How to Apply Numbering for Messages in Sequence Diagram?

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In **Visual Paradigm**, you can number your messages on a sequence diagram in more than one way.

In this tutorial, we will introduce two main ways - (1) **diagram-based** and (2) **frame-based**. When we specify the "scope" to be either diagram or frame, basically we are telling Visual Paradigm where it should restart the number sequence for messages.

*Note: The following example is demonstrated using Visual Paradigm.*

1. **Diagram-based Numbering**

Diagram-based Numbering (Single Level)

In your UML sequence diagram, right-click on the background and select **Sequence Number > Single Level**.

![Diagram-based Numbering](image)

As an example, we can see that despite making use of a frame element, the number sequence continues across, as long as they are within the same diagram.
Diagram-based Numbering (Nested Level)

In your UML sequence diagram, right-click on the background and select **Sequence Number > Nested Level**.

Similarly, we can see that despite making use of a frame element, the number sequence continues across, as long as they are within the same diagram.

2. Frame-based Numbering

Frame-based Numbering (Single Level)

In your UML sequence diagram, right-click on the background and select **Sequence Number > Frame-based Single Level**.

As an example, we can see that the message numbering restarts in the frame, despite it is within the same diagram.
Frame-based Numbering (Nested Level)

In your UML sequence diagram, right-click on the background and select **Sequence Number > Frame-based Nested Level**.

As an example, here we can see that the message numbering restarts in the frame. Also, "decimals numbers" are used to reflect the nesting levels of the procedural callings.