

CBuilder Whats New

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What's New in C++ Builder XE7

C++ Builder XE7 is a must-have upgrade for all C++ developers and is the newest version of the award winning, multi-device app development solution for Windows, Mac, iOS, Android, gadgets, and wearables. There are great Windows and VCL features, a new Parallel Programming Library, significant FireMonkey enhancements for building multi-device apps, new Enterprise Mobility Services, and enhancements for connecting with gadgets and wearables, thanks to the new Bluetooth support.

Key New Features

Multi-Device Designer

Benefits

- **C++ Builder XE7 delivers the only true single source solution for natively compiled applications on Windows, Mac, iOS, and Android.**
- **A revolutionary new way to build a single user interface based on visual form designer that scales and adjust to different types of devices, form factors, and operating systems**
- **Develop your UI once and then view and adjust or customize it for each device type (mobile, tablet and desktop; iOS, Android, Windows and Mac)**
- **Make changes on the main user interface that are propagated to other device specific user interfaces; fine tune a device specific form factor without affecting the other views**
- **Customize layouts and styles for each device as desired or easily utilize the inherited style**

FireMonkey Behavior service

- Predefined views including size and layout standards are included for many popular mobile device, tablet and desktop form factors. You can also add your own.
- Only one "form class" is required across all of the form factors allowing the developer to create a single source file managing all of the common user interface events in one shared source file.
- A new service API that allows the framework and developer to query information about the device the app is running on to dynamically adjust itself for the form factor and platform
- UI element locations are automatically adjusted for each type of target device (for example, the position of tabs on different mobile platforms)

MultiView component

- The MultiView component is a brand new, unique FireMonkey component that utilizes the behavior services to dynamically display itself depending on the form factor and desired platform behavior
- The multi-view lays out menus appropriately for a phone as a drawer and for a tablet as popup or docked menu

Enterprise Mobility Services

- Enterprise Mobility Services is a turnkey REST based MEAP (Mobile Enterprise Application Platform) middleware stack that includes API hosting, data access, and SQL Database access and deployment, serving mobile, desktop and web application clients
- Data management across tiers through middleware that is stateless, restful, and scalable

**App Connectivity
with App
Tethering, REST
and Bluetooth**

- **Create custom APIs for your business functionality**
 - **High-performance enterprise database access for Oracle, DB2, Microsoft SQL Server Informix, SQL Server, and many more from a mobile application through the middleware**
 - **Custom Mobile API management with REST/JSON through loadable modules**
 - **Data access components for multi-tier data access through standard REST/JSON**
 - **User, session, and API calls analytics and reporting using a web based interface**
 - **Secure Data Storage Service on both servers and mobile devices**
 - **Rapidly connect your apps to your enterprise APIs and databases and services on-premises or in a private cloud**
 - **Flexible deployment license options. Purchase deployment licenses based on the numbers of users that access the Enterprise Mobility Services**
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- **With App Tethering, C++ Builder makes it extremely easy for apps to broadcast and find other apps to tether with over local WiFi or Bluetooth**
 - **Extend existing VCL Windows apps with mobile companion apps or Bluetooth devices by simply adding a few components to each app**
 - **Connect with Bluetooth and Bluetooth LE enabled gadgets like healthcare sensors and wearables to build unique and domain specific solutions**
 - **Easily connect to REST APIs on any near field device to interact with that gadget**
 - **Specific Bluetooth LE component to connect with power sipping micro gadgets**

Parallel Computing Library

- The Parallel Computing library helps you exponentially increase performance making it easier to write multi-threaded applications that take advantage of multi-core CPUs
- Boost the performance of your existing VCL and FireMonkey applications, with a self-tuning thread pool
- Include the new System.Threading unit in your apps and you can do the following:
 - Parallel 'for' loops
 - Scheduling of tasks
 - Futures
 - Joining of multiple tasks and waiting for all to complete
- Easy integration for a significant performance boost

IDE and Development Tools Enhancements

- The new PAServer Manager is a Mac OS X tray app that allows you to start and manage multiple instances of PAServer (the Platform Assistant app for developing iOS and Mac OS X apps)
- Improved Subversion version control support with new Git version control support
- New integrated multi-device designer
- IDE support for adding Java classes to an Android apk
- IDE Guided Tours to help learn about C++Builder features
- New Java2Delphi native bridge file generator for Android

RTL and VCL Enhancements

- New OmniXML library for faster performance, particularly on mobile platforms and easier selection of default XML engine
- Improved JSON low level processing

Object Pascal Language Enhancements

- Updated C++ STL library for iOS and new versions of Boost and Dinkumware Libraries for Win64
 - Enhancements to the taskbar component introduced in XE6 to support with a new TJumpLists VCL component for Windows Taskbar Jump Lists
 - New unit for Web encoding and decoding
 - Hundreds of quality and performance improvements
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- Improved initialization for dynamic arrays
 - Mix and match constant and dynamic arrays
 - String-like operations on dynamic arrays including + operator concatenation, Insert and Delete
 - An array constructor can be used to specify an initial value of a global dynamic array variable
 - Also, generics containers optimizations

Database and FireDAC Enhancements

- IBLite embeddable database now available for Windows, Mac, Android and iOS
- FireDAC streaming support for blob fields and support for MSSQL file streams
- Support for DBMS API command native timeouts.
- FireDAC connection parameters are now displayed in the Object Inspector as a record
- Data Explorer enhancements (primary keys and fields are displayed, foreign keys and fields are displayed, sequences/generators are now displayed)
- Other FireDAC enhancements including a new IBLite driver for desktop and mobile

FireMonkey Enhancements

- TEdit and TCalendar controls utilize a new presentation architecture: you choose whether you want the control to use the standard styled presentation or a platform native presentation on iOS dynamically
- Multi monitor support on desktop platforms
- TBannerAd component supports the Google Mobile Ads API from Google Play Services
- Immersive full screen mode on Android KitKit
- TListView pull to refresh on iOS and Android

Here's what you can do with C++ Builder XE7



Develop multi-device apps for Windows, Mac, iOS and Android using the tools and language you know and trust and keep building Windows applications using the VCL library.

