

C++Builder 3 - Questions and Answers

Q. When will C++Builder 3 be released?

A. All versions of C++Builder 3 will ship in the first calendar quarter of 1998.

Q. What are the different versions of the C++ Builder product and which is right for me.

A. There are five different versions of C++Builder: Each version of the software includes the features of the version below it and adds additional capabilities.

C++Builder 3 Enterprise is for the developer or business concentrating on building multi-tier distributed applications with characteristics such as thin client, 24x7 operations, integrating legacy systems, load balancing, distributed objects and heavily transaction oriented. C++ Builder 3 Enterprise will support CORBA, DCE, TCP/IP and DCOM.

C++Builder 3 Client/Server Suite is for the developer or business that is seeking the greatest amount of productivity while building scalable client/server applications. Corporate developers can build decision support, executive information, Internet server, Internet clients and/or order entry systems.

C++Builder 3 Professional allows the professional developer to create almost any Windows application using a comprehensive C++ compiler with ANSI compliance, powerful debugging, advanced project management and more. Application types include but are not limited to console, device drivers, and other non-visual applications, visual applications, database applications, Internet applications, and more.

C++Builder 3 Standard is for the beginning C++ developer who wants the most productive C++ development environment ever created.

C++Builder /400 is for the developer who wants leverage their AS/400 and use it to build Windows applications that can publish information over Web or integrate into other systems

Q. What are the major technology areas for C++Builder 3?

A. C++ Builder 3 was designed for serious C++ Systems Developer and C++ Application Developer. With that in mind we wanted to create a powerful C++ environment that allowed you to deliver almost any C++ application in a fraction of the time. C++Builder 3 includes an integrated environment that gave you the low-level tools needed to fully take advantage of C++ but also incorporates rapid application principles such as reusable components, visual application and forms design, integrated database development and integrated Internet development. C++Builder 3 is an environment that allows you to leverage your C++ skills to create any Windows application.

C++Builder Major technology areas:

- 1) **New: Advanced Project Management and powerful debugging for building robust and complex applications**
- 2) **High-performance, no-compromises C++ compiler** and Incremental linker for reducing the Compile/Link/Run cycle and increasing overall productivity
- 3) **Integrated database development** for getting scalable client/server and multi-tier applications to production on-time and on-budget
- 4) **New: Seamless Internet development** helps easily build applications that incorporate current Internet standards for the client and server

- 5) **Productivity of rapid application development** gets applications to production in a fraction of the time. Including support for Object Frameworks: OWL and MFC, as well as object oriented reusable components and over 10 new Wizards.
- 6) **Exclusive: One-Step ActiveX/ATL** for reusable components and language interoperability.
- 7) **Support for Standards:** ANSI, Internet Standards (ISAPI, NSAPI, HTML, SMTP, Sockets, etc.), STL 2.0 and Microsoft Standards with ATL, DCOM, etc.
- 8) **New: Business Insight:** a set of integrated Reporting, Graphing and Decision Support components that enable businesses to make decisions faster
- 9) **New: Migration Wizards** allow developers to use and migrate existing OWL and MFC code so that you can take advantage of C++Builder's productivity features.

But that's not all. See a complete feature and benefit analysis on the Borland Web site at www.borland.com

Q. What were the results of the C++ Web Survey conducted on the Borland Web site.

- A. The Web survey was and will continue to be a valuable way to solicit feedback from Borland's customer base as well as from non-Borland users. We use these results to drive the feature sets of the products and in that way we can insure that we build the product that will let you get your applications to production faster. We also use the Web survey results to develop marketing campaigns that will be effective in reaching developers.

Interesting results:

- a) The two largest programming issues that Visual C++ and Borland C++ developers face today are building applications with a visual front end and database programming. However, developers using Borland C++Builder version 1 had used the productivity of Rapid Application Development to easily create visual applications and used the seamlessly integrated database components to create scalable client/server applications on time and on budget. C++Builder 3 addresses the advanced project management and powerful debugging features that C++Builder developers asked for most.
- b) The areas of C++ programming that are going to demand the most attention are Internet programming and database programming. Also, building visual applications will continue to be an issue for non C++Builder 3 customers.
- c) The C++ features that are most highly requested, in rank order, were: powerful debugging, advanced project management, ActiveX creation, comprehensive sample applications and accurate help files.

As you can see, the feature set of Borland C++Builder 3 has been driven by this survey.

