



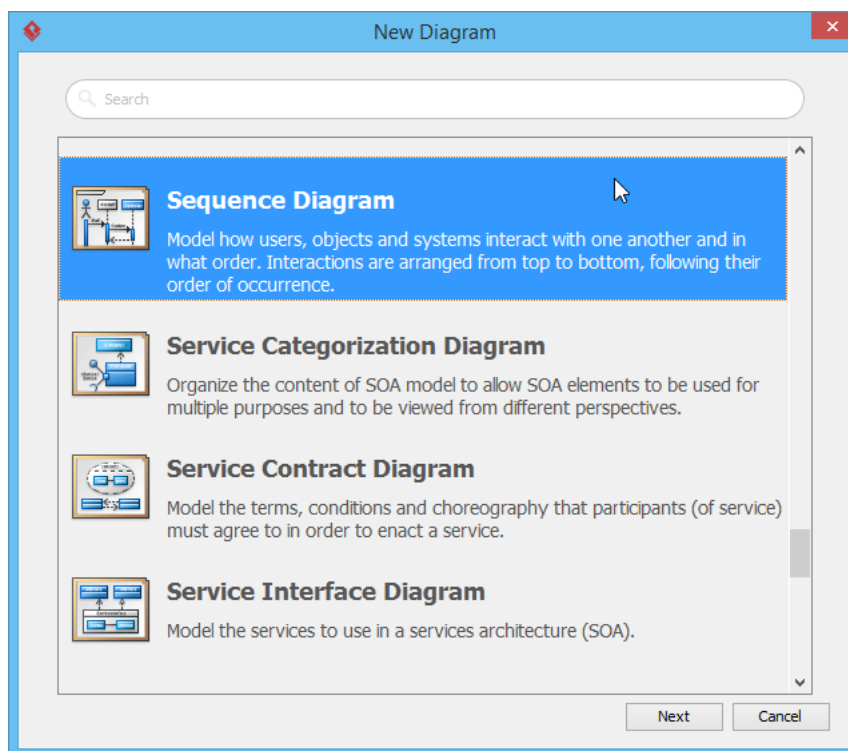
How to Develop UML Sequence Diagram with Keyboard?

Written Date : October 28, 2009

[UML sequence diagram](#) is design for visualizing interaction or message passing between users, system, sub-systems or objects. Drawing and maintaining large sequence diagram require a lot of afford. This tutorial is going to teach you how to draw and edit sequence diagram solely by keyboard.

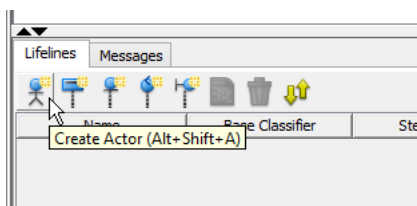
Drawing a sequence diagram with keyboard

1. Create an empty sequence diagram by selecting **Diagram > New** from the application toolbar. In the **New Diagram** window, select **Sequence Diagram** and click **Next**.

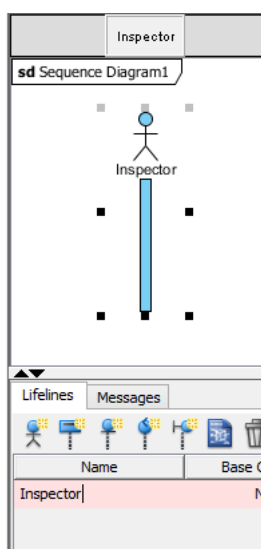


2. Leave the diagram name unchanged and then click **OK** to create the diagram.
3. Right-click on the background of the diagram and select **Show Text Editor** from the popup menu.

