.
let notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid)
printfn $"Created {notExplicitCOM.Name} type from CLSID {notExplicitGuid}"

// Compare the two type objects.
printfn $"{notExplicit.Name} and {notExplicitCOM.Name} equal: {notExplicit == notExplicitCOM}"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance notExplicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"
// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to the
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//      Created __ComObject type from CLSID 74f03346-a711-4b4b-8000-000000000000
```

```
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component v
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed du
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLA
```

```
Imports System.Runtime.InteropServices
```

```
<Assembly:ComVisible(True)>
```

```
' Define two classes, and assign one an explicit GUID.
<GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")>
Public Class ExplicitGuid
End Class
```

```
Public Class NoExplicitGuid
End Class
```

```
Module Example
```

```
    Public Sub Main()
```

```
        Dim explicitType As Type = GetType(ExplicitGuid)
        Dim explicitGuid As Guid = explicitType.GUID
```

```
        ' Get type of ExplicitGuid from its GUID.
        Dim explicitCOM As Type = Type.GetTypeFromCLSID(exp
        Console.WriteLine("Created {0} type from CLSID {1}"
                           explicitCOM.Name, explicitGuid)
```

```
        ' Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
                           explicitType.Name, explicitCOM.Na
                           explicitType.Equals(explicitCOM))
```

```
        ' Instantiate an ExplicitGuid object.
```

```
        Try
```

```
            Dim obj As Object = Activator.CreateInstance(exp
            Console.WriteLine("Instantiated a {0} object", c
```

```
        Catch e As COMException
```

```
            Console.WriteLine("COM Exception:{1}{0}{1}", e.M
```

```
        End Try
```

```
        Dim notExplicit As Type = GetType(NoExplicitGuid)
        Dim notExplicitGuid As Guid = notExplicit.GUID
```

```
' Get type of ExplicitGuid from its GUID.
Dim notExplicitCOM As Type = Type.GetTypeFromCLSID(
Console.WriteLine("Created {0} type from CLSID {1}",
    notExplicitCOM.Name, notExplicitCOM.GUID)

' Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}",
    notExplicit.Name, notExplicitCOM.Name,
    notExplicit.Equals(notExplicitCOM))

' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(notExplicitCOM)
    Console.WriteLine("Instantiated a {0} object", obj.GetType().Name)
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, e.GetType().Name)
End Try
End Sub
End Module

' The example displays the following output:
'      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
'      ExplicitGuid and __ComObject equal: False
'      COM Exception:
'      Retrieving the COM class factory for component with CLSID
'      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to error
'      80040154 Class not registered
'      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
'
'      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
'      NoExplicitGuid and __ComObject equal: False
'      COM Exception:
'      Retrieving the COM class factory for component with CLSID
'      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to error
'      80040154 Class not registered
'      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

Instead, the [GetTypeFromCLSID\(Guid, String, Boolean\)](#) should only be used to retrieve the GUID of an unmanaged COM object, and the resulting [Type](#) object that is passed to the [CreateInstance\(Type\)](#) method must represent an unmanaged COM object.

## Applies to



# GetTypeFromCLSID(Guid, Boolean)

Source: [Type.cs](#)

Gets the type associated with the specified class identifier (CLSID), specifying whether to throw an exception if an error occurs while loading the type.

```
public:
    static Type ^ GetTypeFromCLSID(Guid clsid, bool
throwOnError);
```

```
[System.Runtime.Versioning.SupportedOSPlatform("windows")]
public static Type? GetTypeFromCLSID (Guid clsid, bool
throwOnError);
```

```
[<System.Runtime.Versioning.SupportedOSPlatform("windows"
static member GetTypeFromCLSID : Guid * bool -> Type
```

```
Public Shared Function GetTypeFromCLSID (clsid As
Guid, throwOnError As Boolean) As Type
```

## Parameters

**clsid** [Guid](#)

The CLSID of the type to get.

**throwOnError** [Boolean](#)

**true** to throw any exception that occurs.

-or-

**false** to ignore any exception that occurs.

## Returns

[Type](#)

**System.\_\_ComObject** regardless of whether the CLSID is valid.

Attributes [SupportedOSPlatformAttribute](#)