Q. How does C++ Builder 3 fit in Borland's Family of Tools?

- A. Delphi, C++ Builder, IntraBuilder and JBuilder are part of a family of tools that meet the growing needs of the developer community. C++Builder is ideal for leveraging existing your corporate assets such as: C++ programmers, AS/400 machines, C++ or Cobol encoded business rules, Internet programs and initiatives, legacy code and more. Five different versions of C++Builder helps ensure that you will be able to build value added information networks that keep your business running while providing a strategic business advantage.

Borland's Family of Tools also include:

- Delphi the easiest to use, highest productivity, client/server Windows tool

- JBuilder for Java, Cross-Platform development.
- IntraBuilder for point and click database applications over the Web.

Q. What is a Value Added Information Network and how does C++Builder assist in building them?

- A. An Information Network is a network of connected resources that cooperate to transform a corporation's vast amounts of data into real-time information that is customized for, and meaningful to, its users, whether they are employees, customers or suppliers. An Information Networks help corporations to
- Increase availability of information
 1. Native High-Speed SQL Link database drivers, ODBC connectivity
 2. Entera legacy information connectivity
 3. Native AS/400 connectivity
 4. Business Insight technology
 - Increase scalability of applications
 1. From Desktop to Enterprise wide database connectivity
 2. C++ ANSI compliant language for portability
 3. Cross Platform object support through TCP/IP, DCE, CORBA, DCOM
 - Reduce development costs, bottlenecks
 1. Reusable component paradigm
 2. Reusable OWL and MFC frameworks
 3. Over 10 new Wizards for greater productivity
 4. Integrated Reporting, Decision Support, Database and Internet development
 - Increase application manageability, reliability
 1. Powerful Debugging
 2. Advanced project management
 3. AppCenter for managing complex distributed application objects and systems
 - Integrate and leverage existing systems
 1. Entera connectivity to legacy systems and code through IDL
 2. VisiBroker CORBA capabilities
 3. Reuse of ActiveX controls
 4. AS/400 connectivity and reusability of RPG
 - Adhere to emerging standards
 1. Bridging support for ISAPI, NSAPI
 2. STL 2.0 support
 3. Microsoft Systems support such as COM, ATL, ODBC, etc.

Q. How does C++ Builder fit into the bridging architecture of the Golden Gate initiative?

- A. The Golden Gate initiative allows you to bridge between:
- Client/Server and Internet architectures: C++ Builder's integrated database and Internet development capabilities makes building Client and Server Internet and Database applications very easy. In fact, you can reuse Data Modules, MIDAS Brokers and code to migrate applications to these new computing paradigms.
 - Departmental IT and Corporate IT: C++Builder allows for the development of thin client multi-tier applications using either Entera, MIDAS or CORBA. C++Builder also allows you to build two tier and single tier applications using high speed SQL Links native database drivers, ODBC, or native client drivers for Access, FoxPro, dBase, Paradox and more.
 - Microsoft and IBM/Oracle/Netscape/Sun platform: C++Builder is for building any Windows application. However, the ANSI standardization in C++Builder allows for portable code. Also, MIDAS servers created with C++Builder can be used with both Delphi and forthcoming releases of JBuilder.

Q. Where do I get more information about Borland's C++ Builder and other Network products

- A. Borland's Award winning Web site is found at www.borland.com. There are news groups that pertain to all of Borland's products at www.borland.com.

Q. What does seamlessly integrated database development" really mean?

C++Builder Client/Server Suite3 includes an integrated suite of improved client/server tools for building high performance Client / Server applications with such extensive features as

- **New: Centralized Object Repository** for team development
- **SQL Monitor for SQL** for Testing and Tuning
- **New: SQL Builder** for quickly building the most complex SQL statements.
- **Enhanced: SQL Explorer** for integrated administration of database servers
- **Data Module and New Remote DataModule Objects** for separating business logic from user interface
- **Active Scalable Database Dictionary** for consistent use of extended field attributes and enforcing data integrity

Q. How do I turn my data into something more meaningful so that I can make better and faster decisions?

A. C++Builder 3's Business Insight provides the fastest way to turn enterprise-wide data into actionable information. C++Builder 3 includes seamlessly integrated components for graphically displaying enterprise or Internet data.

- Decision Cube for multi-dimensional data analysis
- TeeCharts for flexible high-speed visualization of database information
 - Quick Reports for summarization of data.

Each component of C++Builder's Business Insight works together to provide powerful decision support to your applications. Now you can easily build custom Decision Support Systems applications that give your users the ability to access and analyze enterprise-wide data at precisely the level of detail they require to make informed business decisions.

