# .NET and COM: The Complete Interoperability Guide

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When reviewing corrections, always check the print number of your book. Corrections are made to printed books with each subsequent printing. To determine the printing of your book, view the copyright page. The print number is right-most number on the line below the "First Printing" line. For example, the following indicates the 4th printing of a title.

*First Printing: January 2002*

*Third Printing with corrections: April 2004*

*04                4 3*

| Misprint | Correction |
|---|---|
| *Page 234 in code listing line 29*<br>`HTMLDocumentEvents_onclick` | `HTMLDocumentEvents2_onclick` |
| *Page 300 2nd paragraph after bullets; last line*<br>the CCW holds onto | the RCW holds onto |
| *Page 418 first code line towards the end*<br>`*ClassName*"</object>` | `*ClassName*"></object>` |
| *Page 421 2nd to last paragraph—add line after last sentence:*<br>physical assembly file. | physical assembly file. You must also ensure that your machine policy allows managed code to run in the Internet zone. |
| *Page 479 middle of page code 4th line*<br>`f.BorderStyle = 2` | `f.FormBorderStyle = 2` |
| *Page 492 2nd paragraph after bullets*<br>shutdown of the CLR, including the finalization of any .NET objects that have not yet been finalized, and exits the process with the passed-in error code. | shutdown of the CLR by calling `CoEEShutDownCOM`, finalizing any .NET objects that have not yet been finalized, then exiting the process with the passed-in error code. |
| *Page 609 in Listing 2nd line*<br>2: <is blank here> | `2: Imports System` |
| *Page 659 last paragraph/last sentence*<br>Even if you reference the Interop Assembly for the OLE Automation type library defining `IDispatch` and write a class | The only useful thing you can do with a .NET definition of |

that implements this interface, it will be completely ignored by the CLR and unusable from COM.

IDispatch (which can be found as an empty interface in the PIA for the OLE Automation type library) is make a .NET class marked with ClassInterfaceType.Noneimplement it, because this is the only way to make the type library exporter create a coclass whose default interface is IDispatch.(Some COM clients may care about this.)At run time, however, the CLR ignores the fact this dummy IDispatch interface is implemented.

*Page 677 in listing line 9*

```
Interface IprovideClassInfo
```

```
Interface IobjectSafety
```

*Page 759 first mono listing*

```
using ((IDisposable)FileWriter f = new FileWriter())
{
  foreach(int i in new int[]{1,2,3,4,5,6,7,8,9,10})
    f.WriteLine(i.ToString());
}
```

```
using (IDisposable f = (IDisposable)new FileWriter())
{
  foreach(int i in new int[]{1,2,3,4,5,6,7,8,9,10})
    ((FileWriter)f).WriteLine(i.ToString());
}
```

*Page 763 4th paragraph, 2nd line*

VB.NET

VB .NET

*Page 836 line 17*

```
public struct
```

```
internal struct
```

*Page 841 line 17*

```
public class
```

```
internal class
```

*Page 934 code lines 93-101*

```
 93:    if (pcbRead == NULL)
94:       {
95:     // User isn't interested in how many bytes were read
96:     *pcbRead = originalStream->Read(array, 0, cb);
97:       }
```

```
93:    if (pcbRead == NULL)
94:       {
```

```
98:      else
99:       {
100:     originalStream->Read(array, 0, cb);
101:      }
```

```
95:      // User isn't interested in how many bytes were read
96:       originalStream->Read(array, 0, cb);
97:       }
98:       else
99:       {
100:      *pcbRead = originalStream->Read(array, 0, cb);
101:      }
```

*Page 1018 2nd note Digging Deeper- add line after final sentence*

per source interface.

per source interface. In addition, making this change satisfies existing COM event sources that depend on there being a single event sink per source interface.

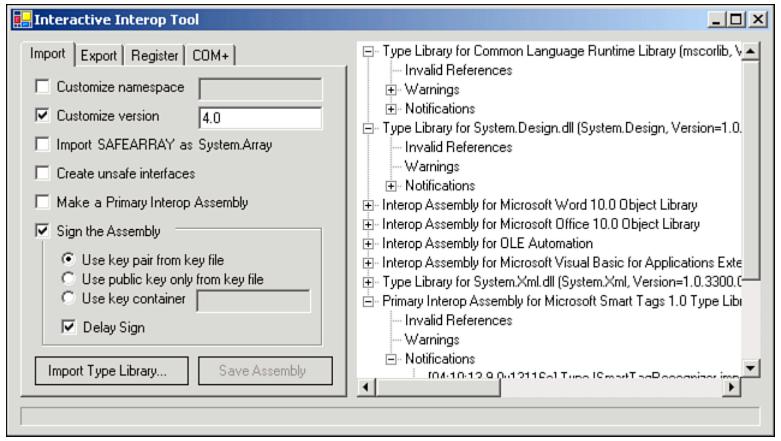
*Page 1062 replace figure*

*Delete existing 22.1*

*Page 1084 replace both figures*

*Delete existing 22.5*

*Delete existing 22.6*



Interactive Interop Tool

Import | Export | Register | COM+

- [ ] Customize namespace
- [✓] Customize version: 4.0
- [ ] Import SAFEARRAY as System.Array
- [ ] Create unsafe interfaces
- [ ] Make a Primary Interop Assembly
- [✓] Sign the Assembly
  - (●) Use key pair from key file
  - ( ) Use public key only from key file
  - ( ) Use key container
  - [✓] Delay Sign

