



Model-Code-Deploy platform

Product Overview

Visual Paradigm for UML (VP-UML) is a powerful, cross-platform and yet the most easy-to-use visual UML modeling and CASE tool. VP-UML provides software developers the cutting edge development platform to build quality applications faster, better and cheaper! It facilitates excellent interoperability with other CASE tools and most of the leading IDEs which excels your entire Model-Code-Deploy development process in this one-stop-shopping solution.

Features

UML Support

1. Class diagram **ENHANCED**
2. Use case diagram
3. Sequence diagram
4. Communication diagram
5. State machine diagram
6. Activity diagram
7. Component diagram
8. Deployment diagram
9. Package diagram
10. Object diagram
11. Composite structure diagram
12. Timing diagram
13. Interaction overview diagram
14. Use case detail editor
15. Use case flow-of-events listing
16. Generate sequence diagrams from flow of events lists
17. Select attribute's getter or setter as call message's action
18. Business model use case support

Requirements Management

1. Requirement diagram
2. Textual analysis

3. CRC Cards
4. User interface designer
5. Identify candidate activity and action by textual analysis
6. Define and customize requirement types
7. Display full set of requirements in tabular view
8. Support generating ID for Requirements

Business Process Modeling

1. Business process diagram
2. Data flow diagram
3. Event-driven process chain diagram
4. Process map diagram
5. Export business process diagrams to BPEL
6. Identify candidate business process elements using textual analysis
7. Automatically stretch pools and lanes to fit diagram
8. Smart routing for connecting objects
9. Extend business process model with stereotype and tagged value
10. Set state for data object
11. Organization chart
12. Relocate a branch of unit through drag and drop
13. Nested lanes support

Animacian

1. Animate business process using Animacian **ENHANCED**
2. Animate sequence diagram using Animacian **ENHANCED**
3. Animate activity diagram using Animacian **ENHANCED**
4. Travel along execution path with slider
5. Step forward and backward in an animation
6. Auto validate execution path
7. Auto calculate all possible execution paths
8. Eliminate paths using filter
9. Dim non-execution path
10. Support Full and Compact Mode
11. Protect diagram when animating
12. Export selected path to flash format **ENHANCED**
13. Animate and navigate animation in exported flash **ENHANCED**

Mind Mapping

1. Mind map diagram
2. Create link relationships between nodes
3. Smart layout for mind mapping nodes and diagram

Database Modeling

1. Entity relationship diagram **ENHANCED**
2. ORM diagrams
3. Reverse engineer existing databases to entity relationship diagrams (ERDs)
4. Generate and execute database schema (DDLs) **ENHANCED**
5. Conceptual, logical and physical ERD support
6. Reverse engineer stored procedures to ERDs
7. Foreign key auto-naming
8. Define PK naming pattern
9. Define FK relationship naming pattern
10. Model primary key in object model by using the <<PK>> stereotype
11. Download database drivers automatically
12. Display database architecture in object-relational mapping (ORM) pane
13. Customizable SQL generation
14. Generate class diagrams from ERDs **ENHANCED**
15. Generate ERDs from class diagrams **ENHANCED**
16. Select target diagram when first synchronized between class diagram and ERD
17. Jump between ORM class and entity
18. Generate and reverse engineer database support for Oracle schema
19. Generate or reverse engineer user-defined database types
20. Database trigger and stored procedure modeling
21. Reverse engineer DDL models to ERD models
22. Database trigger and stored procedure generation and reversal
23. Unique and Index support for entities
24. Convert a normal association to ORM association
25. Support AbstractPersistable class for generating non ORM super class attributes
26. Configurable generated SQL statements in upper or lower case **NEW**
27. Model and generate DB Sequence (Oracle and DB2 only) **NEW**

Object-Relational Mapping

1. Java ORM code generation
2. .NET ORM code generation
3. PHP ORM code generation
4. Lazy collection fetching
5. Database view support
6. Custom ID generator support
7. Map single classes to multiple tables
8. Custom query support
9. Automatic array table generation
10. Criteria class generation
11. DAO code generation
12. Factory code generation
13. POJO code generation
14. Optional library selection
15. Hibernate annotation support in ORM persistence
16. Generate Hibernate version tags for optimistic concurrency control
17. Formula support for ORM attribute
18. User defined exception support in error handling **NEW**
19. Define default type mapping between database column and class attribute **NEW**
20. Configurable naming pattern for synchronization between Class Diagram and ERD **NEW**

