

RAD Studio 2010 FAQ

Embarcadero® RAD Studio - Frequently Asked Questions

GENERAL QUESTIONS

What is Embarcadero RAD Studio?

Embarcadero® RAD Studio 2010 is the industry's most powerful rapid application development suite for visually building GUI-intensive, data-driven end-user applications for both native Windows and .NET. RAD Studio includes Delphi®, C++Builder® and Delphi Prism™, providing the powerful Delphi and C++ languages, Windows native and .NET compilation, heterogeneous database connectivity, a rich visual component framework, and a vast 3rd party ecosystem – enabling you to deliver applications up to 5x faster across multiple Windows and database platforms. RAD Studio's development environments dramatically simplify and speed visual and data-intensive application development from GUI desktop applications to interactive touch-screens, kiosks, and database-driven, multi-tier Web applications and services.

Which editions are available and what are the differences between the editions?

RAD Studio Professional

Embarcadero RAD Studio 2010 Professional is designed for software developers and teams building native Windows, .NET, and touch-screen applications with (or without) embedded and local database persistence. RAD Studio includes Delphi, C++Builder and Delphi Prism, providing you with everything needed for fast native Windows and .NET development. Features include:

- Local database connectivity to InterBase®, Blackfish™ SQL and MySQL in Delphi and C++Builder
- Database connectivity available in Visual Studio via ADO.NET including local database connectivity to InterBase and Blackfish in Delphi Prism
- Blackfish SQL deployment on systems with 1 user, 512MB database size
- VCL for the Web with limit of 5 connections
- Introductory set of code audits and metrics to understand coding style and project health
- UML code visualization, providing a visual representation of source code for easier understanding

RAD Studio Enterprise

Embarcadero RAD Studio 2010 Enterprise is a designed for software developers and teams building client/server, multi-tier, and Web applications for native Windows and .NET. RAD Studio Enterprise offers seamless connectivity with a variety of database servers and enterprise data sources, expanded UML modeling, and a comprehensive tool set for delivering quality applications. RAD Studio Enterprise includes everything in the Professional edition, plus the following for building client/server and multi-tier database and Web applications:

- Database server connectivity to InterBase, Blackfish SQL, Firebird, MySQL, Microsoft SQL Server, Oracle, DB2, Informix and Sybase when building native Windows applications
- Remote server connectivity to InterBase and Blackfish SQL when building .NET applications
- DataSnap multi-tier application development and .NET DataSnap client development
- Blackfish SQL deployment on systems with 5 users, 2GB database size
- VCL for the Web with no connection limit

- Complete set of 80+ code metrics and 200+ code audits
- Full two-way UML modeling capabilities with multiple diagram types, synchronization between code and models, documentation generation, and design patterns

RAD Studio Architect

Embarcadero RAD Studio 2010 Architect is designed for application developers and teams building data-intensive client/server GUI and Web applications with enterprise database systems. RAD Studio Architect combines data-driven rapid application development for native Windows and .NET with rich visual data modeling to help developers understand, design, and get the most value out of enterprise databases and data structures. RAD Studio Architect includes everything in the Enterprise edition, plus powerful database modeling and design capabilities:

- Reverse-engineer, analyze, and optimize databases
- Automatically generate database code from models for forward engineering
- Create logical and physical models based on information extracted from databases and script files
- Work with highly readable and navigable diagrams
- Advanced compare and merge with bidirectional comparisons and merges of model and database structures

What does RAD Studio include?

Delphi 2010 – Delphi 2010 is the premier rapid application development environment for Windows, enabling you to quickly and easily deliver powerful applications across multiple Windows and database platforms.

C++Builder 2010 – C++Builder 2010 is the only true RAD C++ environment – combining a powerful ANSI C++ tool chain with a rich and extensible visual component framework for ultra-fast Windows application development.

Delphi Prism 2010 – Build .NET, ASP.NET, data-driven, and cross-platform Mono applications fast with Delphi Prism. Use the rich Delphi Prism programming language and take advantage of the latest .NET technologies.