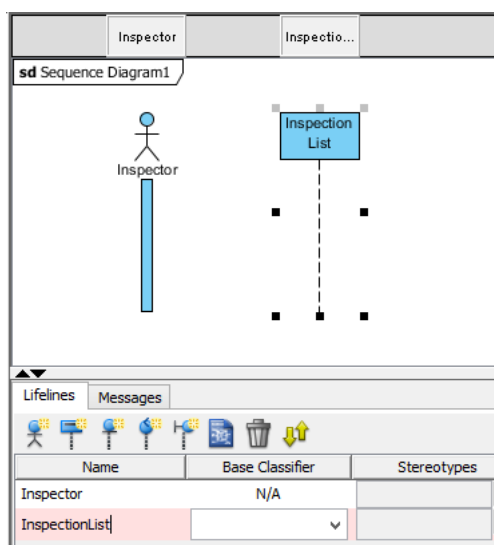
- Let's create an actor. Click the **Create Actor** button or pressing **Alt+Shift+A** shortcut.



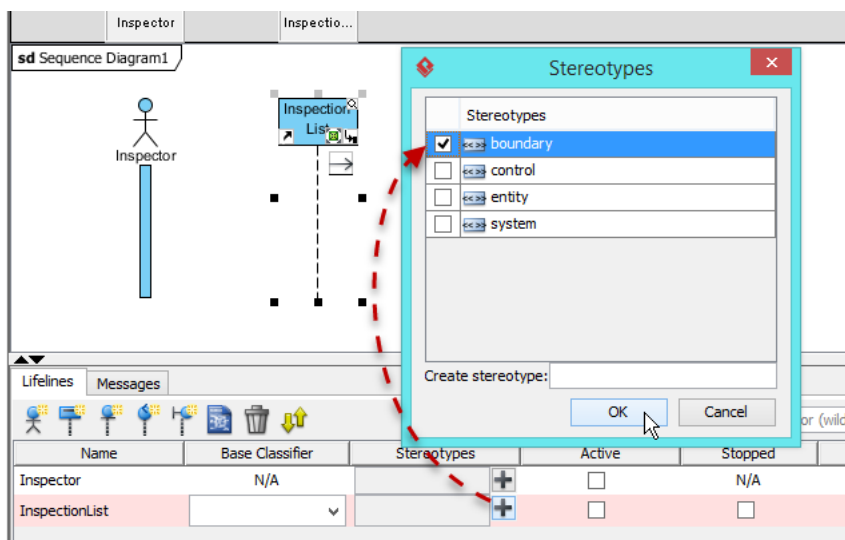
- Now a new entry for the actor has been inserted. Let's name the actor as *Inspector*.







- Now let's try to create a lifeline by pressing the **Create Lifeline** button, or pressing **Alt+Shift+L** shortcut. Name the lifeline as *InspectionList*.



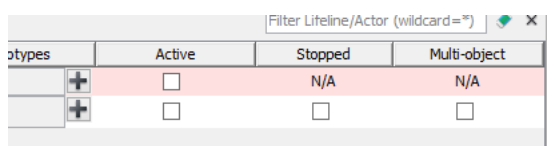
- The lifeline *InspectionList* should be a boundary object. Let's press the right arrow key to shift the focus from the name of the lifeline to the **Plus** sign next to **Stereotypes** box. Press **Spacebar** and now the **Stereotypes dialog** will be shown. Press the down arrow button to select *boundary* stereotype, then press the **Enter** key to commit. Now the *InspectionList* lifeline has been specified as boundary type.



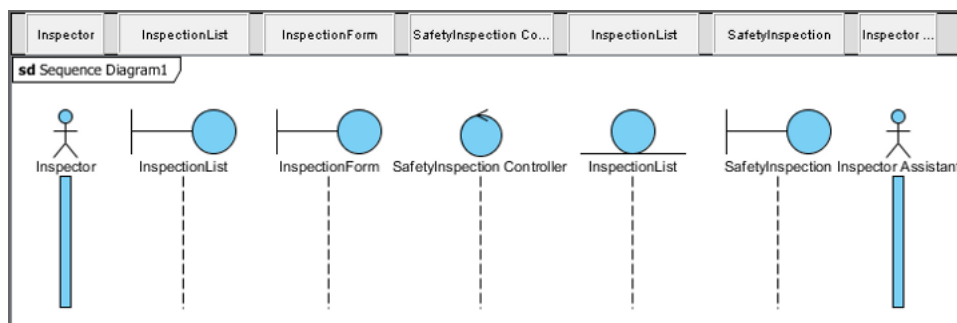
- Besides create a standard lifeline, you can also create boundary, control and entity lifelines with the shortcut keys.

