# Programmer's Guide

DOC-OEM6-ActiveX-US-06/00

# Table of Contents

# About this manual

## Welcome!

Welcome to the number one Windows based label design and printing software. It provides the simplest, yet highest performance solution for your labeling requirements.

This version of this labeling software integrates the ActiveX technology offering you the possibility toe easily create a program to control your labeling software.

**The Programmer's Guide**

The purpose of this manual is to help you program your own application to control your labeling software. All you should know about using ActiveX with your labeling software is described in this manual. However, to get more information about the ActiveX technology, refer to the Microsoft reference manuals.

The Programmer's Guide is divided into three parts:

- **Discover ActiveX for your labeling software**: this part gives the bases for programming with ActiveX.
- **Reference Guide**: this part gives all the object, method and property definitions integrated by your labeling software.
- **Appendix**: this part gives you information on Visual C++ Data Type.

## Typographical conventions

This manual distinguishes different types of information by using the following conventions:

- terms taken from the interface itself, such as commands, appear in **bold**;
- keys appear in small caps, as in the following example: ”Press the SHIFT key”;
- numbered lists mean there is a procedure to follow;
- when the conjunction ”or” appears next to a paragraph it means there is another procedure available for performing a given task;
- When a menu command contains submenus, the menu name followed by the command to select appears in bold. Thus, ”Choose **File Open**” means choose the **File** menu, then the **Open** command.

This symbol provides tips for optimizing certain tasks, speeding up the execution of commands, etc.

This symbol highlights important information about a particular function or procedure.

This symbol highlights an example or an exercise.

# Discover ActiveX Automation for your labeling software

1

## Introduction

Using **ActiveX Automation**, you can control almost anything you create with your labeling software — even your labeling software itself.

The ActiveX technology lets you easily integrate your labeling software as a printing module or a designer module in your own organization.

ActiveX is object oriented and all of the ActiveX objects are programmable from any languages such as Visual Basic. So the user can control his labeling software using your own program.

Your labeling software becomes the server and your program is the client application.

Through this manual, you will find examples and references using Visual Basic 6.0.

## What is an ActiveX object?

An ActiveX object is an instance of a class that exposes properties, methods, and events to ActiveX clients. ActiveX objects support the COM (Component Object Model) - Microsoft technology. An ActiveX component is an application or library that is able to create one or more ActiveX objects. In this case, your labeling software exposes many objects that you can use to create new applications and programming tools. Within your labeling software, objects are organized hierarchically, with an object named **Application** at the top of the hierarchy (see Chapter 2 - 15: the hierarchy diagram).

Each ActiveX object has its own member function definition. When the member functions are exposed, it makes the object programmable by an ActiveX client. Three types of members can be exposed for an object:

- **Methods** are actions that an object can perform. For example, the **Document** object in your labeling software provides a **Close** method that closes the current document.
- **Properties** are functions that access information about the state of an object. The **Application** object's **Visible** property determines whether the labeling software is visible or not.
- **Events** are actions recognized by an object, such as clicking the mouse or pressing a key. You can write code to respond to such actions. In Automation, an event is a method that is called, rather than implemented, by an object (see also Chapter 1 - 11).

Your labeling software often works with several instances of an object which together make up a **Collection object**. For example, since your labeling software is a multiple-document interface (MDI), it might have multiple documents. To provide an easy way to access and program the documents, your labeling software exposes an object named **Documents**, which refers to all of the already opened document objects. **Documents** is a collection object.

A Collection object lets you work as a group with the objects it manage (see Chapter 1 - 9).

All the methods, properties and events are defined in Chapter 2 - 17: Reference Guide.

## What is the type library?

The type library supplied by the labeling software is a file (**Lppx2.tlb**) that describes the type of all the ActiveX objects. The type library does not store objects, it stores type information. By accessing the type library, your application can determine the characteristics of an object, such as the interfaces supported by the object and the names and parameters.

This library helps you to write your program because it contains all the definitions of object methods and properties that you can access. Using this library you optimize your job.

The name of this type library is **LabelManager2** with the **TK Labeling ActiveX 6.0** reference.

The procedures below show how to install and use the type library with Visual Basic 6.0.

▶ **To install the type library**

**1** Choose **Project References**.

**2** Activate **TK Labeling ActiveX 6.0** in the list of available references then validate the dialog box.

▶ **To display the methods and properties**

**1** Use the **Object Explorer** by pressing the F2 key.

**2** In the library list, select **LabelManager2**.

▶ **To use the type library**

- While writing code, you have just to enter a period ”.” after an object to get the associated methods and properties, or after a method to get the associated properties.

## Mechanisms

Your labeling software offers you two main objects: the **Application** object that is at the top of the hierarchy and the **Document** object. These main objects provide access to the subordinated objects (see Chapter 2 - 15: the hierarchy diagram).

The first step to activate the server is the main object creation, in this case, the **Application** object.

The last step is the deactivation of the server with the **Quit** method.

## Server Activation

Several methods are available to create an ActiveX object.

**Create Object function**

This function creates and returns a reference to the **Application** object.

**Syntax** CreateObject(server name)

Defines an object variable. This object variable is meant to contain the object reference. **Dim as Object** creates a link at execution.

```
Dim MyApp as Object
Set MyApp = CreateObject(”Lppx2.Application”)
```

This code launches the application that creates the object. In this case, the labeling software. As soon as the object is created, you reference it in the code with the object variable that you have defined, i.e. MyApp.

**Note**

If you define an object variable with “As Object”, a variable containing a reference for any object type is created. However, the access to an object via this variable is realized by a late bind, i.e. the link is created during the execution of your program. To create an object variable that induces an early bind, i.e. a link during the compilation of your program, define the object variable with a specific identifier (see below).

For example, you can define and create the reference using the code below:

```
Dim MyApp As Lppx2.Application
Set MyApp = CreateObject(”Lppx2.Application”)
```

The variable reference creating an early bind increases the performance but must only contain one reference.

## GetObject function

This function returns a reference to an ActiveX object from a file.

**Syntax** GetObject([pathname],[server name])

The syntax of the **GetObject** function includes the following arguments:

| Item | Description |
|---|---|
| pathname | Optional. Variable of **Variant** type (String). Complete path-name with the name of the file containing the object to get. If you don’t define the pathname, you have to define the server name. |
| servername | Optional. Variable of **Variant** type (String). Name of the application that gives the object. |

**Note**

Use the **GetObject** function to access an ActiveX object from a file and to assign this object, an object variable. Use the Set instruction to assign the object that is returned by the **GetObject** function at the object variable (see below).

Below are several examples showing the variations of the **GetObject** syntax.

```
Dim MyDoc As Object
Set MyDoc = GetObject(”c:\ProgramFile\document.lab”)
```

When this code is executed, the application associated with the pathname argument is launched and the object included in the file is activated.

**Note**

In the case where the server automation is already loaded in the system memory, the ActiveX mechanism selects it, then the document is activated.

In the example below, the server name is specified. Use this parameter if you have several versions of your labeling software to open the document.lab with the correct version.

```
Dim MyApp As Object
Set MyApp = GetObject (”c:\ProgramFile\docu-
ment.lab”,”Lppx2.Application”)
```

Note that in the example below the Visual Basic for **Application** expression **GetObject(,”Lppx2.Application)** will fail unless the **Application** (the labeling software) is already running. If the **Application** is not already running, a new instance will not be launched.

```
Dim MyApp As Object
Set MyApp = GetObject (,”Lppx2.Application”)
```

In this example, the variation of the **GetObject** syntax varies from the previous example in that a new instance of the application will always be launched even if the application is already running. This variation is equivalent to a **CreateObject** statement.

```
Dim MyApp As Object
Set MyApp = GetObject (””,”Lppx2.Application”)
```

**New function**

The key word **New** can only be used if you work with the Type Library (see: What is the type library).

**New** assigns an object reference to a variable or to a property.

**Syntax**
Set MyApp = {[New] objectexpression }

This example demonstrates reation of the MyApp object that represents **Application**. This is the standard access to get the subordinated objects of **Application**.

```
Dim MyApp As LabelManager2.Application
Set MyApp = New LabelManager2.Application
```

The syntax of the Set instruction contains the following items:

| Item | Description |
|---|---|
| objectvar | Name of the variable or property. |
| New | Optional. This key word is generally used in the declarations to allow the implicit creation of an object. Used with Set, the New key word creates a new instance of the class. If the objectvar argument contains a reference to an object, this reference is lost when a new association is created. |

**Note**

The objectvar must have an object type compatible with the object to which it is assigned.

## Server Deactivation

The last step of your program is the deactivation of the server with the **Quit** method.

To correctly deactivate the server, you must:

**a.** Close all the documents with the **CloseAll** method on the **Documents** collection.

**b.** Call the **Quit** method of the **Application** object. This method means the process is ended.

**c.** Ask Visual Basic to delete the **Application** from the system memory by setting the value of the variable to **Nothing**.

**Quit method**

The **Quit** method is used to end the process. Before using this method, you must close all the documents.

The following example shows how to deactivate the server. Use the **CloseAll** method on the **Documents** collection to close all the documents. Then, use the **Quit** method on the **Application** object to end the process. At the end, the Set instruction delete the **Application** from the system memory.

```
MyApp.Documents.CloseAll False
MyApp.Quit
Set MyApp = Nothing
```

## Data Type

There are three data types corresponding to the three main objects: **Application**, **Document** and **Collection**.

**Application Object**

The **Application** object represents the labeling software. The **Application** object contains the properties and the methods that return the first level objects. For example, the **ActiveDocument** property returns a **Document** object.

▶ **Using the Application object**

To return the **Application** object, use the **Application** property. The following sample shows how to display the path defined for the labeling software.

```
Dim MyApp As LabelManager2.Application
Set MyApp = New LabelManager2.Application

MsgBox MyApp.Path
```

Most of the properties and methods that return the common user interface objects, such as the active document (**ActiveDocument** property), can be used without the identifier of the **Application** object by using the **With** keyword.

```
Dim MyApp As LabelManager2.Application
...
      With MyApp
            .ActiveDocument
            .Print
      end With
```

The properties and methods that can be used without the **Application** object are called "global."

- To display the global properties and methods in the object explorer (F2 key), click on **global** at the beginning of the list displayed in the **Classes** zone.

**Document Object**

The **Document** object represents an open document. Each open document in the labeling software is represented by a **Document** object. This object has members (properties, methods, and events) that you can use to manipulate the document.

You can access the current document if there is an open document by using the **ActiveDocument** property of the **Application** object.

All open documents that belong to the documents collection are represented by the **Documents** object. You can find a particular document by moving through this collection.

**Collection Object**

A **Collection** object is an ordered set of items that can be referred to  a unit.

**Note**

The **Collection** object provides a convenient way to refer to a related group of items as a single object. The items, or members, in a collection need only be related by the fact that they exist in the collection. Members or items of a collection don't have to share the same data type (see Chapter 1 - 8).

A collection can be created the same way other objects are created. For example:

```
Dim X As New Collection
```

Once a collection is created, members can be added using the **Add** method and removed using the **Remove** method. Specific members can be returned from the collection using the **Item** method, while the entire collection can be returned using the **For Each...Next** statement.

## ▶ Collection methods

Methods for collection are described in the following table. The **Item** method is required; other methods are optional.

| Method name | Return type | Description |
|---|---|---|
| **Add** | VT_DISPATCH or VT_EMPTY | Adds an item to a collection. Returns VT_DISPATCH if object is created (object cannot exist outside the collection) or VT_EMPTY if no object is created (object can exist outside the collection). |
| **Item** | Varies with type of collection | Returns the indicated item in the collection. Required. The **Item** method may take one or more arguments to indicate the element within the collection to return. This method is the default member for the collection object. |
| **Remove** | VT_EMPTY | Removes an item from a collection. Uses indexing arguments in the same way as the **Item** method. |

The **Item** method takes one or more arguments to indicate the index. Indexes can be numbers or strings.

Because **Item** is the default method, you could write either:

```
MyObject.Item(3).Name
-Or-
MyObject(3).Name
```

## ▶ Count Property

Returns a **Long** (long integer) containing the number of objects in a collection. Read-only.

## Event management

When a program detects that something has happened, it can notify its clients. For example, if a stock ticker program detects a change in the price of a stock, it can notify all clients of the change. This notification process is referred to as firing an event.

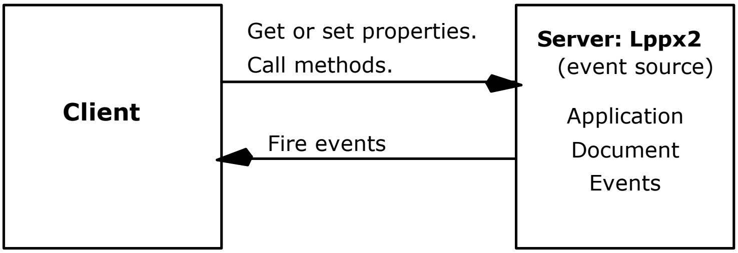


**Figure 1** Interaction between the Client and the Labeling software

**Handling an Object's Events**

An object that triggers events is called an **event source**. To handle the events triggered by an event source, you can declare a variable of the object's class using the **WithEvents** keyword.

For example, to handle the **ProgressPrinting** event of a **Document**, place the following code in the Declarations section:

```
Option Explicit
Private WithEvents MyDoc As LabelManager2.Document
Private mblnCancel As Boolean
```

In this case, the client application must set the **EnableEvents** property of the application to True in order to trigger the events.

The **WithEvents** keyword specifies that the variable **MyDoc** will be used to handle an object's events. You specify the kind of object by supplying the name of the class from which the object will be created.

The variable **MyDoc** is declared in the Declarations section because **WithEvents** variables must be module-level variables. This is true regardless of the type of module you place them in.

The variable mblnCancel will be used to cancel the LongTask method.

