astah* Basic Operation Guide
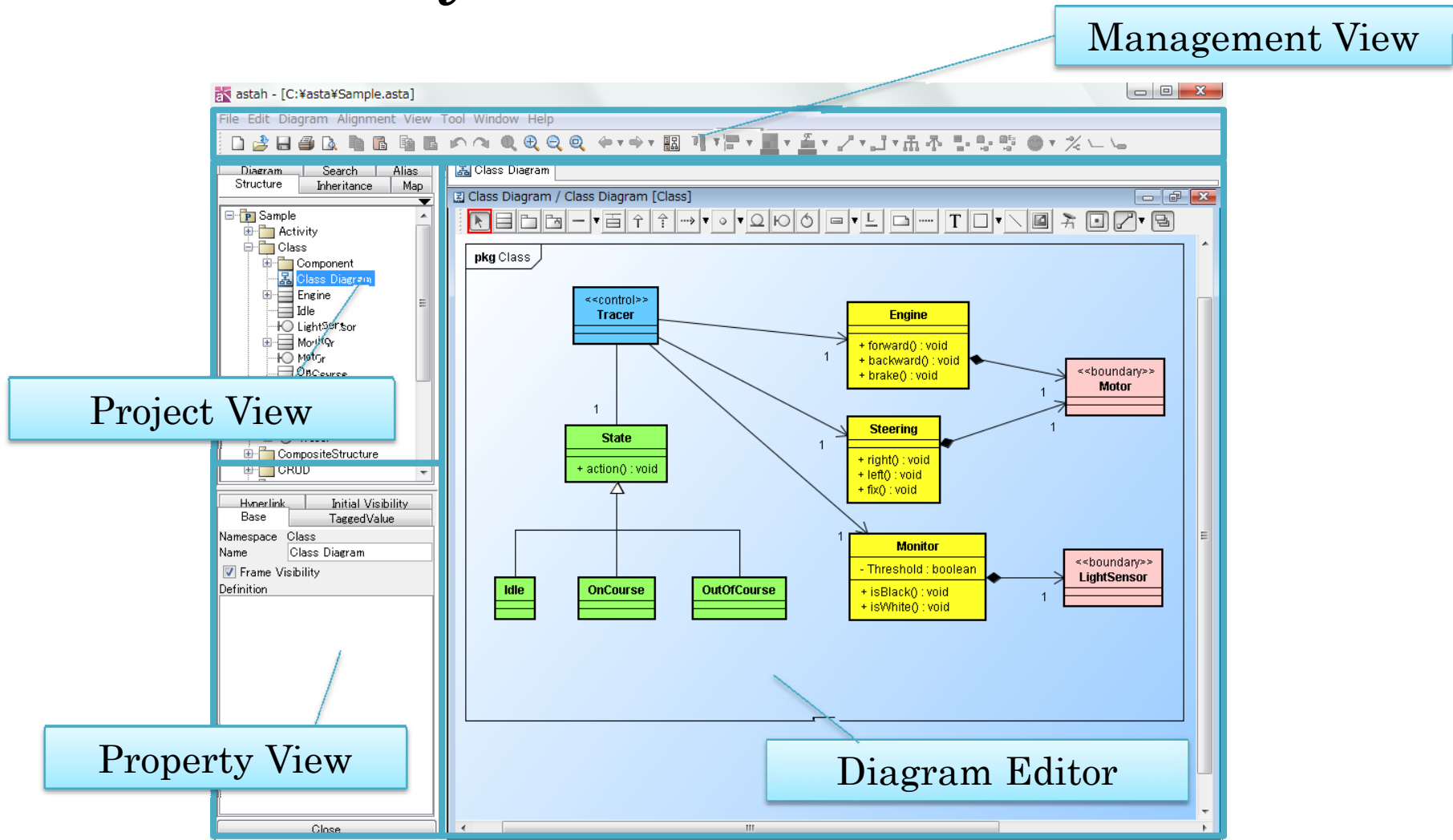
astah* professional
astah* UML
astah* community

October 19, 2009
Change Vision, Inc.

Preface

- astah* is a light-weight UML editor integrated with ERD, DFD, CRUD and Mind Mapping features for software developers.

- This guide introduces you the basic operations in astah*.

- Contents

Screen Layout (1)


Management View

Project View

Property View

Diagram Editor

Screen Layout (2)

- ## Management View
  - To operate astah* with the main menu and the tool bar.
- ## Project View
  - Structure Tree：To display the structure of models.
  - Inheritance Tree: To display the inheritance structure of classes.
  - Map View: To display an entire Diagram Editor.
  - Diagram View: To display a list of diagrams in the project.
- ## Property View
  - To edit properties of models.
- ## Diagram Editor
  - To edit diagrams

Model and View Elements (1)
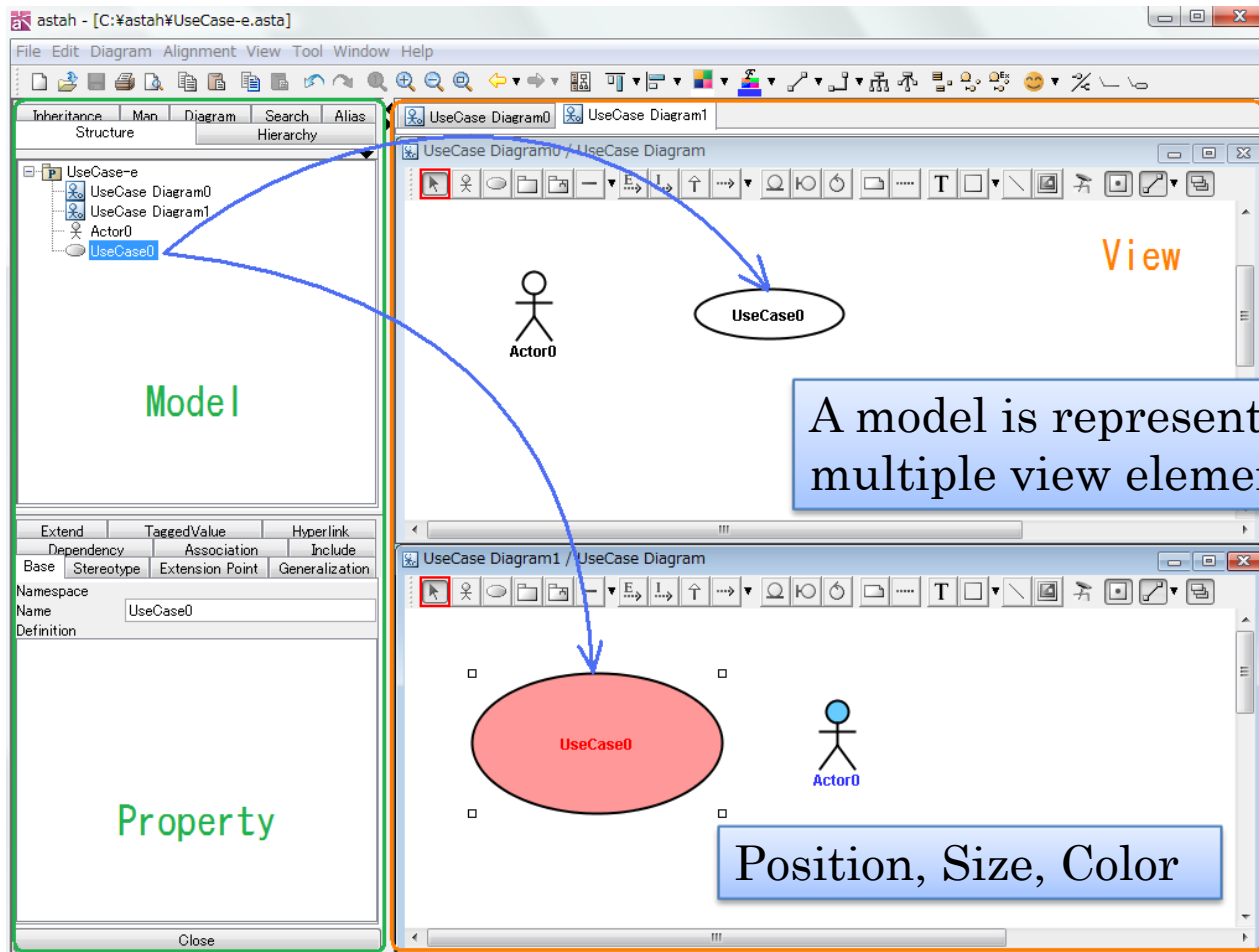
Model and View Elements (2)

- Concept of model and view elements
  - Elements of a project such as Class or UseCase are called "model"
  - Elements on diagrams are called "view elements"
  - A model can be represented in more than one diagram as view elements
  - Color and size can be set differently to each view element

Model and View Elements (3)

- "Delete from Diagram" and "Delete from Model"
  - "Delete from Diagram" removes selected view elements from the diagram as keeping the models in the project.
  - "Delete from Model" deletes selected models and the view elements from the project completely.
- Copy and Paste
  - In the Class Diagram and UseCase Diagram, view elements are created by copy and paste, but the models are shared with the original elements.
  - In other diagrams, view elements and models are created (cloned) by copy and paste.

How to create a diagram/model (1)

- Creating a new project
  - Go to [File] – [New] in the main menu, or select [Create New Project] button on the tool bar.
- Creating a new project with a template
  - Go to [File] – [New by Template], and select a template file.

How to create a diagram/model (2)

- Creating Diagrams
  - All diagrams can be created under Packages.
  - The type of the creating diagrams are specified depending on the parent model (e.g. Class, UseCase, Operation)
  1. Go to [Diagram] in the main menu
  2. Go to [Create Diagram] popup menu in the structure tree
- Switching Diagrams
  - Select a tab in the Diagram Editors
  - Select a diagram in the structure tree
  - Select a diagram in the Diagram View

Creating a Diagram

Create a diagram from [Diagram] in the main menu
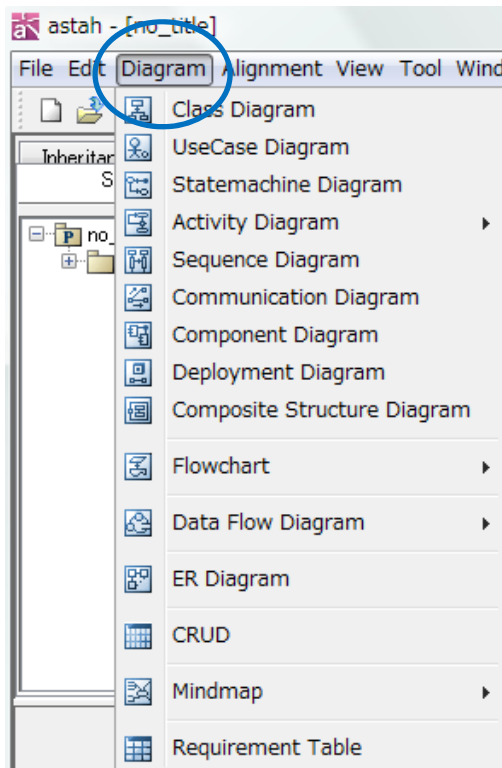
Create a diagram from [Create Diagram] in the structure tree
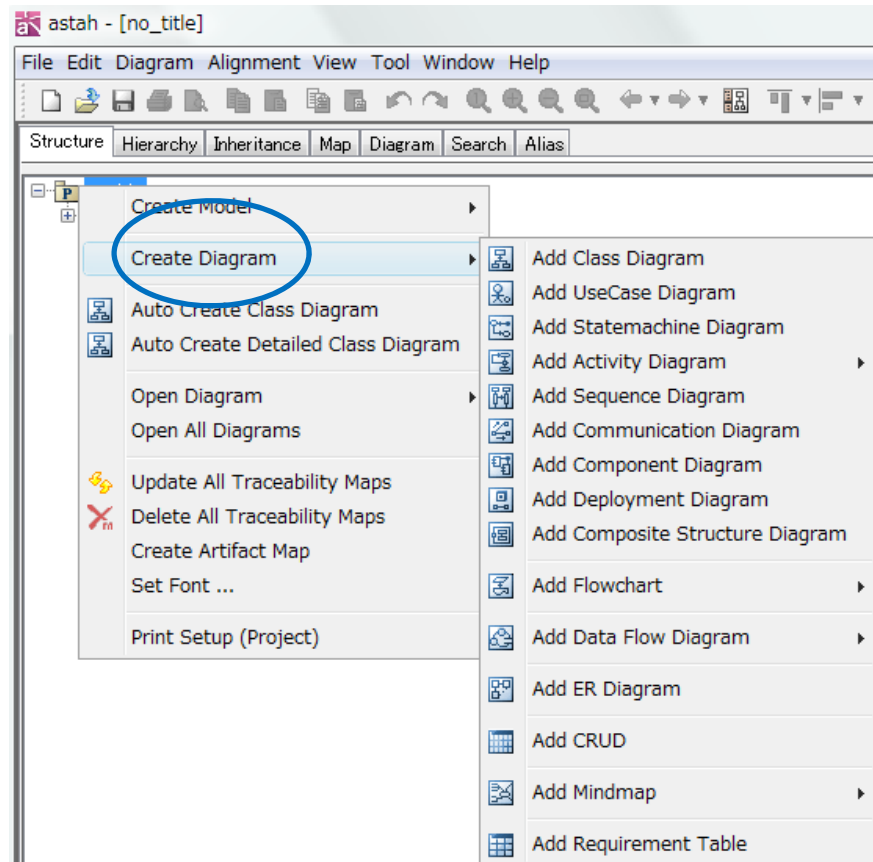
Diagrams