## Examples

The following example uses the CLSID of the Microsoft Word [Application object](#) to retrieve a COM type that represents the Microsoft Word application. It then instantiates the type by calling the [Activator.CreateInstance](#) method, and closes it by calling the [Application.Quit](#) method. An exception is thrown if an error occurs while loading the type.

```
using System;
using System.Reflection;
using System.Runtime.InteropServices;

public class Example
{
    private const string WORD_CLSID = "{000209FF-0000-0000-0000-000000000000}";

    public static void Main()
    {
        try {
            // Start an instance of the Word application.
            var word = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID));
            Console.WriteLine("Instantiated Type object from CLSID: " + WORD_CLSID);
        }
        catch {
            Console.WriteLine("Error instantiating Word application.");
        }
    }
}
```

```
        WORD_CLSID);
    Object wordObj = Activator.CreateInstance(word);
    Console.WriteLine("Instantiated {0}",
        wordObj.GetType().FullName, wordObj);

    // Close Word.
    word.InvokeMember("Quit", BindingFlags.InvokeMethod,
        null, wordObj, new object[] { 0, 0, 0 });
}
catch (Exception) {
    Console.WriteLine("Unable to instantiate an object for {0}",
        WORD_CLSID);
}
}

// The example displays the following output:
//   Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
//   Instantiated Microsoft.Office.Interop.Word.Application object
```

```
open System
open System.Reflection

let [<Literal>] WORD_CLSID = "{000209FF-0000-0000-C000-000000000000}"

try
    // Start an instance of the Word application.
    let word = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID)
    printfn $"Instantiated Type object from CLSID {WORD_CLSID}"
    let wordObj = Activator.CreateInstance word
    printfn $"Instantiated {wordObj.GetType().FullName} object"

    // Close Word.
    word.InvokeMember("Quit", BindingFlags.InvokeMethod,
        null, wordObj, new object[] { 0, 0, 0 })
with _ ->
    printfn $"Unable to instantiate an object for {WORD_CLSID}"

// The example displays the following output:
//   Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
//   Instantiated Microsoft.Office.Interop.Word.Application object
```

```
Imports System.Reflection
Imports System.Runtime.InteropServices
```

#### Module Example

```
Private Const WORD_CLSID As String = "{000209FF-0000-0000-0000-000000000000}"

Public Sub Main()
    ' Start an instance of the Word application.
    Try
        Dim word As Type = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID))
        Console.WriteLine("Instantiated Type object from CLSID {0}", WORD_CLSID)

        Dim wordObj As Object = Activator.CreateInstance(word)
        Console.WriteLine("Instantiated {0}", wordObj.GetType().FullName)

        ' Close Word.
        word.InvokeMember("Quit", BindingFlags.InvokeMethod, null, wordObj, New Object() { 0, 0 })

        ' The method can throw any of a number of unexpected exceptions.
    Catch e As Exception
        Console.WriteLine("Unable to instantiate an object from CLSID {0}", WORD_CLSID)
    End Try
End Sub
End Module

' The example displays the following output:
'      Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
'      Instantiated Microsoft.Office.Interop.Word.ApplicationClass
```

## Remarks

The [GetTypeFromCLSID](#) method supports late-bound access to unmanaged COM objects from .NET Framework apps when you know the COM object's class identifier (CLSID). The class identifier for COM classes is defined in the HKEY\_CLASSES\_ROOT\CLSID key of the registry. You can retrieve the value of the [IsCOMObject](#) property to determine whether the type returned by this method is a COM object.



Tip

You can call the [GetTypeFromProgID](#) method for late-bound access to COM objects whose programmatic identifier (ProgID) you know.

Instantiating an unmanaged COM object from its CLSID is a two-step process:

1. Get a [Type](#) object that represents the `__ComObject` that corresponds to the CLSID by calling the [GetTypeFromCLSID](#) method.
2. Call the [Activator.CreateInstance\(Type\)](#) method to instantiate the COM object.

See the example for an illustration.

Exceptions such as [OutOfMemoryException](#) will be thrown when specifying `true` for `throwOnError`, but it will not fail for unregistered CLSIDs.

## Notes to Callers

This method is intended for use when working with COM objects, not with .NET Framework objects. All managed objects, including those that are visible to COM (that is, their [ComVisibleAttribute](#) attribute is `true`) have a GUID that is returned by the [GUID](#) property. Although the method returns a [Type](#) object that corresponds to the GUID for .NET Framework objects, you can't use that [Type](#) object to create a type instance by calling the [CreateInstance\(Type\)](#) method, as the following example shows.

```
using System;
using System.Runtime.InteropServices;

[assembly:ComVisible(true)]
```



```
// Define two classes, and assign one an explicit GUID.
[GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")]
public class ExplicitGuid
{ }

public class NoExplicitGuid
{ }

public class Example
{
    public static void Main()
    {
        Type explicitType = typeof(ExplicitGuid);
        Guid explicitGuid = explicitType.GUID;

        // Get type of ExplicitGuid from its GUID.
        Type explicitCOM = Type.GetTypeFromCLSID(explicitGuid);
        Console.WriteLine("Created {0} type from CLSID {1}",
            explicitCOM.Name, explicitGuid);

        // Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
            explicitType.Name, explicitCOM.Name,
            explicitType.Equals(explicitCOM));

        // Instantiate an ExplicitGuid object.
        try {
            Object obj = Activator.CreateInstance(explicitCOM);
            Console.WriteLine("Instantiated a {0} object", obj);
        }
        catch (COMException e) {
            Console.WriteLine("COM Exception:\n{0}\n", e.Message);
        }

        Type notExplicit = typeof(NoExplicitGuid);
        Guid notExplicitGuid = notExplicit.GUID;

        // Get type of ExplicitGuid from its GUID.
        Type notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid);
        Console.WriteLine("Created {0} type from CLSID {1}",
            notExplicitCOM.Name, notExplicitGuid);

        // Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
            notExplicit.Name, notExplicitCOM.Name,
            notExplicit.Equals(notExplicitCOM));

        // Instantiate an ExplicitGuid object.
```

```
        try {
            Object obj = Activator.CreateInstance(notExplicitGuid, CLSID);
            Console.WriteLine("Instantiated a {0} object", obj.GetType());
        }
        catch (COMException e) {
            Console.WriteLine("COM Exception:\n{0}\n", e.Message);
        }
    }
}

// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to the following error:
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//
//      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to the following error:
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