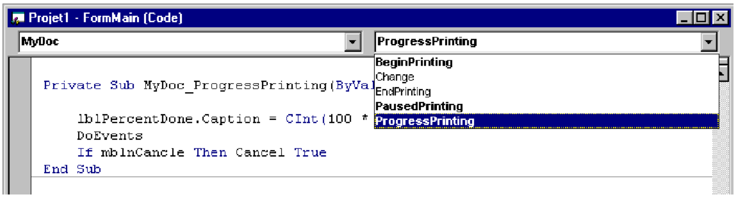
▶ **Limitations on WithEvents variables**

You should be aware of the following limitations on the use of **WithEvents** variables:

- A **WithEvents** variable cannot be a generic object variable. That is, you cannot declare it As Object - you must specify the class name when you declare the variable.
- You cannot declare a **WithEvents** variable As New. The event source object must be explicitly created and assigned to the **WithEvents** variable.
- You cannot declare **WithEvents** variables in a standard module. You can declare them only in class modules, form modules, and other modules that define classes.
- You cannot create arrays of **WithEvents** variables.

### ▶ Writing code to handle an event

As soon as you declare a variable **WithEvents**, the variable name appears in the left-hand drop down of the module's code window. When you select **MyDoc**, the **Document** class events will appear in the right-hand drop down, as shown in Figure 2 below:



```
Private Sub MyDoc_ProgressPrinting(ByVal

    lblPercentDone.Caption = CInt(100 *
    DoEvents
    If mblnCancle Then Cancel True
End Sub
```

**Figure 2** An event associated with a **WithEvents** variable

Selecting an event will display the corresponding event procedure, with the prefix **MyDoc_**. All the event procedures associated with a **WithEvents** variable will have the variable name as a prefix.

For example, add the following code to the
 **MyDoc_ProgressPrint** event procedure:

```
Private Sub MyDoc_ProgressPrinting (ByVal Percent as
integer,Cancel as integer)
   lblPercentDone.caption = CInt (100 * Percent) & “%”
   DoEvents
   If mblnCancel Then Cancel = True
End Sub
```

Whenever the **ProgressPrinting** event is raised, the event procedure displays the percent complete in a Label control. The **DoEvent** statement allows event processing to occur. The module-level variable mblnCancel is set to True, and the **MyDoc_ProgressPrinting** event then tests it and sets the ByRef Cancel argument to True.

## Connecting a WithEvents variable to an object

When you declare a variable **WithEvents** at design time, there is no object associated with it. A **WithEvents** variable is just like any other object variable. You have to create an object and assign a reference to the object to the **WithEvents** variable.

Add the following code to the **Form_Load** event procedure to create the **LabelManager2.Application**.

```
Private Sub Form_Load()
   Set MyApp = New LabelManager2.Application
   Set MyDoc = MyDoc.Documents.Add (”My Document”)
   MyApp.EnableEvents = True
End Sub
```

When the code above is executed, Visual Basic creates a **LabelManager2.Application** and  a new document called “My Document” then connects its events to the event procedures associated with **MyDoc**. From that point on, whenever the **MyDoc** raises its **ProgressingPrinting** event, the **MyDoc_PrintProgressing** event procedure will be executed.

## Compatibility with the previous version

This version is compatible with the previous version of the label design software.

However, the labeling software includes new features and certain processes have changed.

To ensure your program can be executed with this version, verify your code by referring to the User's Guide for information on the functions that have changed.

For example, the previous version of your labeling software uses a simple-document interface (SDI) and, the **ActiveDocument** property always refers to a document. This version is a multiple-document interface (MDI) and there isn't always an open document. If you use this property, verify that there is an open document after the server is activated.

To remain compatible with the previous version :

- a document is automatically created at initialization,
- the **Open** method will close the current document (if one exists), before a new document is created (The **Close** method functions the same way).

However, if the **Application** object is visible, the user has control of the active document management. For example, if the user closes the active document, a new document is not automatically created.

## Particularity about access rights

Certain versions of the labeling software include a **User manager** module. This module controls access to certain functions of the labeling software.

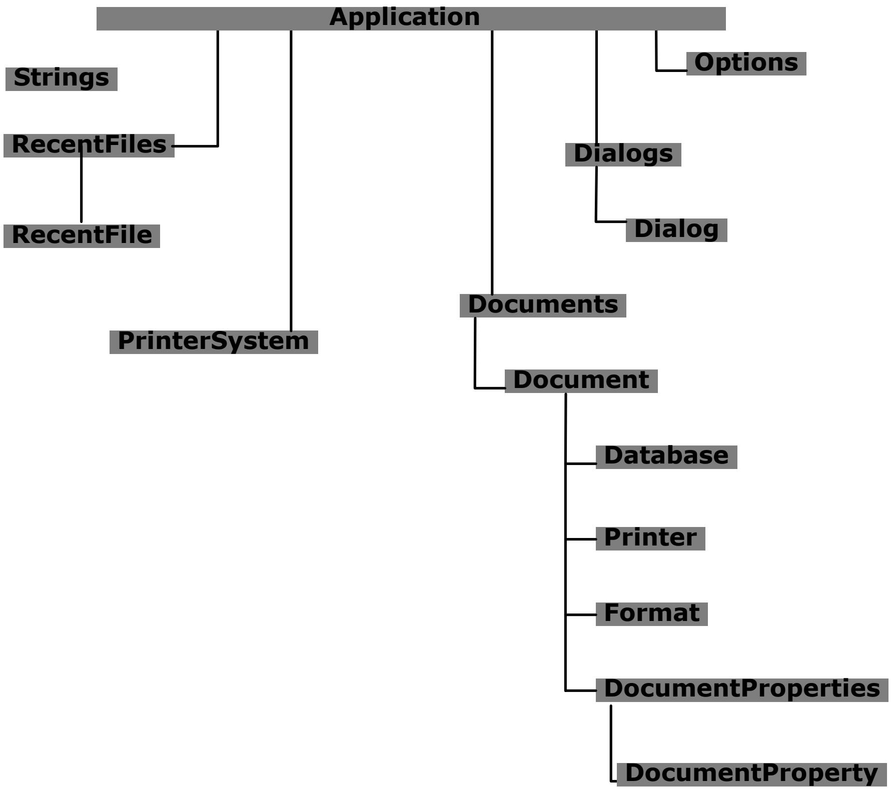
For example, if calling a function through your ActiveX interface fails, verify your rights in the **User manager** module. An error message is displayed and provides information about the nature of the error (see the **Reference Guide**, Chapter 2 - 24: Error code table).

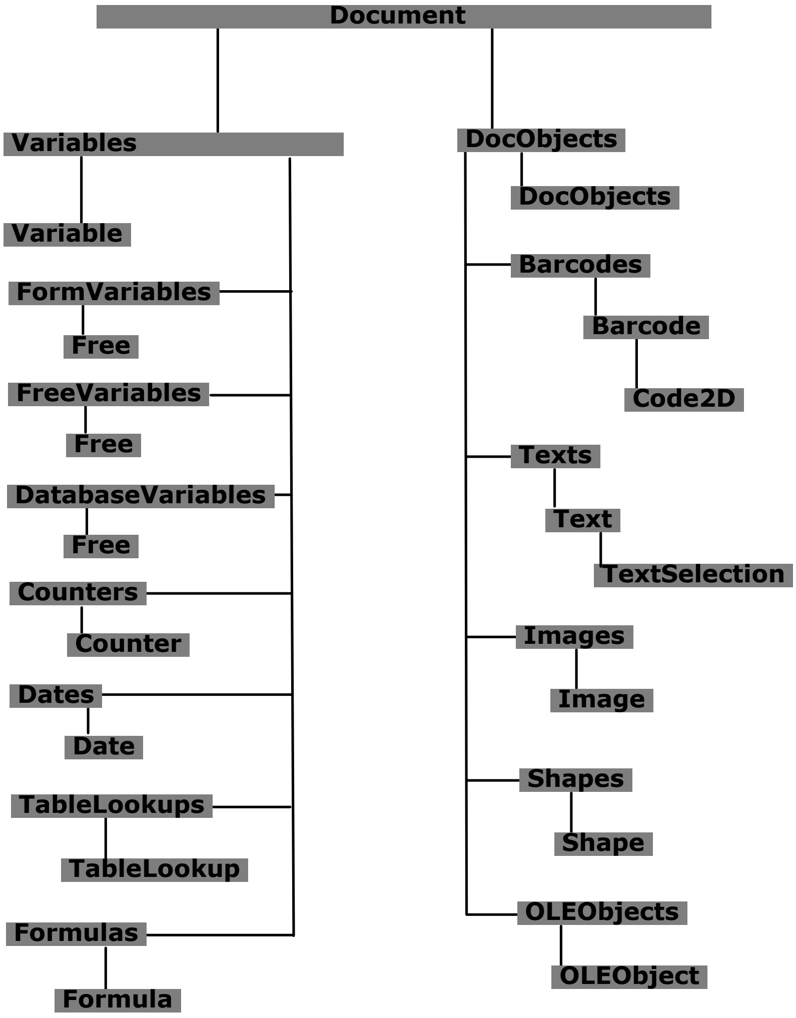
# Reference Guide

2

## Hierarchy diagram

The diagram below shows the object hierarchy:




Document
Variables
Variable
FormVariables
Free
FreeVariables
Free
DatabaseVariables
Free
Counters
Counter
Dates
Date
TableLookups
TableLookup
Formulas
Formula
DocObjects
DocObjects
Barcodes
Barcode
Code2D
Texts
Text
TextSelection
Images
Image
Shapes
Shape
OLEObjects
OLEObject

## Application Object

| Properties | Methods |
|---|---|
| ActiveDocument | ErrorMessage |
| ActivePrinterName | GetLastError |
| Application | ShowHelp |
| Caption | Move |
| DefaultFilePath | Resize |
| Dialogs | Quit |
| Documents | |
| EnableEvents | |
| FullName | |
| Height | |
| Left | |
| Locked | |
| Name (Default) | |
| Options | |
| Parent | |
| Path | |
| PrinterSystem | |
| RecentFiles | |
| Top | |
| UserControl | |
| Version | |
| Visible | |
| Width | |

## Object Properties

### ▶ Application.ActiveDocument

This property allows you to access the document object interface (refer to the document which has the focus in the main application).

Returns an error if no document in application.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Document. |

### ▶ Application.ActivePrinterName

Returns the current pair <Printer, Port> of the active document, if any, empty string if none.

| | |
|---|---|
| **Access** | Read-only. |
| **Type** | VT_BSTR or String. |

### ▶ Application.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-only. |
| **Type** | VT_DISPATCH or Application. |

### ▶ Application.Caption

Returns or sets the caption text for the application window. To change the caption of the application window into the default text, set this property to an empty string ("").

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

## ▶ Application.DefaultFilePath

Sets or returns the default path specification used by the application for opening document files.

**Access** Read/Write.

**Type** VT_BSTR or String.

## ▶ Application.Dialogs

Returns the Dialogs collection that represents all the built-in dialog boxes of the application.

**Access** Read-only.

**Type** VT_DISPATCH or Dialogs.

## ▶ Application.Documents

Returns the Documents collection that represents all the open documents.

**Access** Read-only.

**Type** VT_DISPATCH or Documents.

## ▶ Application.EnableEvents

Enables or disables Automation events notification (Default: False) (see Appendix).

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

## ▶ Application.FullName

Returns the file specification for the application, including path. (Ex : c:\drawdir\scribble).

**Access** Read-Only.

**Type** VT_BSTR or String.

### ▶ Application.Height

Returns or sets the height of the main window of the application (in pixel unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Application.Left

Returns or sets the distance between the left edge of the main window of the application and the left edge of the screen (in pixel unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Application.Locked

Locks the User Interface if True.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

### ▶ Application.Name

Returns the name of the application (for example, ”Microsoft Word”). Default property.

**Access** Read-Only.

**Type** VT_BSTR or String.

### ▶ Application.Options

Represents application and general document options. Many of the properties for the Options object correspond to items in the Options dialog box (Tools menu). Use the Options property to return the Options object.

The following example sets two application options:

```
With Options
    .LoadPrinterSetup = True
    .MeasureSystem = lppxInch
End With
```

**Access** Read-only.

**Type** VT_DISPATCH or Options.

### ▶ Application.Parent

Returns the parent object of the specified object.

**Access** Read-only.

**Type** VT_DISPATCH.

### ▶ Application.Path

Returns the path of the Application ( with « \ » character).

**Access** Read-only.

**Type** VT_BSTR or String.

### ▶ Application.PrinterSystem

Returns the PrinterSystem object that represents all printers in the system.

**Access** Read-only.

**Type** VT_DISPATCH or PrinterSystem.

### ▶ Application.RecentFiles

Returns the RecentFiles collection that represents the list of last recent files used (File menu in UI).

**Access** Read-only.

**Type** VT_DISPATCH or RecentFiles.

### ▶ Application.Top

Returns or sets the distance between the top edge of the main window of the application and the top edge of the screen (in pixel unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

## ▶ Application.UserControl

True if the application was created by the user.

False if the application was created in programming (with the **CreateObject** or **GetObject** method in Visual Basic).

**Note** If the application is visible to the user, this property will always return **True**.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BOOL or Boolean. |

## ▶ Application.Version

Returns the software version number.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

## ▶ Application.Visible

True if the application is visible. (Default: False, if application was launched with CreateObject).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

## ▶ Application.Width

Returns or sets the width of the main window of the application (in pixel unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## Object Methods

### ▶ Application.ErrorMessage

VTS_BSTR or String **ErrorMessage(** *intErrorCode* **)**

Returns the string message error associated with the error code parameter.

**Return value**: Message associated.

**Parameters**:
*intErrorCode* Required VT_I2 or Integer. Error code to process.

### ▶ Application.GetLastError

VTS_I2 or Integer **GetLastError()**

Returns the last error code generated.