Diagram	astah* community	astah* UML	astah* professional
UML2.1 (Class Diagram, UseCase Diagram, Statemachine Diagram, Activity Diagram, Sequence Diagram, Communication Diagram, Component Diagram, Deployment Diagram, Composite Structure Diagram)	Yes	Yes	Yes
Flowchart	*	*	Yes
Data Flow Diagram (DFD)	*	*	Yes
ER Diagram	*	*	Yes
CRUD	*	*	Yes
Mind Map	*	Yes	Yes
Requirement Table	*	*	Yes

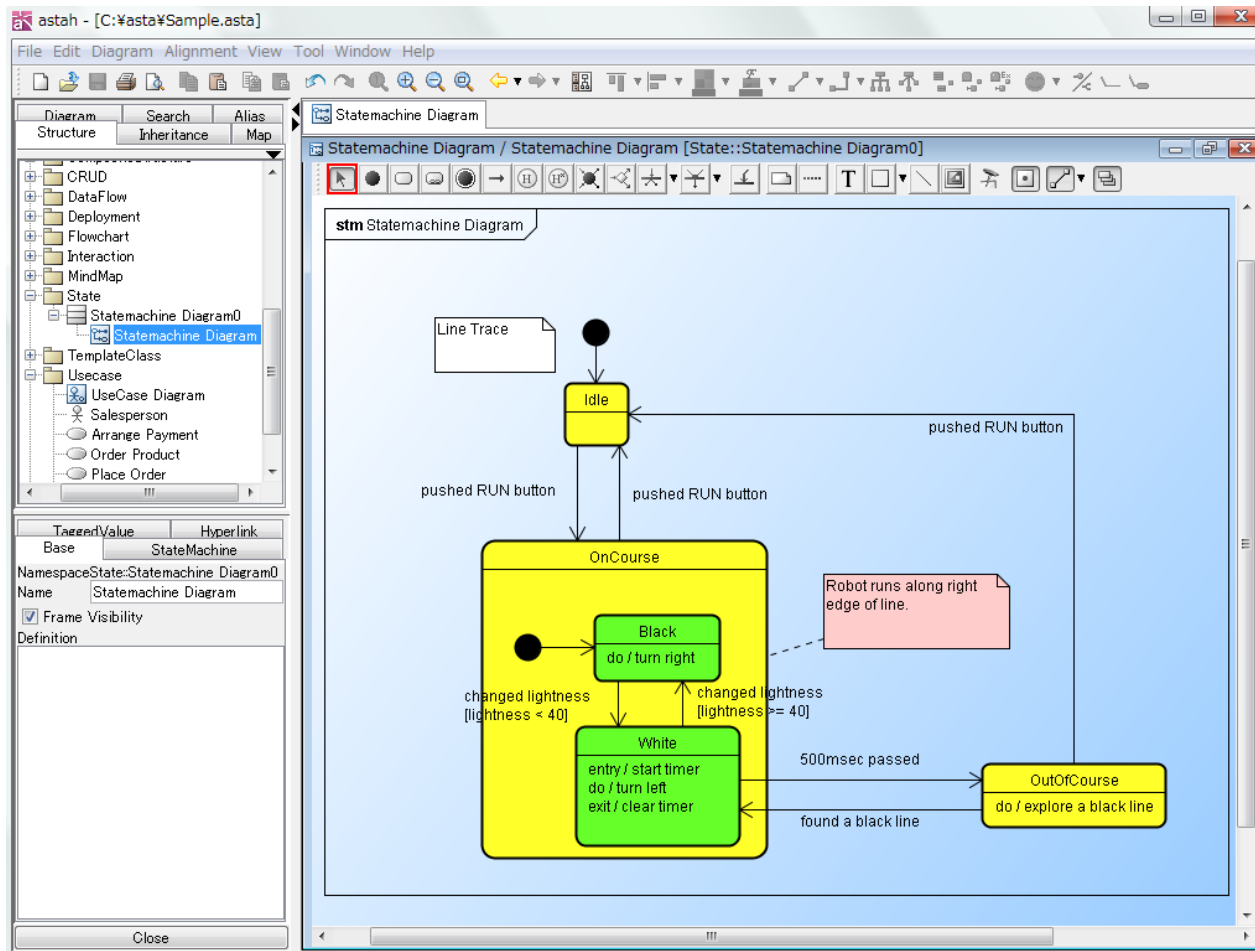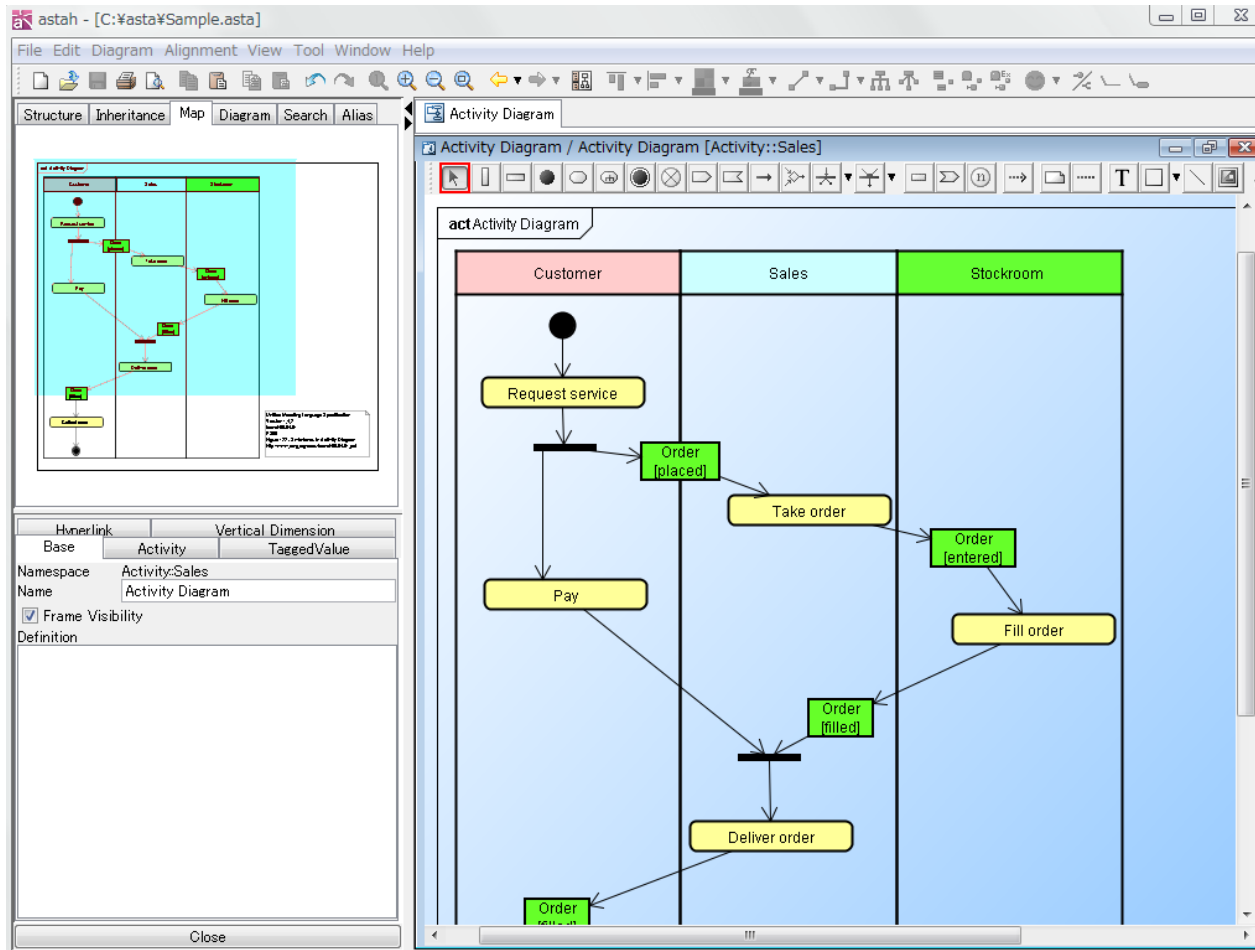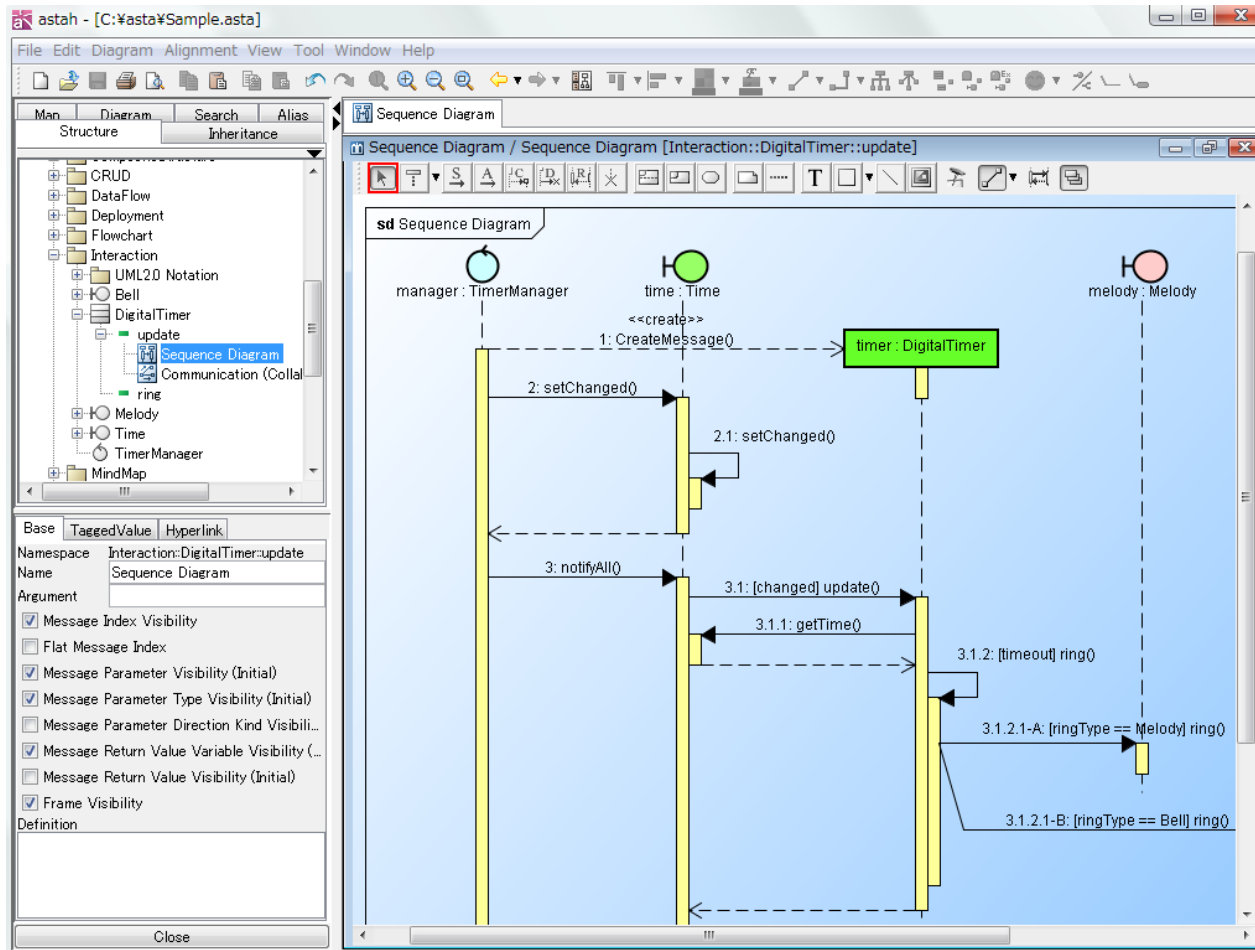Yes: Create, Reference   *: Reference Only

