JBuilder® 2008 R2

embarcadero®

(J) Feature Matrix

ADVANCED JAVA EE SUPPORT	PROFESSIONAL	ENTERPRISE
LiveSource graphical view of EJB 2.1 projects	x	x
LiveSource graphical view of EJB 3.0 projects	x	x
LiveSource graphical view of JPA (Hibernate/TopLink) projects	x	x
Visual point-and-click two-way designer of Entity, Session, and Message Beans	x	x
Visually design CMP 2.x relationships and configure database mapping	x	x
Visually design EJB 3.0/JPA entity relationships and configure database mapping	x	x
Configure XDoclet task properties for application servers supported in JBuilder	x	x
Visually configure persistence properties for EJB 3.0/JPA	x	x
Full build/deploy/redeploy capabilities	x	x
Visually create EJB elements	x	x
Automatically arrange Enterprise JavaBeans on diagrams	x	x
Create multiple diagrams to logically group EJBs into an EJB group	x	x
Adjust filtering to hide or show generated classes	x	x
Import EJB 2.x descriptors, including vendor-specific descriptors, for all supported application servers	x	x
Convert EJB 2.x descriptor-based source to XDoclet or Java EE 5 annotations	x	x
Import multi-module Java EE projects from earlier versions of JBuilder and convert them to native Eclipse projects	x	x
Generate EJB 2.x Entity Beans from existing database schema	x	x
Generate EJB 3.x Entity Beans from existing database schema	x	x
Instant navigation between visual EJB components in designer and source	x	x
Visually create OCL constraints	x	x
Fully integrated with Eclipse 3.4.1 with WTP 3.0	x	x
Visual representation of Java type structure	x	x
Generation of EJB Test Client for EJB 2.x and EJB 3.0 Session Beans		x
DTO/Session Facade and Client Generation for EJB 2.x and EJB 3.0 Entity Beanss		x
APPLICATION SERVERS SUPPORTED		
Apache Geronimo 1.1.1†	x	x
Apache Geronimo 2.1.3	x	x
Apache Tomcat 6.0.18	x	x
BEA WebLogic Application Server 9.2 MP3	x	x
BEA WebLogic Application Server 10.1 MP1	x	x
Borland Enterprise Server 6.7	x	x
IBM WebSphere 6.1	x	x
IBM WebSphere 6.1 with EJB 3 Feature Pack	x	x
JBoss 4.0.5	x	x
JBoss 4.2.2	x	x
Oracle Application Server 10.1.3.3	x	x
Oracle Containers 4 Java 10.1.3.3†	x	x
Sun GlassFish V1 UR1†	x	x
Sun GlassFish V2 UR2	x	x

ENTERPRISE	PROFESSIONAL	ENTERPRISE
WEB SERVICES DESIGNER		
Visual two-way designer for creating Axis based Web Service-enabled applications	x	x
Visual representation of WSDL with methods and operations	x	x
Activate or deactivate services without removing components from the designer	x	x
Instant navigation between visual Web Services components in designer and source	x	x
Import Web services projects from earlier versions of JBuilder, and convert them to native Eclipse projects	x	x
Deploy an EJB 2.x as a Web Service	x	x
BUILD, DEBUG, AND RUN WEB SERVICES		
Create an Axis deployment environment	x	x
Dynamic generation and deployment of Web Services components during project		
builds	x	x
Deploy Axis runtime to Tomcat, JBoss, WebLogic, WebSphere, Geronimo, GlassFish, or Oracle	x	x
CODE PROFILING AND PERFORMANCE TUNING		
Seamless integration with JBuilder	x	x
Complete code profiling and performance management capabilities for identifying and solving code-level performance issues.	x	x
Improve performance and reliability of any Java code: Java applications, Java EE applications, servlets, applets, EJBs, JavaBeans, JSP applications, and Java Tag Libraries	x	x
Easily connects to a remote Java process to test a program running on a different machine or a program launched outside of JBuilder	x	x
MEMORY AND CPU PROFILING		
High-level performance-related data displayed in real time in order to determine whether a performance issue is related to CPU, memory, or both	x	x
Automatic Memory Leak Detector monitors the evolution of memory usage over time for the immediate identification of potential memory leaks	x	x
Real-time monitoring of object allocations to understand how the profiled program uses the virtual machine memory; Allocation Backtrace View enables identification of the code or part of the program responsible for object allocations	x	x
Object Size Display automatically computes and displays, in real time, the amount of memory being consumed by all instances of a class; then sort and view by object size to prioritize objects consuming the most memory	x	x
Reduced reference graph provides a transitive closure of the full reference graph to display only references that should be removed in order to free the object for garbage collection	x	x
CPU Profiler measures pure CPU usage or time usage during a profiling session, with option to use sampling-based or instrumentation-based profiler	x	x
Display profiling information per thread and thread groups, with color highlighting of threads that were busy during profiling session	x	x
HotSpot Display lists methods where most time was spent, to help identify bottlenecks due to single methods	x	x
Scalable call graph visually isolates critical code. Select a string allocation and highlight the flow of a method call to see where memory and time are being spent	x	x
Automatic Application Quality Analyzer supports performance-error prevention and coding standards by automatically detecting VM-level performance bugs	x	x
Export views in XML, HTML and CSV format	x	x
THREAD DEBUGGING		
Real-time display of the progress of all threads running within the virtual machine	x	x
Understand thread contentions for a monitor with the detailed panels of the Contention View	x	x
Wait state monitoring to understand why a thread is not making progress with the Waiting View and I/O Waiting View	x	x
Identify and correct excessive locking where a thread enters and holds monitors using the Monitor Enter View reports	x	x
Analyze deadlocks using graphical view of the relationships between threads and monitors to quickly understand deadlock situations	x	x
Predict deadlocks with Monitor Usage Analyzer which generates full list of warnings and errors that might lead to deadlocks and performance bottlenecks, such as lock order warnings, lock and wait warnings, and lock and I/O wait warnings	x	x