**Return value**: Error code (see Error code table below).

**Parameters**: None.

| | |
|---|---|
| No error | 0 |
| | |
| Can’t open data file | 1200 |
| Can’t open query file | 1201 |
| Can’t open descriptor file | 1202 |
| Can’t open label file | 1203 |
| Can’t open POC file | 1204 |
| Can’t open log file | 1205 |
| | |
| Printer not found | 1300 |
| Driver not found | 1301 |
| | |
| Incorrect Datasource enum value | 1400 |
| Incorrect Rotation enum value | 1401 |
| Incorrect HRAlign enum value | 1402 |
| Incorrect HRPosition enum value | 1403 |
| Incorrect HR check digit enum value | 1404 |
| Incorrect Anchor point enum value | 1405 |
| Incorrect counter base enum value | 1406 |
| Incorrect Label object enum value | 1407 |
| Incorrect view size enum value | 1408 |
| Incorrect view mode enum value | 1409 |
| Incorrect MeasureSystem enum value | 1410 |
| Incorrect dialog type enum value | 1411 |

| | |
|---|---|
| Incorrect language enum value | 1412 |
| Incorrect symbology enum value | 1413 |
| Incorrect built in document property enum value | 1414 |
| Incorrect view orientation enum value | 1415 |
| Incorrect form prompt mode enum value | 1416 |
| | |
| Object not found | 1500 |
| Can't create object | 1501 |
| Variable not found | 1502 |
| Can't create variable | 1503 |
| Invalid font object | 1504 |
| Invalid variable object | 1505 |
| Name of item already used | 1506 |
| | |
| Database not connected | 1600 |
| Database connection failed | 1601 |
| | |
| Number must be positive | 2000 |
| Data type must be a boolean | 2001 |
| Invalid path | 2002 |
| File already exists | 2003 |
| Can't prompt dialog box (no active document) | 2100 |
| | |
| Not sufficient access rights to perform this operation | 3000 |

**Figure 3** Error code table

## ▶ Application.ShowHelp

VTS_NONE **ShowHelp**(*strHelpFile*, *longHelpContext*)

This method activates a help file.

**Parameters**:
*strHelpFile* Optional VT_BSTR or String. Specifies the help file to open (.HLP or .CHM). If not specified, associated help file is opened.

*longHelpContext* Optional VT_I4 or Long. Specifies the id context to jump to. If not specified, general index is prompted.

## ▶ Application.Move

VTS_NONE **Move**( *longposLeft*, *longposTop*)

Moves the application window to the specified position (posLeft, posTop), in pixel unit.

**Parameters:**
*longposLeft* Required VT_I4 or Long. Sets the distance between the left edge of the main window of the application and the left edge of the screen(in pixel unit).

*longPosTop* Required VT_I4 or Long. Sets the distance between the top edge of the main window of the application and the top edge of the screen (in pixel unit).

## ▶ Application.Resize

VTS_NONE **Resize**( *longWidth*, *longHeight*)

Resizes the application window (Width, Height), in pixel unit.

**Parameters**:
*longWidth* Required VT_I4 or Long. Sets the width of the main window of the application (in pixel unit).

*longHeight* Required VT_I4 or Long. Sets the height of the main window of the application (in pixel unit).

## ▶ Application.Quit

VTS_NONE **Quit**( )

Quits the current application. No effect if the application has been launched manually. First executes a Document.CloseAll (False) then releases the application.

## PrinterSystem Object

| Properties | Methods |
|---|---|
| (None) | Families |
| | Models |
| | Printers |
| | Ports |
| | Add |
| | Remove |
| | Rename |

**Object Methods**

▶ **PrinterSystem.Families**

VTS_DISPATCH or Strings **Families** ()

Retrieves printer families list.

▶ **PrinterSystem.Models**

VTS_DISPATCH or Strings **Models** ( *strFamilyName*)

Retrieves models associated with a family.

**Parameters:**
*strFamilyName* Optional VT_BSTR or String. It specifies the Family for which the models list is needed. If none, it returns the full models list.

▶ **PrinterSystem.Printers**

VTS_DISPATCH or Strings **Printers** ( *intKindOfPrinters*)

Retrieves installed printers as string pairs < Printer, Port >.

**Parameters:**
*intKindOfPrinters* Optional VT_I2 or Integer or enumKindOf-Printers.(default lppxInternalPrinters).

The value can be one of the following:

| | |
|---|---|
| lppxInternalPrinters= | 1 |
| lppxWindowsPrinters= | 2 |
| lppxAllPrinters= | 3 |

### ▶ **PrinterSystem.Ports**

VTS_DISPATCH or Strings **Ports** ().

Retrieves all installed ports on the system.

### ▶ **PrinterSystem.Add**

VTS_BSTR or String **Add** (*strPrinterName, strPortName, boolDirectAccess*)

Installs a new printer and returns the full name assigned to it.

**Parameters:**
*strPrinterName* Required VT_BSTR or String. PrinterName to install (got with Printers.InternalPrinters).

*strPortName* Required VT_BSTR or String. PortName associated with the printer.

*boolDirectAccess* Optional VT_BOOL or Boolean(default value FALSE). Is the port used with direct access or not.

**Note** Only models can be installed with this method.

### ▶ **PrinterSystem.Remove**

VTS_NONE **Remove** (*strPrinterPortName*).

Removes an installed printer.

**Parameters:**
*strPrinterPortName* Required VT_BSTR or String. Full name of an installed printer (got with PrinterSystem.Printers(lppxInter-nalPrinters) method).

**Note** Only models can be removed.

If an active document uses this printer, the operation fails.

## ▶ **PrinterSystem.Rename**

VTS_NONE **Rename** (*strPrinterName, strNewPrinter-Name*).

Renames a model.

**Parameters:**
*strPrinterName* Required VT_BSTR or String. Name of the installed printer to rename.

*strNewPrinterName* Required VT_BSTR or String. New name to assign.

**Note** Only models can be renamed.

## Options Object

| Properties | Methods |
|---|---|
| Application | (None) |
| CreateBackup | |
| DefaultDescriberPath | |
| DefaultSharedVarPath | |
| DefaultImagePath | |
| DefaultPrintOutFilePath | |
| DefaultQueryPath | |
| DefaultUserSettingsPath | |
| EuroConversionRate | |
| Language | |
| LoadPrinterSetup | |
| LoadPrinter | |
| MeasureSystem | |
| OpenMergeDatabase | |
| Parent | |
| OpenReadOnly | |
| SharedFileAccessTimeout | |
| TrayNotification | |

**Object Properties**

▶ **Options.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Options.CreateBackup

Returns or sets the CreateBackup option. (Default: True).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Options.DefaultDescriberPath

Returns or sets the DefaultDescriberPath option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Options.DefaultSharedVarPath

Returns or sets the DefaultSharedVarPath option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Options.DefaultImagePath

Returns or sets the DefaultImagePath option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Options.DefaultPrintOutFilePath

Returns or sets the DefaultPrintOutPath option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Options.DefaultQueryPath

Returns or sets the DefaultQueryPath option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Options. DefaultUserSettingsPath

Returns or sets the DefaultUserSettingsPath option.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Options. EuroConversionRate

Returns or sets the EuroConversionRate option. (Default 6.55957).

**Access** Read/Write.

**Type** VT_R4 or Single.

### ▶ Options.Language

Returns or sets the Language option.

**Access** Read/Write.

**Type** VT_I4 or Long or enumLanguage type.

The value can be one of the following:

| | |
|---|---|
| lppxEnglish | = 1 |
| lppxFrench | = 2 |
| lppxGerman | = 3 |
| lppxItalian | = 4 |
| lppxSpanish | = 5 |
| lppxDanish | = 6 |
| lppxSwedish | = 7 |
| lppxJapanese | = 8 |
| lppxHungarian | = 9 |
| lppxDutch | = 10 |
| lppxCzech | = 11 |
| lppxNorwegian | = 12 |
| lppxFinnish | = 13 |
| lppxPortuguese | = 14 |
| lppxSimplifiedChinese | = 15 |
| lppxTraditionalChinese | = 16 |
| lppxKorean | = 17 |

**Note** Depending on the product, not all languages are available.

### ▶ Options.LoadPrinter

Returns or sets the LoadPrinter option. (Default : False).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Options.LoadPrinterSetup

Returns or sets the LoadPrinterSetup option. (Default : True).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Options.MeasureSystem

Returns or sets the MeasureSystem option. (Default : lppxMillimeter).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumMeasureSystem type. |

The value can be one of the following:

| | |
|---|---|
| lppxMillimeter | = 0 |
| lppxInch | = 1 |

**Note**

Using lppxMillimeter unit means that values entered are in Millimeter per cent.
Using lppxInch unit means that values entered are in Inch per thousand.

### ▶ Options.OpenMergeDatabase

Returns or sets the OpenMergeDatabase option. (Default: False)

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ **Options.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### ▶ **Options.OpenReadOnly**

Returns or sets the OpenReadOnly option. (Default : False)

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ **Options. SharedFileAccessTimeout**

Returns or sets the SharedFileAccessTimeout option. (Default: 10000 ms)

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ **Options.TrayNotification**

Enables or disables notification of printing in System Tray Bar. (Default: True)

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

## Dialogs Collection

| Properties | Methods |
|---|---|
| Application | Item (Default) |
| Count | |
| Parent | |

**Object Properties**

▶ **Dialogs.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only |
| **Type** | VT_DISPATCH or Application object. |

▶ **Dialogs.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Dialogs.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

### ▶ Dialogs.Item

VTS_DISPATCH or Dialog **Item**( *intIndex* ).

Returns a member of a collection, by position.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*intIndex* Required VT_I2 or Integer or enumDialogType. The index number of a member of the collection.

The index must be a numeric expression (a number from 1 to the value of the collection's Count property), or a constant.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Dialogs(1)
Object.Dialogs.Item(1)
```

The value can be one of the following:

| | |
|---|---|
| lppxPrinterSelectDialog= | 1 |
| lppxOptionsDialog= | 2 |
| lppxFormDialog= | 3 |
| lppxPrinterSetupDialog= | 4 |
| lppxPageSetupDialog= | 5 |
| lppxDocumentPropertiesDialog= | 6 |

## Dialog Object

| Properties | Methods |
|---|---|
| Application | Show |
| Parent | |
| Type | |

### Object Properties

#### ▶ Dialog.Application

Returns the **Application** object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

#### ▶ Dialog.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

#### ▶ Dialog.Type

Returns the type of the prompted dialog box.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer or enumDialogType type. |

## Object Methods

### ▶ Dialog.Show

| | |
|---|---|
| VTS_I2 or Integer | **Show**(). |

Prompts the dialog box associated.

| | |
|---|---|
| **Return value** | 1 if the user has clicked on OK.<br>2 if the user has clicked on Cancel. |

If application is not visible, dialog box is prompted at the top level of all windows.

If there is no document open, the dialog boxes (except Options dialog box) can't be displayed because they depend on the document.

## RecentFiles Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Maximum | Clear |
| Parent | Remove |

**Object Properties**

### ▶ RecentFiles.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ RecentFiles.Count

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

### ▶ RecentFiles.Maximum

Returns or sets the maximum number of items in the specified collection (from 0 to 16).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ RecentFiles.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

## Object Methods

### ▶ RecentFiles.Add

VTS_DISPATCH or RecentFile **Add**(*DocumentReference, boolReadOnly*).

Adds a document reference to the collection and in the File menu.

**Parameters:**
*DocumentReference* Required VT_VARIANT or Variant. This reference must be unique in the collection.

*boolReadOnly* Optional VT_BOOL or Boolean. If document must be opened, it will be opened with ReadOnly attribute.

### ▶ RecentFiles.Clear

VTS_NONE **Clear.**

Resets the collection and clears menu.

### ▶ RecentFiles.Item

VTS_DISPATCH or RecentFile **Item**( *intIndex* ).

Returns a member of a collection, by position (default method).

**Note**

If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*Index* Required VT_I2 or Integer. The index number of a member of the collection.

The index must be a numeric expression (a number from 1 to the value of the collection's Count property), or a constant.

**Note**

If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The **Item** method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.RecentFiles(1)
Object.RecentFiles.Item(1)
```

### ▶ **RecentFiles.Remove**

VTS_NONE **Remove**( *intIndex* ).

Deletes object with *intIndex* index.

## RecentFile Object

| Properties | Methods |
|---|---|
| Application | Open |
| Parent | |
| Path | |
| Name | |

**Object Properties**

▶ **RecentFile.Application**

Returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **RecentFile.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

▶ **RecentFile.Path**

Returns the path associated with the current filename (always without « \ » character).

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

▶ **RecentFile.Name**

Returns the name associated with the current filename.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

## Object Methods

### ▶ RecentFile.Open

VTS_DISPACTCH or <u>Document</u> **Open**().

Opens the document associated with the current filename.

## Documents Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | CloseAll |
| DefaultExt | Item (Default) |
| Parent | Open |
| | SaveAll |

**Object Properties**

▶ **Documents.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Documents.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **Documents.DefaultExt**

This property returns the default document filename extension for the application.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

▶ **Documents.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

### ▶ Documents.Add

VTS_DISPATCH or Document **Add**(*strDocumentName*).

Adds a new Document to the collection.

**Return value**: Returns a Document object if succeeded.

**Parameters:**
*strDocumentName* Optional VT_BSTR or String.
Specifies the name of the new document to add.
If none, system automatically assigns one.

### ▶ Documents.CloseAll

VTS_NONE **CloseAll** ( *boolSaveChanges* ).

Closes all documents.

**Parameters:**
*boolSaveChanges* Optional VT_BOOL or Boolean. Specifies the save action for all documents. (default: True).

If *boolSaveChanges* is True and a document has not been previously saved, the Saves As dialog box is automatically prompted.

### ▶ Documents.Item

VTS_DISPATCH or Document **Item**( *varIndex* ).

Returns a Document of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. There-fore, the following two lines of code are equivalent.

```
Object.Documents(1)
Object.Documents.Item(1)
```

### ▶ **Documents.Open**

VTS_DISPATCH or Document **Open**( *strFileName, boolReadOnly* ).