1. Class Diagram
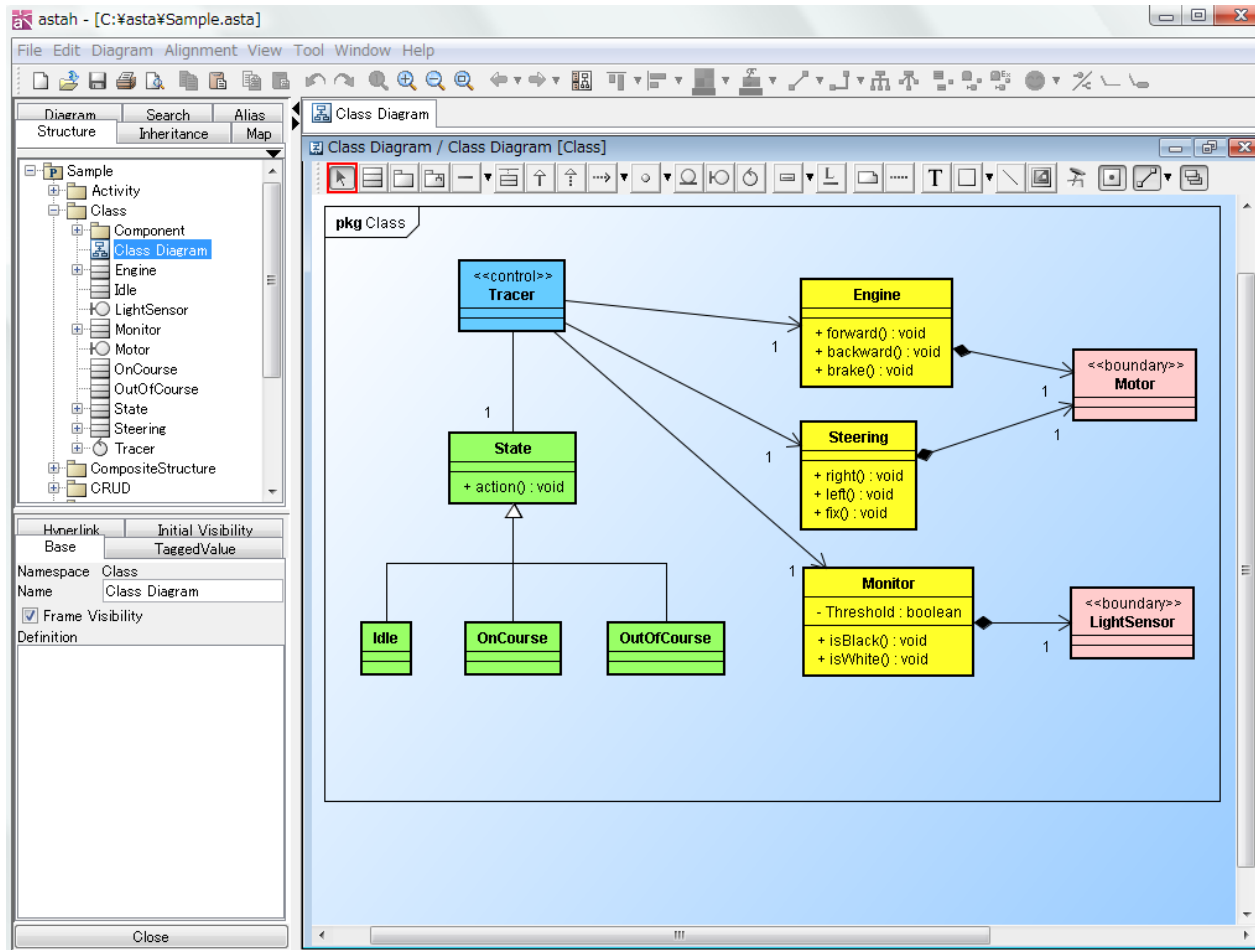
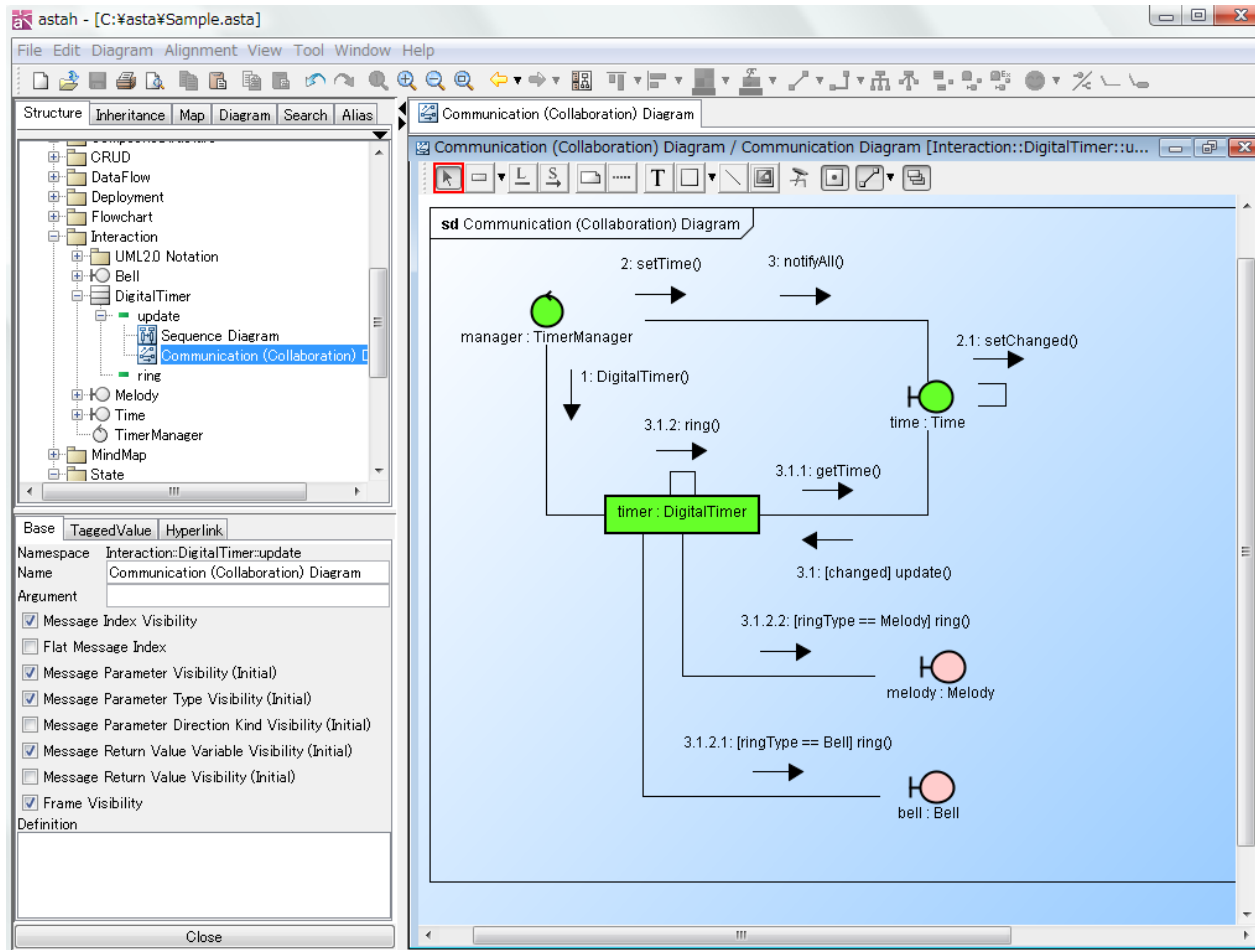# 2. UseCase Diagram
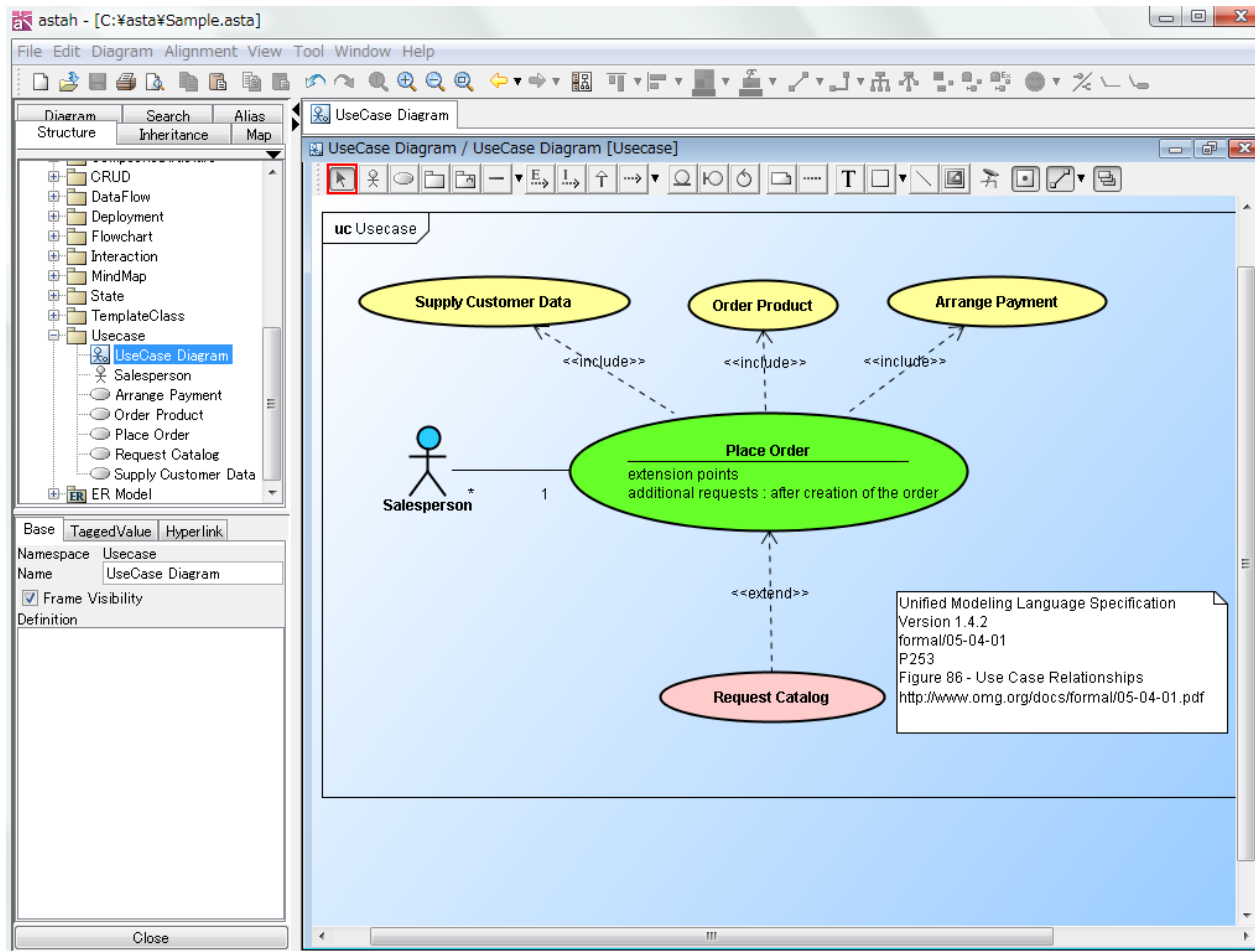