Q. How will C++Builder 3 make multi-tier development easier.

C++Builder 3 delivers the only open, scalable, multi-tier architecture that allows you to respond quickly to the emerging computing environments emerging from the Internet and enterprise. C++Builder 3 allows you to partition applications, so you can centrally locate business logic for maintenance and reusability. It integrates legacy code with new code by offering language interoperability in COM. It integrates legacy data with new data through high speed SQL Links and access to Entera. C++Builder 3, thereby, leverages existing investments and utilizes your company's knowledge base more fully. Plus, C++Builder 3 incorporates a thin client architecture reducing the complexity of business critical systems and ensuring, low-cost deployment, less configuration and maintenance, and a robust application environment.

Q. What does "thin client" mean and how does C++Builder help me build thin client applications?

A. A thin client application usually means that the application is partitioned into three virtual or physical components: interface logic, business logic and database access logic. The major benefits of this architecture are not limited to but include:

- **Centralized Business Logic** means it can be maintained in one location instead of being maintained at each client
- User interface applications are smaller (requiring less disk space) and can be more easily updated and **maintained** given that they only pertain
 - Business logic code can be removed from database servers reducing the dependency on RDBMS specific SQL. This in turn means that business logic is encoded in C++ and can therefore be **more easily debugged**. Extracted and centrally located business logic can also be more easily applied to different RDBMS systems that come on line because of acquisition or integration of disparate systems (such as help desk and Enterprise Resource Planning technologies).

C++Builder has many mechanisms for helping create ultra-thin client applications:

- MIDAS Development Kit for multi-tier distributed applications – Remote DataBroker: MIDAS allows users to centralize database access which means no more distribution and configuration of the BDE for every client
- MIDAS Development Kit: Constraint Broker automatically propagates Relational Database constraints to the client so that the client doesn't have to a) code these into the client and b) use the network for data validation
- Packages: Reduces the overall size of an application by not having to statically link in all the code directly into the executable. Instead, a common set of functionality can be delivered to a client and used by multiple applications.
- Entera Services: Entera allows developers to write cross platform database and application server functionality that can be easily used by thin clients. These applications can run business critical application 24 hours a day, 7 days a week.
- WebBroker: Delivers HTML data and applications to Web browsers on any platform.
 - ActiveForm and WebDeployment: Delivers ActiveX applications to Web browsers thereby reducing deployment and maintenance costs of applications.

Q. How will C++Builder 3 help me develop Internet applications?

- A. C++Builder 3 will help developers build client side Internet aware applications as well as Internet Server applications.

Server Side Internet Development: C++Builder 3 adds the WEB Broker for high speed dissemination of database information over the Web. The WEB Broker consists of the Web Module, Web Dispatcher, Web Session and Web Bridge along with a set of HTML producing components. These components allow developers to easily create ISAPI and NSAPI server extensions as well as CGI and WebCGI applications. HTMLProducer components work seamlessly with Tables, Queries, and StoredProcedures to publish their data. The WebDispatcher takes requests from the browser/user and invokes the proper methods that will return HTML content. In this way, C++ developers can now easily create Internet Server applications. And, the WEB Broker technologies are server independent to protect your code base as the competing Internet standards evolve.

Client Side Internet Development: C++Builder 3 includes new native Internet controls from NetMasters. These include over 17 drop in components that provide standard Internet functionality such as Sockets, UDP, TCP, SMTP, POP 3, HTML, FTP, HTTP and more. This enables C++Builder 3 customers to easily add Internet client support to their applications. Developers do not need to learn a new tool or a new language in order to add such capabilities as Web browsing, Internet mail, FTP file transfer, network news support to their client/server applications.

ActiveForms and WebDeployment: For the Microsoft platform in particular, C++Builder 3 allows developers to easily create ActiveForms/ATL that turn any C++Builder form into an ActiveForm. ActiveForms are ActiveX Controls that use the C++Builder form as a container for other C++ components. ActiveForms publish ActiveX property pages and type libraries for adding high-speed functionality to other development environments, for example Internet Explorer. Once ActiveForms are created, WebDeployment automates the creation of WebServer pages for delivering the ActiveForm application and associated program files (e.g. Help Files, DLLs, etc.). In addition, Code-Signing and CAB file compression are also automatically handled for you. All in all, ActiveForms and WebDeployment are easy to use, integrated seamlessly into the IDE, and significantly reduce deployment costs.

Q. Does C++Builder 3 allow me to create ActiveX Controls?

- A. A. Yes, C++Builder 3 is the highest-productivity C++ application environment for creating high-speed, fully compiled, industry-standard ActiveX controls based on ATL. C++Builder 3 allows any C++ developer to easily create ActiveX Controls that can be used with existing development tools, such as Visual C++, Java, Visual Basic, or PowerBuilder, in use throughout the enterprise. ActiveX Controls created in C++Builder can also be used within the strategic

Internet direction of Microsoft to enhance Internet page content and deliver applications over the Internet infrastructure.