Opens the specified document and adds it to the Documents collection.

**Return value**: Returns a Document object.

**Parameters:**
*strFileName* Required VT_BSTR or String. The name of the document (paths are accepted).

*boolReadOnly* Optional VT_BOOL or Boolean. True to open the document as read-only. By default, set to False.

### ▶ **Documents.SaveAll**

VTS_NONE **SaveAll**( *boolAlwaysPrompt* ).

Saves all the documents in the Documents collection.

If a document hasn't been previously saved, the Save As dialog box is prompted even if the Prompt parameter is assigned to False.

**Parameters:**
*boolAlwaysPrompt* Optional VT_BOOL or Boolean. True if user wants to prompt the save dialog box (default: False).

# Document Object

| Properties | Methods |
|---|---|
| Application | Close |
| BuiltInDocumentProperties | CopyToClipboard |
| Database | Merge |
| Format | FormFeed |
| TriggerForm | GeneratePOF |
| FullName | Insert |
| Name (Default) | PrintDocument |
| DocObjects | PrintLabel |
| Parent | Save |
| Printer | SaveAs |
| ReadOnly | Activate |
| Variables | CopyImageToFile |
| ViewMode | |
| ViewOrientation | |
| WindowState | |
| IsModified | |

## Object Properties

### ▶ Document.Application

Returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application Object.

### ▶ Document. BuiltInDocumentProperties

Returns the DocumentProperties collection that represents document properties.

**Access** Read-Only.

**Type** VT_DISPATCH or DocumentProperties collection.

### ▶ Document.Database

Returns the Database object associated with the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Database object. |

### ▶ Document.Format

Returns the Format object that represents the format of the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Format object. |

### ▶ Document.TriggerForm

Sets or returns the TriggerForm in printing situation.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumTriggerForm type. |

The value can be one of the following:

| | |
|---|---|
| lppxNever | = 1 |
| lppxForEachSerie | = 2 |
| lppxForEachLabel | = 3 |

### ▶ Document.FullName

Returns the file specification for the document, including path.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

Ex : c:\drawdir\scribble.

### ▶ Document.Name

Returns the document's name. Default property.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

### ▶ Document.IsModified

Tests that the document has been modified since the last save operation.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BOOL or Boolean. |

The possible modifications are : creating, deleting and editing DocObjects; creating and deleting variables...

### ▶ Document.DocObjects

Returns the DocObjects collection that represents all the created objects in the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or DocObjects object. |

### ▶ Document.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### ▶ Document.Printer

Returns the Printer object that represents the associated printer.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Printer object. |

### ▶ Document.ReadOnly

True, if the changes of the current document cannot be saved to the original document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BOOL or Boolean. |

## ▶ Document.Variables

Returns the Variables collection that represents all the created Variable objects in the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Variables collection. |

## ▶ Document.ViewMode

Sets or retrieves the current mode of visual display.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumViewMode type. |

The value can one of the following:

| | |
|---|---|
| lppxViewModeName | = 1 |
| lppxViewModeSize | = 2 |
| lppxViewModeValue | = 3 |
| lppxViewModeForm | = 4 |

## ▶ Document.ViewOrientation

Sets or retrieves the orientation of the view of the document.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumRotation type. |

The value can be one of the following:

| | |
|---|---|
| lppxNoRotation | = 0 |
| lppx90DegreeRight | = 1 |
| lppxUpSideDown | = 2 |
| lppx90DegreeLeft | = 3 |

## ▶ Document.WindowState

Sets or retrieves the current size of the visual display of the document.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumWindowState type. |

The value can one of the following:

| | |
|---|---|
| lppxNormal= | 1 |
| lppxMinimized= | 2 |
| lppxMaximized= | 3 |

## Object Methods

### ▶ Document.Close

VTS_I2 **Close**( *boolSave* ).

Closes document.

**Parameters:**
*boolSave* Optional VT_BOOL or Boolean.(default false) If True, saves document.

### ▶ Document.CopyToClipboard

VTS_BOOL **CopyToClipboard**().

Copies an image of the document to the Clipboard.

### ▶ Document.FormFeed

VTS_I2 **FormFeed** ().

Ends the process job.

### ▶ Document.GeneratePOF

VTS_I2 **GeneratePOF** (*strDestinationFileName, strModelFile-Name* ).

Generates a POF file.

**Parameters:**
*strDestinationFileName* Required VT_BSTR or String. Name of the file to print to.

*strModelFileName* Optional VT_BSTR or String. Name or FullName of Configuration file (.POC) to use.
If none, default POC file is used.

### ▶ Document.Insert

VTS_I2 **Insert** ( *strDocumentFileName* ).

Inserts a document in the current document.

**Parameters:**
*strDocumentFileName* Required VT_BSTR or String. Name of the document to insert.

### ▶ Document. Merge

VTS_I2 **Merge** (*longLabelQuantity, longLabelCopy, longInterCut, longPageCopy, longLabelNoPrintedFrom, strFileName*).

Merges document with the associated Database.

**Parameters:**

| | |
|---|---|
| *longLabelQuantity* | Required VT_I4 or Long. |
| *longLabelCopy* | Optional VT_I4 or Long (default 1). |
| *longInterCut* | Optional VT_I4 or Long (default 1). |
| *longPageCopy* | Optional VT_I4 or Long (default 1). |
| *longLabelNoPrintedFrom* | Optional VT_I4 or Long (default 1). |
| *strFileName* | Optional VT_BSTR or String (default empty string). |

**Note** Parameters are described in the User's Guide.

### ▶ Document.PrintDocument

VTS_I2 **PrintDocument** ( *longLabelQuantity* ).

Prints document and executes an automatic FormFeed.

**Parameters:**

| | |
|---|---|
| *longLabelQuantity* | Optional VT_I4 or Long. Quantity of labels to print (Default : 1). |

### ▶ Document.PrintLabel

VTS_I2 **PrintLabel** (*longLabelQuantity, longLabelCopy, longInterCut, longPageCopy, longLabelNoPrintedFrom, strFileName*).

Prints document.

**Parameters:**

| | |
|---|---|
| *longLabelQuantity* | Required VT_I4 or Long. |
| *longLabelCopy* | Optional VT_I4 or Long (default 1). |
| *longInterCut* | Optional VT_I4 or Long (default 1). |
| *longPageCopy* | Optional VT_I4 or Long (default 1). |
| *longLabelNoPrintedFrom* | Optional VT_I4 or Long (default 1). |
| *strFileName* | Optional VT_BSTR or String (default empty string). |

**Note** Parameters are described in the User's Guide.

### ▶ Document.Save

VTS_I2 **Save** ().

Saves the document.

If the document has not been saved, a dialog box is prompted automatically.

### ▶ Document.SaveAs

VTS_I2 **SaveAs** ( *strDocumentFileName* ).

Saves the document with a new name.

**Parameters:**

| | |
|---|---|
| *strDocumentFileName* | Required VT_BSTR or String. |

### ▶ Document.Activate

VTS_NONE **Activate** ().

Causes the document object to be activated, being the ActiveDocument.

## ▶ Document.CopyImageToFile

VTS_BSTR or String **CopyImageToFile**(*Colors, Extension, Rotation,Percent, strFilename*).

Generates file that contains the Image of the document.

**Return value:** Returns a string that represents the full name of the generated Bitmap file.

**Parameters:**

| | |
|---|---|
| *Colors* | Optional VT_I2 or Integer. (Default 8). Specifies the number of bits-per-pixel. Depending of the generated file, the values must be : 1, 4, 8, 16, 24, 32. |
| *Extension* | Optional VT_BSTR or String (Default “BMP”). Specifies the extension of the file to generate. For a complete list of extensions, refer to the labeling software documentation. |
| *Rotation* | Optional VT_I2 or Integer (Default 0). Rotation in geometrical degree. The values must be between 0 and 360. |
| *Percent* | Optional VT_I2 or Integer (Default 100). Scaling factor. The values must be between 1 and 400. |
| *strFileName* | Optional VT_BSTR or String (Default “ “). If specified: name of the generated Bitmap file. |

## Database Object

| Properties | Methods |
|---|---|
| Application | Close |
| AutoVariables | MoveFirst |
| BOF | MoveLast |
| EOF | MoveNext |
| IsOpen | MovePrevious |
| Parent | OpenASCII |
| Name (Default) | OpenODBC |
| DocObjects | OpenQuery |
| Parent | Save |

**Object Properties**

### ▶ Database.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Database.AutoVariables

Automatic creation of database variables when database connects. (Default: True).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

## ▶ Database.BOF

Returns a value that indicates whether the current row position is before the first row in the current recordset.

**Return value**:

|  |  |
|---|---|
| True | The current row position is before the first row. |
| False | The current row position is on or after the first row. |

**Access** Read-Only.

**Type** VT_BOOL or Boolean.

## ▶ Database.EOF

Returns a value that indicates whether the current row position is after the last row in the current recordset.

**Return value:**

|  |  |
|---|---|
| True | The current row position is after the last row. |
| False | The current row position is on or before the last row. |

**Access** Read-Only.

**Type** VT_BOOL or Boolean.

## ▶ Database.IsOpen

Tests if the Database object has been open successfully.

**Access** Read-Only.

**Type** VT_BOOL or Boolean.

## ▶ Database.Parent

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

## Object Methods

### ▶ Database.Close

VTS_NONE **Close**().

Closes an open database.

### ▶ Database.MoveFirst

VT_BOOL or <u>Boolean</u> **MoveFirst**().

Repositions the current row pointer in the <u>first</u> row of the current recordset and makes that row the current row.

### ▶ Database.MoveLast

VT_BOOL or <u>Boolean</u> **MoveLast**().

Repositions the current row pointer in the <u>last</u> row of the current recordset object and makes that row the current row.

### ▶ Database.MoveNext

VT_BOOL or <u>Boolean</u> **MoveNext**().

Repositions the current row pointer in the <u>next</u> row of the current recordset object and makes that row the current row.

### ▶ Database.MovePrevious

VT_BOOL or <u>Boolean</u> **MovePrevious**().

Repositions the current row pointer in the <u>previous</u> row of the current recordset object and makes that row the current row.

### ▶ Database.OpenASCII

VT_BOOL or Boolean **OpenASCII**( *strTextFileName, strDescriberFileName* ).

Opens ASCII database.

**Return value**: Returns a boolean that indicates whether the opening fails or not.

**Parameters:**
*strTextFileName* Required VT_BSTR or String. The database text file.

*strDescriberFileName* Required VT_BSTR or string. Describer associated with the text file.

### ▶ Database.OpenQuery

VT_BOOL or Boolean **OpenQuery**( *strQueryFileName* ).

Opens a CSQ query file.

**Return value**: returns a boolean that indicates whether the opening fails or not.

**Parameters:**
*strQueryFileName* Required VT_BSTR or String. The file which contains the query.

### ▶ Database.OpenODBC

VT_BOOL or Boolean **OpenODBC**( *strDatasourceConnex-ion, strQueryString* ).

Opens an ODBC database.

**Return value**: Returns a boolean that indicates whether the opening fails or not.

**Parameters:**
*strDatasourceConnexion* Required VT_BSTR or String. The database string connection. For the *strDatasourceConnexion* parameter, refer to Microsoft ODBC documentation.

*strQueryString* Required VT_BSTR or String. SQL query.

## Printer Object

| Properties |
|---|
| Application |
| DeviceCodeNames |
| DeviceFontNames |
| FullName (Default) |
| Name |
| Parent |
| WindowsFontNames |
| WindowsCodeNames |
| XDPI |
| YDPI |

| Methods |
|---|
| ShowSetup |
| Send |
| SetParameter |
| SwichTo |

### Object Methods

▶ **Printer.ShowSetup**

VTS_NONE **ShowSetup**().

Prompts the Printer Setup dialog box, in order to change the current printer settings.

▶ **Printer.Send**

VTS_BOOL **Send** ( *strEscapeSequence* ).

Sends an escape sequence to the physical device.

**Parameters:**
*EscapeSequence* Required VT_BSTR or String. Escape sequence to send.

▶ **Printer.SetParameter** (not yet implemented)

VTS_BOOL or Boolean **SetParameter**(*strParameter, varValue*).

Changes the current printer settings.

**Parameters:**
*strParameter* Required VT_BSTR or String. Parameter name to use.

*varValue* Required VT_VARIANT or Variant. Value to set.

▶ **Printer.SwitchTo ()**

VTS_BSTR or String **SwitchTo**( *strPrinterName, strPortName, boolDirectAccess* ).

Changes the current printer.

**Return value**: Returns the name of the installed printer.

Automatically installs a printer if no printer is already installed. You don't need to add a printer through the user interface.

**Parameters:**
*strPrinterName* Required VT_BSTR or String. Printer 's name to switch to.

*strPortName* Optional VT_BSTR or String. Port's *name to switch to.*

*boolDirectAccess* Optional VT_BOOL or Boolean. Is the connection of the port direct or not.

**Form 1**
SwitchTo(« THTPrinter L-1234 », « LPT1: », FALSE).
Result of this instruction is « THTPrinter L-1234,LPT1: ».

**Form 2**
SwitchTo(« THTPrinter L-1234, ->COM3: »).
Result of this instruction is « Copy of THTPrinter L-1234, ->COM3: » because printer's name is unique.

You can either use form 1 or form 2.

Don't insert spaces between the components in Form 2.
Notice that the names are case sensitive !

## Object Properties

### ▶ Printer.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Printer.DeviceFontNames

Returns the Strings collection that represents all the printer fonts names.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Strings collection. |

### ▶ Printer.DeviceCodeNames

Returns the Strings collection that represents all the printer code names.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Strings collection. |

### ▶ Printer.FullName

Returns the full name of the pair <Printer, Port>.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

### ▶ Printer.Name

Returns the simple name of the current printer.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Printer.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### ▶ Printer.XDPI

Returns the horizontal resolution of the printer (in DPI).

