



# **Feature Matrix**

upload applications to a web server

extension masks

realure mainx
Feature
INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)
New in XE3! Multiple new project and file types have been added
New in XE3! Client Web Application and Client Page. Develop web applications with client-side technologies that you can run without a webserver
New in XE3! Client Mobile Application and Client Mobile Page. Develop mobile applications with client-side technologies that you can run without a webserver
New in XE3! Mobile Themes. Create themes for your mobile applications easily with HTML5 Builder's visual designer
New in XE3! Workflow optimized, context-sensitive, user interface focused on improving user productivity
New in XE3! Client deployment wizard for deploying client web applications
Enhanced in XE3! Project Manager to display and organize the contents of your current project with support for content preview and search
Introduced in XE! Project Manager view menu for directory (nested), directory (flat) and list view of files in a project
Enhanced in XE3! Project Options to allow you to select which parameters to send to the running script and other extra options via the Run/Debug drop-down menus
Enhanced in XE! File manipulation and creation through the Project Manager facilities
Introduced in XE! Multi-select files in the Project Manager
Enhanced in XE3! IDE Insight always accessible via integrated top level search bar
Introduced in XE! Checkbox for Boolean types in the Object Inspector greatly enhancing readability
Enhanced in XE3! Web-oriented color property editor to use standard browser colors or custom ones with support for RGBA for specifying transparency
Introduced in XE! Improved search features in the editor and with Find tab integration
Introduced in XE! Added capabilities and configuration to the File   Reopen menu
Enhanced in XE! Use Unit interaction capabilities increased
Introduced in XE! Multi-instance loading so you can have several IDEs open at the same time
Introduced in XE! Super fast loading, so you can use it as code editor
Enhanced in XE! Significant all-around IDE performance improvements
Introduced in XE! History Manager with automatic multi-level file backups, file differencing and restore
Enhanced in XE! IDE Welcome Page – with fast access to recent projects, Embarcadero Developer Network RSS news feeds, documentation, helpful links, updates, Weblogs, and more
Enhanced in XE! Ability to individually customize editor options for particular file types
Enhanced in XE! Symbol Insight – click to navigate to declarations
Enhanced in XE! Tool Palette for easy access RPCL (RadPHP Component Library) components
Enhanced in XE! Tool Palette incremental filtering automatically narrows down component list to find what you need as you type
Introduced in XE! Context-aware Tool Palette, it shows only the appropriate items depending on what you are editing
Enhanced in XE! Structure Pane to see and navigate the hierarchy of source code, HTML or components displayed in the editor or designer
Enhanced in XE! Object Inspector for visual customization of PHP and AJAX components without writing code; now features subproperties and faster performance
Introduced in XE! New File Dialog to allow you select the extension of the file to create
Add Folder to Project menu option allows you to add several source files to your project in a single action
Set your default browser and multiple browsers to appear as options under the Run menu

Deployment Wizard helps you isolate the files necessary for your application to run and copies those files to a folder on your computer to make it easy to

Enhanced in XE! Find in Files to specify the text you want to locate and to set options that affect the search such as directories, file, case and file

Introduced in XE! Documentation Wizard, uses phydoc to generate the documentation for your product

Enhanced in XE! Event log displays error messages from the PHP rendering engine and syntax checker

Internationalization Wizard using gettext() simplifies localization of applications

Enhanced in XE! Integrated web server for easy running applications directly from the IDE

#### **Feature**

#### MOBILE DEVELOPMENT

Enhanced in XE3! Easily build web optimized mobile applications and App Store ready apps for iOS, Android, BlackBerry, Windows Phone, Symbian and WebOS

Large library of built-in drag and drop components for mobile application development

Introduced in XE2! jQuery mobile components: MButton, MPanel, CheckBoxGroup, MRadioGroup, MobileTheme, MEdit, MTextArea, MSlider, MLink, MCollapsible,MToolBar, MToggle, MRadioButton, MCheckBox, MComboBox, MCollapsibleSet, MList, MAccelerometer, MCamera, MCompass, MGeolocation, MNetwork, MContacts, PageEvents, MPageExtraEvents, MDB, MDBTransaction, MFileReader, MFileWriter,MFileEntry, MDirectoryEntry, MDirectoryReader, MFileSystem, MFileTransfer, MCapture, MNotification, MConnection,MDevice

New in XE3! Additional jQuery Mobile components for use in your mobile applications, including MCanvas, MImage, MLabel, MMap, MMedia, MShape

New in XE3! Build your mobile applications in the cloud using the integrated PhoneGap Build service