ER/Studio 8.0 Developer Edition (full license in RAD Studio Architect, trial license in RAD Studio Pro/Ent) – ER/Studio helps data architects discover, document, and re-use data assets and gives you the power to easily reverse-engineer, analyze, and optimize existing databases.

Blackfish™ SQL RAD Studio Edition – Blackfish SQL is a high-performance, small-footprint, SQL-92 compliant transactional database. RAD Studio includes the Blackfish SQL software with a license for development and deployment of Blackfish SQL in certain situations at no additional cost.

InterBase SMP 2009 Developer Edition – InterBase SMP 2009 Developer Edition provides developers with the best cross-platform database to build and test database applications for embedded and SME applications.

InstallAware Express – InstallAware Express provides an unsurpassed feature set, enabling you to build sophisticated installations in record time without any programming or scripting skills.

Partner Software – RAD Studio users have access to a variety of free and trial editions of tools and components from Embarcadero Technology Partners accessible from the product launcher as either a partner DVD ISO or online from the Embarcadero developer network.

What is Embarcadero All-Access?

If you want to go beyond Windows application development with additional tools for Java, PHP and Ruby on Rails coding; plus a complete set of database tools, Embarcadero All-Access is the solution for you.

Embarcadero All-Access provides all the application development and database tools you need-when you need them-across all major platforms, frameworks, and programming languages. It's the single, cost-effective toolbox solution for developers, architects, performance testers, and DBAs.

All-Access provides you with industry-leading database tools, including DBArtisan®, Rapid SQL®, ER/Studio®, and many more. It also provides powerful application development tools, including Delphi®, JBuilder®, C++Builder®, Delphi Prism™ the InterBase® SMP database, and more.

Where can I purchase RAD Studio? How much does it cost?

You can purchase RAD Studio from one of our valuable partners or our online Embarcadero Shop site. See http://www.embarcadero.com/products/how_to_buy.php for more information.

What is Support and Maintenance for RAD Studio?

Support and Maintenance can be purchased at the time you purchase your RAD Studio product or upgrade. The support and maintenance agreement gives you a year of upgrades (including major and minor upgrades) and a specified number of support incidents. See the Support dropdown menu item of our web site for additional information.

Why is it important to buy Support and Maintenance for RAD Studio?

The Delphi Prism portion of RAD Studio may have more frequent feature upgrades than the rest of RAD Studio. Only users with active maintenance agreements have access to the new feature upgrades.

Where can I get the latest updates for RAD Studio?

Updates and additional software for RAD Studio users are available on the registered users download page at http://cc.embarcadero.com/reg/rad_studio. More major new feature upgrades are available only to users with current Maintenance agreements. Notifications for those upgrades are delivered via email and the upgrades can be downloaded via the Maintenance Portal web site by following the instructions in the email.

Is RAD Studio available in languages other than English?

RAD Studio is available in English, French, German and Japanese. The installer lets you choose any combination of languages and in 2010 it's easy to switch between languages in the IDE.

Which types of licenses are available?

RAD Studio is available with multiple licensing options including:

- Individual named user licenses
- Named and concurrent user licenses managed using the Embarcadero License Server or FLEXnet which provide the additional flexibility of managing licenses on a license server
- 5-pack and 10-pack licenses at discounted prices
- Academic individual licenses for students and educators
- Academic volume licenses for classroom use

What are the limitations of the Academic editions?

The Academic edition can be used only for learning in an academic or classroom environment. Educational institutions cannot use the academic version to produce software for use within their institution.

Who qualifies for the upgrade pricing on RAD Studio 2010?