Visual Modeling

1. Reference other projects' model elements **NEW**
2. Freehand shape support **NEW**
3. Justify shape name **NEW**
4. Support enable or disable minimum shape size **NEW**
5. Layer support to show/hide set of shape with single click **NEW**
6. Support showing line jump in Arc, Square, Skip or normal **NEW**
7. Align Connector Caption Base on Connector Orientation **NEW**
8. Annotation with callout shapes
9. Annotation with freehand shapes
10. Organize model elements and diagrams using Model Explorer
11. Bookmark support
12. Handi-Selection tool
13. Customizable data types for use with multiple programming languages
14. Overview diagrams
15. Resource-centric interface
16. Model sharing

17. Cut, copy and paste
18. Copy diagrams as images for use in other applications
19. Undo and redo options
20. Mouse gestures
21. Reverse connector direction
22. Group creation support
23. Jump to feature for selecting a particular shape or model
24. Quick connect feature
25. Easy navigation to connected elements
26. Model commenting
27. Duplicate shapes and models
28. Selectable/non-selectable toggling for shapes
29. Diagram locking
30. Reference to any type of artifact
31. Advanced file and directory selector
32. Advanced tree support
33. Duplicate, move and reconnect connectors
34. Package headers for all types of diagrams
35. Tagged value display toggling for diagram elements
36. Sub-diagrams and reference indicators
37. Rectilinear, round rectilinear, oblique, round oblique and curve connector styles
38. Space reclamation or elimination using Sweeper feature
39. Space elimination using Magnet
40. Create shapes with user-defined initial sizes
41. Drag-and-drop creation of shapes using trees in diagrams
42. Auto-fit shape sizes
43. In-line editing
44. Spell checking
45. Visual alignment guides
46. Numerous grid options
47. Diagram information display in diagrams
48. Jump to diagram feature
49. Drag-and-drop copying, moving and reordering of classes and entity members
50. Open view from model element
51. Diagram renaming boxes
52. Add folders as favorites
53. Display Undo/Redo action names
54. Inverse shape selection
55. Create new attribute with Enter key

56. Automatic reroute connector when overlapped with other shapes
57. Hide shapes or type of shapes on a diagram
58. Visualize related model element
59. Enforcing master view between model element and shape
60. Auto extend activation
61. Model name completion for class
62. Pinnable connector end **NEW**

Visual Diff **NEW**

1. Compare and show difference between diagrams visually **NEW**
2. Support compare by name, id and transitor options **NEW**
3. Compare view, model element or both kinds of properties **NEW**
4. Filter result by displaying all, addition, modification or deletion of items **NEW**

Design Pattern Support

1. Assign nicknames to model elements
2. Full Gang of Four (GOF) design patterns support
3. Define pattern with a configurable number of subclasses
4. Define pattern with a configurable number of attributes and operations
5. Define pattern with implementation hierarchy
6. Define pattern with automatically named association end
7. Automatically rename elements in pattern
8. Design pattern support for sequence diagrams
9. Design pattern support for all UML diagram types
10. Design pattern support for entity relationship diagrams
11. Design pattern support for business process diagrams
12. Sharing Design Patterns through team collaboration support

Model Element Nicknaming

1. Assign nicknames to model elements

Model Transitor

1. Generate and link model elements
2. Trace the origin of model elements (model traceability)
3. Diagram Transitor
4. Navigate between operation and sequence diagram
5. Transit Entity relationship diagram from Conceptual to Logical to Physical

Style and Formatting

1. Manage and apply styles within project **NEW**
2. Customizable shape style and formatting
3. Image incorporation in diagrams
4. Stereotyped element appearance
5. Rich text documentation
6. Add rich text elements to diagrams
7. Shape format copier
8. Enrich model documentation with images
9. Save/load template for model documentation
10. Display stereotyped model element as image icon