3. Statemachine Diagram
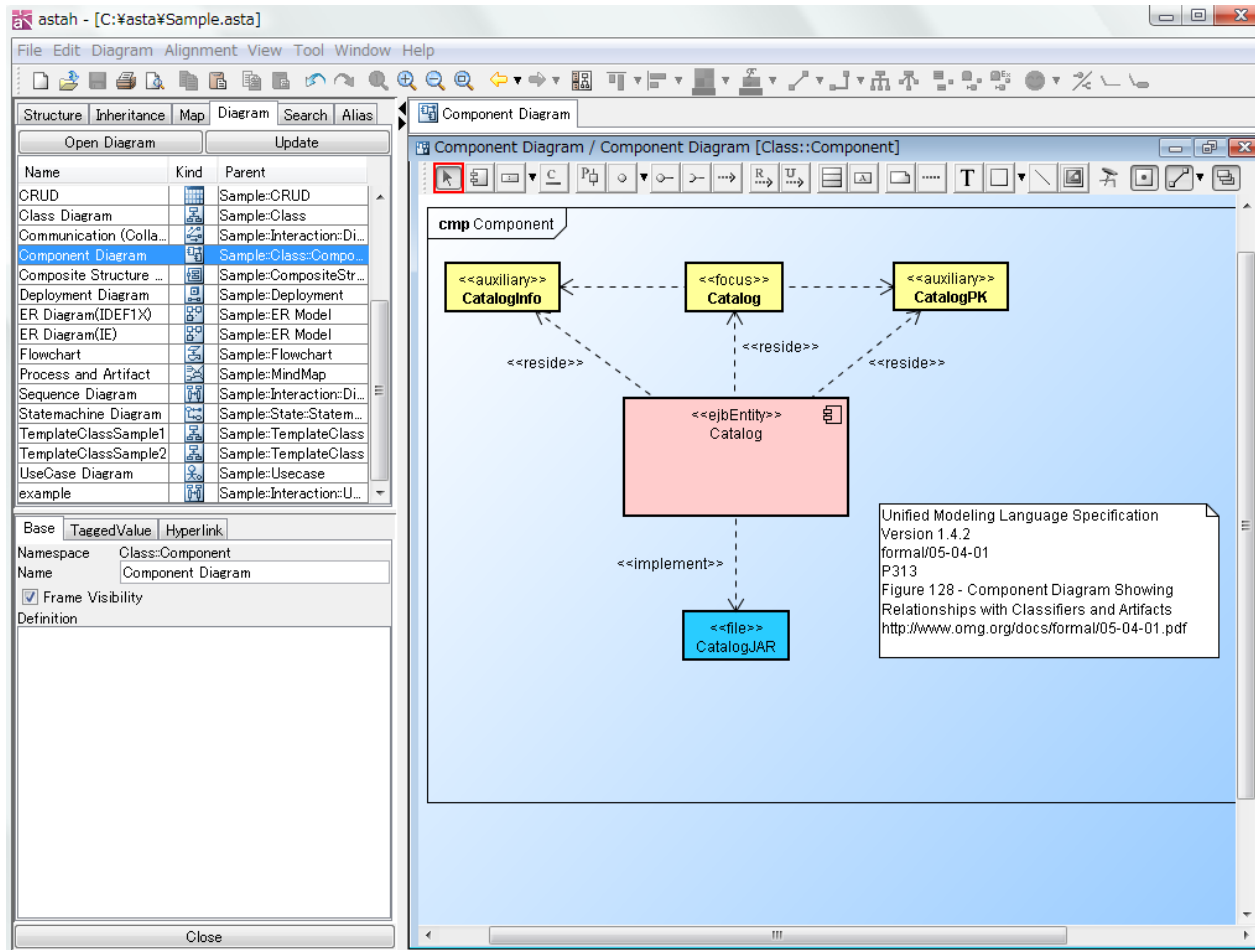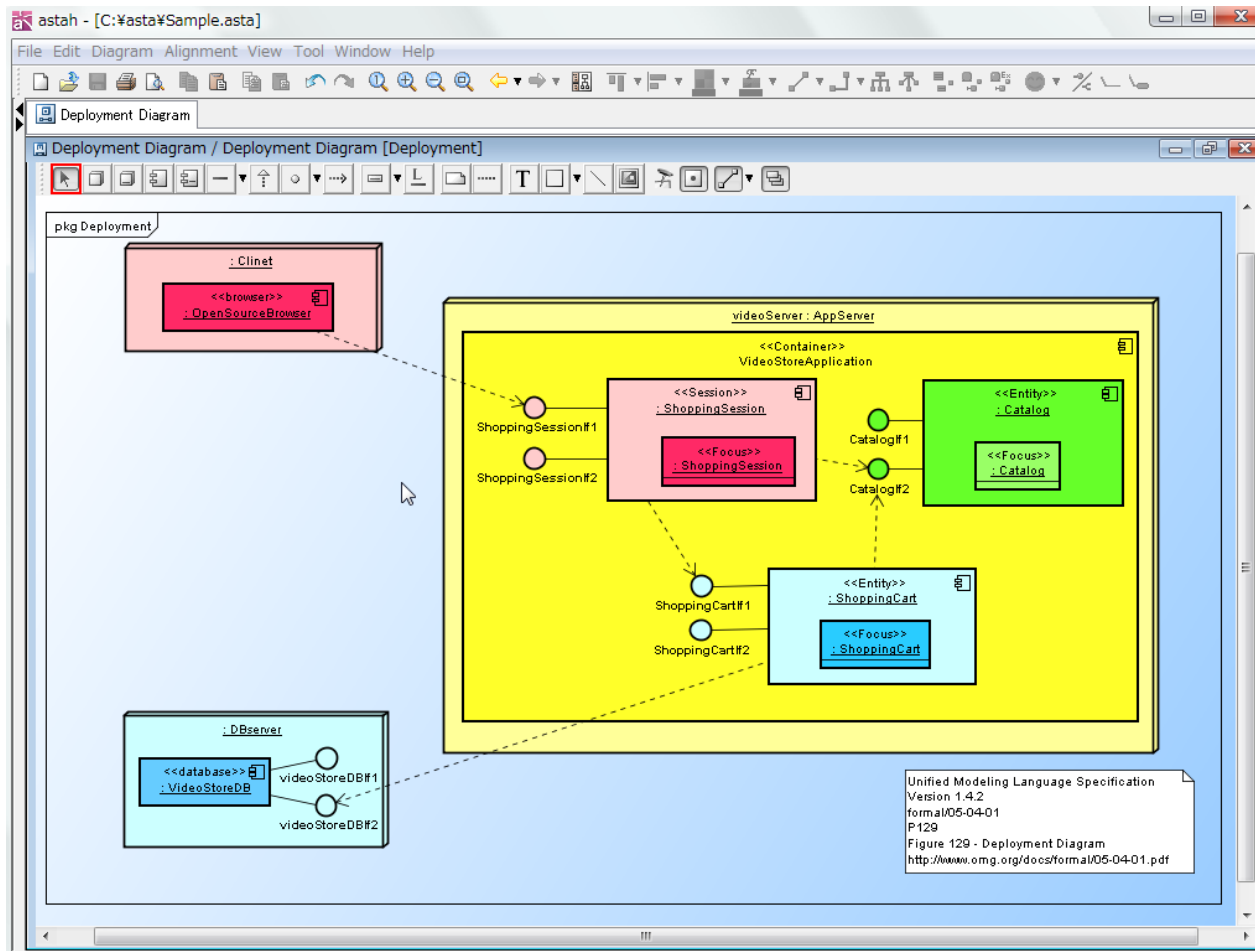
4. Activity Diagram