Introduced in XE2! Visual mobile design surface to see how the interface will look on the device

# HTML5 Builder COMPONENT LIBRARY (RPCL)

New in XE3! Improve your pages' tab navigation with the new ActiveControl property that defines which control gets the focus when the page is loaded

New in XE3! CSS3, the third version of the standard stylesheet language, is supported in HTML5 Builder, so you can now get access to advanced style properties on every control

New in XE3! Get rounded corners with BorderRadius. This new property groups all border-related properties

New in XE3! BoxShadow and TextShadow provide you with shadowing effects for containers and content

New in XE3! Use gradients to generate the color combinations you need without relying on image files

New in XE3! Select an InputType for your Edit and MEdit components, for easy client-side validation

New in XE3! Use the Canvas component to easily draw 2D and 3D interactive images

New in XE3! Get and use location data in your web and mobile apps with the Geolocation component

New in XE3! Play audio and video content using the HTML5 Media component

New in XE3! Existing controls were updated to leverage HTML5: Bevel, ColorPicker, DateTimePicker, ProgressBar, Shape, TrackBar, SpinEdit

New in XE3! Additional properties have been added to existing controls for enhanced functionality

New in XE3! Use controls' draggable property to enable drag and drop implementations

New in XE3! CSS3 Animations through custom property editors

New in XE3! Quickly transform and animation components

New in XE3! Associate custom animations to your controls' events using their Animations property

New in XE3! Create a DataList component and link it to a text-input component so the data is provided as an input suggestion

New in XE3! SVG Image Support. The Image component supports now vector graphics in SVG, that you can animate and modify in real time using JavaScript

New in XE3! Enhanced Color support. Color-based properties now support RGBA values. The fourth color channel, alpha, lets you define a level of transparency for your colors

New in XE3! HiddenFields is now a property of web and mobile pages, providing an easier and cleaner new approach

New in XE3! RPCL components generate validated HTML5 code

Enhanced in XE3! Components have been updated to provide separation of HTML, CSS, and JavaScript

Enhanced in XE3! Data Access components including Database, Datasource, Table, Query and StoredProc with support for databases through PDO

Enhanced in XE! Advanced components including ImageList, TrackBar, ProgressBar, SpinEdit, DateTimePicker, ColorPicker

Enhanced in XE! System components including Timer, BasicAuthentication and StyleSheet

Enhanced in XE! Data Controls components including DBRepeater

Enhanced in XE2! Zend Framework components ZACL, ZAuth, ZAuthDB, ZAuthDigest, ZCache, ZMail, ZMailTransportSMTP, ZMailTransportSMTP, ZMailTransportSMTP, ZMailTransportSMTP, ZMailTransportSMTP, ZMailTransportSendmail, ZCaptcha, ZBarcode, ZCurrency, ZDate, ZFile, ZFeedReader, ZFeedWriter, ZPubSubHubBubPublisher, ZGDataAuth, ZGDataCalendar, ZGDataDocs, ZGDataYoutube, ZGDataYoutube, ZGDataHealth, ZGDataSpreadsheets, ZGDataPhotos, ZGDataBooks, ZGDataApps, ZOAuth, ZRegistry, ZJson, ZHttp, ZJsonServer, ZRestServer, ZRestClient, ZOpenIdConsumer, ZOpenIdConsumerStorageDB, ZOpenConsumerStorageFile, ZOpenIdProvider, ZOpenIdProviderStorageDB, ZOpenIdProviderStorageFile, ZOpenIdProviderUserSession, ZMarkup and Zloa

Introduced in XE! Facebook Social Plugins components to allow visual development of social-aspects of Facebook applications including LikeButton, LikeBox, ActivityFeed, and LiveStream

Introduced in XE! Support for communication components for native Delphi and C++Builder DataSnap applications including DSJavaScriptClient and DSRestConnection

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Extend the RPCL (RadPHP Component Library) at any time with third-party libraries, new additions from the RPCL open source project on SourceForge or your own components

#### **Feature**

Component Writer's Guide with information on building your own components

#### **CODE EDITOR**

Enhanced in XE3! Customizable source code editor for editing PHP, HTML, JavaScript, CSS, SQL and XML

User configurable Color Syntax Highlighting

New in XE3! Code Insight support for HTML, JavaScript and jQuery, in addition to PHP

Enhanced in XE! Help Insight – convenient tooltips provide help snippets as you develop

Enhanced in XE! ErrorInsight provides syntax checking as you type so you can easily fix syntax errors on the fly

Code Folding to collapse code blocks for easier viewing and navigation of your PHP code