Connectivity Icon

Develop apps that connect with gadgets and wearables using AppTethering, Bluetooth, and REST calls to devices and sensors

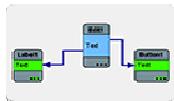


Get FireDAC high performance



Connect with popular cloud services with

enterprise database connectivity and make database app development fun again.



Bind any UI control to other objects or datasets. With LiveBindings, every component is data aware.

REST as well as BaaS providers for push notifications, authentication, storage and more!



Develop multi-tier, enterprise applications with DataSnap SDK or easily create server packages and client app modules for the new, turnkey Enterprise Mobility Services.

Haven't upgraded in a while? Here are new features introduced in other recent releases:

^{FM} = Available for the FM Application Platform

^{VCL} = Available for VCL

<p>NEW! in C++Builder XE6</p>	<ul style="list-style-type: none"> ▪ Application Tethering Components ^{FM} ^{VCL} ▪ Taskbar component ^{VCL} ▪ Cloud Service (BaaS) integration with components for Kinvey and Parse ^{FM} ^{VCL} ▪ New VCL Styles ^{VCL} ▪ VCL sensor components ^{VCL} ▪ In-app purchase and in-app advertising ^{FM} ▪ Create apps for Google Glass ^{FM} ▪ Accessibility for FireMonkey desktop ^{FM}
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	<ul style="list-style-type: none"> ▪ Improvements in quality, performance and stability <small>FM VCL</small> ▪ Build Android apps with C++ <small>FM</small> ▪ C++ Package Support for 64-bit Windows <small>FM VCL</small> ▪ Find definition and find references for C++ <small>FM VCL</small> ▪ FireDAC enhancements and Informix driver updates <small>FM VCL</small> ▪ Database Explorer for FireDAC <small>FM VCL</small> ▪ Apache support (WebBroker) ▪ DirectX 11 headers <small>FM VCL</small>
NEW! in C++Builder XE5	<ul style="list-style-type: none"> ▪ Develop iOS apps <small>FM</small> ▪ New mobile components for iOS <small>FM</small> ▪ REST Client support to access cloud based RESTful web services (in Professional edition and higher) <small>FM</small> ▪ FireDAC integrated into the C++Builder install and core components included in Professional edition <small>FM</small> ▪ IBLite database for iOS with unlimited deployment license <small>FM</small> ▪ Develop iOS 7 apps <small>FM</small> ▪ Fixes and enhancements <small>FM VCL</small>
NEW! in C++Builder XE4	<ul style="list-style-type: none"> ▪ FireMonkey sensors support for location, orientation and motion <small>FM</small> ▪ FireMonkey Frames and new TListView component ▪ OS X full screen mode <small>FM</small> ▪ FireDAC – Powerful, fast and easy data access <small>FM VCL</small> ▪ C++ compiler fixes <small>FM VCL</small> ▪ Updated DataSnap mobile connectors <small>FM VCL</small>
NEW! in C++Builder XE3	<ul style="list-style-type: none"> ▪ 64-bit Windows C++ compiler <small>FM VCL</small> ▪ Windows 8 support <small>FM VCL</small>

	<ul style="list-style-type: none"> ▪ Incorporate the Windows modern look into your apps with Metropolis UI <small>FM VCL</small> ▪ OS X Mountain Lion and Retina Display support <small>FM</small> ▪ Visual LiveBindings <small>FM VCL</small> ▪ Enhanced FireMonkey styles, audio/video and 3D <small>FM</small>
NEW! in C++Builder XE2	<ul style="list-style-type: none"> ▪ FireMonkey application platform - create multi-platform, multi-device applications from one codebase <small>FM</small> ▪ Create Windows and Mac OS X desktop applications with FireMonkey <small>FM</small> ▪ DataSnap mobile connectors <small>FM VCL</small> ▪ LiveBindings engine <small>FM VCL</small> ▪ FastReport reporting tool <small>VCL</small>
NEW! in C++Builder XE	<ul style="list-style-type: none"> ▪ Expanded multi-tier development with DataSnap <small>FM VCL</small> ▪ Additional bundled tools (CodeSite Express, IP*Works, Beyond Compare Differ) <small>VCL</small> ▪ Cloud computing support for Azure and Amazon <small>FM VCL</small> ▪ Subversion integration in the IDE <small>FM VCL</small>
NEW! in C++Builder 2009 and C++Builder 2010	<ul style="list-style-type: none"> ▪ Build touch and gesture enabled applications <small>FM VCL</small> ▪ Windows 7 support <small>FM VCL</small> ▪ IDE Insight <small>FM VCL</small> ▪ Unicode <small>FM VCL</small> ▪ Ribbon Controls <small>VCL</small> ▪ Major DataSnap upgrade <small>FM VCL</small> ▪ Generics and anonymous methods <small>FM VCL</small>

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Free 30-Day License

Free, fully functional 30-day license of C++Builder XE7

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