Q. What are ActiveForms / ATL?

- A. ActiveForms/ATL are ActiveX Controls that use the C++Builder form as a container for other C++Builder components. ActiveForms publish ActiveX property pages and type libraries for adding high-speed functionality to other development environments, for example Internet Explorer, Visual Basic, Power++ or PowerBuilder. ActiveForms can be used to deliver applications over the Web with new Web Deployment capabilities also found in C++Builder. This reduces the cost of Distributing and Configuring applications in the traditional manner.

Q. Have there been any improvements in the C++Builder integrated development environment.

- A. Yes, there have been substantial improvements in the development environment making C++Builder 3 the most powerful IDE for the C++ language. C++Builder 3 now includes Code Insight which is a set of experts and technologies to make developers more productive. Code Insight includes Tool Tip Expression evaluation for simplified debugging, DLL debugging for building robust applications, Code Find (an integrated GREP utility), and Code Templates Expert for inserting syntactically correct pieces of code into the editor thereby increasing productivity. C++Builder 3's Dual IDE allows the developer to simplify and customize the IDE so that it does what you want it to do.

Q. How does Delphi and Borland C++ Builder complement each other?

- A. Delphi and C++ Builder share many common technologies to make them work seamlessly together and to reduce the learning curves of each product. Now team members can use a common RAD Work Bench IDE, and share Code, Forms, Data Modules, Remote Data Modules, MIDAS Servers as well as Scalable Dictionaries and object repositories. Both products share a common component model, database engine, client and server SQL tool suite, Object Inspector, back-end compiler and more. This means that as your projects grow and the needs of the corporations grow, your tools will work together to create solutions more quickly.

Q. How does C++Builder 3 compare to Visual C++ 5.0?

- A. C++Builder 3 has many advantages compared to Microsoft's Visual C++.

Borland C++Builder Advantages:

- Exclusive: Productivity of Rapid Application Development. While both C++Builder 3 and VC++ use the C++ language, C++Builder has integrated Forms Design, integrated visual application development, Component reusability, scalable database access, and high-speed no compromises compiler. C++Builder builds on the popularity of other development tools that have incorporate RAD, such as JBuilder, Visual Café, Visual Age, Delphi, PowerBuilder and Visual Basic, to reduce development times significantly.
- New: High Speed Incremental Linker. C++Builder 3 includes a world class incremental linker that cuts the Compile/Link/Run cycle down significantly. This in turn means that the developer can test smaller chunks of code on a more frequent basis. This helps get robust code to production more quickly.
- One Tool, One Language, One-Environment, One-skillset: C++Builder 3 integrates Internet, Database, Visual application, non-visual application, and Windows application development into one environment. While you can use C++Builder with Delphi or Visual Basic to create visual applications, you can remain in C++Builder to do the database or visual work while programming in your favorite language. This means you don't have to learn two environments or two languages.

- Component and Object frameworks: C++Builder includes the ability to use MFC and OWL frameworks in order to add to existing projects and support existing systems. However, C++Builder also includes the Visual Component Library so that developers can build reusable components that help bring applications together more quickly.
- Exclusive: Multi-Tier application development for enterprise wide Value Added Information Network applications: C++Builder 3 Client/Server Suite includes the MIDAS Development for easily building thin-client applications
- New: Business Insight -- Decision Support Capabilities: C++Builder 3 turns data into actionable information for better decision making. C++Builder 3 provides the fastest way to turn enterprise-wide data into actionable information. Graphically display enterprise or Internet data. Special features – exclusive to C++Builder 3 is the Decision Cube XTab for multi-dimensional data analysis, TeeCharts for flexible high-speed graphing of Decision Cube and database information, and Quick Reports which visually and easily designs reports -- put your business at the center of development
- One-Step ActiveX: C++Builder 3 is the most productive application environment for creating high speed, industry standard ActiveX components and COM objects based on ATL.
- Shorter Learning Curve: The combination of RAD Productivity, the VCL being able to create visual applications more quickly than MFC, the integrated toolset for building sophisticated applications make C++Builder easier to use and faster to learn.