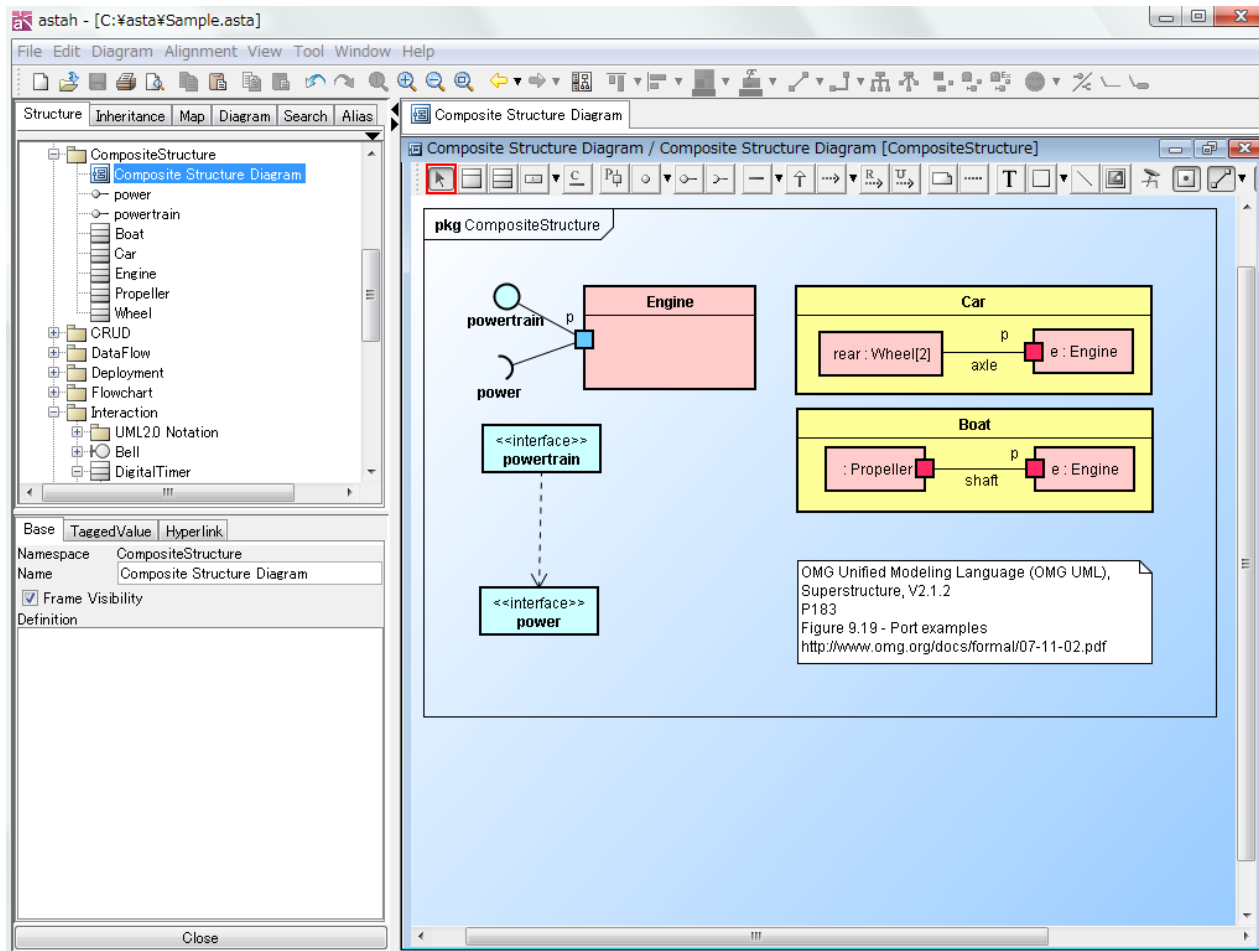# 5. Sequence Diagram

6. Communication Diagram

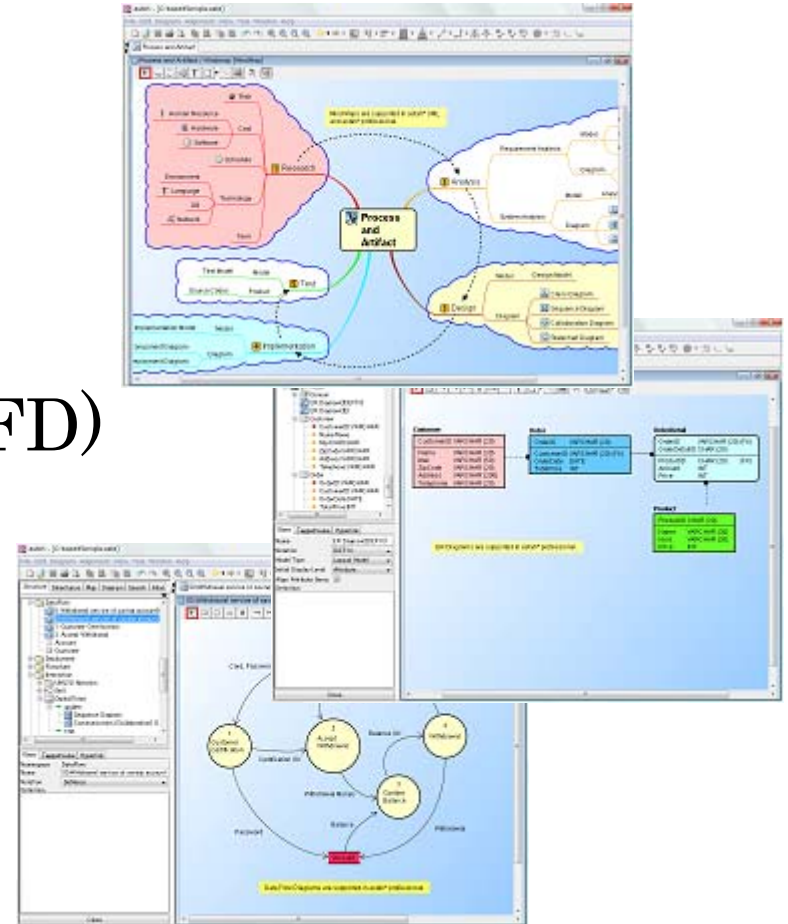# 7. Component Diagram

8. Deployment Diagram

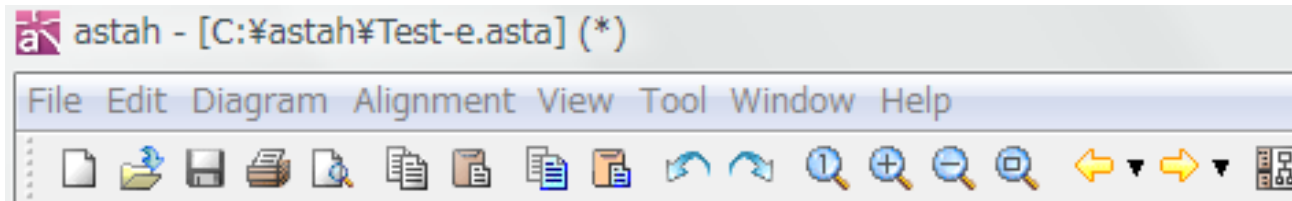# 9. Composite Structure Diagram

10. Other Diagrams

- astah* UML
  - Mind Map
- astah* professional
  - Flowchart
  - Data Flow Diagram(DFD)
  - ER Diagram
  - CRUD
  - Mind Map
  - Requirement Table

View Operation

astah - [C:¥astah¥Test-e.asta] (*)

File Edit Diagram Alignment View Tool Window Help

Zoom to Default (100%)

Fit in Window
Display the whole diagram

Zoom out
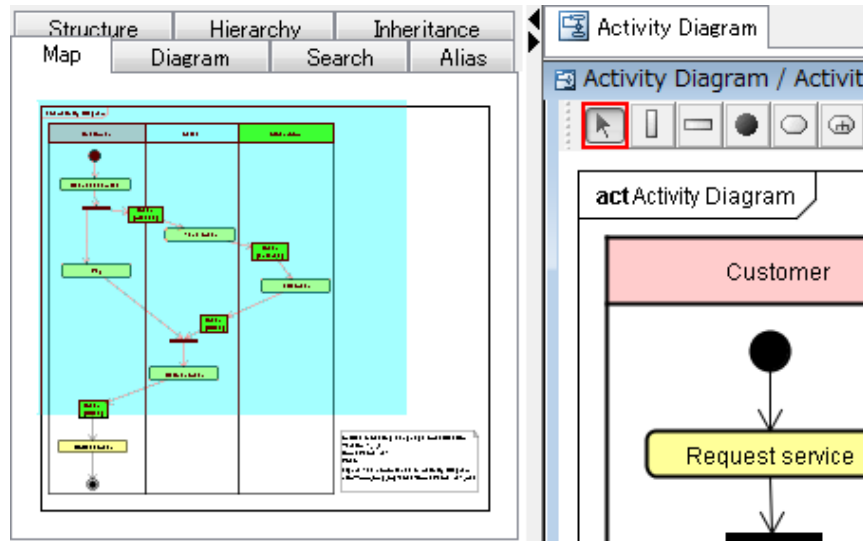Press button to zoom out

Zoom in
Press button to zoom in

Scroll
・Right-Mouse Drag to scroll whole diagram
・Mouse wheel to scroll up/down
・Shift + Mouse wheel to scroll in sideways

Zoom
・Ctrl + Right-Mouse Drag
・Ctrl + Mouse Wheel

Map View

- The Map View displays the entire contents of an active diagram that is currently opened in the Diagram Editor.
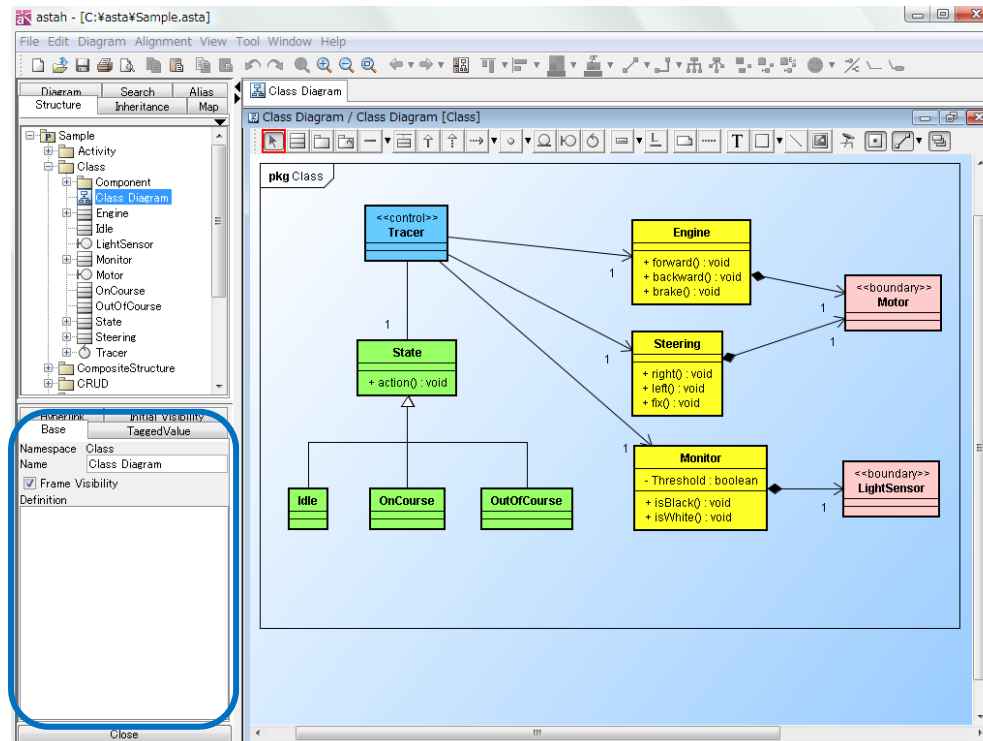

| Left-Mouse Drag on Map View Move the location of the display area in the Diagram Editor	Right-Mouse Drag on Map View Specify the size of the display area in the Diagram Editor

Property View

- The Property View displays the detailed information of the selected model.

- Items in the Property View are varied depending on models.
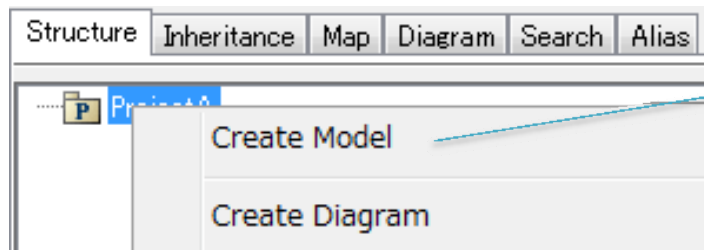
Create Models in Diagram Editor

- Creating models on Diagram Editor

(1) Select a button
(2) Click on the diagram

Mode Lock

Class0
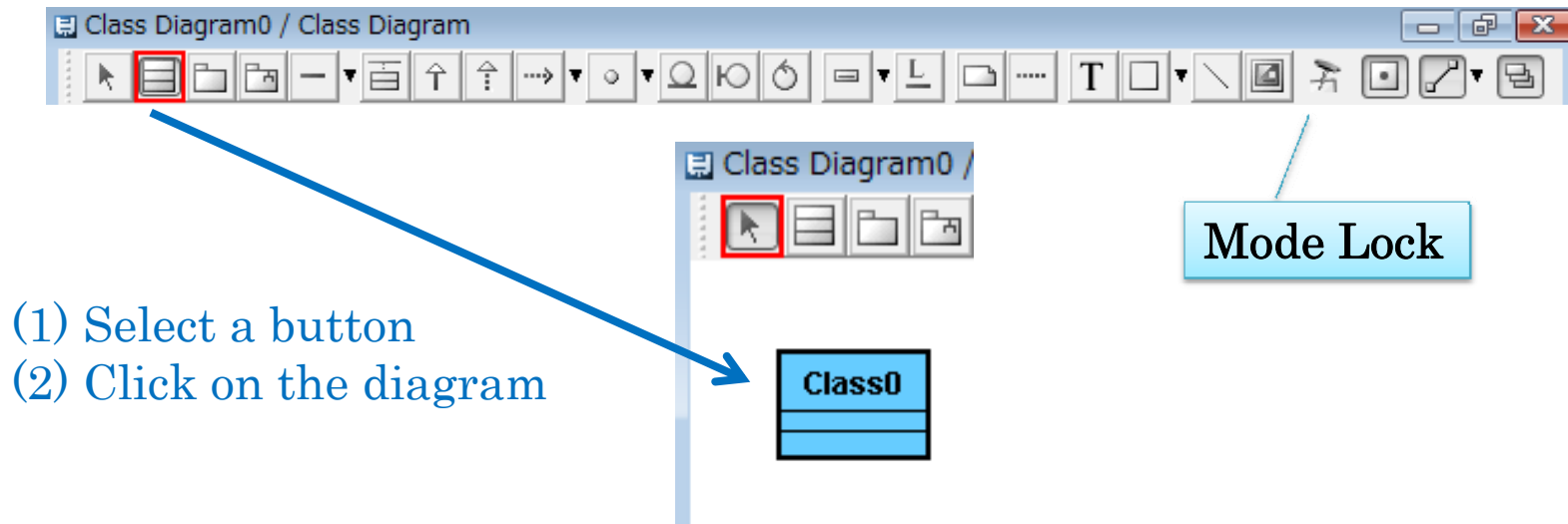
- Creating models continuously
  – Click on the diagram editor with Shift key.
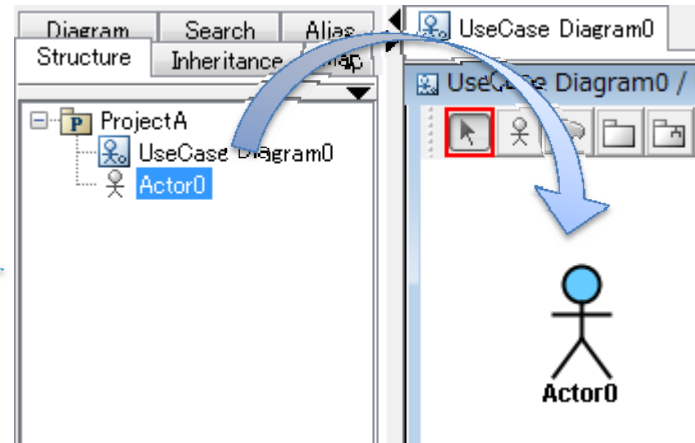 – Set the mode lock on.

Create models in a tree

- How to create models from structure tree
  - Right-click on a model in the structure tree and select a popup menu.