Import Type Library... | Save Assembly

```
⊟ Type Library for Common Language Runtime Library (mscorlib, V
    Invalid References
  ⊞ Warnings
  ⊞ Notifications
⊟ Type Library for System.Design.dll (System.Design, Version=1.0.
    Invalid References
    Warnings
  ⊞ Notifications
⊞ Interop Assembly for Microsoft Word 10.0 Object Library
⊞ Interop Assembly for Microsoft Office 10.0 Object Library
⊞ Interop Assembly for OLE Automation
⊞ Interop Assembly for Microsoft Visual Basic for Applications Exte
⊞ Type Library for System.Xml.dll (System.Xml, Version=1.0.3300.
⊟ Primary Interop Assembly for Microsoft Smart Tags 1.0 Type Lib
    Invalid References
    Warnings
  ⊟ Notifications
```

*Page 1150 figure caption*

Three Classes are used

*Page 1227 Listing heading- delete mono on Class*

*The* ***WizardVisualization*** *Class*

*Page 1252 Last paragraph; last sentence*

offset multiplied by the array element size to the pointer value passed to

*Page 1253- last lines of all 3 code segments (x3)*

`largeArray, 10));`

*Page 1330 Digging Deeper last line*

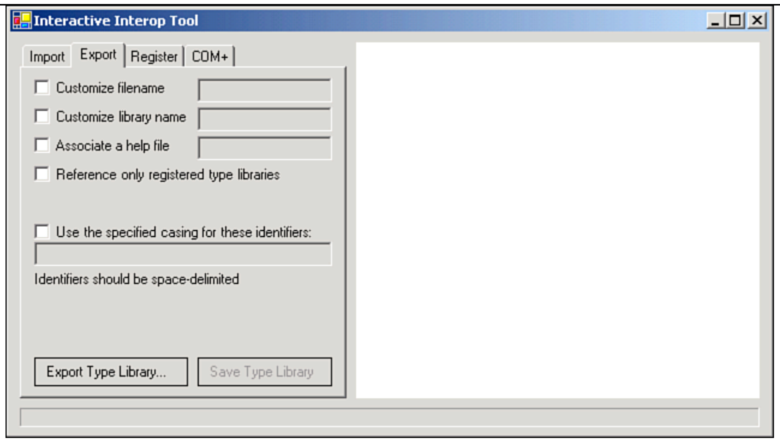
pointers that the CCW holds onto.

*Page 1431 first bullet*

GD132.DLL

*Page 1452 line 18 from the bottom*

`static extern bool eap32ListNext`



Interactive Interop Tool

Import | Export | Register | COM+

☐ Customize filename

☐ Customize library name

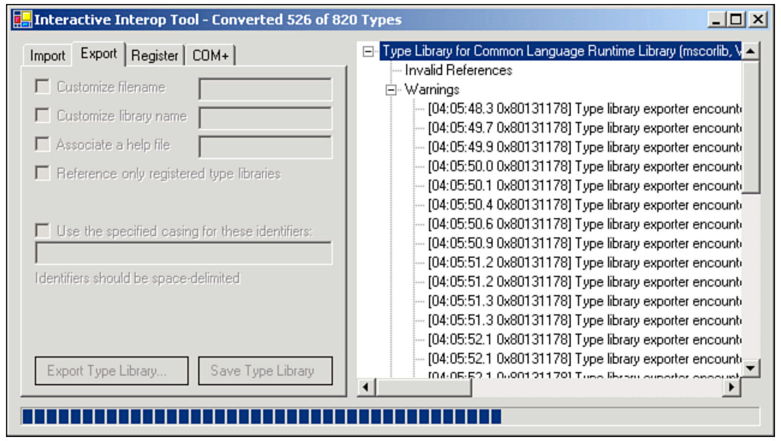
☐ Associate a help file

☐ Reference only registered type libraries

☐ Use the specified casing for these identifiers:

Identifiers should be space-delimited

Export Type Library... | Save Type Library



Interactive Interop Tool - Converted 526 of 820 Types

Import | Export | Register | COM+

☐ Customize filename

☐ Customize library name

☐ Associate a help file

☐ Reference only registered type libraries

☐ Use the specified casing for these identifiers:

Identifiers should be space-delimited

Export Type Library... | Save Type Library

```
Type Library for Common Language Runtime Library (mscorlib, V
  Invalid References
  Warnings
    [04:05:48.3 0x80131178] Type library exporter encount
    [04:05:49.7 0x80131178] Type library exporter encount
    [04:05:49.9 0x80131178] Type library exporter encount
    [04:05:50.0 0x80131178] Type library exporter encount
    [04:05:50.1 0x80131178] Type library exporter encount
    [04:05:50.4 0x80131178] Type library exporter encount
    [04:05:50.6 0x80131178] Type library exporter encount
    [04:05:50.9 0x80131178] Type library exporter encount
    [04:05:51.2 0x80131178] Type library exporter encount
    [04:05:51.2 0x80131178] Type library exporter encount
    [04:05:51.3 0x80131178] Type library exporter encount
    [04:05:51.3 0x80131178] Type library exporter encount
    [04:05:52.1 0x80131178] Type library exporter encount
    [04:05:52.1 0x80131178] Type library exporter encount
```

Three classes are used

The WizardVisualization Class

|  |  |
|---|---|
|  | offset (a number of bytes) to the pointer value passed |
|  | `largeArray, 40));` |
|  | pointers that the RCW holds onto. |
|  | `GDI32.DLL` |
|  | `static extern bool Heap32ListNext` |

This errata sheet is intended to provide updated technical information. Spelling and grammar misprints are updated during the reprint process, but are not listed on this errata sheet.