```
open System
open System.Runtime.InteropServices

[<assembly: ComVisible true>]
do ()

// Define two classes, and assign one an explicit GUID.
[<Guid "d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4">]
type ExplicitGuid() = class end

type NoExplicitGuid() = class end

let explicitType = typeof<ExplicitGuid>
let explicitGuid = explicitType.GUID

// Get type of ExplicitGuid from its GUID.
let explicitCOM = Type.GetTypeFromCLSID explicitGuid
printfn $"Created {explicitCOM.Name} type from CLSID {explicitCOM.CLSID}"
```

```
// Compare the two type objects.
printfn $"{explicitType.Name} and {explicitCOM.Name} equal: {explicitType.Equals(explicitCOM)}"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance explicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"

let notExplicit = typeof<NoExplicitGuid>
let notExplicitGuid = notExplicit.GUID

// Get type of ExplicitGuid from its GUID.
let notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid)
printfn $"Created {notExplicitCOM.Name} type from CLSID {notExplicitGuid}"

// Compare the two type objects.
printfn $"{notExplicit.Name} and {notExplicitCOM.Name} equal: {notExplicit.Equals(notExplicitCOM)}"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance notExplicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"

// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//
//      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

```
Imports System.Runtime.InteropServices
```

```
<Assembly:ComVisible(True)>
```

```
' Define two classes, and assign one an explicit GUID.
<GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")>
Public Class ExplicitGuid
End Class
```

```
Public Class NoExplicitGuid
End Class
```

```
Module Example
```

```
    Public Sub Main()
```

```
        Dim explicitType As Type = GetType(ExplicitGuid)
        Dim explicitGuid As Guid = explicitType.GUID
```

```
        ' Get type of ExplicitGuid from its GUID.
        Dim explicitCOM As Type = Type.GetTypeFromCLSID(explicitGuid)
        Console.WriteLine("Created {0} type from CLSID {1}"
            explicitCOM.Name, explicitGuid)
```

```
        ' Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
            explicitType.Name, explicitCOM.Name,
            explicitType.Equals(explicitCOM))
```

```
        ' Instantiate an ExplicitGuid object.
        Try
            Dim obj As Object = Activator.CreateInstance(explicitType)
            Console.WriteLine("Instantiated a {0} object", obj)
        Catch e As COMException
            Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, obj)
        End Try
```

```
        Dim notExplicit As Type = GetType(NoExplicitGuid)
        Dim notExplicitGuid As Guid = notExplicit.GUID
```

```
        ' Get type of ExplicitGuid from its GUID.
        Dim notExplicitCOM As Type = Type.GetTypeFromCLSID(notExplicitGuid)
        Console.WriteLine("Created {0} type from CLSID {1}"
            notExplicitCOM.Name, notExplicitGuid)
```

```
        ' Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
            notExplicit.Name, notExplicitCOM.Name,
            notExplicit.Equals(notExplicitCOM))
```

```
' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(not
    Console.WriteLine("Instantiated a {0} object", c
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.M
End Try
End Sub
End Module
' The example displays the following output:
'     Created __ComObject type from CLSID d055cba3-1f83
'     ExplicitGuid and __ComObject equal: False
'     COM Exception:
'     Retrieving the COM class factory for component wi
'     {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due
'     80040154 Class not registered
'     (Exception from HRESULT: 0x80040154 (REGDB_E_CLAS
'
'     Created __ComObject type from CLSID 74f03346-a718
'     NoExplicitGuid and __ComObject equal: False
'     COM Exception:
'     Retrieving the COM class factory for component wi
'     {74F03346-A718-3516-AC78-F351C7459FFB} failed due
'     80040154 Class not registered
'     (Exception from HRESULT: 0x80040154 (REGDB_E_CLAS
```

Instead, the [GetTypeFromCLSID\(Guid, String, Boolean\)](#) should only be used to retrieve the GUID of an unmanaged COM object, and the resulting [Type](#) object that is passed to the [CreateInstance\(Type\)](#) method must represent an unmanaged COM object.