- Professional upgrade eligibility – Upgrade pricing is available to registered owners of 2006-2009 versions of Borland Developer Studio, CodeGear RAD Studio, Delphi, Delphi Prism, or C++Builder; or Turbo Professional products. Special Limited Time Only thru Dec 31, 2009 all classic versions 1 thru 2005 also qualify for upgrade pricing.
- Enterprise upgrade eligibility – Upgrade pricing is available to registered owners of 2006-2009 versions of Borland Developer Studio, CodeGear RAD Studio, Delphi, Delphi Prism or C++Builder Professional or Enterprise products. Special Limited Time Only thru Dec 31, 2009 all classic versions 1 thru 2005 also qualify for upgrade pricing.
- Architect upgrade eligibility – Upgrade pricing is available to registered owners of 2006-2009 versions of Borland Developer Studio, CodeGear RAD Studio, Delphi, Delphi Prism or C++Builder Enterprise or Architect products. Special Limited Time Only thru Dec 31, 2009 all classic versions 1 thru 2005 also qualify for upgrade pricing.

I'm still on a much older version of Delphi or C++Builder. Do I still qualify for upgrade pricing?

Yes. For a limited time only thru Dec 31, 2009 all classic versions 1 thru 2005 also qualify for upgrade pricing

How is Blackfish SQL licensed in RAD Studio?

Blackfish RAD Studio Editions are specially licensed versions of Blackfish SQL included with CodeGear RAD Studio, Delphi Prism, Delphi and C++Builder.

Architect and Enterprise editions of the IDEs include unlimited Blackfish SQL database desktop or server deployment on systems with up to 5 users / 20 connections, and support for databases up to 2GB.

Professional editions of the IDEs include unlimited Blackfish SQL desktop database deployment on systems with 1 local user / 4 connections, and support for databases up to 512 MB.

See the license terms in the RAD Studio license.rtf file for further information.

How is InterBase licensed in RAD Studio?

InterBase 2009 Developer Edition is InterBase SMP 2009 Server licensed for up to 20 users and 80 logical connections. You can install InterBase Developer Edition on a server for testing purposes using the serial number included in the RAD Studio 2010 readme file or you can download and request a serial number from the InterBase download page at <https://downloads.embarcadero.com/free/interbase>.

When you're ready to deploy applications using InterBase, Embarcadero offers a variety of editions (Desktop, Server and To-Go) and a variety of licensing options (flexible server licensing, multi-packs and OEM licensing). Contact Embarcadero Sales or partners for more information. See the license terms in the RAD Studio license.rtf file for additional licensing details.

Is Embarcadero RAD Studio similar to or the same as CodeGear™ RAD Studio and Borland® Developer Studio?

Embarcadero RAD Studio 2010 is the newest version in the studio product line. The previous version was named CodeGear RAD Studio 2009. Earlier versions were named CodeGear RAD Studio 2007 and Borland Developer Studio 2006.

TECHNICAL QUESTIONS

NATIVE DEVELOPMENT WITH DELPHI AND C++BUILDER QUESTIONS

Can I develop applications on one version of Windows and deploy to others?

Yes. You develop applications on the Windows OS that is most productive for you, so you can develop applications on your choice of operating systems (Windows 7, Windows Vista, XP, Server 2008 or Server 2003). Applications built with Delphi and C++Builder will run on all of those Windows versions plus Windows 2000.

Will applications built with Delphi and C++Builder 2010 run on older versions of Windows including Windows 2000, 95, 98 and Me?

Because of the use of Unicode as the default string type, Windows 98, 95, and ME will not run applications produced with Delphi and C++Builder 2010. These operating systems do not support Unicode strings, and Microsoft has dropped support for them. Applications built with Delphi 2010 and C++Builder 2010 will run on Windows 2000.

What are the pre-requisites for installing the Delphi and C++Builder portions of RAD Studio?

To install, you will need to have installed on your system:

- The Microsoft .NET Framework 2.0 or higher
- The Microsoft Visual J# 2.0 Redistributable Package
- Windows Internet Explorer® 6.0 or higher
- MSXML 6

The installer will install the prerequisite software if you don't already have it installed.

I'm wondering about moving my existing code to Unicode. What do I need to do?