CODE COVERAGE	PROFESSIONAL	ENTERPRISE
Real-time Class Coverage View to quickly see the coverage for each class and identify classes not fully covered	x	x
Real-time display of all classes and interfaces used by the tested program and real-time percentage of lines covered per class	x	x
Method Coverage View displays the methods and lines of code for a selected class that have not been used, allowing developers to modify test plans to cover all areas of the code	x	x
Source Code Viewer shows lines of code that have never been executed, making it easier to spot dead code	x	x
Option to display the interfaces that have been loaded by the virtual machine and those that have not been loaded	x	x
Batch-mode support to easily include code coverage in any batch-mode testing process	x	x
REQUEST ANALYZER		
Profile the performance behavior of your Java EE application code across the following Java EE components: JDBC, JSP, JNDI, Enterprise JavaBeans, and JMS containers	x	x
Improve performance and reliability of Java EE-related application code earlier in development with drill-down performance information for Java EE components	x	x
Visual interface simplifies the complexity of Java EE application interactions using graphical representation	x	x
System Dashboard view provides a graphical display of the application time spent in Java EE components and total number of requests. Shows the percentage of use for each server module to quickly detect any major component-level performance issues	x	x
System Composite view displays all of the Java EE events that have occurred in an application, in real time, in their proper hierarchy. Hierarchy shows the relationship of events in terms of which events spawn others	x	x
AUDITS AND METRICS		
Metrics evaluate object model complexity and quantify your code	x	x
Metrics results can be viewed graphically in either bar charts or Kiviat charts format	x	x
Metrics can be used to create reports and compare the overall impact of changes in a project	x	x
Over 80 industry standard Metrics included	x	x
Audits provide information on design issues, naming conventions, and other items which can impact code quality	x	x
Audit results can be displayed with descriptions of what each audit looks for and how to fix violations	x	x
Over 200 industry standard Audits included	x	x
Includes a group of audits known as "Bad Smell Audits" that detect some issues or convention violations in source code (misplaced classes, attributes and methods, wrong inheritance usage), which require some code refactoring	x	x
Create specific QA Sets for source code audits and metrics, and save them to a local file system, or as part of a project which can then be shared with the team	x	x
Both Metrics and Audits can be executed from the command-line, so integration into current build tools is simplified	x	x
UML™ MODELING AND CODE ARCHEOLOGY		
Generate HTML documentation	x	x
Documentation template designer	x	x
Generate documentation using template	x	x
Generate image files from UML diagrams	x	x
Automatic generation of sequence diagrams	x	x
XMI import and export	x	x
Use Case diagramss		x
Activity diagramss		x
Sequence diagrams	x	x
Class diagrams	x	x
Component diagramss		x
Deployment diagramss		x
State Machine diagramss		x
Composite Structure diagramss		x
Communication diagramss		x
Requirements management using ReqPro	x	x
Enable Java modeling for any Java project	x	x