## Applies to



## GetTypeFromCLSID(Guid, String)

Source: [Type.cs](#) 

Gets the type associated with the specified class identifier (CLSID) from the specified server.

```
public:  
    static Type ^ GetTypeFromCLSID(Guid clsid,  
        System::String ^ server);
```

```
[System.Runtime.Versioning.SupportedOSPlatform("windows")  
public static Type? GetTypeFromCLSID (Guid clsid,  
    string? server);
```

```
[<System.Runtime.Versioning.SupportedOSPlatform("windows"  
static member GetTypeFromCLSID : Guid * string -> Type
```

```
Public Shared Function GetTypeFromCLSID (clsid As  
    Guid, server As String) As Type
```

## Parameters

**clsid** [Guid](#)

The CLSID of the type to get.

**server** [String](#)

The server from which to load the type. If the server name is `null`, this method automatically reverts to the local machine.

## Returns

[Type](#)

`System.__ComObject` regardless of whether the CLSID is valid.

Attributes [SupportedOSPlatformAttribute](#)

## Examples

The following example uses the CLSID of the Microsoft Word [Application object](#) to retrieve a COM type that represents the Microsoft Word application from a server named `computer17.central.contoso.com`. It then instantiates the type by calling the [Activator.CreateInstance](#) method, and closes it by calling the [Application.Quit](#) method.

```
using System;
using System.Reflection;
using System.Runtime.InteropServices;

public class Example
{
    private const string WORD_CLSID = "{000209FF-0000-0000-0000-000000000000}";

    public static void Main()
    {
        // Start an instance of the Word application.
        var word = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID));
        Console.WriteLine("Instantiated Type object from CLSID {0}", WORD_CLSID);

        try {
            Object wordObj = Activator.CreateInstance(word);
            Console.WriteLine("Instantiated {0}", wordObj.GetType().FullName, wordObj);

            // Close Word.
            word.InvokeMember("Quit", BindingFlags.InvokeMethod, null, wordObj, new object[] { 0, 0, 0 });
        } catch (COMException) {
            Console.WriteLine("Unable to instantiate object.");
        }
    }
}
```

```
// The example displays the following output:  
//     Instantiated Type object from CLSID {000209FF-0000-  
//     Instantiated Microsoft.Office.Interop.Word.Applicat
```

```
open System  
open System.Reflection  
open System.Runtime.InteropServices  
  
let [<Literal>] WORD_CLSID = "{000209FF-0000-0000-C000-0000-0000-0000-0000-0000}"  
  
// Start an instance of the Word application.  
let word = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID, '  
printfn $"Instantiated Type object from CLSID {WORD_CLSID}"  
try  
    let wordObj = Activator.CreateInstance word  
    printfn $"Instantiated {wordObj.GetType().FullName} +  
  
    // Close Word.  
    word.InvokeMember("Quit", BindingFlags.InvokeMethod,  
with :? COMException ->  
    printfn "Unable to instantiate object."  
// The example displays the following output:  
//     Instantiated Type object from CLSID {000209FF-0000-  
//     Instantiated Microsoft.Office.Interop.Word.Applicat
```

```
Imports System.Reflection  
Imports System.Runtime.InteropServices  
  
Module Example  
    Private Const WORD_CLSID As String = "{000209FF-0000-0000-C000-0000-0000-0000-0000-0000}"  
  
    Public Sub Main()  
        ' Start an instance of the Word application.  
        Dim word As Type = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID, '  
        Console.WriteLine("Instantiated Type object from CLSID {0}", WORD_CLSID)  
  
        Try  
            Dim wordObj As Object = Activator.CreateInstance word  
            Console.WriteLine("Instantiated {0}", wordObj.GetType().FullName)  
        End Try  
    End Sub  
End Module
```



```
' Close Word.  
word.InvokeMember("Quit", BindingFlags.InvokeMet  
wordObj, New Object() { 0, 0,  
Catch e As COMException  
Console.WriteLine("Unable to instantiate object.  
End Try  
End Sub  
End Module  
' The example displays the following output:  
'     Instantiated Type object from CLSID {000209FF-0000-0  
'     Instantiated Microsoft.Office.Interop.Word.Applicati
```

## Remarks

The [GetTypeFromCLSID](#) method supports late-bound access to unmanaged COM objects from .NET Framework apps when you know the COM object's class identifier (CLSID). The class identifier for COM classes is defined in the HKEY\_CLASSES\_ROOT\CLSID key of the registry. You can retrieve the value of the [IsCOMObject](#) property to determine whether the type returned by this method is a COM object.

### Tip

You can call the [GetTypeFromProgID](#) method for late-bound access to COM objects whose programmatic identifier (ProgID) you know.

Instantiating an unmanaged COM object from its CLSID is a two-step process:

1. Get a [Type](#) object that represents the `__ComObject` that corresponds to the CLSID by calling the [GetTypeFromCLSID](#) method.
2. Call the [Activator.CreateInstance\(Type\)](#) method to instantiate the COM object.