Q. How can Microsoft Visual C++ developers convert to C++Builder?

- A. C++Builder 3 was designed so that developers could easily migrate their Visual C++ and MFC applications to C++Builder in order to take advantage of C++Builder's rapid application development productivity. C++Builder includes MFC for full source-code compatibility, advanced compiler options for optimizing MFC applications, an advanced project manager that can maintain multiple targets including MFC applications, a resource expert for converting RC scripts to Visual Forms and COFF Import Library support that enables your to use MFC generated libraries.

Q. How can Borland C++ developers take advantage of C++Builder?

- A. C++Builder 3 is the evolution of Borland C++. C++Builder uses an enhanced 32-bit compiler and advanced project management capabilities first found in Borland C++. C++Builder also automatically converts Borland C++ projects with the Project Conversion Wizard, includes OWL and advanced compiler options for compatability. Also included in C++Builder is the resource expert for automatically converting RC scripts to visual forms. Use the productivity of C++Builder to get new C++ applications to production in just a fraction of the time.

Q. How does C++Builder 3 and Delphi 3 compare?

- A. C++Builder 3 and Delphi 3 share many common technologies including form design, RAD productivity, the Visual Component Library, MIDAS Development kits that work together, and more. This means that the over 50 new award winning technologies that provide unbeatable productivity can be found in both environments. However, C++Builder includes additional functionality that gives the C++ developer the low-level capabilities that they would expect such as low-level debugging tools, advanced project manager, extensive use of ATL for One-Step ActiveX, etc.

Q. Why did the version numbering C++Builder change from version 1 to version 3.

- A. C++Builder 3 includes well over 50 new significant technologies including new advanced project management, powerful debugging, MIDAS development kit for Multi-Tier distributed applications and more. The version number has changed to reflect this large functionality. Also, C++Builder 3 shares many of the RAD WorkBench features such as, Data Modules, Remote DataModules and forms of Delphi 3 this too is reflected in a version 3.

Q. Is it possible to buy Borland C++ version 5.02?

- A. C++Builder 3 is the successor and natural evolution of Borland C++. C++Builder 3 will be able to meet a majority of your development needs. Borland C++Builder 3 has incorporated and improved upon most of the features that were only available in Borland C++ (e.g. Project Management). However, Borland C++ version 5.02 will be made available to our customers.

Q. Does Borland have a list of consultants and trainers for C++Builder 3?

- A. Yes, Borland has a program called Borland Solutions Provider that does provide a list of trainers, consultants, value added resellers, commercial application developers, premier value added resellers and other types of services. Again, this information can be obtained from the Borland Web site.

Q. What other documentation or tools can help me better understand C++Builder 3.

- A. On the world wide web, from your sales representative, from your Borland Solution Provider and/or on your C++Builder CD is information pertaining to C++Builder. Resources include but are not limited to:

- Features and Benefits Matrix
- C++Builder 3 Reviewers Guide
- New Feature summary Doc
- C++Builder statement of purpose
- C++Builder Version comparison Matrix
- CBT Tutorial
- Top 10 reasons to buy any given version of C++Builder
- Questions and Answers guide
 - Your account representative

Q. Are upgrades from C++Builder 1 available?

- A. Yes. Borland will offer special upgrades for customers who purchase the current version of C++Builder. There are two types of upgrades, Competitive upgrades and Borland Upgrades. If you currently use a non-Borland product such as Visual Basic, Visual C++, Visual Café, Power++, or Microsoft Visual Studio then you qualify for a competitive upgrade. If you are a user of Borland products such as JBuilder, Delphi, IntraBuilder, or Borland C++ you are entitled to an additional rebate above and beyond the competitive upgrade price.

If you are a maintenance customer of Borland C++Builder Client/Server Suite in the past year, you will automatically receive this new version C++Builder 3 update free of charge.

Q. Can C++Builder 3 create 16 bit applications?

- A. C++Builder 3 is a 32 bit product and will create applications for only 32 bit platforms such as Windows 95 and Windows NT. However, Borland C++ is available from Borland for creating 16 bit applications.

Q. What documentation comes with C++Builder 3?

- A. Different documentation sets come with different versions of the product. This is outlined in the Version Matrix for C++Builder 3 on the Borland WebSite. Every version of C++Builder 3 includes the *Teach Yourself Borland C++Builder in 14 days* by Kent Reisdorf and SAMS Publishing in order to get everyone quickly learned in the program. All versions of the product have the printed documentation in electronic format on the CD, as well as extensive helps. In fact, Borland has opted to increase the coverage, and comprehension of its documentation by providing mostly electronic media instead of printed media. This gives us more time to include better help topics, jumps, documentation, scenarios, examples, etc. Complete printed Documentation will be available from Borland shortly after the release of C++Builder 3.