Select a menu from [Create Model] popup menu in the structure tree

Drag & Drop a model to the diagram

Copy & Paste

- Copy & Paste : View Elements
  - Select [Copy] / [Paste] in the popup menu of the view element on the diagram
  - Copy : Ctrl + C
  - Paste : Ctrl + V
- Copy & Paste : Style
  - Select [Copy Style] / [Paste Style] in the popup menu of the view element on the diagram
  - Style : background color, line style, font color, etc.
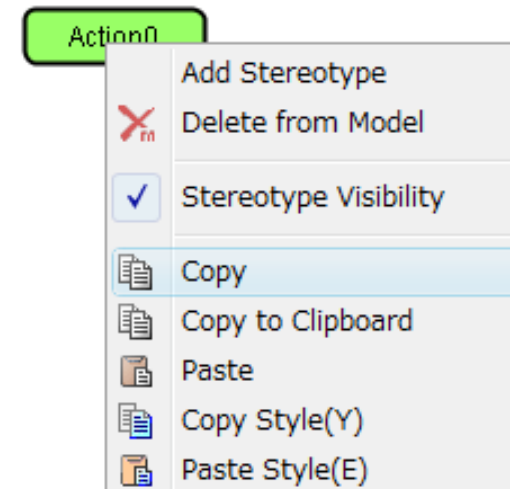
Select / Unselect view elements

- Select more than one element
  - Select view elements by using the Left-Mouse drag
  - Select view elements with Shift / Ctrl + Left-Click
  - Select All : Ctrl + A
- Unselect elements
  - Left-click on the selected view element with Shift / Ctrl key
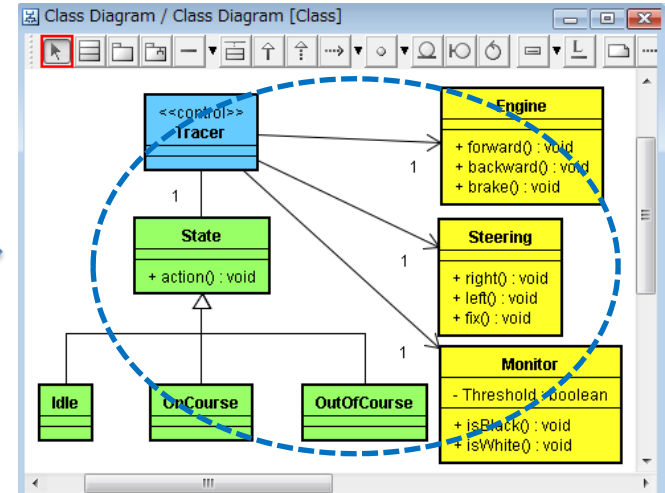
Direct-Edit View Elements
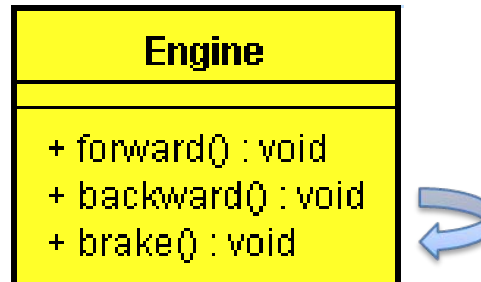
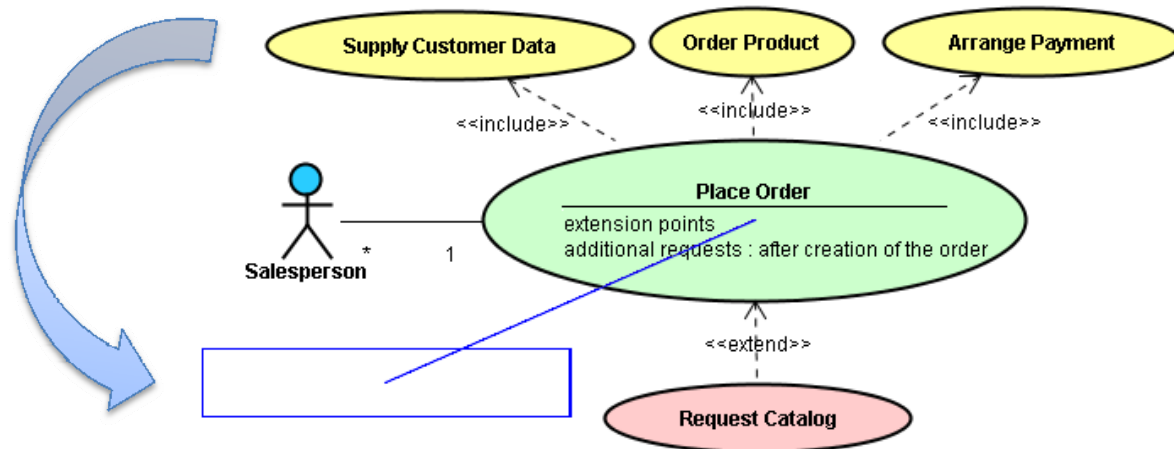- Press F2 or double-click on the selected text

- Direct-Edit Attributes / Operations
  - Change the order of Attributes / Operations, or move them to other Classes by drag & drop

Move View Elements

- Move view elements by Left-drag or arrow keys

|	
Left-mouse drag with Shift key to move vertically / horizontally	Left-mouse drag with Ctrl key to move by grid

Edit View Information

- View information is the information of view elements.
  - Visibility of Attribute/Operation, resize, color, etc.
- Visibility on/off
  - Switch the visibility on/off from the popup menu.
  - Set the default visibilities in [Tool] – [System Properties] – [Visibility1 and 2]
- Resize
  - Drag the knob (the corner of the element).
  - Auto-resize function is available.
- Color
  - Set color with the main menu, the tool bottom or the popup menu.
- Switch Notation
 - Switch the notation of classes between the normal and icon notations.

Visibility On/Off

- Select the visibility pop-up menu to switch the visibility on/off
- Examples:
  - Attribute Compartment
  - Operation Compartment
  - Namespace
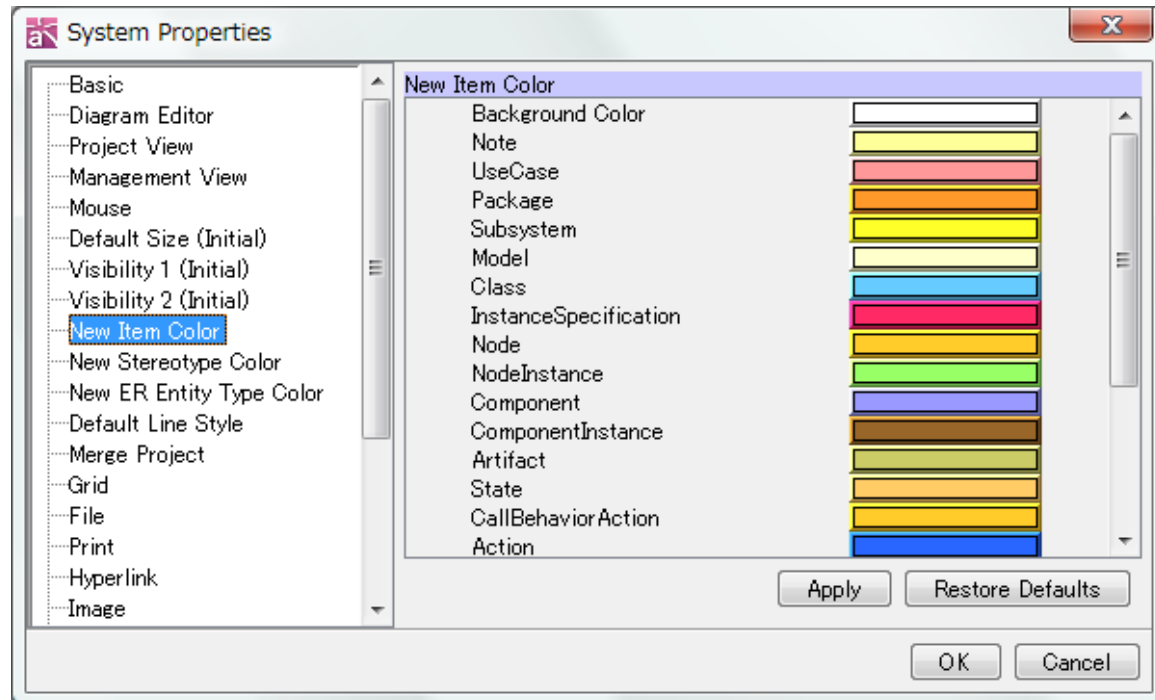 - Visibility of Attribute /Operation
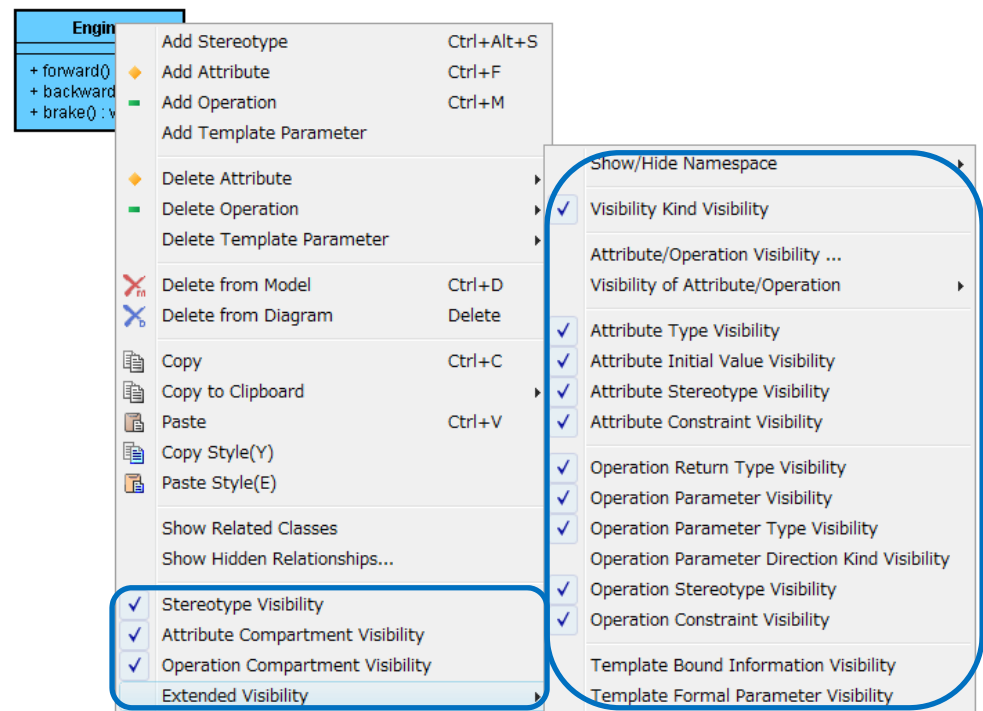
Set Color

- Select view elements on the diagram, and select [Set Color] from the tool bar.

- Go to [Edit] – [Set Color] from the main menu.