## Notes to Callers

This method is intended for use when working with COM objects, not with .NET Framework objects. All managed objects, including those that are visible to COM (that is, their [ComVisibleAttribute](#) attribute is `true`) have a GUID that is returned by the [GUID](#) property. Although the method returns a [Type](#) object that corresponds to the GUID for .NET Framework objects, you can't use that [Type](#) object to create a type instance by calling the [CreateInstance\(Type\)](#) method, as the following example shows.

```
using System;
using System.Runtime.InteropServices;

[assembly:ComVisible(true)]

// Define two classes, and assign one an explicit GUID.
[GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")]
public class ExplicitGuid
{ }

public class NoExplicitGuid
{ }

public class Example
{
    public static void Main()
    {
        Type explicitType = typeof(ExplicitGuid);
        Guid explicitGuid = explicitType.GUID;

        // Get type of ExplicitGuid from its GUID.
        Type explicitCOM = Type.GetTypeFromCLSID(explicitGuid);
        Console.WriteLine("Created {0} type from CLSID {1}",
                          explicitCOM.Name, explicitGuid);

        // Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
                          explicitType.Name, explicitCOM.Name,
                          explicitType.Equals(explicitCOM));

        // Instantiate an ExplicitGuid object.
```

```
try {
    Object obj = Activator.CreateInstance(explicitCOM);
    Console.WriteLine("Instantiated a {0} object", obj);
}
catch (COMException e) {
    Console.WriteLine("COM Exception:\n{0}\n", e.Message);
}

Type notExplicit = typeof(NoExplicitGuid);
Guid notExplicitGuid = notExplicit.GUID;

// Get type of ExplicitGuid from its GUID.
Type notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid);
Console.WriteLine("Created {0} type from CLSID {1}'",
    notExplicitCOM.Name, notExplicitGuid);

// Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}",
    notExplicit.Name, notExplicitCOM.Name,
    notExplicit.Equals(notExplicitCOM));

// Instantiate an ExplicitGuid object.
try {
    Object obj = Activator.CreateInstance(notExplicitGuid);
    Console.WriteLine("Instantiated a {0} object", obj);
}
catch (COMException e) {
    Console.WriteLine("COM Exception:\n{0}\n", e.Message);
}
}

// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//
//      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

```
open System
open System.Runtime.InteropServices

[<assembly: ComVisible true>]
do ()

// Define two classes, and assign one an explicit GUID.
[<Guid "d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4">]
type ExplicitGuid() = class end

type NoExplicitGuid() = class end

let explicitType = typeof<ExplicitGuid>
let explicitGuid = explicitType.GUID

// Get type of ExplicitGuid from its GUID.
let explicitCOM = Type.GetTypeFromCLSID explicitGuid
printfn $"Created {explicitCOM.Name} type from CLSID {explicitGuid}"

// Compare the two type objects.
printfn $"{explicitType.Name} and {explicitCOM.Name} equal"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance explicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"

let notExplicit = typeof<NoExplicitGuid>
let notExplicitGuid = notExplicit.GUID

// Get type of ExplicitGuid from its GUID.
let notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid)
printfn $"Created {notExplicitCOM.Name} type from CLSID {notExplicitGuid}"

// Compare the two type objects.
printfn $"{notExplicit.Name} and {notExplicitCOM.Name} equal"

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance notExplicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object"
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"
```

```
// The example displays the following output:  
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4  
//      ExplicitGuid and __ComObject equal: False  
//      COM Exception:  
//      Retrieving the COM class factory for component vtbl {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to  
//      80040154 Class not registered  
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))  
//  
//      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb  
//      NoExplicitGuid and __ComObject equal: False  
//      COM Exception:  
//      Retrieving the COM class factory for component vtbl {74F03346-A718-3516-AC78-F351C7459FFB} failed due to  
//      80040154 Class not registered  
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

```
Imports System.Runtime.InteropServices
```

```
<Assembly:ComVisible(True)>
```

```
' Define two classes, and assign one an explicit GUID.  
<GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")>
```

```
Public Class ExplicitGuid
```

```
End Class
```

```
Public Class NoExplicitGuid
```

```
End Class
```

```
Module Example
```

```
    Public Sub Main()
```

```
        Dim explicitType As Type = GetType(ExplicitGuid)
```

```
        Dim explicitGuid As Guid = explicitType.GUID
```

```
        ' Get type of ExplicitGuid from its GUID.
```

```
        Dim explicitCOM As Type = Type.GetTypeFromCLSID(explicitGuid)  
        Console.WriteLine("Created {0} type from CLSID {1}",  
                           explicitCOM.Name, explicitGuid)
```

```
        ' Compare the two type objects.
```

```
        Console.WriteLine("{0} and {1} equal: {2}",  
                           explicitType.Name, explicitCOM.Name,  
                           explicitType.Equals(explicitCOM))
```

```
' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(explicitGuid)
    Console.WriteLine("Instantiated a {0} object", obj)
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, vbCrLf)
End Try

Dim notExplicit As Type = GetType(NoExplicitGuid)
Dim notExplicitGuid As Guid = notExplicit.GUID

' Get type of ExplicitGuid from its GUID.
Dim notExplicitCOM As Type = Type.GetTypeFromCLSID(notExplicitGuid.ToByteArray())
Console.WriteLine("Created {0} type from CLSID {1}", notExplicitCOM.Name, notExplicitGuid)

' Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}", notExplicit.Name, notExplicitCOM.Name, notExplicit.Equals(notExplicitCOM))

' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(notExplicitGuid)
    Console.WriteLine("Instantiated a {0} object", obj)
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, vbCrLf)
End Try
End Sub
End Module

' The example displays the following output:
'      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
'      ExplicitGuid and __ComObject equal: False
'      COM Exception:
'      Retrieving the COM class factory for component with CLSID
'      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to error
'      80040154 Class not registered
'      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
'
'      Created __ComObject type from CLSID 74f03346-a718-3516-ac78-f351c7459ffb
'      NoExplicitGuid and __ComObject equal: False
'      COM Exception:
'      Retrieving the COM class factory for component with CLSID
'      {74F03346-A718-3516-AC78-F351C7459FFB} failed due to error
'      80040154 Class not registered
'      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```

Instead, the [GetTypeFromCLSID\(Guid, String, Boolean\)](#) should only be used to retrieve the GUID of an unmanaged COM object, and the resulting [Type](#) object that is passed to the [CreateInstance\(Type\)](#) method must represent an unmanaged COM object.

## Applies to



# GetTypeFromCLSID(Guid, String, Boolean)

Source: [Type.cs](#) 

Gets the type associated with the specified class identifier (CLSID) from the specified server, specifying whether to throw an exception if an error occurs while loading the type.