Sync Edit to modify common identifiers in different locations in your code at the same time

Tracking band visually indicates which lines you have modified/added and which ones were modified on the last save operation

Macro recording and playback to record a specific set of actions in the code editor and repeat them later

Bookmarks allow you to set a mark on a specific location of your source code and return back later

Code Editor customization options include overwrite mode, group undo, scroll to past line, double click line, undo after save, persistent blocks and overwrite blocks, selecting keymappings and setting undo limit

Configurable Source Options include auto indent mode, use tab character, smart tab cursor through tab, optimal fill, backspace unindents, keep trailing blanks, show tab character, show space character, use syntax highlight, show line breaks, highlight current line, selectable syntax highlighting, block indent level and tab stops

Editor display options include visible right margin, visible gutter, show line numbers number all lines, setting right margin, gutter width, editor font, font size

Keymappings include default, BRIEF, IDE classic, Visual Basic emulation, Visual Studio emulation

Enhanced in XE! CodeInsight options turn on and off code completion, code parameters, error insight, code completion auto parenthesis, code template completion and code browser and enable speed adjustments

Enhanced in XE! Code Templates include 15 pre-built timesaving templates that can easily be inserted into your code

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Conversions menu item enables you to select a block of text and convert to all upper-case or all lower-case

Dialogs to add published properties, public properties or publish public properties

Go to Line Number jumps to a line number in the code editor

Options Dialog, faster and with more options

Syntax Check performs a lint syntax check on the active file, showing results of the syntax checking operation in the messages window

#### **REFACTORING**

Introduced in XE! Includes the following refactorings: Extract Interface, Extract Superclass, Pull Members Up, Push Members Down, Rename, Declare Field, Extract Method, Change Parameters

#### INTEGRATED PHP DEBUGGING AND PROFILING

New in XE3! Debug your client web application JavaScript code with integrated web developer tools

Introduced in XE! XDebug integration, faster and more powerful, helps find and fix errors

Enhanced in XE! Integrated PHP Profiler to measure runtime performance and help identify bottlenecks down to the line of code

Breakpoint List window to display, enable, or disable breakpoints currently set in the loaded project, and to change the condition, pass count, or group associated with a breakpoint

Enhanced in XE! Breakpoint view with toolbar, in-place editing and enable/disable checkbox

Enhanced in XE! Advanced breakpoints with Tooltips, actions, and groups for complete debugging control

Call Stack window shows a list with the functions called when debugging or when the execution in debug mode is finished

Global Variables window shows the current function's global variables while in debug mode

Enhanced in XE! Local Variables window shows the current function's local variables while in debug mode

Watches window displays the current value of the watch expression based on the scope of the execution point

Expandable watches for arrays and objects

Enhanced in XE! Evaluator tooltips - just place the mouse over an item, and get the evaluation in a hint

Introduced in XE! Evaluate/Modify, issue function calls or modify variable values on the fly

Enhanced in XE! Multi-tab watch view for logically grouping variables

Enhanced in XE! Event log view showing messages from the IDE

# DATABASE APPLICATION DEVELOPMENT

Enhanced in XE3! Powerful database connectivity via PDO. Includes support for InterBase, Firebird, DB2, Informix, MySQL, Oracle, Postgres, SQLite, and SQL Server

Enhanced in XE! Data Explorer to add a new connection, modify, delete, or rename your database connections

#### **Feature**

Support for Embarcadero's InterBase database

Drag and drop from the data explorer to build data-driven applications with no coding

RPCL (RadPHP Component Library) data access components

RPCL data controls components

# **DOCUMENTATION**

New in XE3! QuickStart Guide to allow you to quickly create your first application with HTML5 Builder

Enhanced in XE3! New sample projects for HTML5, mobile templates and more

Enhanced in XE3! Documentation expanded to include more tutorials and feature information

Enhanced in XE! Help Browser

Context sensitive online help for the development environment available via F1 in the IDE

Documentation wiki accessible via the online help for the latest doc updates

RPCL class library documentation and code examples

Sample programs with documentation

PHP Reference Guide

Install PHP Reference Guide in your choice of English, German, Japanese, French

# THIRD PARTY

New in XE3! TeeChart Lite for HTML5 Builder plots charts to all compatible browsers in native Javascript format using the HTML5 Canvas element. Charts can be added at design-time to Web Server, Web Client and Web Mobile pages, and programmed in both PHP and Javascript languages.

<sup>\*</sup> Features introduced prior to XE3 were part of Embarcadero's previous web development product, RadPHP