Lifeline	Toolbar button	Shortcut
Standard Lifeline		Alt+Shift +L
Boundary Lifeline		Alt+Shift +B
Control Lifeline		Alt+Shift +C
Entity Lifeline		Alt+Shift +E

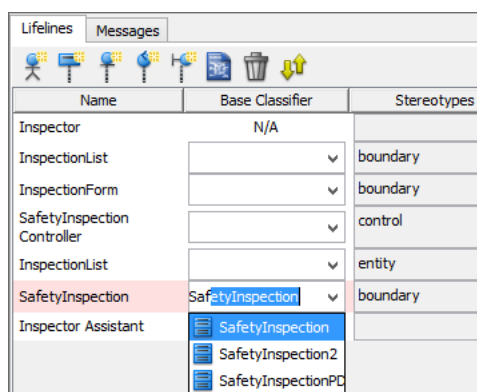
- Some properties of the lifeline such as **Active**, **Stopped** and **Multi-object** can be specified when you focus on the checkbox and press the spacebar key.



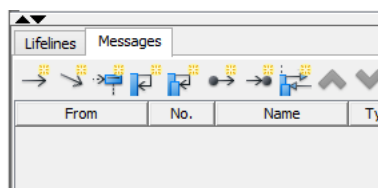
- Repeat the steps to create lifelines *InspectionForm*, *SafetyInspectionController*, *SafetyInspection* also another actor *Inspector Assistant*.



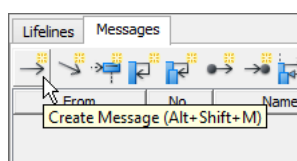
- Let's specify the base classifier of the *SafetyInspection* lifeline. Focus on the **Base Classifier** cell of in the *SafetyInspection* row, and then use the down arrow key to select the base class *SafetyInspection*.



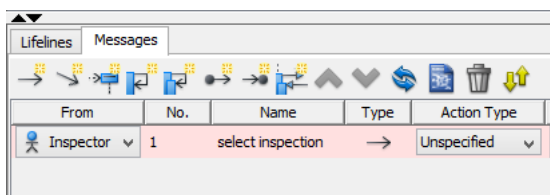
- Once we finish create the lifelines, we can then start creating the messages. Switch to the **Messages** tab.



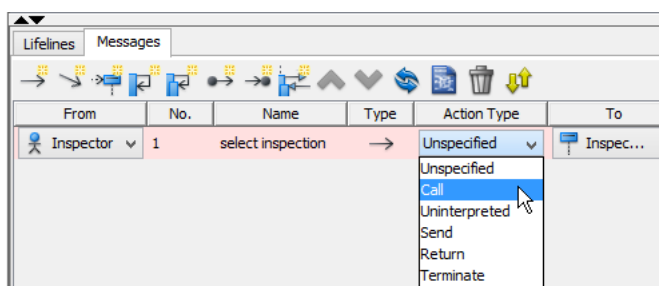
- Click the **Create Message** button, or press **Alt+Shift+M** to create a message.



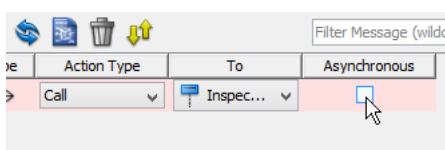
14. Name the message as *select inspection*.