Team Collaboration with VP Teamwork Server

1. Concurrent and collaborative modeling with VP Teamwork Server
2. Import projects to VP Teamwork Server
3. View projects from VP Teamwork Server
4. Commit project changes to VP Teamwork Server
5. Update local project copy using VP Teamwork Server
6. Review past revisions using VP Teamwork Server
7. Compare past revisions using VP Teamwork Server
8. Undo committed changes by reverting revisions **NEW**
9. Detect and resolve conflicts using VP Teamwork Server
10. Branch and tag projects using VP Teamwork Server
11. Merge branch changes using VP Teamwork Server
12. Export multiple revisions from VP Teamwork Server
13. Run VP Teamwork Server on common Java web servers
14. Element based revision history
15. Preview local and server changes before commit or update

Team Collaboration with CVS Repository

1. Concurrent and collaborative modeling with CVS Repository
2. Import projects to CVS Repository
3. View projects from CVS Repository
4. Commit project changes to CVS Repository
5. Update local project copy using CVS Repository
6. Review past revisions using CVS Repository
7. Compare past revisions using CVS Repository
8. Undo committed changes by reverting revisions **NEW**
9. Detect and resolve conflicts using CVS Repository
10. Branch and tag projects using CVS Repository
11. Merge branch changes using CVS Repository
12. Export multiple revisions from CVS Repository
13. Element based revision history
14. Preview local and server changes before commit or update

Team Collaboration with Subversion Repository

1. Concurrent and collaborative modeling with Subversion Repository
2. Import projects to Subversion Repository
3. View projects from Subversion Repository
4. Commit project changes to Subversion Repository
5. Update local project copy using Subversion Repository
6. Review past revisions using Subversion Repository
7. Compare past revisions using Subversion Repository
8. Undo committed changes by reverting revisions **NEW**
9. Detect and resolve conflicts using Subversion Repository
10. Branch and tag projects using Subversion Repository
11. Merge branch changes using Subversion Repository
12. Export multiple revisions from Subversion Repository
13. Element based revision history
14. Preview local and server changes before commit or update

Team Collaboration with Perforce

1. Concurrent and collaborative modeling with Perforce Repository
2. Import projects to Perforce Repository
3. View projects from Perforce Repository
4. Commit project changes to Perforce Repository
5. Update local project copy using Perforce Repository
6. Review past revisions using Perforce Repository
7. Compare past revisions using Perforce Repository
8. Undo committed changes by reverting revisions **NEW**
9. Detect and resolve conflicts using Perforce Repository
10. Branch and tag projects using Perforce Repository
11. Merge branch changes using Perforce Repository
12. Export multiple revisions from Perforce Repository
13. Element based revision history
14. Preview local and server changes before commit or update

Documentation Generation

1. PDF report generation
2. MS Word report generation
3. HTML report generation
4. Project publisher
5. Ad Hoc report creation
6. Intelligent element sorting during report generation

Printing

1. Print multiple diagrams
2. Preview printable pages
3. Print clip marks
4. Page margin, size and orientation alteration support
5. Fit-to-pages option
6. Fit-to-ratio option
7. Customizable page header and footer
8. Project name and diagram name display in header or footer
9. Print with frame or border support
10. Toggle gradient color printing
11. Quick print support

IDE Integrations

1. Activate full UML environment from your favorite IDE
2. Automatic code and model synchronization
3. Simple integration of any IDE
4. Import existing VP-UML project to IDE
5. Integration with Eclipse
6. Integration with NetBeans
7. Integration with IntelliJ IDEA
8. Integration with WebLogic Workshop
9. Integration with Borland JBuilder
10. Integration with Oracle JDeveloper
11. Multilingual support in IDE integration

Reverse Engineering

1. Reverse engineer source code or executables to class diagrams using Instant Reverse feature
2. Reverse engineer Java source code, classes and .jar files
3. Reverse engineer C++ source code **ENHANCED**
4. Reverse engineer .NET .dll and .exe files
5. Reverse engineer CORBA IDL source code
6. Reverse engineer Ada9x source code
7. Reverse engineer XML
8. Reverse engineer XML Schema
9. Reverse engineer databases with JDBC
10. Reverse engineer Hibernate mapping files
11. Reverse engineer PHP5.0 source code
12. Reverse engineer Python
13. On-demand Java reverse engineering
14. Template parameter support