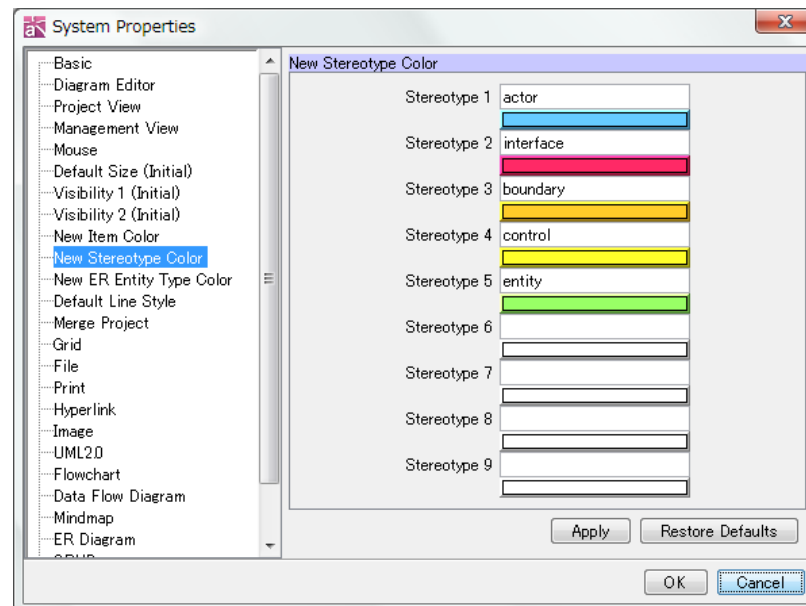- Select [Set Color] from the popup menu on the diagram
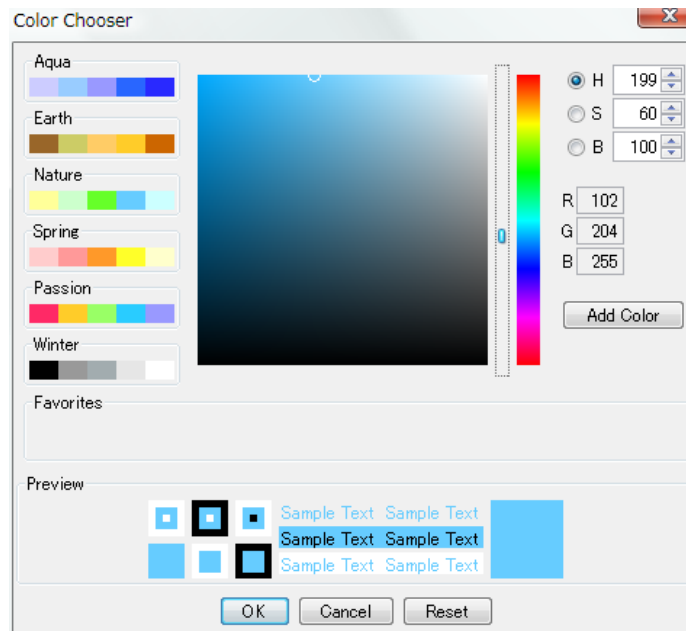
New Item Color

- Set the default color for each view element
 - Go to [Tool] – [System Properties] – [New Item Color]

Stereotype Color

- Set the default color for view elements with specific stereotypes

  – Go to [Tool] – [System Properties] – [New Stereotype Color]

Resize the view elements

- Auto Resize
  - The size of the view element is adjusted automatically by updating names
- Drag to resize
  - Drag the knob of the element to resize.
  - Auto-resize function is set to off after resizing (except UseCse).
- Show view element name in multiple lines
  - New lines are added automatically depending on the width of the element.
  - To add a new line to text, note and some other elements, press Enter key with Shift/Ctrl/Alt key.
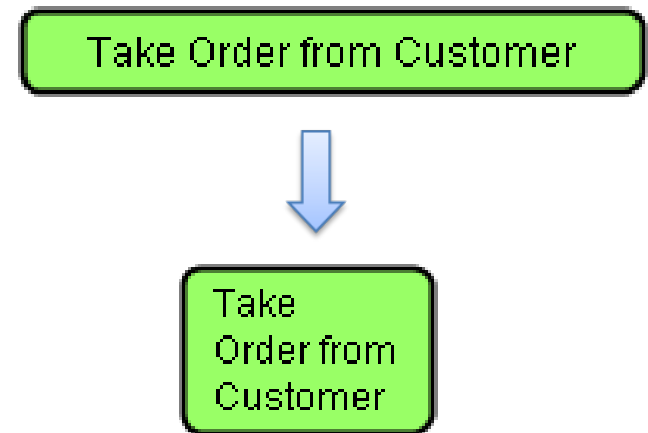
Icon Notation

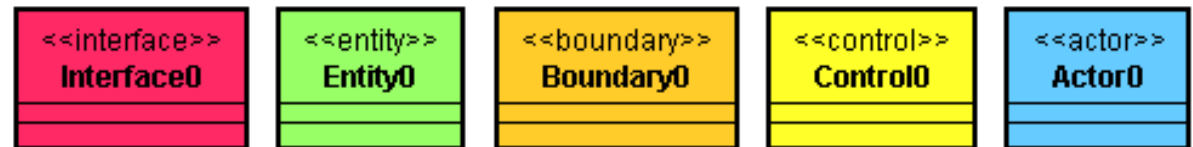- Normal / Icon Notation
  - Select the view elements on the diagram and press [Normal Notation] / [Icon Notation] on the tool bar.
  - Select [Icon Notation] in the popup menu.

Icon Notation

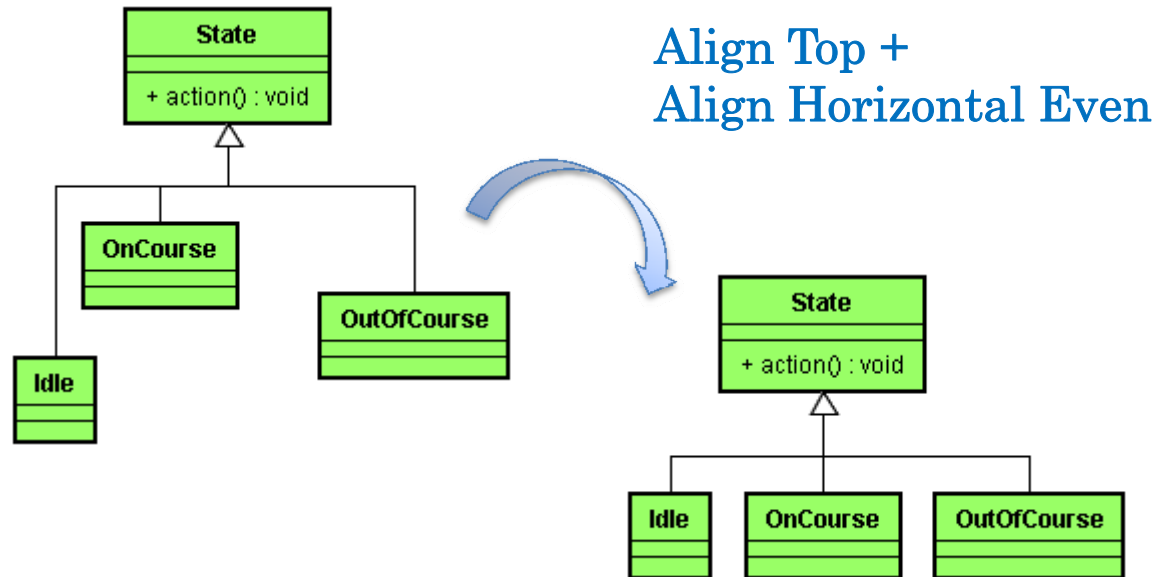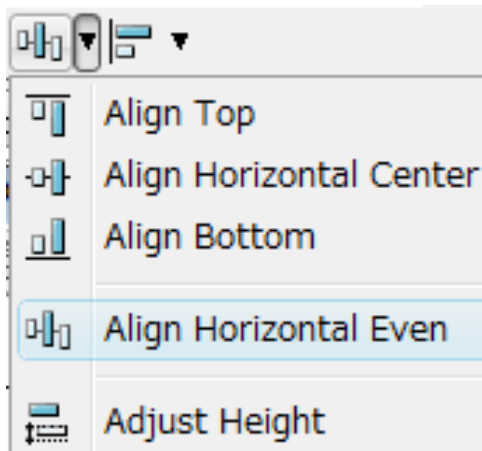Normal Notation

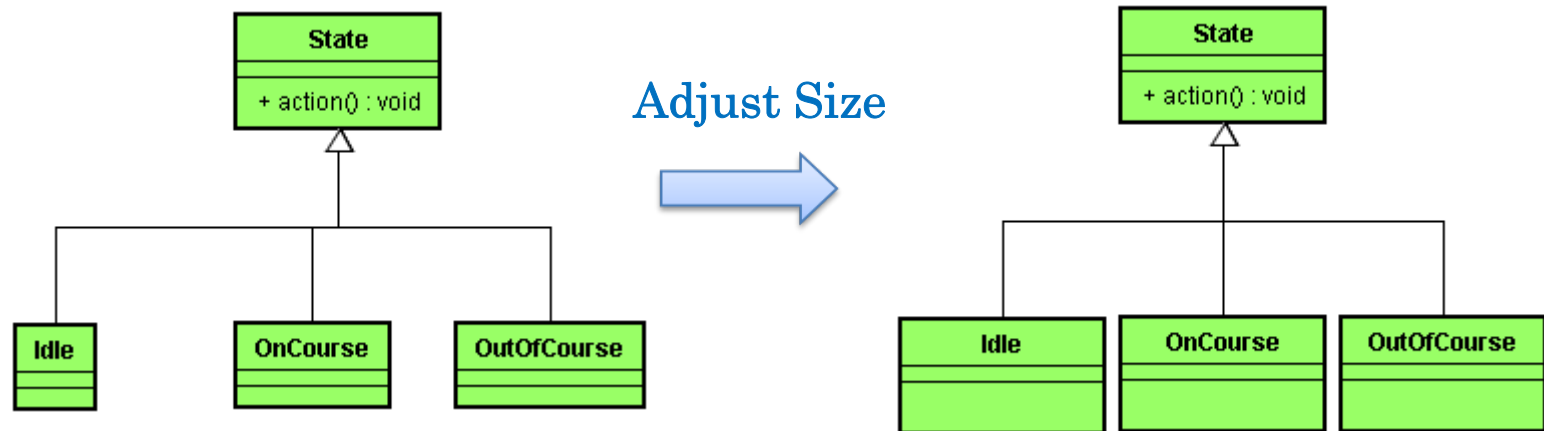# Align view elements

- Align view elements vertically or horizontally.
  - Press [Align] buttons on the tool bar
  - Go to [Align] on the main menu

Align Top +
Align Horizontal Even

Adjust Size

- Adjust the size of the select view elements on the diagram
    - Press [Align Height]/[Align Width] on the tool bar
    - Go to [Align] – [Adjust Size] on the main

Adjust Size

Create Lines

- Create lines (Association, Generalization, Realization, Dependency, Transition, etc.)
    1. Select the line button on the tool palette.
    2. Click the source element.
    3. （Click the middle point）
    4. Click on the target element.
    - Lines can be created by drag and drop.
    - To cancel the operation, press ESC key or right-mouse click.

Rubber is displayed

Set the relation end to the center
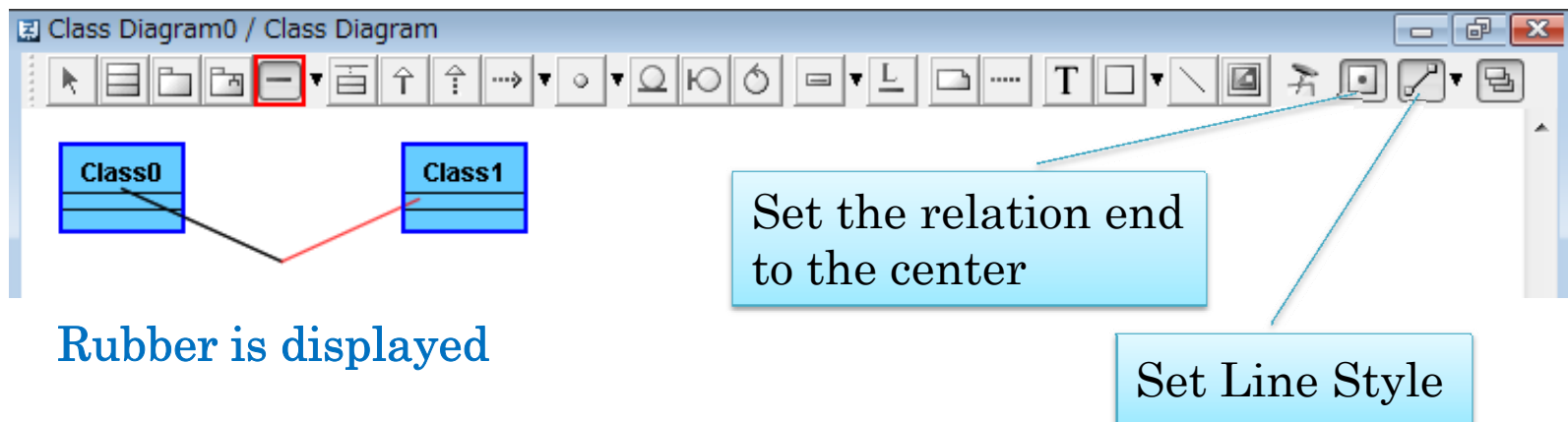
Set Line Style