Most existing code will work fine using the new default UnicodeString. Code that does byte level manipulation of string data, or that carries data in string variables probably needs to be examined and perhaps updated to account for the new character sizes inherent in Unicode string data. For more information, see the documentation and Embarcadero Developer Network for information about moving existing code to Unicode.

Do I have to register my copy of RAD Studio?

Yes. When you first run the product, a small application will open and ask you to register the product. Once that is done, and your product key is validated, then your product will be registered and installed.

Can I open my projects created with earlier versions of Delphi and C++Builder?

Yes, you should be able to do so, depending on the installed components required by your projects. Delphi and C++Builder 2010 use the MSBuild system for the build engine, and thus requires a new project file if you are upgrading from version 2007 or earlier. However, the IDE will seamlessly update your projects to the new format.

What if I need to deploy Blackfish SQL in situations beyond those allowed with the license included Blackfish SQL RAD Studio Edition license?

Additional Blackfish SQL deployment licenses are available separately for purchase. See the Embarcadero online shop site for your country or your favorite Embarcadero reseller partner for pricing.

What's different about Delphi versus competing products?

Delphi is the only RAD IDE for Windows XP, and Vista, 7 and Windows Server 2003 and 2008. Delphi not only runs on all these platforms, but also lets you develop for any of them plus Windows 2000. For example you could be running Windows 7 while developing an application for Windows 2000. This gives you the flexibility to run the OS the best suits your needs, while still developing for all the platforms.

Why do I need to install the Microsoft .NET runtimes and SDK with Delphi and C++Builder?

Some of the functionality of the IDE requires these software packages.

Will my users / customers need the .NET runtimes / SDK in order to run my apps built with Delphi and C++Builder?

No. Applications produced with Delphi and C++Builder 2010 do not require any .NET runtime support. The product produces pure native Windows applications.

What are the differences between the ER/Studio Developer Edition data modeling capabilities in RAD Studio Architect and the standard ER/Studio product?

The ER/Studio data modeling and visualization in RAD Studio Architect is a subset of the full ER/Studio. RAD Studio Architect doesn't include metadata import/export capabilities or access to ER/Studio team repository servers. It includes limited reporting functionality (HTML only). The ER/Studio functionality in RAD Studio Architect supports a specific set of databases in line with those supported by dbExpress, while the full ER/Studio products offer flexible configurations for those databases and more.

Can I install RAD Studio 2010 on a machine with previous versions of RAD Studio, Delphi or C++Builder on it?

Yes, RAD Studio coexists nicely with earlier versions of RAD Studio, C++Builder and Delphi.

Are there new COMPILERVERSION and RTLVERSION values defined for Delphi 2010?

Yes. For Delphi 2010, COMPILERVERSION is set to 21.0, and RTLVERSION is set to 21.0.

C++BUILDER QUESTIONS

What is Standard Library Technical Report 1?

TR1 is the first official ISO extension to the C++ Standard Library, including many components to enhance library use and development, including a reference counted smart pointer and function call wrapper for better resource management; tuple, array and hashing containers; regular expressions; random numbers; improved function binders to simplify calling library algorithms; and type traits.

More details may be found in the final public draft available on the ISO committee website at: <http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2005/n1836.pdf>

What is C++0x?

C++0x is the informal name for the next version of the C++ Standard. While the standard expected until late 2010 many features are now well defined. More details may be found on the ISO committee website. A good place to start would be:

<http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2705.html>

What's different about C++Builder versus competing products?

C++Builder is the only true RAD C++ environment and framework designed for ultra-fast and highly-maintainable Windows GUI application development. No other C++ development environment offers a more comprehensive included visual component library for quickly building rich user interfaces, rich ecosystem of additional components and tools, and rapid development of database applications.

DELPHI PRISM QUESTIONS

Which version of the .NET Framework do I have to have installed to run Delphi Prism?

You must have the .NET Framework 3.5 or 4.0 installed to install and run Delphi Prism.