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I4 or Long. |

### ▶ Printer.YDPI

Returns the vertical resolution of the printer (in DPI).

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I4 or Long. |

### ▶ Printer.WindowsFontNames

Returns the Strings collection that represents all the windows font names.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Strings collection. |

## ▶ Printer.WindowsCodeNames

Returns the Strings collection that represents all the windows code names.

|   |   |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Strings collection. |

## Format Object

| Properties | Methods |
|---|---|
| Application | SaveStock |
| AutoSize | |
| ColumnCount | |
| HorizontalGap | |
| LabelHeight | |
| LabelWidth | |
| MarginLeft | |
| MarginTop | |
| StockName | |
| StockType | |
| PageHeight | |
| PageWidth | |
| Parent | |
| Portrait | |
| Corner | |
| RowCount | |
| VerticalGap | |

**Object Properties**

▶ **Format.Application**

Returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Format. AutoSize

Automatically adjusts the page based on the dimension of the label, the number of labels, margins, and the amount of space between labels.

This option is available only for customized page formats. However, it is always possible to disable the automatic option to enter the Height and Width values manually.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Format.ColumnCount

Retrieves or sets the number of labels per row (horizontal count).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format. HorizontalGap

Retrieves or sets the amount of empty space between the columns (Horizontal) of labels on a page. (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format. VerticalGap

Retrieves or sets the amount of empty space between the rows (Vertical) of labels on a page (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.LabelHeight

Retrieves or sets the height of the label (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.LabelWidth

Retrieves or sets the width of the label (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.MarginLeft

Retrieves or sets the left margin of the page (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.MarginTop

Retrieves or sets the top margin of the page (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.StockName

Retrieves or sets the name of the format model, if any.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Format.StockType

Retrieves or sets the type of the format type, if any.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Format.PageHeight

Retrieves or sets the height of the page (in MeasureSystem unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Format.PageWidth

Retrieves or sets the width of the page (in MeasureSystem unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Format.Parent

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

### ▶ Format.Portrait

Retrieves or sets the orientation of the document.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

### ▶ Format.Corner

Retrieves or sets the radius corner of the document (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Format.RowCount

Retrieves or sets the number of labels per column (vertical count).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## Object Methods

### ▶ Format. SaveStock

VTS_NONE Format.**SaveStock**().

Saves the current stock Name/Type. (In order to reuse it with others documents)

## DocumentProperties Collection

| Properties | Methods |
|---|---|
| Application | Item (Default) |
| Count | |
| Parent | |

**Object Properties**

▶ **DocumentProperties.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **DocumentProperties.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **DocumentProperties.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

## ▶ DocumentProperties.Item

VTS_DISPATCH or DocumentProperty **Item**( *longIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*longIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.DocumentProperties(1)
Object. DocumentProperties.Item(1)
```

An enumerated type enumBuiltInDocumentProperty is enabled:

| | |
|---|---|
| lppxPropertyManager | = 1 |
| lppxPropertyCompany | = 2 |
| lppxPropertyCategory | = 3 |
| lppxPropertyTitle | = 4 |
| lppxPropertySubject | = 5 |
| lppxPropertyAuthor | = 6 |
| lppxPropertyKeywords | = 7 |
| lppxPropertyComments | = 8 |

## DocumentProperty Object

| Properties | Methods |
|---|---|
| Application | (None) |
| Name | |
| Parent | |
| Type | |
| Value (Default | |

**Object Properties**

▶ **DocumentProperty.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **DocumentProperty.Name**

Returns the name of  the variable.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_BSTR or String. |

▶ **DocumentProperty.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

## ▶ DocumentProperty.Type

Returns the type of the property.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer or enumProperty type. |

The value can be one of the following:

| | |
|---|---|
| lppxPropertyTypeNumber | = 1 |
| lppxPropertyTypeBoolean | = 2 |
| lppxPropertyTypeDate | = 3 |
| lppxPropertyTypeString | = 4 |
| lppxPropertyTypeFloat | = 5 |

## ▶ DocumentProperty.Value

Returns the current value of the DocumentProperty.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_VARIANT or Variant. |

## DocObjects Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |
| Barcodes | |
| Shapes | |
| OLEObjects | |
| Images | |
| Texts | |

**Object Properties**

▶ **DocObjects.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **DocObjects.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **DocObjects.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

## ▶ DocObjects.Barcodes

Returns the Barcodes collection that represents all the created Barcode objects in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Barcodes collection.

## ▶ DocObjects.Shapes

Returns the Shapes collection that represents all the created Shape objects in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Shapes collection.

## ▶ DocObjects.OLEObjects

Returns the OLEObjects collection that represents all the created OLEObject objects in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or OLEObjects collection.

## ▶ DocObjects.Images

Returns the Images collection that represents all the created Image objects in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Images collection.

## ▶ DocObjects.Texts

Returns the Texts collection that represents all the created Text objects in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Texts collection.

## Object Methods

### ▶ DocObjects.Add

VT_DISPATCH or DocObject **Add**( *longDocObjectType, strDocObjectName* ).

Adds a new DocObject object to the current document.

**Return value**: Returns a DocObject object.

**Parameters:**
*longDocObjectType* Required VT_I4 or Long or enumDocObject. The type of object to add.

The value can be one of the following:

| | |
|---|---|
| lppxObjectText | = 1 |
| lppxObjectBarCode | = 2 |
| lppxObjectImage | = 3 |
| lppxObjectLine | = 4 |
| lppxObjectRectangle | = 5 |
| lppxObjectEllipse | = 6 |
| lppxObjectPolygon | = 7 |
| lppxObjectOblique | = 8 |
| lppxObjectRoundRect | = 9 |
| lppxObjectOLEObject | = 10 |

*strDocObjectName* Optional VT_BSTR or String. The name of the object to add.

### ▶ DocObjects.Item

VTS_DISPATCH or DocObject **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection’s Count property), a constant, or a string.

**Note** If the value provided as Index doesn’t match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object. DocObjects (1)
Object. DocObjects.Item(1)
```

## ▶ DocObjects.Remove

VTS_NONE **Remove**( *varIndex* ).

Removes a member from the DocObjects object.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a collection member. If numeric expression: index must be a number from 1 to the value of the collection's Count property. If a string expression: index must correspond to the key argument specified when this member reffered to was added to the collection.

## DocObject Object

| Properties | Methods |
|---|---|
| AnchorPoint | Bound |
| Application | Move |
| BackColor | |
| ForeColor | |
| Height | |
| Left | |
| Locked | |
| Name | |
| Parent | |
| Printable | |
| Rotation | |
| Top | |
| Type | |
| Width | |

### Object Properties

#### ▶ DocObject.AnchorPoint

Returns or sets the anchor point of the current object.

**Access** Read/Write.

**Type** VT_I2 or Integer or enumAnchorPoint type.

| | |
|---|---|
| lppxTopLeft | = 1 |
| lppxTopCenter | = 2 |
| lppxTopRight | = 3 |
| lppxCenterLeft | = 4 |
| lppxCenter | = 5 |
| lppxCenterRight | = 6 |
| lppxBottomLeft | = 7 |
| lppxBottomCenter | = 8 |
| lppxBottomRight | = 9 |

## ▶ DocObject.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

## ▶ DocObject.Height

Returns or sets the height of the object (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## ▶ DocObject.Left

Returns or sets the distance between the left edge of the anchor point of the object and the left edge of the document (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## ▶ DocObject.Name

Returns or sets the name of the DocObject.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

## ▶ DocObject.Printable

Sets or not whether the object is printable.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ DocObject.Rotation

Sets or retrieves the rotation of the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

The value can be one of the following: 0, 900, 1800, 2700.

### ▶ DocObject.Top

Returns or sets the distance between the top edge of the anchor point of the object and the top edge of the document. (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ DocObject.Type

Returns the type of the object (in enumDocObject type).

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

### ▶ DocObject.Width

Returns or sets the width of the object (in enumMeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## Object Methods

### ▶ DocObject.Bound

VTS_NONE **Bound** ( *longLeftPosition, longTopPosition* , *longRightPosition* , *longBottomPosition*).

Sets the bounding rectangle of an object.

**Parameters:**

*longLeftPosition* Required VT_I4 or Long. Distance between the left edge of an object and the left edge of the document (in MeasureSystem unit).

*longTopPosition* Required VT_I4 or Long. Distance between the top edge of an object and the top edge of the document (in MeasureSystem unit).

*longRightPosition* Required VT_I4 or Long. Distance between the right edge of an object and the left edge ofthe document (in MeasureSystem unit).

*longBottomPosition* Required VT_I4 or Long. Distance between the bottom edge of an object and the top edge ofthe document (in MeasureSystem unit).

### ▶ DocObject.Move

VTS_NONE **Move** (*longLeftPosition, longTopPosition* ).

Moves an object in its window.

**Parameters:**

*longLeftPosition* Required VT_I4 or Long. Distance between the left edge of an object and the left edge of the document (in MeasureSystem unit).

*longTopPosition* Required VT_I4 or Long. Distance between the top edge of an object and the top edge of the document (in MeasureSystem unit).

## Images Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | |

**Object Properties**

▶ **Images.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Images.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **Images.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

▶ **Images.Add**

VTS_DISPATCH or Image **Add**(*strImageName*).

Adds a new Image object to the collection.

**Return value**: Returns a Image object.

**Parameters:**
*strImageName* Optional VT_BSTR or String. The name of the object to add.

### ▶ **Images.Item**

VTS_DISPATCH or Image **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note**

If the value provided as Index does not match any existing member of the collection, none object returned.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note**

If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. The following two lines of code are equivalent.

```
Object. Images (1)
Object. Images.Item(1)
```

### ▶ **Images.Remove**

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

# Image Object

| Properties | Methods |
|---|---|
| **DocObject** object properties | **DocObject** object methods |
| Brightness | |
| FileName | |
| HorzFlip | |
| VertFlip | |
| Negative | |
| VariableName | |
| VariableObject | |

**Object Properties**

▶ **Image.Brightness**

This adjustment influences the color reduction process. Use this property to print a color image on a noncolor printer.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer (between –255 and +255). |

▶ **Image.FileName**

Retrieves or sets the filename of the image.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

▶ **Image. VertFlip**

Displays the image as if it is reflected in a mirror.

Reflection axis is vertical.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Image. HorzFlip

Displays the image as if it is reflected in a mirror.

Reflection axis is horizontal.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Image.Negative

Prints the image negatively.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Image.VariableName

Retrieves or sets the current variable name associated with the image.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Image.VariableObject

Retrieves or sets the current Variable object associated with the image.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_DISPATCH or Variable object. |

## Barcodes Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | |

### Object Properties

▶ **Barcodes.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Barcodes.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **Barcodes.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

## Object Methods

### ▶ Barcodes.Add

VTS_DISPATCH or Barcode **Add**( *strBarcodeName* ).

Adds a new Barcode object to the collection.

**Return value**: Returns a Barcode object.

**Parameters:**
*strBarcodeName* Optional VT_BSTR or String. The name of the object to add.

### ▶ Barcodes.Item

VTS_DISPATCH or Barcode **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters:**
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. The following two lines of code are equivalent.

```
Object. Barcodes (1)
Object. Barcodes.Item(1)
```

### ▶ Barcodes.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters***:*
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Barcode Object

| Properties | Methods |
|---|---|
| **DocObject** object properties | **DocObject** object methods |
| BarHeight | |
| CheckMode | |
| Code2D | |
| Device | |
| HRAlignment | |
| HRCheckCharacter | |
| HRFont | |
| HRFreeTextObject | |
| HRDevice | |
| HRGap | |
| HRPosition | |
| NarrowBarWidth | |
| Ratio | |
| Symbology | |
| Value | |
| VariableName | |
| VariableObject | |

**Object Properties**

▶ **Barcode.BarHeight**

Retrieves or sets the bar height of the barcode (in MeasureSystem unit).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

## ▶ Barcode.CheckMode

Retrieves or sets the check control of the barcode (in enum-CheckMode type).

**Access** Read/Write.

**Type** VT_I4 or Long or enumCheckMode type.

The value can be one of the following:

| | |
|---|---|
| lppxCheckModeNone | = 0 |
| lppxCheckMode1Digit | = 1 |
| lppxCheckMode2Digit | = 2 |
| lppxCheckModeMod11Mod10 | = 3 |

## ▶ Barcode.Code2D

Retrieves the Code2D object for 2D barcodes.

**Access** Read-Only.

**Type** VT_DISPATCH or Code2D object.

## ▶ Barcode.Device

Determines if the barcode is graphical or generated by the printer.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

## ▶ Barcode.HRAlignment

Retrieves or sets the current human readable alignment.

**Access** Read/Write.

**Type** VT_I4 or Long or enumAlignment type.

The value can be one of the following:

| | |
|---|---|
| lppxAlignLeft | = 0 |
| lppxAlignCenter | = 1 |
| lppxAlignRight | = 2 |

### ▶ Barcode.HRCheckCharacter

Includes or not the check character control in the human readable.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Barcode.HRDevice

Determines if the human readable is printer generated or not.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Barcode.HRFont

Retrieves or sets the font of the human readable.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_FONT or StdFont object. |

### ▶ Barcode.HRFreeTextObject

Retrieves the Text object representing the text of the human readable.

|  |  |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Text object. |

### ▶ Barcode.HRGap

Retrieves or sets the gap between the barcode and its human readable (in MeasureSystem unit).

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Barcode.HRPosition

Sets or retrieves the position of the human readable.

**Access** Read/Write.

**Type** VT_I4 or Long or enumHRPosition type.

The value can be one of the following:

| | |
|---|---|
| lppxHRPositionNone | = 0 |
| lppxHRPositionBelow | = 1 |
| lppxHRPositionAbove | = 2 |
| lppxHRPositionFree | = 3 |

### ▶ Barcode.NarrowBarWidth

Retrieves or sets the narrow bar width of the barcode (in MeasureSystem unit).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Barcode.Ratio

Retrieves or sets the ratio of the barcode (between 20 and 35).