Line Styles

- Setting Line Styles
  - Normal, Right-angle, Curve, Right-angle Curve
  - To switch the line style, select lines on the diagram and click the line style button on the tool bar or use the line popup menu.
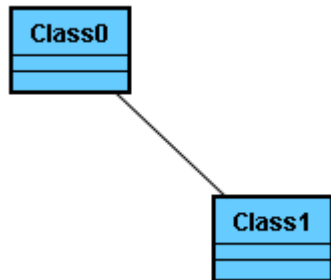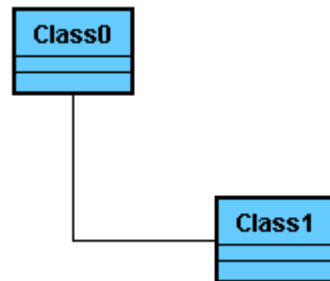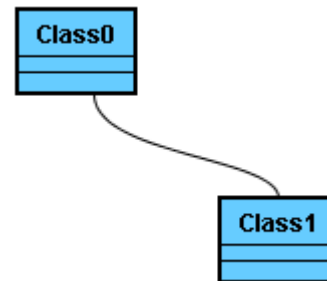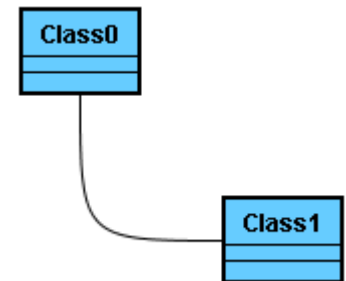
Normal   Right-Angle   Curve   Right-Angle Curve

How to change the target

- Drag and drop the knob from the source element to the target element.
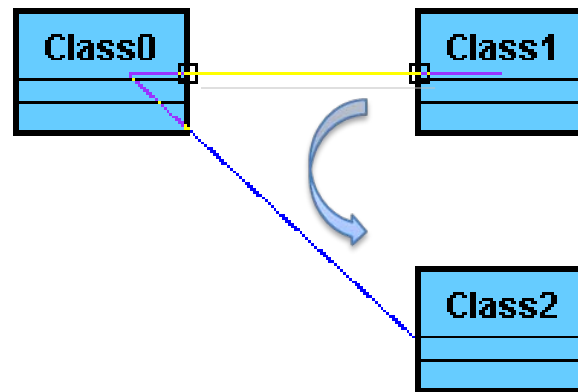
- To draw the polygonal line, drag and drop the middle point of the line.
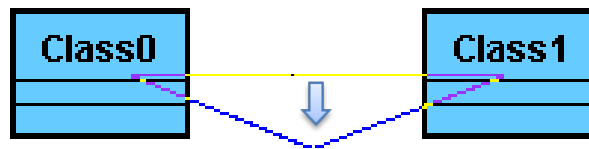
Polygonal line

Export Image

- Export Image with JPEG, PNG, EMF format
  - Go to [Tool] – [Export Image] in the main menu
  - Copy by using [Copy to Clipboard] popup menu on diagram elements
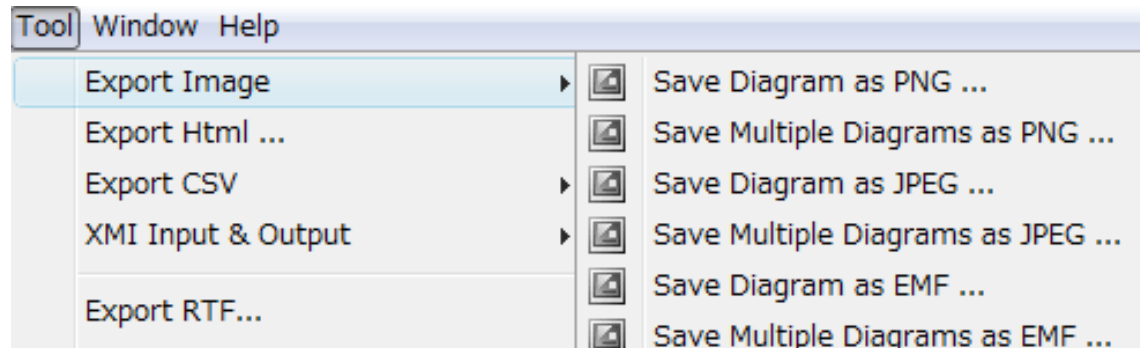
- EMF format is supported in astah* UML and astah* professional.
- The product name is displayed on the image background in astah* community.

Print

- Print
  - Print a diagram on the diagram editor.
- Print-Multi
  - Print multiple diagrams in the project.
  - Sort the order of printings in the Diagram dialog.
- Print Preview, Preview-Multi
  - Preview a diagram or multiple diagrams.
- Print Setup
  - Set the print setup for each project/diagram.
  - Specify header, footer, paper size, scale, etc.

- Preview, Preview-Multi and Print Setup are supported in astah* UML and astah* professional.
- The product name is displayed on the printing in astah* community.

Search and Replace

- Search and replace
  - Search and replace models in the Search tab.

- Search by options
  - Select the following options in the Search dropdown list.
    - **<<Undrawn and Unreferenced Models>>**
    - **<<Undrawn models>>**
      (models which are not drawn in diagrams)
    - **<<Unreferenced Models>>**
      (Models which are not referenced by others)
    - **<<Invalid Hyperlinks>>**
      Check Hyperlinks (File only)
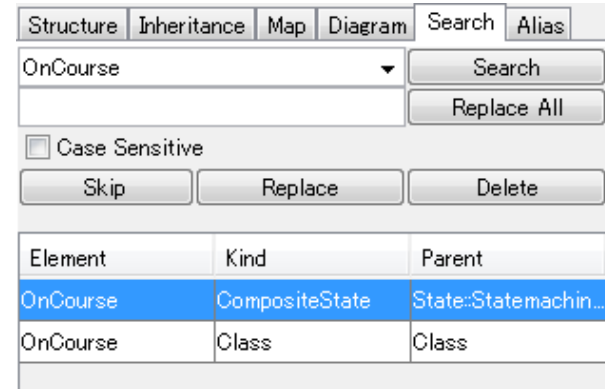
Search and Replace are supported in astah* UML and astah* professional.

Shortcut Keys

	Function	Key
Edit	Select All	Ctrl + A
	Delete from Model	Ctrl + D
	Delete from Diagram	DELETE
	Undo	Ctrl + Z
	Redo	Ctrl + Y
	Copy	Ctrl + C
	Copy with BMP/ JPG format	Ctrl +Alt + C
	Paste	Ctrl + V
	Add Attribute	Ctrl + F
	Add Operation	Ctrl + M
	Add Stereotype	Ctrl + Alt + S
	Edit	F2

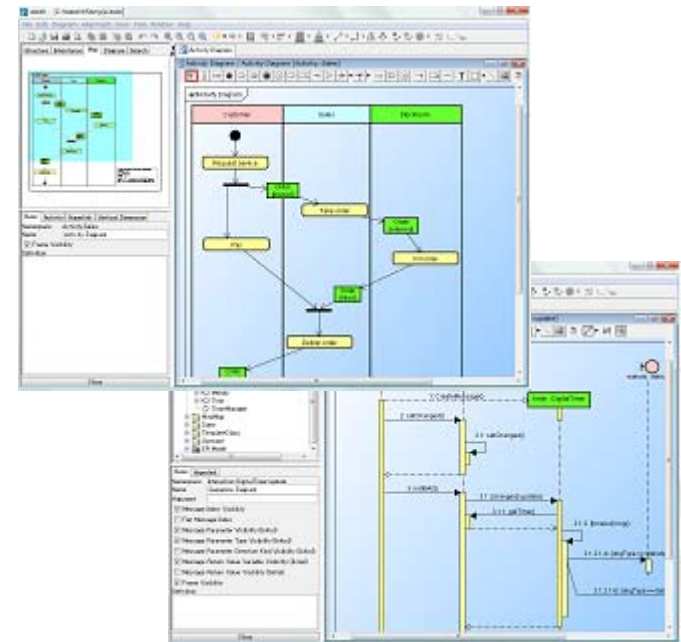|	Function	Key
File	New	Ctrl + N
	Save	Ctrl + S
Window	Switch Tab	Ctrl + Tab
	Show/Hide Project View	Ctrl + Shift + P
Align	Align Vertical Center	Ctrl + Alt + l
	Align Horizontal Center	Ctrl + Alt + - (minus)
	Align Top	Ctrl + Alt + Up
	Align Bottom	Ctrl + Alt + Down
	Align Right	Ctrl + Alt + Right
	Align Left	Ctrl + Alt + Left
View	Zoom to Default	Ctrl + 1
	Fit in Window	Ctrl + 0
	Zoom in	Ctrl + Wheel up, Ctrl + [,Ctrl + Right-Drag up
	Zoom out	Ctrl + Wheel down, Ctrl + [, Ctrl + Right-Drag down

astah* community

- astah* community is a UML modeling tool.
- Basic Functions:
  - UML2.1
  - Class Diagram, UseCase Diagram, Statemachine Diagram, Activity diagram, Sequence diagram, Communication Diagram, Component Diagram, Deployment Diagram, Composite Structure diagram, Object Diagram, Package Diagram
  - Align elements and adjust size
  - Print
 - Export image (JPEG, PNG)
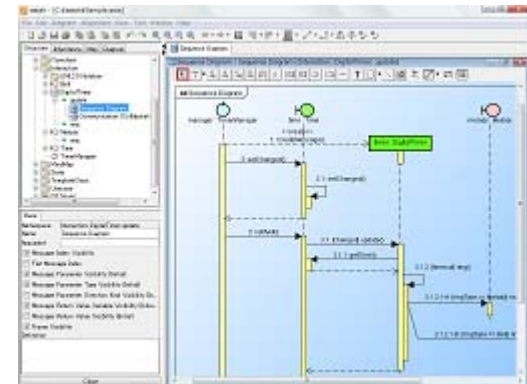
astah* UML

- astah* UML supports UML + Mind Map.
- Additional Functions:
    - Import Java
    - Export Java
    - Export C# / C++
    - Export RTF
    - Export HTML
    - Export image (JPEG, PNG, EMF)
    - Merge files
    - Convert UML and Mind Map
    - UseCase Description
    - Navigation function
    - Hyperlink

astah* professional

- astah* professional is the UML editor integrated with ERD, DFD, CRUD and Mind Mapping features.

- Additional Functions: Please see astah* UML page.

- Special Functions:
  - ER diagram
  - Flowchart
  - CRUD
  - Data Flow Diagram (DFD)
  - Requirement Table
  - Traceability Map
  - Compare Diagrams
  - Reference Project Management
  - XMI Input/Output
  - Convert diagrams and models (ER Diagram, Flowchart, DFD, etc.)
  - Stereotype Customized Icon
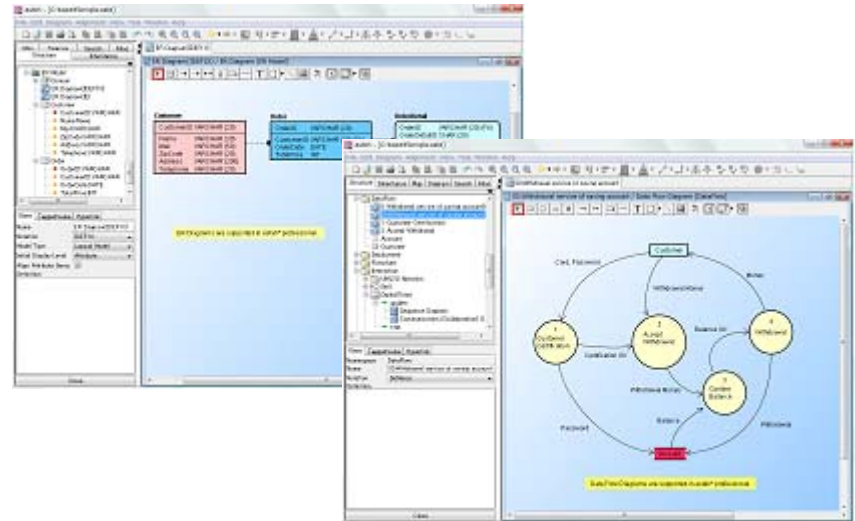
astah* website and contact

- astah* Website   http://astah.change-vision.com/
  - Update information is available on the website.
- astah* Community Site
  - http://astah.change-vision.com/en/community-site.html
  - Share your comments regarding UML and astah*.
- Contact : astah-sales@change-vision.com
  - If you have any questions about purchasing astah* UML or astah* professional, please contact us.