

# CODESOFT™ 6 and ActiveX

**What can it do for you?**

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**PRODUCT WHITE PAPER**



# CODESOFT™ 6 and ActiveX

## *What can ActiveX do for you?*

Gone are the days of writing code for all aspects of a program by yourself — since the advent of ActiveX, applications are expected to be more flexible, modifiable and extendable. CODESOFT 6 has met this demand by incorporating ActiveX technology that allows it to be integrated with other applications.

## What is ActiveX?

ActiveX is based on Microsoft's Component Object Model (COM) architecture. It enables a program to add functionality by calling ready-made components that blend in and appear as normal parts of the program. They are typically used to add user interface functions, such as 3-D toolbars, a notepad, calculator or even a spreadsheet. ActiveX also enables you to control the functions of another application.

The ability to control other applications is known as ActiveX Automation. Automation, a subset of ActiveX, lets an application expose its internal functions as COM objects. It enables tasks that are normally selected from menus to be automatically executed. Virtually any internal routine can be written as a COM object and its interfaces exposed to other programs. Not only can processes be automated, but this also offers programmers a toolbox of functions that can save them time and effort in writing similar routines.

It is this architecture that CODESOFT 6 uses to expose its components to other applications. ActiveX Automation allows them to integrate label printing and printer control without the need to perform extensive programming or learn about printer control in detail.

Gone are the days of controlling printers by yourself — instead, you can work on the design of your application itself rather than recreating what already exists.

As you can easily see, this technology enables you to create a "vertical" application that specifically meets your needs. Needless to say, using a development tool such as Visual Basic makes it much easier to develop your programs.

## Defining the Requirements

A well-defined specification is important for establishing the requirements of the application that you are going to create. Before getting into the code, you must have a clear understanding of what kind of components you will need.

You have the specific domain knowledge necessary — the capabilities and limitations of yourself, the tools that you use and the hardware that will be involved. With the availability of ActiveX technology, it is wiser to choose an existing component rather than trying to reinvent the wheel. Applying CODESOFT 6 as the solution to printing will be the key to successful control of a labeling process using ActiveX.

## Getting Into the Details

CODESOFT 6 operates not only as a stand-alone product, but it is also an ActiveX Automation Server.

*CODESOFT acts as an Automation Server to help you work more efficiently.*

The application that created an ActiveX object is known as the “server application.” When the application that contains the object, known as the “client application” uses the object, the server application is launched in order to perform the specified task.

This means that not only can CODESOFT be used independently, it can also be used from within just about every major application available from Microsoft and hundreds of other manufacturers.

CODESOFT 6 is an EXE based server— it's an out of process server that will be executed in its own address space, which avoids conflicts with the client application.

CODESOFT not only provides you with the best tool for controlling label output, it also enables you to use portions of its GUI. So once again, by incorporating it into your application, you reduce the effort needed to develop a complete solution.

## The Type Library

The type library supplied by CODESOFT 6 is a file that describes the type of all the ActiveX objects. The type library doesn't store objects, it stores type information. By accessing the type library, your application can determine the characteristics of an object.

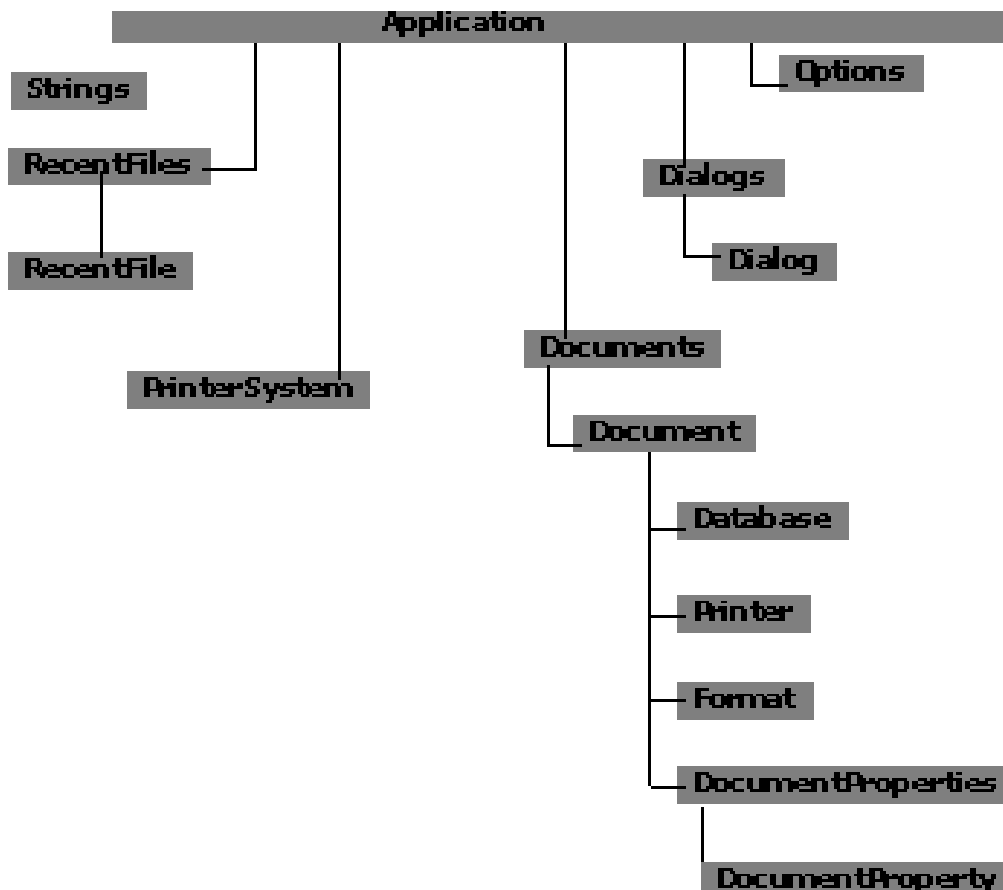
Using the type library will help facilitate development of your application. To understand how to work with a type library, refer to the information provided with your development tool. Details on

the CODESOFT type library and objects can be found in the Programmer's Guide available with the product as electronic documentation.