```
public:
    static Type ^ GetTypeFromCLSID(Guid clsid,
        System::String ^ server, bool throwOnError);
```

```
[System.Runtime.Versioning.SupportedOSPlatform("windows")]
public static Type? GetTypeFromCLSID (Guid clsid,
    string? server, bool throwOnError);
```

```
[<System.Runtime.Versioning.SupportedOSPlatform("windows"
static member GetTypeFromCLSID : Guid * string * bool
-> Type
```

```
Public Shared Function GetTypeFromCLSID (clsid As Guid, server As String, throwOnError As Boolean) As Type
```

## Parameters

**clsid** [Guid](#)

The CLSID of the type to get.

**server** [String](#)

The server from which to load the type. If the server name is `null`, this method automatically reverts to the local machine.

**throwOnError** [Boolean](#)

`true` to throw any exception that occurs.

-or-

`false` to ignore any exception that occurs.

## Returns

[Type](#)

`System.__ComObject` regardless of whether the CLSID is valid.

Attributes [SupportedOSPlatformAttribute](#)

## Examples

The following example uses the CLSID of the Microsoft Word [Application object](#) to retrieve a COM type that represents the Microsoft Word application from a server named `computer17.central.contoso.com`. It then instantiates the type by



calling the [Activator.CreateInstance](#) method, and closes it by calling the [Application.Quit](#) method. An exception is thrown if an error occurs while loading the type.

```
using System;
using System.Reflection;
using System.Runtime.InteropServices;

public class Example
{
    private const string WORD_CLSID = "{000209FF-0000-0000-0000-000000000000}";

    public static void Main()
    {
        try {
            // Start an instance of the Word application.
            var word = Type.GetTypeFromCLSID(Guid.Parse(WORD_CLSID),
                                                "computer17.cer",
                                                true);

            Console.WriteLine("Instantiated Type object from CLSID {0}",
                              WORD_CLSID);
            Object wordObj = Activator.CreateInstance(word);
            Console.WriteLine("Instantiated {0}",
                              wordObj.GetType().FullName, wordObj);

            // Close Word.
            word.InvokeMember("Quit", BindingFlags.InvokeMethod, null,
                              wordObj, new object[] { 0, 0, 0 });
        }
        // The method can throw any of a variety of exceptions.
        catch (Exception e) {
            Console.WriteLine("{0}: Unable to instantiate application from CLSID {1}",
                              e.GetType().Name, WORD_CLSID);
        }
    }
}

// The example displays the following output:
//      Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
//      Instantiated Microsoft.Office.Interop.Word.Application from CLSID {000209FF-0000-0000-0000-000000000000}
```

```
open System
open System.Reflection

let [<Literal>] WORD_CLSID = "{000209FF-0000-0000-C000-000000000000}"

try
    // Start an instance of the Word application.
    let word = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID)
    printfn $"Instantiated Type object from CLSID {WORD_CLSID}"
    let wordObj = Activator.CreateInstance word
    printfn $"Instantiated {wordObj.GetType().FullName} type"

    // Close Word.
    word.InvokeMember("Quit", BindingFlags.InvokeMethod,
    // The method can throw any of a variety of exceptions.
    with e ->
        printfn $"{e.GetType().Name}: Unable to instantiate a Word application."
    // The example displays the following output:
    //    Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
    //    Instantiated Microsoft.Office.Interop.Word.Application type
```

```
Imports System.Reflection
Imports System.Runtime.InteropServices

Module Example
    Private Const WORD_CLSID As String = "{000209FF-0000-0000-C000-000000000000}"