15. We can change the message to call type by select **Call** message in the **Action Type** combo box.






16. And specify the message is **Asynchronous** or not from the checkbox.

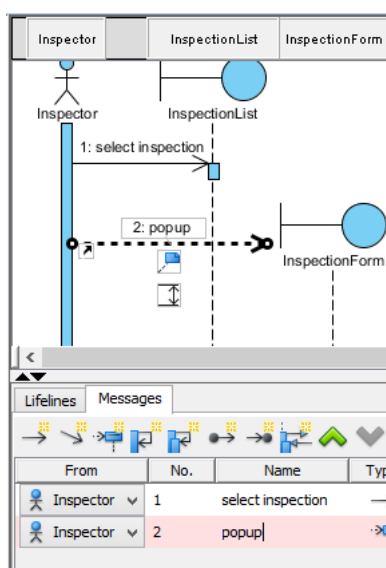


17. Similar to the lifelines, you can create various kinds of messages via the toolbar buttons and shortcut keys.

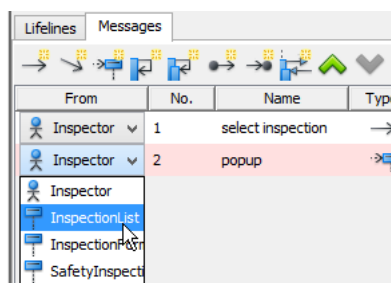
Message	Toolbar button	Shortcut
Standard Message		Alt+Shift +M
Duration Message		Alt+Shift +D
Creation Message		Alt+Shift +C
Self Message		Alt+Shift +S
Recursive Message		Alt+Shift +R

Found Message		Alt+Shift +F
Lost Message		Alt+Shift +L
Reentrant Message		Alt+Shift +E

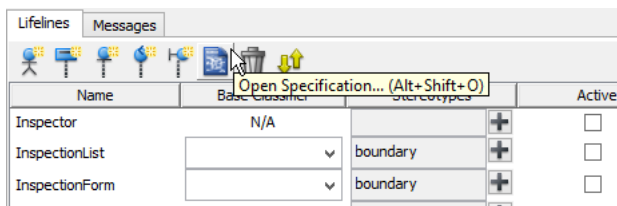
18. Let's create a creation message between *InspectionList* and *InspectionForm*. Press **Alt+Shift+C** to create the creation message. Name the message as *popup*.



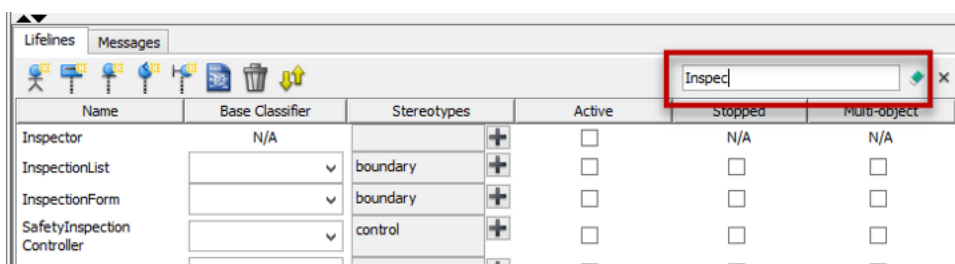
19. Since a standard message has been created between *Inspector* and *InspectionList*, the creation message will be created with the next available lifeline, which is *InspectionForm*.
20. To change the origin of the creation message to *InspectionList*, keep the focus **From** combo box on the creation message row in the table, and press the up/down arrow to select *InspectionList* lifeline.



21. The specification dialog of the lifeline or message can be opened by pressing **Alt+Shift+O**, or pressing the **Open Specification** button.



22. You can search for the lifelines or messages through the **search** box.



Related Links

- [Full set of UML tools and UML diagrams](#)



[Visual Paradigm home page](https://www.visual-paradigm.com/)
(<https://www.visual-paradigm.com/>)

[Visual Paradigm tutorials](https://www.visual-paradigm.com/tutorials/)
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