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ Barcode.Symbology

Retrieves or sets the symbology of barcode.

**Access** Read/Write.

**Type** VT_I4 or Long or enumSymbology type.

The value can be one of the following (depending on product and printer):

| | |
|---|---|
| LppxCode11 | 49 |
| lppx25Interleave | 50 |
| LppxCode39 | 51 |
| LppxCode49 | 52 |
| LppxMaxicode | 53 |
| LppxCode16K | 54 |
| LppxGermanPostcode | 55 |
| LppxEAN8 | 56 |
| LppxUPCE | 57 |
| LppxBC412 | 58 |
| LppxMicroPDF | 59 |
| LppxCode93 | 65 |
| lppx25Beared | 66 |
| LppxCode128 | 67 |
| LppxEAN128 | 68 |
| LppxEAN13 | 69 |
| LppxCode39Full | 70 |
| LppxCode128Auto | 71 |
| LppxCodablockF | 72 |
| lppx25Industrial | 73 |
| lppx25Standard | 74 |
| LppxCodabar | 75 |
| LppxLogmars | 76 |
| LppxMsi | 77 |
| LppxCodablockA | 78 |
| LppxPostnet | 79 |
| LppxPlessey | 80 |
| LppxCode128SSCC | 81 |
| LppxUPCExtended | 83 |
| LppxUPCA | 85 |
| LppxUPCEXT2 | 86 |
| LppxUPCEXT5 | 87 |
| LppxCode25PRDG | 88 |
| LppxUPCWEIGHT | 89 |
| LppxUPCEPLUS2 | 97 |

| | |
|---|---|
| LppxUPCEPLUS5 | 98 |
| LppxUPCAPLUS2 | 99 |
| LppxUPCAPLUS5 | 100 |
| LppxEAN8PLUS2 | 101 |
| LppxEAN8PLUS5 | 102 |
| LppxEAN13PLUS2 | 103 |
| LppxEAN13PLUS5 | 104 |
| LppxITF | 105 |
| lppx25MatrixEuropean | 106 |
| lppx25MatrixJapan | 107 |
| LppxDatamatrix | 120 |
| lppxItf14 | 121 |
| LppxPdf | 122 |
| LppxQrcode | 123 |
| LppxRss | 124 |
| LppxComposite | 125 |

**Note** Depending on the product, not all symbologies are available.

### ▶ Barcode.Value

Retrieves or sets the value of the barcode.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Barcode.VariableName

Retrieves or sets the current variable name associated with the barcode.

**Access** Read/Write.

**Type** VT_BSTR or String.

## ▶ **Barcode.VariableObject**

Retrieves or sets the current Variable object associated with the barcode.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_DISPATCH or Variable object. |

# Code2D Object

| Properties | Methods |
|---|---|
| Columns | SetOption |
| ECC | |
| ModuleX | |
| ModuleY | |
| Rows | |

## Object Properties

### ▶ Code2D.Columns

Sets or retrieves the column count of the current 2D code.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ Code2D.ECC

Sets or retrieves the Security attribute of the current 2D code (see annexes).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ Code2D.ModuleX

Sets or retrieves the thickness of the ModuleX attribute of the current 2D code.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ Code2D.ModuleY

Sets or retrieves the thickness of the ModuleY attribute of the current 2D code.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ Code2D.Rows

Sets or retrieves the row count of the current 2D code.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

## Object Methods

### ▶ Code2D.SetOption

VTS_NONE **Code2D.SetOption**( *strOptionName*, *varOptionVa-lue*).

Sets option of the current 2D code.

**Parameters:**

| | |
|---|---|
| *strOptionName* | Required VT_BSTR or String. Name of the option to set. |
| *varOptionValue* | Required VT_VARIANT or Variant. Value of the option to set. |

# Texts Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | |

**Object properties**

▶ **Texts.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **Texts.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Texts.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

▶ **Texts.Add**

VTS_DISPATCH or Text **Add**( *strTextName* ).

Adds a new Text object to the collection.

**Return value**: Returns a Text object.

**Parameters**:
*strTextName* Optional VT_BSTR or String. The name of the object to add.

### ▶ Texts.Item

VTS_DISPATCH or Text **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note**

If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note**

If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Texts(1)
Object. Texts.Item(1)
```

### ▶ Texts.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

# Text Object

| Properties | Methods |
|---|---|
| Alignment | DocObject object methods |
| FitToFrame | AppendCRLF |
| Font | AppendString |
| Value | AppendTextObject |
| VariableName | AppendVariable |
| VariableObject | Copy |
| WordHyphenation | InsertCRLF |
| WordWrap | InsertString |
| SelText | InsertTextObject |
| | InsertVariable |
| | Paste |

## Object Properties

### ▶ Text.Alignment

Sets or retrieves current alignment (in enumAlignment type).

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumAlignment type. |

### ▶ Text.FitToFrame

Sets or retrieves fit to frame option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Text.Font

Sets or retrieves text font.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_FONT or StdFont object. |

### ▶ Text.Value

Sets or retrieves global value of the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Text.VariableName

Retrieves or sets the current variable name associated with the text.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Text.VariableObject

Retrieves or sets the current Variable object associated with the text.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_DISPATCH or Variable object. |

### ▶ Text. WordHyphenation

Retrieves or sets the WordHyphenation option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Text.WordWrap

Retrieves or sets the WordWrap option.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Text.SelText

Retrieves the current selection of text if any.

**Access** Read-Only.

**Type** VT_DISPATCH or TextSelection object.

## Object Methods

### ▶ Text.AppendCRLF

VTS_NONE **AppendCRLF** ( *fntFont* ).

Appends a <CrLf> at the end of the text.

**Parameters**:
*fntFont* Optional VT_FONT or StdFont. Font associated with the Carriage return.

### ▶ Text.AppendString

VTS_NONE **AppendString**( *strString*, *fntFont* ).

Appends a string at the end of the text.

**Parameters**:
*strString* Required VT_BSTR or String. String to append.

*fntFont* Optional VT_FONT or StdFont. Font associated with the string.

### ▶ Text.AppendTextObject

VTS_NONE **AppendTextObject**( *objectText* ).

Appends a Text object at the end of the text.

**Parameters**:
*objectText* Required VT_DISPATCH or Text object. Text object to append.

### ▶ Text.AppendVariable

VTS_NONE **AppendVariable**( *objectVariable*, *fntFont* ).

Appends a Variable object at the end of the text.

**Parameters**:
*objectVariable* Required VT_DISPATCH or Variable object. Variable object to append.

*fntFont* Optional VT_FONT or StdFont. Font associated with the Variable object.

### ▶ Text.Copy

VTS_NONE **Copy**().

Copies the Text object to the clipboard.

**Note**

About « Insert » functions :
Positions starts at 1.
A variable object equals 1 position.
A CarriageReturn field equals 1 position.

### ▶ Text. InsertCRLF

VTS_NONE **InsertCRLF** ( *longPosition*, *fntFont* ).

Inserts a carriage return at the position *longPosition.*

**Parameters**:
*longPosition* Optional VT_I4 or Long. Position to insert CarriageReturn.

*fntFont* Optional VT_FONT or StdFont. Font associated with the CarriageReturn field.

### ▶ Text. InsertString

VTS_NONE **InsertString** ( *strString*, *longPosition*, *fntFont* ).

Inserts a string at the position *longPosition.*

**Parameters**:
*strString* Required VT_BSTR or String. String to insert.

*longPosition* Optional VT_I4 or Long. Position to insert string.

*fntFont* Optional VT_FONT or StdFont. Font associated with the string.

### ▶ Text. InsertTextObject

VTS_NONE **InsertTextObject** ( *objectText*, *longPosition* ).

Inserts a Text object at the position *longPosition.*

**Parameters**:
*objectText* Required VT_DISPATCH or Text object. Text to insert.

*longPosition* Optional VT_I4 or Long. Position to insert Text object.

### ▶ Text. InsertVariable

VTS_NONE **InsertVariable** ( *objectVariable*, *longPosition*, *fntFont* ).

Inserts a Variable object at the position *longPosition.*

**Parameters**:
*objectVariable* Required VT_DISPATCH or Variable object. Variable to insert.

*longPosition* Optional VT_I4 or Long. Position to insert Variable object.

*fntFont* Optional VT_FONT or StdFont. Font associated with the Variable object.

## TextSelection Object

| Properties | Methods |
|---|---|
| BackColor | Copy |
| Font | Cut |
| ForeColor | Paste |
| Value | Select |
| IsEmpty | |

### Object Properties

#### ▶ TextSelection.BackColor

Retrieves or sets back color of the selected text if any.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

#### ▶ TextSelection.Font

Retrieves or sets font of the select text if any.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_DISPATCH or StdFont. |

#### ▶ TextSelection.ForeColor

Retrieves or sets fore color of the selected text if any.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

#### ▶ TextSelection.IsEmpty

Tests if the selected text exists.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

▶ **TextSelection.Value**

Retrieves or sets value of the selected text if any.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

## Object Methods

▶ **TextSelection.Copy**

VTS_NONE **Copy**().

Copies the selected text, if any, to the clipboard.

▶ **TextSelection.Cut**

VTS_NONE **Cut**().

Cuts the selected text, if any, and copies it to the clipboard.

▶ **TextSelection.Paste**

VTS_NONE **Paste**().

Pastes the text from clipboard into the current selected text.

▶ **TextSelection.Select**

VTS_NONE **Select**( *longFirstPosition, longLastPosition*).

Selects the text from *longFirstPosition* to *longLastPosition.*

**Parameters**:
*longFirstPosition* Optional VT_I4 or Long. Index of the first position of the text to select (starts with 1).

*longLastPosition* Optional VT_I4 or Long. Index of the last position of the text to select.

**Note**

If *longLastPosition* is omitted the text selection starts with *longFirstPosition* and ends with the end of the text.
If *longFirstPosition* and *longLastPosition* are omitted, all the text is selected.

## OLEObjects Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | |

### Object Properties

**▶ OLEObjects.Count**

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

**▶ OLEObjects.Application**

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

**▶ OLEObjects.Parent**

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

### Object Methods

**▶ OLEObjects.Add**

VTS_DISPATCH or OLEObject **Add**( *strOLEObjectName* ).

Adds a new OLEObject object to the collection.

**Return value**: Returns a OLEObject object.

**Parameters***:*
*strOLEObjectName* Required VT_BSTR or String. The name of the object to add.

## ▶ OLEObjects.Item

VTS_DISPATCH or OLEObject **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. There-fore, the following two lines of code are equivalent.

```
Object. OLEObjects (1)
Object. OLEObjects.Item(1)
```

## ▶ OLEObjects.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## OLEObject Object

| Properties | Methods |
|---|---|
| **DocObject** object properties | **DocObject** object methods |
| Object | EmbedFile |
| | LinkFile |
| | ConnectServer |

### Object Properties

#### ▶ OLEObject.Object

Returns directly the **IDispatch** interface of the object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### Object Methods

#### ▶ OLEObject. EmbedFile

VTS_BOOL or Boolean **EmbedFile**( *strOLEFileNameToCon-nect* ).

Connects the object to a file (see Insert OLE object dialog box).

**Return value**: Returns the result of the connection.

**Parameters**:
*strOLEFileNameToConnect* Required VT_BSTR or String. The name of the filename to connect to.

#### ▶ OLEObject. LinkFile

VTS_BOOL or Boolean **LinkFile**( *strOLELinkFileNameToCon-nect* ).

Connects the object to a file (see Insert OLE object dialog box).

**Return value**: Returns the result of the connection.

**Parameters**:
*strOLELinkFileNameToConnect* Required VT_BSTR or String. The name of the linkfilename to connect to.

## ▶ OLEObject. ConnectServer

VTS_BOOL or Boolean **ConnectServer**( *strCLSIDorPROGID-ServerName* ).

Connects the object to an OLE server (see Insert OLE object dialog box).

**Return value**: Returns the result of the connection.

**Parameters**:
*strCLSIDorPROGIDServerName* Required VT_BSTR or String. The CLSID with brackets or directly the name of the OLE server.

## Shapes Collection

| Properties | Methods |
|---|---|
| Application | AddEllipse |
| Count | AddLine |
| Parent | AddOblique |
| | AddPolygon |
| | AddRectangle |
| | AddRoundRect |
| | Item (Default) |
| | Remove |

**Object Properties**

### ▶ Shapes.Count

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

### ▶ Shapes.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Shapes.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

### ▶ Shapes.AddEllipse

VTS_DISPATCH or Shape **AddEllipse**(*longLeft, longTop, longRight, longBottom*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*longLeft* Required VT_I4 or Long. Sets the left corner of the bounding rectangle of the object (in MeasureSystem unit).

*longTop* Required VT_I4 or Long. Sets the top corner of the bounding rectangle of the object (in MeasureSystem unit).

*longRight* Required VT_I4 or Long. Sets the right corner of the bounding rectangle of the object (in MeasureSystem unit).

*longBottom* Required VT_I4 or Long. Sets the bottom corner of the bounding rectangle of the object (in MeasureSystem unit).

### ▶ Shapes.AddLine

VTS_DISPATCH or Shape **AddLine**(*longLeft, longTop, longRight, longBottom*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*longLeft* Required VT_I4 or Long. Sets the left corner of the bounding rectangle of the object (in MeasureSystem unit).

*longTop* Required VT_I4 or Long. Sets the top corner of the bounding rectangle of the object (in MeasureSystem unit).

*longRight* Required VT_I4 or Long. Sets the right corner of the bounding rectangle of the object (in MeasureSystem unit).

*longBottom* Required VT_I4 or Long. Sets the bottom corner of the bounding rectangle of the object (in MeasureSystem unit).

### ▶ Shapes.AddOblique

VTS_DISPATCH or Shape **AddOblique**(*longLeft, longTop, longRight, longBottom*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*longLeft* Required VT_I4 or Long. Sets the left corner of the bounding rectangle of the object (in MeasureSystem unit).

*longTop* Required VT_I4 or Long. Sets the top corner of the bounding rectangle of the object (in MeasureSystem unit).

*longRight* Required VT_I4 or Long. Sets the right corner of the bounding rectangle of the object (in MeasureSystem unit).

*longBottom* Required VT_I4 or Long. Sets the bottom corner of the bounding rectangle of the object (in MeasureSystem unit).

### ▶ Shapes.AddRectangle

VTS_DISPATCH or Shape **AddRectangle**(*longLeft, longTop, longRight, longBottom*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*longLeft* Required VT_I4 or Long. Sets the left corner of the bounding rectangle of the object (in MeasureSystem unit).

*longTop* Required VT_I4 or Long. Sets the top corner of the bounding rectangle of the object (in MeasureSystem unit).

*longRight* Required VT_I4 or Long. Sets the right corner of the bounding rectangle of the object (in MeasureSystem unit).

*longBottom* Required VT_I4 or Long. Sets the bottom corner of the bounding rectangle of the object (in MeasureSystem unit).

### ▶ Shapes.AddRoundRect

VTS_DISPATCH or Shape **AddRoundRect**(*longLeft, longTop, longRight, longBottom, longCorner*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*longLeft* Required VT_I4 or Long. Sets the left corner of the bounding rectangle of the object (in MeasureSystem unit).

*longTop* Required VT_I4 or Long. Sets the top corner of the bounding rectangle of the object (in MeasureSystem unit).

*longRight* Required VT_I4 or Long. Sets the right corner of the bounding rectangle of the object (in MeasureSystem unit).

*longBottom* Required VT_I4 or Long. Sets the bottom corner of the bounding rectangle of the object (in MeasureSystem unit).

*LongCorner* Required VT_I4 or Long. Sets the radius of the corner (distance from bound) (in MeasureSystem unit).

### ▶ Shapes.AddPolygon

VTS_DISPATCH or Shape **AddPolygon**(*varSafeArrayOf-Points*).

Adds a new Shape object to the collection.

**Return value**: Returns a Shape object.

**Parameters**:
*varSafeArrayOfPoints* Required VT_VARIANT/VT_ARRAY or Variant. Sets the list of points of the object (in MeasureSystem unit).

**Note** It can be a one-dimensional array of values or a two-dimensional array of values.

### ▶ Shapes.Item

VTS_DISPATCH or Shape **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note**

If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note**

If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Shapes(1)
Object. Shapes.Item(1)
```

