

So what is Visual Basic? The "Visual" part refers to the method used to create the graphical user interface (GUI). Rather than writing numerous lines of code to describe the appearance and location of interface elements, you simply drag and drop prebuilt objects into place on screen. If you've ever used a drawing program such as Paint, you already have most of the skills necessary to create an effective user interface.

The "Basic" part refers to the BASIC (Beginners All-Purpose Symbolic Instruction Code) language, a language used by more programmers than any other language in the history of computing. Visual Basic has evolved from the original BASIC language and now contains several hundred statements, functions, and keywords, many of which relate directly to the Windows GUI. Beginners can create useful applications by learning just a few of the keywords, yet the power of the language allows professionals to accomplish anything that can be accomplished using any other Windows programming language.

The Visual Basic programming language is not unique to Visual Basic. The Visual Basic programming system, Applications Edition included in Microsoft Excel, Microsoft Access, and many other Windows applications uses the same language. The Visual Basic programming system, Scripting Edition (VBScript) for Internet programming is a subset of the Visual Basic language. The investment you make in learning Visual Basic will carry over to these other areas.

Whether your goal is to create a small utility for yourself or your work group, a large enterprise-wide system, or even distributed applications spanning the globe via the Internet, Visual Basic provides you with a complete set of tools to simplify rapid application development.

- Data access features allow you to create databases and front-end applications for most popular database formats, including Microsoft SQL Server and other enterprise-level databases.
- ActiveX™ technologies allow you to use the functionality provided by other applications, such as Microsoft Word word processor, Microsoft Excel spreadsheet, and other Windows applications. You can even automate applications and objects created using the Professional or Enterprise editions of Visual Basic.
- Internet capabilities make it easy to provide access to documents and applications across the Internet from within your application.
- Your finished application is a true exe file that uses a run-time dynamic-link library (DLL) that you can freely distribute.

Visual Basic Editions

Visual Basic is available in three versions, each geared to meet a specific set of development requirements.

- The Visual Basic Learning edition allows programmers to easily create powerful applications for Microsoft Windows 95 and Windows NT®. It includes all intrinsic controls, plus grid, tab, and data-bound controls. Documentation provided with this edition includes *Learn VB Now* (a multimedia CD-ROM title), a printed *Programmer's Guide*, online Help, plus Visual Basic Books Online. It also incorporates a limited subset of the Jet engine's data access capabilities in the Data control and special data-bound controls. These features allow you to access existing databases, but do not provide for creating new databases or data access objects.
- The Professional edition provides computer professionals with a full-featured set of tools for developing solutions for others. It includes all the features of the Learning edition, plus additional ActiveX controls, including Internet controls, and the Crystal Report Writer. Documentation provided with the Professional edition includes the Programmer's Guide, online Help, the *Component Tools Guide* and the *Crystal Reports for Visual Basic User's Manual*. The Professional Edition includes all of the Data control features, and in addition provides the full data access objects programming interface. Professional Edition users can combine data access objects with the Data control to gain all of the advantages of simplified data access while maintaining the flexibility of complete programmatic control.
- The Enterprise edition allows professionals to create robust distributed applications in a team setting. It includes all the features of the Professional edition, plus the Automation Manager, Component Manager, database management tools, the Microsoft Visual SourceSafe™ project-oriented version control system, and more. Printed documentation provided with the Enterprise edition includes all Professional edition pieces, plus the *Building Client/Server Applications with Visual Basic* book and the *SourceSafe User's Guide*. The Enterprise Edition adds a number of powerful Client/Server tools to Visual Basic's data access capabilities, including the Remote Data control (RDC) specifically designed to access remote ODBC client/server databases

These books cover features available in the Learning, Professional, and Enterprise editions.

Programmer's Guide - A guide to creating applications with Visual Basic. Explains programming techniques, using frequent examples to show how the techniques work in typical applications.

Visual Basic Help - Provides a complete reference for features available in all editions of Visual Basic. Includes sections on the programming language, controls, the development environment, and more.

These books cover features available in the Professional and Enterprise editions only.

Using ActiveX Controls - An introduction to the ActiveX controls — formerly called OLE controls — included with the Visual Basic Professional and Enterprise editions. Start here for general information, scenarios of real-life uses, and code. Included in the *Component Tools Guide*.

Creating ActiveX Components - A guide to creating ActiveX controls, ActiveX documents, and ActiveX code components (formerly OLE servers). Includes introductory step-by-step chapters as well as in-depth design guides. Included in the *Component Tools Guide*.

Extending the Visual Basic Environment with Add-Ins - A guide to using the Visual Basic extensibility object model to tailor the development environment to your unique needs. Use objects in the model to build add-ins that automate repetitive tasks, monitor the development environment for certain events, or perform complex tasks. Included in the *Component Tools Guide*.

Accessing DLLs and the Windows API - A guide to enhancing functionality provided by Visual Basic by calling functions in dynamic-link libraries (DLLs). Through DLLs, you can access the thousands of procedures that form the backbone of the Microsoft Windows operating system, as well as routines written in other languages. Included in the *Component Tools Guide*.

Building Internet Applications - An introduction to deploying ActiveX components in conjunction with Internet technology. Overviews component security issues, downloading through Internet browsers, and packaging components for Internet distribution. Included in the *Component Tools Guide*.

Guide to Data Access Objects - A guide to creating and manipulating databases using the Microsoft Jet database engine and data access objects (DAO).

Crystal Reports for Visual Basic - A guide to the features of Crystal Reports, which you can use to create custom reports, lists, and form letters using data from an existing database.

These books cover features available in the Enterprise edition only.

Guide to Building Client/Server Applications with Visual Basic - A user's guide to the development tools provided in the Enterprise edition, and a set of architectural and design guidelines for using these tools to build three-tiered client/server applications. The application model presented here shows how to partition applications into logical groups of services that can be implemented as separate physical components that are shareable, scalable, and relocatable across the enterprise network.

Using the Repository with Visual Basic - A guide to using Microsoft Repository, an extensible object modeling system that allows full programmatic access via Automation objects. Microsoft Repository comes with the Repository Add-in, a Visual Basic add-in module that automatically stores and maintains the structure of your Visual Basic projects in an object-oriented data repository.

Visual SourceSafe - A guide to using Visual SourceSafe, an easy-to-use tool for storing files, controlling access to files, and maintaining multiple versions of files.