    Public Sub Main()
        Try
            ' Start an instance of the Word application.
            Dim word As Type = Type.GetTypeFromCLSID(Guid.Parse WORD_CLSID,
                "computername", BindingFlags.Default, true)
            Console.WriteLine("Instantiated Type object from CLSID {0}",
                WORD_CLSID)

            Dim wordObj As Object = Activator.CreateInstance(word)
            Console.WriteLine("Instantiated {0}",
                wordObj.GetType().FullName)

            ' Close Word.
            wordObj.InvokeMember("Quit", BindingFlags.InvokeMethod,
                wordObj, New Object() { 0, 0, 0, 0 })
            ' The method can throw any of a variety of exceptions.
```

```
        Catch e As Exception
            Console.WriteLine("{0}: Unable to instantiate an object of type {1}.", e.GetType().Name, WORD_CLSID)
        End Try
    End Sub
End Module
' The example displays the following output:
'     Instantiated Type object from CLSID {000209FF-0000-0000-0000-000000000000}
'     Instantiated Microsoft.Office.Interop.Word.Application object
```

## Remarks

The [GetTypeFromCLSID](#) method supports late-bound access to unmanaged COM objects from .NET Framework apps when you know the COM object's class identifier (CLSID). The class identifier for COM classes is defined in the HKEY\_CLASSES\_ROOT\CLSID key of the registry. You can retrieve the value of the [IsCOMObject](#) property to determine whether the type returned by this method is a COM object.

### Tip

You can call the [GetTypeFromProgID](#) method for late-bound access to COM objects whose programmatic identifier (ProgID) you know.

Instantiating an unmanaged COM object from its CLSID is a two-step process:

1. Get a [Type](#) object that represents the `__ComObject` that corresponds to the CLSID by calling the [GetTypeFromCLSID](#) method.
2. Call the [Activator.CreateInstance\(Type\)](#) method to instantiate the COM object.

Exceptions such as [OutOfMemoryException](#) will be thrown when specifying `true` for `throwOnError`, but it will not fail for

unregistered CLSIDs.

## Notes to Callers

This method is intended for use when working with COM objects, not with .NET Framework objects. All managed objects, including those that are visible to COM (that is, their [ComVisibleAttribute](#) attribute is `true`) have a GUID that is returned by the [GUID](#) property. Although the [GetTypeFromCLSID\(Guid, String, Boolean\)](#) method returns a [Type](#) object that corresponds to the GUID for a particular managed object, you can't use that [Type](#) object to create a type instance by calling the [CreateInstance\(Type\)](#) method, as the following example shows.

```
using System;
using System.Runtime.InteropServices;

[assembly:ComVisible(true)]

// Define two classes, and assign one an explicit GUID.
[GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")]
public class ExplicitGuid
{ }

public class NoExplicitGuid
{ }

public class Example
{
    public static void Main()
    {
        Type explicitType = typeof(ExplicitGuid);
        Guid explicitGuid = explicitType.GUID;

        // Get type of ExplicitGuid from its GUID.
        Type explicitCOM = Type.GetTypeFromCLSID(explicitGuid);
        Console.WriteLine("Created {0} type from CLSID {1}",
                          explicitCOM.Name, explicitGuid);

        // Compare the two type objects.
        Console.WriteLine("{0} and {1} equal: {2}",
```

```
        explicitType.Name, explicitCOM.Name,
        explicitType.Equals(explicitCOM));

    // Instantiate an ExplicitGuid object.
    try {
        Object obj = Activator.CreateInstance(explicitCOM);
        Console.WriteLine("Instantiated a {0} object", obj);
    }
    catch (COMException e) {
        Console.WriteLine("COM Exception:\n{0}\n", e.Message);
    }

    Type notExplicit = typeof(NoExplicitGuid);
    Guid notExplicitGuid = notExplicit.GUID;

    // Get type of ExplicitGuid from its GUID.
    Type notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGuid);
    Console.WriteLine("Created {0} type from CLSID {1}",
        notExplicitCOM.Name, notExplicitGuid);

    // Compare the two type objects.
    Console.WriteLine("{0} and {1} equal: {2}",
        notExplicit.Name, notExplicitCOM.Name,
        notExplicit.Equals(notExplicitCOM));

    // Instantiate an ExplicitGuid object.
    try {
        Object obj = Activator.CreateInstance(notExplicitCOM);
        Console.WriteLine("Instantiated a {0} object", obj);
    }
    catch (COMException e) {
        Console.WriteLine("COM Exception:\n{0}\n", e.Message);
    }
}

// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to the
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
//
//      Created __ComObject type from CLSID 74f03346-a711-412a-b96b-000000000000
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component with CLSID
```

```
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed du
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLA
```

```
open System
open System.Runtime.InteropServices

[<assembly: ComVisible true>]
do ()

// Define two classes, and assign one an explicit GUID.
[<Guid "d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4">]
type ExplicitGuid() = class end

type NoExplicitGuid() = class end

let explicitType = typeof<ExplicitGuid>
let explicitGuid = explicitType.GUID

// Get type of ExplicitGuid from its GUID.
let explicitCOM = Type.GetTypeFromCLSID explicitGuid
printfn $"Created {explicitCOM.Name} type from CLSID {exp