### ▶ Shapes.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Shape Object

| Properties | Methods |
|---|---|
| **DocObject** object properties | **DocObject** object methods |
| LineWidth | SetPoints |

### Object Properties

▶ **Shape.LineWidth**

Sets or retrieves the thickness of the bounds of the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### Object Methods

▶ **Shape.SetPoints**

VTS_NONE **SetPoints** ( *varArrayOfPoints* ).

Sets all points describing the current object.

**Parameters**:
*varArrayOfPoints* Required VT_VARIANT/VT_ARRAY or Variant. An expression that evaluates to an array of points.

**Note** In order to have a closed polygon, last point must match first point.

## Variables Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |
| Counters | |
| DatabaseVariables | |
| Dates | |
| FormVariables | |
| Formulas | |
| FeeVariables | |
| TableLoockups | |

**Object Properties**

### ▶ Variables.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Variables.Count

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

### ▶ Variables.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### ▶ Variables.Counters

Returns the Counters collection that represents all the created Counter variables in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Counters collection.

### ▶ Variables.DatabaseVariables

Returns the DatabaseVariables collection that represents all the created Free variables with database link in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or DatabaseVariables collection.

### ▶ Variables.Dates

Returns the Dates collection that represents all the created Date variables in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Dates collection.

### ▶ Variables.FormVariables

Returns the FormVariables collection that represents all the created Free variables with form attribute in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or FormVariables collection.

### ▶ Variables.Formulas

Returns the Formulas collection that represents all the created Formula variables in the document.

**Access** Read-Only.

**Type** VT_DISPATCH or Formulas collection.

### ▶ Variables.FreeVariables

Returns the FreeVariables collection that represents all the created Free variables in the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or FreeVariables collection. |

### ▶ Variables.TableLookups

Returns the TableLookups collection that represents all the created TableLookup variables in the document.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or TableLookups collection. |

## Object Methods

### ▶ Variables.Add

VTS_DISPATCH or Variable **Add**( *VariableDataSource*, *strVariableName*).

Adds a new Variable object to the current document.

**Return value**: Returns a Variable object.

**Parameters**:
*strVariableDataSource* Required VT_I4 or Long. The data source type of the variable to add.

Can be one of the following values (enumDatasource type):

| | |
|---|---|
| lppxDataSourceCounter | = 1 |
| lppxDataSourceTableLookup | = 2 |
| lppxDataSourceDate | = 3 |
| lppxDataSourceFormula | = 4 |
| lppxDataSourceFree | = 5 |
| lppxDataSourceForm | = 6 |
| lppxDataSourceDataBase | = 7 |

*strVariableName* Optional VT_BSTR or String. The name of the variable to add.

### ▶ Variables.Item

VTS_DISPATCH or Variable **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Variables(1)
Object.Variables.Item(1)
```

### ▶ Variables.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters***:*
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Variable Object

| Properties | Methods |
|---|---|
| Application | (None) |
| DataSource | |
| Name | |
| Parent | |
| Value (Default) | |

**Object Porperties**

### ▶ Variable.Application

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

### ▶ Variable.DataSource

Returns the kind of data source of the variable (enumDatasource type).

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer or enumDataSource type. |

### ▶ Variable.Name

Returns the name of  the variable.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Variable.Parent

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

## ▶ Variable.Value

Returns the current value of the variable.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

# TableLoockups Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

**Object Properties**

▶ **TableLookups.Count**

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

▶ **TableLookups.Application**

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

▶ **TableLookups.Parent**

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

**Object Methods**

▶ **TableLookups.Add**

VTS_DISPATCH or TableLookup **Add**( *strLinkedTableName*).

Adds a new TableLookup object to the collection.

**Return value**: Returns a TableLookup object.

**Parameters**:
*strLinkedTableName* Optional VT_BSTR or String. The name of the object to add.

### ▶ TableLookups.Item

VTS_DISPATCH or TableLookup **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.TableLookups(1)
Object.TableLookups.Item(1)
```

### ▶ TableLookups.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## TableLoockup Object

| Properties | Methods |
|---|---|
| **Counter** object properties | **Counter** object methods |
| CounterUse | AddKey |
| DatabaseSource | DeleteKey |
| ResultField | |
| Keys | |
| Length | |
| PadLength | |
| TableName | |

**Object Properties**

### ▶ TableLookup.CounterUse

Activates or not a counter on the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ TableLookup.DatabaseSource

Sets or retrieves the data source name of the linked ODBC database.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ TableLookup.Length

Sets or retrieves the length of the output value.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ TableLookup.PadLength

Sets or retrieves the number of characters to pad up to.

**Access** Read/Write.

**Type** VT_I4 or Long.

### ▶ TableLookup.ResultField

Sets or retrieves the name of the linked output field.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ TableLookup.Keys

Returns strings collection for keys.

**Access** Read-Only.

**Type** VT_DISPATCH or Strings.

### ▶ TableLookup.TableName

Sets or retrieves the linked table name of the current data source.

**Access** Read/Write.

**Type** VT_BSTR or String.

## Object Methods

### ▶ TableLookup.AddKey

VTS_NONE **AddKey** (*strSearchFieldName, strSearchFieldValue*).

Adds a pair (<SearchFieldName>,<SearchFieldValue>) in the Search Field List.

**Parameters**:
*strSearchFieldName* Required VT_BSTR or String. The field name.

*strSearchFieldValue* Required VT_BSTR or String. The value of the field (must be the name of an other variable).

## ▶ TableLookup.DeleteKey

VTS_NONE **DeleteKey**( *strFieldName* ).

Deletes the search for the field *strFieldName.*

**Parameters**:
*StrFieldName* Required VT_BSTR or string. Fieldname to delete.

## Formulas Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Counte | Item (Default) |
| Parent | Remove |

### Object Properties

**▶ Formulas.Count**

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

**▶ Formulas.Application**

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

**▶ Formulas.Parent**

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

### Object Methods

**▶ Formulas.Add**

VTS_DISPATCH or Formula **Add**( *strFormulaName* ).

Adds a new Formula object to the collection.

**Return value**: Returns a Formula object.

**Parameters**:
*strFormulaName* Optional VT_BSTR or String. The name of the object to add.

### ▶ Formulas.Item

VTS_DISPATCH or Formula **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Formulas(1)
Object.Formulas.Item(1)
```

### ▶ Formulas.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

# Formula Object

| Properties | Methods |
|---|---|
| **Counter** object properties | **Counter** object methods |
| CounterUse | **Test** method |
| Expression | |
| Length | |
| PadLength | |

**Object Properties**

▶ **Formula.CounterUse**

Activates or not counting on the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

▶ **Formula.Expression**

Sets or retrieves the format of the Formula object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

▶ **Formula.Length**

Sets or retrieves the length of the output value.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

▶ **Formula.PadLength**

Sets or retrieves the number of characters to pad up to.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

**Object Methods**

## ▶ Formula.Test

VTS_BOOL or Boolean **Test**().

Tests the validity of the formula.

**Return value**: Returns a boolean which indicate if the Formula object format is valid or not.

## Dates Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

**Object Properties**

▶ **Dates.Count**

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

▶ **Dates.Application**

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

▶ **Dates.Parent**

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

**Object Methods**

▶ **Dates.Add**

VTS_DISPATCH or Date **Add**( *strDateName* ).

Adds a new Date object to the collection.

**Return value**: Returns a Date object.

**Parameters**:
*strDateName* Optional VT_BSTR or String. The name of the object to add.

### ▶ Dates.Item

VTS_DISPATCH or Date **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection’s Count property), a constant, or a string.

**Note** If the value provided as Index doesn’t match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Dates(1)
Object.Dates.Item(1)
```

### ▶ Dates.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection’s Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Date Object

| Properties | Methods |
|---|---|
| **Variable** object properties | **Variable** object methods |
| Device | |
| Format | |

**Object Properties**

### ▶ Date.Device

Determines if the date is generated by the printer or not.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

### ▶ Date.Format

Sets or retrieves the format of the value.

**Access** Read/Write.

**Type** VT_BSTR or String.

Can contain a prefix code which indicates country code:

| Prefix Code | Country |
|---|---|
| (UK) | English(default) |
| (GE) | German |
| (IT) | Italian |
| (FR) | French |
| (SW) | Swedish |
| (SP) | Spanish |
| (CH) | Chinese |
| (DK) | Danish |
| (JP) | Japanese |

Followed by the real format:

| **Commands** | **Value** |
|---|---|
| ‘m’ | month as 1...12 |
| ‘mm’ | month as 01...12 |
| ‘mmm’ | month as Jan...Dec |
| ‘mmmm’ | month as January...December |
| ‘d’ | day of month as 1.31 |
| ‘dd’ | day of month as 01..31 |
| ‘ddd’ | day of week as 0..6 (0=Sunday, 1=Monday,...) |
| ‘dddd’ | day of week as Sun...Sat |
| ‘ddddd’ | day of week as Sunday...Saturday |
| ‘j’ | Julian day as 1...366 |
| ‘jj’ | Julian day as 001...366 |
| ‘y’ | year as 0...9 |
| ‘yy’ | year as 00...99 |
| ‘yyyy’ | year as 1900...2040 |
| ‘w’ | week number as 1...53 |
| ‘ww’ | week number as 01...53 |
| ‘h’ | hour as 0...23 |
| ‘hh’ | hour as 00...23 |
| ‘hhh’ | hour as 0...12 |
| ‘’hhhh’ | hour as 00..12 |
| am\|pm | am or pm |
| ‘n’ | Minutes as 0...59 |
| ‘nn’ | Minutes as 00...59 |
| ‘c’ | Separator (c = any non ambiguous character) |
| ’ccc’ | Separator string |

## Counters Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

### Object Properties

#### ▶ Counters.Count

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

#### ▶ Counters.Application

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

#### ▶ Counters.Parent

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

### Object Methods

#### ▶ Counters.Add

VTS_DISPATCH or Counter **Add**( *strCounterName* ).

Adds a new Counter object to the collection.