COLLABORATION AND TEAM DEVELOPMENT

CREATE NEW TEAM PROJECT ENVIRONMENT DEFINITION

Wizard to create a new deployment models		x
Options for deep and shallow scanning for pre-existing servicess		x
Create new installation or assimilate existing installation for:		
Source code managements		x
Defect trackings		x
Requirements management and project plannings		x
Continuous integration buildss		x
Create new projects on a new or existing server deployment, across all servicess		x
Create new users, add users to new or existing projectss		x
Mylyn (OSS)	x	x
XPlanner Mylyn Connector	x	x
StarTeam Mylyn Connectors		x

INSTALL NEW TEAMINSIGHT STACK

	PROFESSIONAL	ENTERPRISE
Deep or shallow scan of target server for potential conflictss		x
Full deployment and automated configuration of all servicess		x
Automated test of deployment to verify the system is operationals		x

SUPPORTED TOOLS FOR TEAMINSIGHT

Bugzillas		x
Apache Continuums		x
CVSs	x	
Borland® StarTeam®s		x
Subversion®s		x
XPlanners		x

PROJECT PORTAL

Monitor activity in source code repository for project, track recent check-inss		x
Monitor quality metrics including tables of bugs by severity, by product area, by owner, newest bugs, and bug find/fix ratess		x
Monitor team velocity via live burn-down chartss		x
Monitor team progress against committed features, feature-by-features		x
Monitor continuous integration builds, track failed builds to identify root-causes		x

IDE INTEGRATION

Automatic configuration of IDE to pull project from CVSs		x
Automatic configuration of IDE to pull project from Subversions		x
Single-pane view of individual's project responsibilities: Assigned Tasks, Requirements Owned, Requirements Tracked, Assigned Bugs, Reported Bugs, and Code To-Doss		x
Project portal and all services available via integrated, tabbed browser in IDEs		x
Integrated creation and editing of bug reportss		x
Integrated creation and editing of requirements and taskss		x
Full off-line mode for persistent access to requirements, tasks, defects with automated synchronizations		x
Serverless LAN peer discovery and chat	x	x
Peer code reviewss		x
Open API to enable integration with other popular version control systems such as Perforce, ClearCase, and ClearQuest	x	x
Import/Export Workspace settings	x	x

APPLICATION FACTORIES

Visually organize codes		x
Associate changes to actionss		x
Data mine actions from the pasts		x
Associate all project artifacts in the context of the desired user story or tasks		x
Application Module Designers		x

Application Factory Explorers		x
Recipe Editors		x
Data-aware Web application modules for Struts 2, Spring MVC, JSFs		x
E-commerce application module based on OFBizs		x
Template application modules for PetStore and JSF-BookStores		x
Content Management System (CMS) modules based on AtLeaps		x
Code generation/templating mechanisms that provide a way to generate template code via Application Module Scriptss		x

SWING DESIGNER (provided as is, not supported)	PROFESSIONAL	ENTERPRISE
CODE GENERATION OPTIONS		
Bi-Directional Code Generation	x	x
Read & write almost any style	x	x
Block mode (default)	x	x
Flat mode	x	x
Prefix component creation	x	x
Share variables	x	x
Control variable declaration	x	x
Create event handler stubs	x	x
Define default variable names	x	x
Make selected widgets fields by default	x	x
Make all widgets fields by default	x	x
Event handlers as anonymous classes	x	x
Event handlers as inner classes	x	x
Implement listener interface in parent class	x	x
SPECIAL FEATURES		
Reverse engineer hand-written code	x	x
Supports user code refactoring	x	x
Free-form code editing	x	x
Visual Inheritance	x	x
Custom widget support	x	x
Palette Manager	x	x
Embedded Composite support	x	x
Custom Widget Templates	x	x
Widget Morphing	x	x
Layout Assistant	x	x
Graphical Tab Order Editing	x	x
Multi-Widget Select & Edit	x	x
Marquee Select	x	x
Align multiple widgets	x	x
Replicate width and height	x	x
Gradient Editor for CLabels	x	x
Unlimited Undo/Redo	x	x
Cut/Copy/Paste	x	x
Sticky Mode for multi-widget add	x	x
Show externalized strings	x	x
Display labels in multiple locales	x	x
Internationalization tools & wizards	x	x
Auto-update resource bundles	x	x
Control editor layout	x	x