// Compare the two type objects.
printfn $"{explicitType.Name} and {explicitCOM.Name} equa

// Instantiate an ExplicitGuid object.
try
    let obj = Activator.CreateInstance explicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object'
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"

let notExplicit = typeof<NoExplicitGuid>
let notExplicitGuid = notExplicit.GUID

// Get type of ExplicitGuid from its GUID.
let notExplicitCOM = Type.GetTypeFromCLSID(notExplicitGui
printfn $"Created {notExplicitCOM.Name} type from CLSID {

// Compare the two type objects.
printfn $"{notExplicit.Name} and {notExplicitCOM.Name} ec

// Instantiate an ExplicitGuid object.
```

```
try
    let obj = Activator.CreateInstance notExplicitCOM
    printfn $"Instantiated a {obj.GetType().Name} object'
with :? COMException as e ->
    printfn $"COM Exception:\n{e.Message}\n"
// The example displays the following output:
//      Created __ComObject type from CLSID d055cba3-1f8
//      ExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component v
//      {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed du
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLA
//
//      Created __ComObject type from CLSID 74f03346-a71
//      NoExplicitGuid and __ComObject equal: False
//      COM Exception:
//      Retrieving the COM class factory for component v
//      {74F03346-A718-3516-AC78-F351C7459FFB} failed du
//      80040154 Class not registered
//      (Exception from HRESULT: 0x80040154 (REGDB_E_CLA
```

```
Imports System.Runtime.InteropServices
```

```
<Assembly:ComVisible(True)>
```

```
' Define two classes, and assign one an explicit GUID.
<GuidAttribute("d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4")>
```

```
Public Class ExplicitGuid
```

```
End Class
```

```
Public Class NoExplicitGuid
```

```
End Class
```

```
Module Example
```

```
    Public Sub Main()
```

```
        Dim explicitType As Type = GetType(ExplicitGuid)
```

```
        Dim explicitGuid As Guid = explicitType.GUID
```

```
        ' Get type of ExplicitGuid from its GUID.
```

```
        Dim explicitCOM As Type = Type.GetTypeFromCLSID(exp
```

```
        Console.WriteLine("Created {0} type from CLSID {1}'
                           explicitCOM.Name, explicitGuid)
```

```
' Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}",
                  explicitType.Name, explicitCOM.Name,
                  explicitType.Equals(explicitCOM))

' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(explicitCOM)
    Console.WriteLine("Instantiated a {0} object", obj.GetType().Name)
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, explicitCOM.Name)
End Try

Dim notExplicit As Type = GetType(NoExplicitGuid)
Dim notExplicitGuid As Guid = notExplicit.GUID

' Get type of ExplicitGuid from its GUID.
Dim notExplicitCOM As Type = Type.GetTypeFromCLSID(notExplicitGuid.ToByteArray())
Console.WriteLine("Created {0} type from CLSID {1}", notExplicitCOM.Name, notExplicitCOM.FullName)

' Compare the two type objects.
Console.WriteLine("{0} and {1} equal: {2}",
                  notExplicit.Name, notExplicitCOM.Name,
                  notExplicit.Equals(notExplicitCOM))

' Instantiate an ExplicitGuid object.
Try
    Dim obj As Object = Activator.CreateInstance(notExplicitCOM)
    Console.WriteLine("Instantiated a {0} object", obj.GetType().Name)
Catch e As COMException
    Console.WriteLine("COM Exception:{1}{0}{1}", e.Message, notExplicitCOM.Name)
End Try
End Sub
End Module

' The example displays the following output:
'
' Created __ComObject type from CLSID d055cba3-1f83-4bd7-ba19-e22b1b8ec3c4
' ExplicitGuid and __ComObject equal: False
' COM Exception:
' Retrieving the COM class factory for component with CLSID
' {D055CBA3-1F83-4BD7-BA19-E22B1B8EC3C4} failed due to error
' 80040154 Class not registered
' (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
'
' Created __ComObject type from CLSID 74f03346-a718-4612-b7f2-833d0d81e01c
' NoExplicitGuid and __ComObject equal: False
' COM Exception:
' Retrieving the COM class factory for component with CLSID
' {74F03346-A718-4612-B7F2-833D0D81E01C} failed due to error
' 80040154 Class not registered
' (Exception from HRESULT: 0x80040154 (REGDB_E_CLASSNOTREG))
```



```
' {74F03346-A718-3516-AC78-F351C7459FFB} failed due  
' 80040154 Class not registered  
' (Exception from HRESULT: 0x80040154 (REGDB_E_CLAS
```

Instead, the [GetTypeFromCLSID\(Guid, String, Boolean\)](#) should only be used to retrieve the GUID of an unmanaged COM object, and the resulting [Type](#) object that is passed to the [CreateInstance\(Type\)](#) method must represent an unmanaged COM object.

## Applies to




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