**Return value**: Returns a Counter object.

**Parameters**:
*strCounterName* Optional VT_BSTR or String. The name of the object to add.

### ▶ Counters.Item

VTS_DISPATCH or Counter **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Counters(1)
Object.Counters.Item(1)
```

### ▶ Counters.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Counter Object

| Properties |
|---|
| **Variable** object properties |
| NumberOfDecimals |
| DecimalSeparator |
| DecimalUse |
| ThousandSeparator |
| Increment |
| ISO |
| BaseType |
| CustomSet |
| MaxValue |
| ResetToValue |
| PadCharacter |
| Prefix |
| Suffix |
| TriggerMode |
| TriggerParameter |

| Methods |
|---|
| **Variable** object methods |

### Object Properties

#### ▶ Counter. NumberOfDecimals

Sets or retrieves the number of digits after the decimal point.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

#### ▶ Counter. DecimalSeparator

Sets or retrieves the decimal separator.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Counter. DecimalUse

Uses or not decimal formatting.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

### ▶ Counter. ThousandSeparator

Sets or retrieves the thousand separator.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Counter. Increment

Sets or retrieves the increment.

**Access** Read/Write.

**Type** VT_VARIANT or Variant.

### ▶ Counter. ISO

Uniquely numbers each copy of a label.

**Access** Read/Write.

**Type** VT_BOOL or Boolean.

### ▶ Counter. BaseType

Sets or retrieves the counting base used for counting.

**Access** Read/Write.

**Type** VT_I2 or Integer or enumBase type.

The value can be one of the following:

| | |
|---|---|
| lppxBaseBinary | = 2 |
| lppxBaseOctal | = 8 |
| lppxBaseDecimal | = 10 |
| lppxBaseHexadecimal | = 16 |
| lppxBaseAlphabetic | = 26 |
| lppxBaseAlphaNumeric | = 36 |
| lppxBaseCustom | = 255 |

### ▶ Counter. TriggerMode

Sets the Increment method:

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer or enumTriggerMode type. |

The value can be one of the following:

| | |
|---|---|
| lppxNumberOfPrintedLabels | = 1 |
| lppxResetOfAnotherCounter | = 2 |

(Default set to lppxNumberOfPrintedLabels)

### ▶ Counter. TriggerParameter

Sets the parameter for the trigger mode.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_VARIANT or Variant. |

**Note** Can be the number of labels printed or the name of an other counter.

By default, it is the number of labels printed with a value set to 1.

### ▶ Counter.CustomSet

Sets or retrieves the characters list of the custom counter (ex: « 0123456789ABCD »).

The first element must be the neutral element.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Counter. MaxValue

Sets or retrieves the Max value of the current object.

When reached, this value will trigger a reset of the counter.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_VARIANT or Variant. |

### ▶ Counter.ResetToValue

Sets or retrieves the reset value.

**Access** Read/Write.

**Type** VT_VARIANT or Variant.

### ▶ Counter.PadCharacter

Sets or retrieves the character used to pad the left of variable value.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Counter.Prefix

Sets or retrieves the prefix string added to the variable.

**Access** Read/Write.

**Type** VT_BSTR or String.

### ▶ Counter.Suffix

Sets or retrieves the suffix string added to the variable.

**Access** Read/Write.

**Type** VT_BSTR or String.

## FreeVariables Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | item (Default) |
| Parent | Remove |

**Object Properties**

### ▶ FreeVariables.Count

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

### ▶ FreeVariables.Application

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

### ▶ FreeVariables.Parent

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

**Object Methods**

### ▶ FreeVariables.Add

VTS_DISPATCH or Free **Add**( *strFreeName* ).

Adds a new Free object to the collection with no specific attribute.

**Return value**: Returns a Free object.

**Parameters**:
*strFreeName* Optional VT_BSTR or String. The name of the object to add.

### ▶ FreeVariables.Item

VTS_DISPATCH or Free **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.FreeVariables(1)
Object.Freevariables.Item(1)
```

### ▶ FreeVariables.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

# Free Object

| Properties | Methods |
|---|---|
| **Counter** object properties | **Counter** object methods |
| CounterUse | |
| DisplayInForm | |
| FormOrder | |
| FormPrompt | |
| Inputmask | |
| Length | |
| PadLength | |
| Shared | |

## Object Properties

### ▶ Free.CounterUse

Activates or not a counter on the object.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Free.DisplayInForm

Includes or not the current object in the Form grid.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

### ▶ Free.FormOrder

Specifies the order of objects in the Form grid.

| | |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I2 or Integer. |

### ▶ Free.FormPrompt

Specifies the prompt associated in the Form grid.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Free.InputMask

Specifies the format prompt associated in the Form grid.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BSTR or String. |

### ▶ Free.Length

Sets or retrieves the length of the output value.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Free.PadLength

Sets or retrieves the number of characters to pad up to.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_I4 or Long. |

### ▶ Free.Shared

Specifies the list of proposed values for the prompt associated in the Form grid.

|  |  |
|---|---|
| **Access** | Read/Write. |
| **Type** | VT_BOOL or Boolean. |

## DatabaseVariables Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

**Object Properties**

▶ **DatabaseVariables.Count**

Returns the number of items in the specified collection.

**Access** Read-Only.

**Type** VT_I2 or Integer.

▶ **DatabaseVariables.Application**

This property returns the Application object that represents the root object of the hierarchy.

**Access** Read-Only.

**Type** VT_DISPATCH or Application object.

▶ **DatabaseVariables.Parent**

Returns the parent object of the specified object.

**Access** Read-Only.

**Type** VT_DISPATCH.

**Object Methods**

▶ **DatabaseVariables.Add**

VTS_DISPATCH or Free **Add**( *strFreeName* ).

Adds a new Free object to the collection with database attribute.

**Return value**: Returns a Free object.

**Parameters**:
*strFreeName* Optional VT_BSTR or String. The name of the object to add.

▶ **DatabaseVariables.Item**

VTS_DISPATCH or Free **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection’s Count property), a constant, or a string.

**Note** If the value provided as Index doesn’t match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.DatabaseVariables(1)
Object.DatabaseVariables.Item(1)
```

▶ **DatabaseVariables.Remove**

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection’s Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## FormVariables Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

### Object Properties

▶ **FormVariables.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **FormVariables.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **FormVariables.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

**Object Methods**

### ▶ FormVariables.Add

VTS_DISPATCH or Free **Add**( *strFreeName* ).

Adds a new Free object to the collection with form attribute.

**Return value**: Returns a Free object.

**Parameters**:
*strFreeName* Optional VT_BSTR or String. The name of the object to add.

### ▶ FormVariables.Item

VTS_DISPATCH or Free **Item**( *varIndex* ).

Returns a member of a collection, either by position or by name.

**Note** If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*varIndex* Required VT_VARIANT or Variant. The name or index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection's Count property), a constant, or a string.

**Note** If the value provided as Index doesn't match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.FormVariables(1)
Object.FormVariables.Item(1)
```

### ▶ FormVariables.Remove

VTS_NONE **Remove** ( *varIndex* ).

Removes a member from the collection.

*Index* Required VT_VARIANT or Variant. An expression that specifies the position of a member of the collection. If a numeric expression, index must be a number from 1 to the value of the collection's Count property. If a string expression, index must correspond to the key argument specified when the member referred to was added to the collection.

## Strings Collection

| Properties | Methods |
|---|---|
| Application | Add |
| Count | Item (Default) |
| Parent | Remove |

### Object Properties

▶ **Strings.Application**

This property returns the Application object that represents the root object of the hierarchy.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH or Application object. |

▶ **Strings.Count**

Returns the number of items in the specified collection.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_I2 or Integer. |

▶ **Strings.Parent**

Returns the parent object of the specified object.

| | |
|---|---|
| **Access** | Read-Only. |
| **Type** | VT_DISPATCH. |

### Object Methods

▶ **Strings.Add**

VTS_NONE **Add** ( *strStringValue* ).

Adds a new string to the collection.

**Parameters**:
*strStringValue* Required VT_BSTR or String. Specifies the string to add.

### ▶ Strings.Item

VTS_BSTR **Item**( *longIndex* ).

Returns a member of a collection, either by position or by name.

**Note**

If the value provided as Index does not match any existing member of the collection, no object is returned.

**Parameters**:
*longIndex* Required VT_14 or Variant. The index number of a member of the collection.

The index can be a numeric expression (a number from 1 to the value of the collection’s Count property), a constant, or a string.

**Note**

If the value provided as Index doesn’t match any existing member of the collection, an error occurs.
The Item method is the default method for collections. Therefore, the following two lines of code are equivalent.

```
Object.Strings(1)
Object.Strings.Item(1)
```

### ▶ Strings.Remove

VTS_NONE **Remove** ( *longIndex* ).

Removes a member from the collection.

**Parameters**:
*longIndex* Required VT_I4 or Long. The index number of a member of the collection.

Must be a numeric expression (a number from 1 to the value of the collection’s Count property).

## Document Events

| Properties | Methods |
|---|---|
| (None) | Change |
| | BeginPrinting |
| | ProgressPrinting |
| | EndPrinting |
| | PausedPrinting |

**Object Methods**

▶ **Document.BeginPrinting**

VTS_NONE **BeginPrinting** ( *strDocName* ).

Informs the user when the printing process begins for document *strDocName.*

**Parameters**:
*strDocName* VT_BSTR or String Name of the document starting to print.

▶ **Document.Change**

VTS_NONE **Change** ( ).

Informs the user of a change in the document.

User is invited to save or save as the current document.

▶ **Document.ProgressPrinting**

VTS_NONE **ProgressPrinting** ( *LabelPercent, refCancel* ).

Informs the user of the printing progress for the current document.

**Parameters**:
*LabelPercent* VT_I2 or Integer Percent value of the printing of the current label.

*refCancel* VT_I2 or Integer. User must assign this parameter to 1 to abort process.

## ▶ Document.EndPrinting

VTS_NONE **EndPrinting** ( *Reason* ).

Infoms the user of the end of the printing process for current document with anotification code.

Reason VT_I2 or Integer or enumEndPrinting type. Code for the reason for the end of the process.

The value can be one of the following:

| | |
|---|---|
| lppxEndOfJob | = 1 |
| lppxCancelled | = 2 |
| lppxSystemFailure | = 3 |

## ▶ Document.PausedPrinting

VTS_NONE **PausedPrinting** ( *Reason, refCancel* ).

Informs the user of a problem during printing process for the current document.

Reason VT_I2 or Integer or enumPausedReasonPrinting type. Reason for the end of the process.

The value can be one of the following:

| | |
|---|---|
| lppxGenericError | = 0 |
| lppxNoPaper | = 2 |
| lppxNoRibbon | = 3 |
| lppxPortNotAvailable | = 4 |
| lppxPrinterNotReady | = 5 |
| lppxCommunicationError | = 6 |
| lppxHeadLifted | = 7 |
| lppxPrinterMemory | = 8 |
| lppxPrinterSettings | = 9 |
| lppxSetupCommunication | = 10 |

**Parameters:**
*refCancel* VT_I2 or Integer. User must assign this parameter to 1 to abort process.

## Application Events

| Properties |
|---|
| (None) |

| Methods |
|---|
| Close |
| Quit |
| DocumentClosed |

**Object Methods**

▶ **ApplicationEvent. Close**

VTS_NONE **Close** ().

Informs that a user has closed the application.

▶ **ApplicationEvent. Quit**

VTS_NONE **Quit** ().

Informs users when someone quits the application with **Application.Quit** method or if the user has manually closed the application.

▶ **ApplicationEvent. DocumentClosed**

VTS_NONE **DocumentClosed** (*strDocTitle* ).

Informs that the document with title *strDocTitle* has been closed.

**Parameters**:
*strDocTitle* VT_BSTR or String Title of the document closed.

# Appendix 3

## Information on Visual C++ Data Type

This section provides information on the data type used with Visual C++.
For more information, refer to the Microsoft Visual C++ 6.0 documentation.

VARENUM usage key,
[V] - may appear in a VARIANT
[T] - may appear in a TYPEDESC
[P] - may appear in an OLE property set
[S] - may appear in a Safe Array

| **Item** | [V] | [T] | [P] | [S] | **Value** |
|---|---|---|---|---|---|
| VT_EMPTY | * |  | * |  | nothing |
| VT_NUL | * |  | * |  | SQL style Null |
| VT_I2 | * | * | * | * | 2 byte signed int |
| VT_I4 | * | * | * | * | 4 byte signed int |
| VT_R4 | * | * | * | * | 4 byte real |
| VT_R8 | * | * | * | * | 8 byte real |
| VT_CY | * | * | * | * | currency |
| VT_DATE | * | * | * | * | date |
| VT_BSTR | * | * | * | * | OLE Automation string |
| VT_DISPATCH | * | * | * | * | IDispatch |
| VT_ERROR | * | * | * | * | SCODE |

| Item | [V] | [T] | [P] | [S] | Value |
|---|---|---|---|---|---|
| VT_BOOL | * | * | * | * | True=-1, False=0 |
| VT_VARIANT | * | * | * | * | VARIANT |
| VT_UNKNOWN | * | * |  | * | IUnknown |
| VT_DECIMAL | * | * |  | * | 16 byte fixed point |
| VT_RECORD | * |  | * | * | user defined type |
| VT_I1 | * | * | * | * | signed char |
| VT_UI1 | * | * | * | * | unsigned char |
| VT_UI2 | * | * | * | * | unsigned short |
| VT_UI4 | * | * | * | * | unsigned short |
| VT_I8 |  | * | * |  | signed 64-bit int |
| VT_UI8 |  | * | * |  | unsigned 64-bit int |
| VT_INT | * | * | * | * | signed machine int |
| VT_UINT | * | * |  | * | unsigned machine int |
| VT_VOID |  | * |  |  | C style void |
| VT_HRESULT |  | * |  |  | Standard return type |
| VT_PTR |  | * |  |  | pointer type |
| VT_SAFEARRAY |  | * |  |  | (use VT_ARRAY in VARIANT) |
| VT_CARRAY |  | * |  |  | C style array |
| VT_USERDEFINED |  | * |  |  | user defined type |
| VT_LPSTR |  | * | * |  | null terminated string |
| VT_LPWSTR |  | * | * |  | wide null terminated string |
| VT_FILETIME |  |  | * |  | FILETIME |
| VT_BLOB |  |  | * |  | Length prefixed bytes |
| VT_STREAM |  |  | * |  | Name of the stream follows |
| VT_STORAGE |  |  | * |  | Name of the storage follows |
| VT_STREAMED_OBJECT |  |  | * |  | Stream contains an object |
| VT_STORED_OBJECT |  |  | * |  | Storage contains an object |

| Item | [V] | [T] | [P] | [S] | Value |
|---|---|---|---|---|---|
| VT_BLOB_OBJECT | | | * | | Blob contains an object |
| VT_CF | | | * | | Clipboard format |
| VT_CLSID | | | * | | A Class ID |
| VT_VECTOR | | | * | | simple counted array |
| VT_ARRAY | * | | | | SAFEARRAY* |
| VT_BYREF | * | | | | void* for local use |
| VT_BSTR_BLOB | | | | | Reserved for system use |

**Note**

VT: data type of variable or function parameters.
VTS: data type of the function return value

# Index