## The CODESOFT 6 Hierarchy

CODESOFT offers two main objects — the Application object, which is at the top of the hierarchy, and the Document object. Creating the Application object activates the automation server; thus starting CODESOFT. The Document object refers to the actual label design file. CODESOFT 6 also includes many more objects, too numerous to describe here. A complete listing and explanation of the available objects is found in the Programmer's Guide.

Figure 1 presents a brief overview of the CODESOFT 6 Application object hierarchy. Figure 2 presents an overview of the Document object hierarchy.



**Figure 1: The CODESOFT 6 Application object hierarchy.**

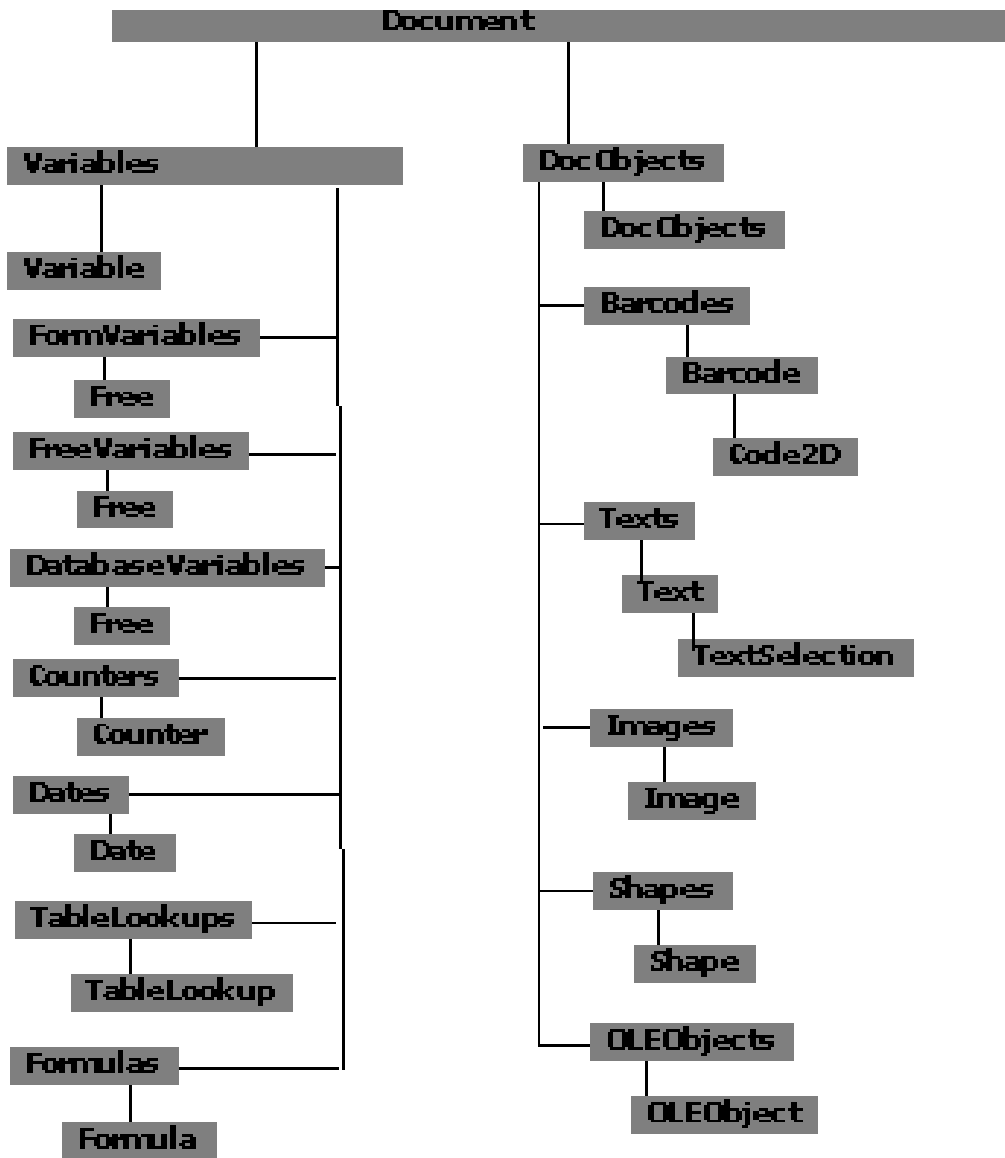


Figure 2: The CODESOFT 6 Document object hierarchy.

## Conclusion

*A more efficient solution  
is now here.*

CODESOFT 6 is at your disposal for creating a dedicated application using a powerful ActiveX interface. As you can see, it isn't necessary to reinvent the wheel, simply make use of the existing technology.

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