SWING WIZARDS		
Swing JFrame	x	x
Swing JDialog	x	x
Swing JPanel	x	x
Swing JApplet	x	x
Swing JInternalFrame	x	x
Swing Application	x	x

SWING CONTAINERS	PROFESSIONAL	ENTERPRISE
JPanel	x	x
JScrollPane	x	x
JSplitPane	x	x
JTabbedPane	x	x
JToolBar	x	x
JDesktopPane	x	x
JInternalFrame	x	x
JLayeredPane	x	x

SWING LAYOUTS		
Graphical Layout Feedback	x	x
Null/Absolute	x	x
FlowLayout	x	x
BorderLayout	x	x
GridLayout	x	x
CardLayout	x	x
GridBagLayout	x	x
BoxLayout / Struts & Glue	x	x
SpringLayout	x	x
JGoodies FormLayout	x	x
Java 6 GroupLayout	x	x

SWING CONTROLS		
Support for custom / 3rd party widgets	x	x
JButton	x	x
JCheckBox	x	x
JRadioButton	x	x
JToggleButton	x	x
JLabel	x	x
JTextField	x	x
JPasswordField	x	x
JTextArea	x	x
JFormattedTextField	x	x
JSlider	x	x
JScrollBar	x	x
JList	x	
JComboBox	x	x
JSpinner	x	x
JTree	x	
JTable	x	x
JTable on JScrollPane	x	x
Table model column	x	x
JToolBar.Separator	x	x

	PROFESSIONAL	ENTERPRISE
JSeparator	x	x
JProgessBar	x	x
JOptionPane	x	x
JTestPane	x	x
JEditorPane	x	x
Action	x	x
ButtonGroup	x	x
SWING MENUS	**PROFESSIONAL**	**ENTERPRISE**
Graphical Menu Editing	x	x
JMenuBar	x	x
JMenu (Cascade Menu)	x	x
JPopupMenu	x	x
JMenuItem	x	x
JCheckBoxMenuItem	x	x
JRadioButtonMenuItem	x	x
Menu Separator	x	x
AWT WIDGETS		
Panelx	x	
ScrollPane	x	x
Button	x	x
Labelx	x	
Checkbox	x	x
Choice	x	x
List x	x	
Scrollbar	x	x
TextField	x	x
TextArea	x	x
SWING LOOK & FEELS		
Windows	x	x
CDE/Motif	x	x
Metal	x	x
JGoodies Plastic	x	x
JGoodies Plastic 3D	x	x
JGoodies Plastic XP	x	x
JGoodies Windows	x	x
Liquid	x	x
Kunststoff	x	x
ADDITIONAL PRODUCTIVITY FEATURES		
RMI builder	x	x
JNDI builder	x	x
Import JBuilder 2006 projects	x	x
Design Patterns support, including GoF patterns with code template design and re-use	x	x
Feature Navigator	x	x
Tagging of Java objects in projects	x	x
Export JAR with dependency checking	x	x

CERTIFIED ECLIPSE BUNDLE	PROFESSIONAL	ENTERPRISE
Integrated Installation	x	x
Sample Applications	x	x
Eclipse 3.4.1 (Ganymede) Framework with WTP 3.0, including:	x	x
Business Intelligence and Reporting Tools (BIRT)	x	x
CVS plug-in	x	x
Dali Java Persistence Tools	x	x
Data Tools Platform (DTP)	x	x
Eclipse Modeling Framework (EMF)	x	x
Graphical Editing Framework (GEF)	x	x
J2EE Standard Tools (JST)	x	x
Java Development Tools (JDT)	x	x
Mylyn (formerly Mylyr)	x	x
Plug-in Development Environment (PDE)	x	x
Rich Client Platform (RCP)	x	x
Test and Performance Tools Platform (TPTP)	x	x
Web Standard Tools (WST)	x	x
Additional Eclipse and Third-Party Plug-Ins (partial list):		
Apache	x	x
Apache Ant	x	x
Apache Maven 2.0 Integration	x	x
Apache Xerces	x	x
Eclipse Communication Framework (ECF)	x	x
Eclipse Graphical Modeling Framework (GMF)	x	x
Eclipse JavaServer Faces Tools (JSF)	x	x
Eclipse Modeling Framework Technology (EMFT)	x	x
Eclipse UML 2	x	x
Eclipse XSD (part of Eclipse MDT)	x	x
Hibernate	x	x
JUnit	x	x
MySQL	x	x
Spring IDE	x	x