Code Generation

1. Instantly generate source code from class diagrams
2. Generate Java source code
3. Generate C# source code
4. Generate VB.NET source code
5. Generate PHP5.0 source code
6. Generate Object Definition Language source code
7. Generate Flash ActionScript3.0 source code
8. Generate IDL source code
9. Generate C++ source code
10. Generate Delphi source code
11. Generate Perl source code
12. Generate XML Schema source code
13. Generate Python source code
14. Generate Objective-C source code
15. Generate Ada source code
16. Generate Ruby source code
17. Template parameter support
18. Template support for generating source code with generic constructs
19. Customizable source code generation

State Machine Diagram Code Generation

1. Generate Java source code from state diagram
2. Generate C++ source code from state diagram
3. Generate C# source code from state diagram
4. Generate VB.NET source code from state diagram

Java Round-Trip Engineering

1. Reverse engineer Java source code to class diagram
2. Update Java source code based on class diagram

Shape Editor

1. Design arbitrary shapes
2. Import SVG shapes
3. Incorporate different shapes into UML diagram
4. Organize shapes by gallery, category and stencil
5. Advanced shape design capabilities

Layout Facilities

1. Automatic diagram layouts
2. Shape alignment and centering
3. Uniform shape width and height maintenance
4. Automatic shape distribution

Interoperability

1. Import Telelogic Modeler project files
2. Import and export EMF based UML2 model
3. Command-line operations
4. Import and export XMI1.0,1.2 and2.1 **ENHANCED**
5. Import and export XML
6. Import and export VP project file format
7. Import and export use case model to MS Word
8. Import Rational Rose project files
9. Import ERwin data modeler project files
10. Generate BPEL code for Oracle workflow engine
11. Generate BPEL code for JBoss workflow engine
12. Export diagrams as JPG, PNG, SVG and EMF image files
13. Export diagrams as PDFs
14. Slice exported diagrams into smaller segments
15. Import Rational Software Architect files
16. Import Rational DNX
17. Import NetBeans 6.x UML diagrams **ENHANCED**
18. Copy diagram elements as XML
19. Import Visio drawings into Visual Paradigm
20. Import and export Microsoft Excel file for use case diagram
21. Import and export Microsoft Excel file for class diagram
22. Import and export Microsoft Excel file for sequence diagram
23. Import and export Microsoft Excel file for communication diagram
24. Import and export Microsoft Excel file for state machine diagram

25. Import and export Microsoft Excel file for activity diagram
26. Import and export Microsoft Excel file for component diagram
27. Import and export Microsoft Excel file for deployment diagram
28. Import and export Microsoft Excel file for package diagram
29. Import and export Microsoft Excel file for object diagram
30. Import and export Microsoft Excel file for composite structure diagram
31. Import and export Microsoft Excel file for interaction overview diagram
32. Import and export Microsoft Excel file for requirement diagram
33. Import and export Microsoft Excel file for basic diagram
34. Import and export Microsoft Excel file for crc card diagram
35. Import and export Microsoft Excel file for entity relationship diagram
36. Import and export Microsoft Excel file for orm diagram
37. Import and export Microsoft Excel file for business process diagram
38. Import and export Microsoft Excel file for data flow diagram
39. Import and export Microsoft Excel file for epc diagram
40. Import and export Microsoft Excel file for process map diagram
41. Import and export Microsoft Excel file for organization chart
42. Import and export Microsoft Excel file for mind mapping diagram

Intuitive User Interface

1. Group diagrams by category
2. Advanced property pane
3. Dockable user interface windows.
4. New project generation using predefined templates
5. Easy-to-use "New Diagram" dialog
6. Flexible zooming
7. Palette-style toolbar
8. Collapsible toolbar
9. Display tool names for toolbar buttons
10. Expand grouped toolbar buttons
11. Display various diagram categories in toolbar
12. Display stereotyped model types in toolbar
13. Numerous looks-and-feels
14. Import user preferences from existing workspaces
15. Multilingual support
16. Searchable options
17. Customizable program shortcuts

Automatic Updates

1. Automatic online updating
2. Maintain local update server with update synchronizer

Open Architecture

1. Plug-in support (Java)
2. VP model and XML interaction

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