

Smart Development Environment Professional Edition for Visual Studio® (SDE PE-VS) is a modeling platform designed to support system architects, developers, UML™ designers, and data modelers to accelerate the entire model-code-deploy process for complex enterprise applications through our best-of-breed and award-winning visual modeling technology that facilitates UML visualization (the latest UML 2.1 notation and all 13 diagrams supported) and data modeling (ERD).

Powerful and Easy-to-use GUI

Now developers can create diagrams much faster than any tool on the market through SDE-VS's most intuitive resource-centric and mouse location sensitive GUI. Tidy up your complex and messy diagrams is just a matter of one mouse click by using SDE-VS's automatic diagram layout technology and yet the unique gesture editing capability makes diagramming a fun task.

Mighty Code Generation Engines

The forward and reverse code engines automatic derive models from code or from code to models in just seconds is readily accessible for your choice of 10 programming languages including Java, C++, .NET, PHP and XML.

No More Database Programming!

Forward and Reverse engineering from Class diagram to Entity-Relation Diagram (ERD) and from ERD to database generation and vice-versa can be done visually and diagrammatically and it is fully compatible with Hibernate. Visualize and automate the entire object-relational mapping (ORM) process is now transparent to software developers.

Excellent Interoperability and Integration Support

SDE-VS is a well integrated environment with Visual Studio®, you have the option for round-trip engineering to keep model and code synchronized. Furthermore, SDE PE-VS facilitates import/export for XMI of version 1.0, 1.2 and 2.1. Rational Rose and ERwin data model project file import support are also available in the Enterprise Edition.

Team Development Support

Teamwork Server enables your software developer teams to work on the same projects in parallel. SDE-VS also helps developers to eliminate tedious document preparation with automatic report generator that supports for popular HTML, MS Word and PDF report generation and publishing.

Extendibility and Custom Design Support

Extends UML capabilities beyond the latest UML 2.1 is not a dream! Now, SDE-VS allows you to design new notation or incorporate custom shapes or symbols by using our embedded shape editor, image icon import, UML profile or Visio integration capability.

Key Features

- | | |
|---|-----------------------------------|
| 1. Full UML 2.1 notations | 2. Requirements management |
| 3. Object-relational mapping layer generation | 4. Code round-trip engineering |
| 5. Code generation and reverse engineering | 6. Team collaboration (client) |
| 7. PDF, MS Word, HTML report generation | 8. Import/export to XML and image |
| 9. Shape Editor — design your own shapes | |

Pricing

Prices are provided in US dollars

Single Seat License	Floating License	Software Maintenance
Unit price \$699.00	Unit price \$908.50	Extend 1 year maintenance
Unit price with 1 year maintenance \$838.50	Unit price with 1 year maintenance \$1090.00	Single Seat License \$139.50
1 year maintenance cost 20% of unit price.	The price of Floating License is calculated in 30% more of the single seat license.	Floating License \$181.50
	To know more about floating license, please visit Floating License page at here	All version upgrades of Visual Paradigm products are included as part of software maintenance. Customers are entitled to get all version upgrades within their software maintenance period.

Switch to Professional Edition

From Edition	Single Seat License		Floating License	
	with maintenance	without maintenance	with maintenance	without maintenance
Standard	\$480.00	\$629.50	\$623.50	\$818.00
Modeler	\$720.00	\$769.50	\$935.50	\$1000.00
Personal	\$768.00	\$797.50	\$1019.50	\$1049.00

Customers can upgrade the existing edition to get more features and functionalities from your Visual Paradigm products.

Detail 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. Identify candidate activity and action by textual analysis
5. Define and customize requirement types
6. Display full set of requirements in tabular view
7. Support generating ID for Requirements

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. .NET ORM code generation
2. Lazy collection fetching
3. Database view support
4. Custom ID generator support
5. Map single classes to multiple tables
6. Custom query support
7. Automatic array table generation
8. Criteria class generation
9. DAO code generation
10. Factory code generation
11. POJO code generation
12. Optional library selection
13. Hibernate annotation support in ORM persistence
14. Generate Hibernate version tags for optimistic concurrency control
15. Formula support for ORM attribute
16. Define default type mapping between database column and class attribute **NEW**
17. 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 using Sweeper
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. Design pattern support for class diagrams
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. 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. Embedded modeling environment in Visual Studio

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 Ada 9x 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 PHP 5.0 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 PHP 5.0 source code
6. Generate Object Definition Language source code
7. Generate Flash ActionScript 3.0 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

.NET Round-Trip Engineering

1. Reverse engineer C# source code to class diagram
2. Update C# source code based on the class diagram
3. Reverse engineer VB .NET source code to class diagram
4. Update VB .NET source code based on class diagram
5. Reverse engineer C++ source code to class diagram
6. Update C++ source code based on the 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 XMI 1.0, 1.2 and 2.1 **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. Export diagrams as JPG, PNG, SVG and EMF image files

11. Export diagrams as PDFs
12. Slice exported diagrams into smaller segments
13. Import Rational Software Architect files
14. Copy diagram elements as XML
15. Import Visio drawings into Visual Paradigm
16. Import and export Microsoft Excel file for use case diagram
17. Import and export Microsoft Excel file for class diagram
18. Import and export Microsoft Excel file for sequence diagram
19. Import and export Microsoft Excel file for communication diagram
20. Import and export Microsoft Excel file for state machine diagram
21. Import and export Microsoft Excel file for activity diagram
22. Import and export Microsoft Excel file for component diagram
23. Import and export Microsoft Excel file for deployment diagram
24. Import and export Microsoft Excel file for package diagram
25. Import and export Microsoft Excel file for object diagram
26. Import and export Microsoft Excel file for composite structure diagram
27. Import and export Microsoft Excel file for interaction overview diagram
28. Import and export Microsoft Excel file for requirement diagram
29. Import and export Microsoft Excel file for basic diagram
30. Import and export Microsoft Excel file for crc card diagram
31. Import and export Microsoft Excel file for entity relationship diagram
32. Import and export Microsoft Excel file for orm 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

Compare the features included in each edition at <http://www.visual-paradigm.com/product/sde/vs/sdevsditioncomparison.jsp?edition=Professional>

Related Products



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