Do assemblies produced with Delphi Prism require a specific version of the .NET Framework?

No -- Delphi Prism can be targeted to link against any version of the .NET Framework from version 1.1 to 4.0. The developer can choose which version to link against.

Do I have to buy Visual Studio 2008 from Microsoft in order to use Delphi Prism?

No. Delphi Prism contains a full copy of the Visual Studio Shell. If your machine doesn't have a copy of either the Shell or a Visual Studio Professional edition or above already installed, Delphi Prism will install the Visual Studio Shell for you before installing the Delphi Prism language plug-in and features.

What will happen if I install Delphi Prism and I already have a copy of Visual Studio 2008 installed on my computer?

If you already have a copy of Visual Studio Professional or higher installed, Delphi Prism will integrate directly into your existing install automatically.

Does Delphi Prism install into Visual Studio 2010?

As of the release date of RAD Studio 2010, the Delphi Prism portion of the product works with Visual Studio 2008, the currently shipping version of Visual Studio. Embarcadero is investing in future support for the final shipping version of Visual Studio 2010 when it becomes available. Note: Future Delphi Prism releases with new features are only available to RAD Studio customers with current Maintenance agreements so we strongly encourage users to purchase Support and Maintenance.

Why does the Delphi Prism IDE say "Microsoft Visual Studio"?

Delphi Prism runs inside the Visual Studio Shell. This is basically the Visual Studio IDE without any language plug-ins from Microsoft. Thus, you see the Microsoft branding. But rest assured that you can see Delphi Prism as soon as you select the File|New... menu.

Can I add C# or VB.NET functionality to Delphi Prism with the Visual Studio Express products from Microsoft?

No. Because of the way that the Microsoft Express products are installed, they will not integrate directly into installation of Visual Studio Shell. However, Delphi Prism and the Visual Studio Express products can reside on the same machine together and can be run side-by-side. However, if you have Delphi Prism installed, and then install Visual Studio 2008 Professional or above, you will get the Visual Studio 2008 functionality in the same IDE as Delphi Prism.

What platforms will my Delphi Prism applications run on?

Delphi Prism applications will run almost anywhere the Common Language Runtime (CLR) exists. Delphi Prism applications will take full advantage of the .NET 3.5 or .NET 4.0 Frameworks on Windows. Delphi Prism applications will also work on Mono for Linux. In addition, Delphi Prism applications will execute on Mono for the Mac.

Does Delphi Prism include support for VCL.NET?

No. Development for VCL.NET has been deprecated and will not be supported in Delphi Prism. Developers using VCL.NET can either use Delphi 2007 to continue those products or can migrate their VCL.NET applications to VCL for Win32.

Will my existing Delphi for Win32 code compile in Delphi Prism?

Probably not without some changes. While the languages used by Delphi and Delphi Prism are very similar, they are not entirely compatible. Each language has features and idioms designed specifically for the platforms that they are meant to run on. However, the languages are close enough that code written for one can usually be used on the other with minor changes.

Is there any way to make the Delphi Prism language more compatible with my Win32 Delphi code?

Yes – Delphi Prism includes a “compatibility” switch which enables certain language features that will be more familiar to Delphi for Win32 developers. This option can be set on a per-project basis as part of the project options tab.

Can I build applications for the Compact Framework using Delphi Prism?

Delphi Prism will compile against the CF assemblies. However, there is no design-time support as the Compact Framework designers are closely integrated with the C# and VB.NET personalities of Visual Studio and not available for use by other language plug-ins.

Who wrote the compiler used in Delphi Prism?

The Delphi Prism compiler was written by RemObjects. It is the same compiler that formed the basis of their Chrome and Oxygene products, which are now being superseded by Delphi Prism

What is the relationship between RemObjects and Embarcadero?

RemObjects Software and Embarcadero are close partners. Embarcadero licenses technology from RemObjects Software that is included in Delphi Prism. Both companies are committed to working together towards advancing the product as it continues to thrive and evolve.