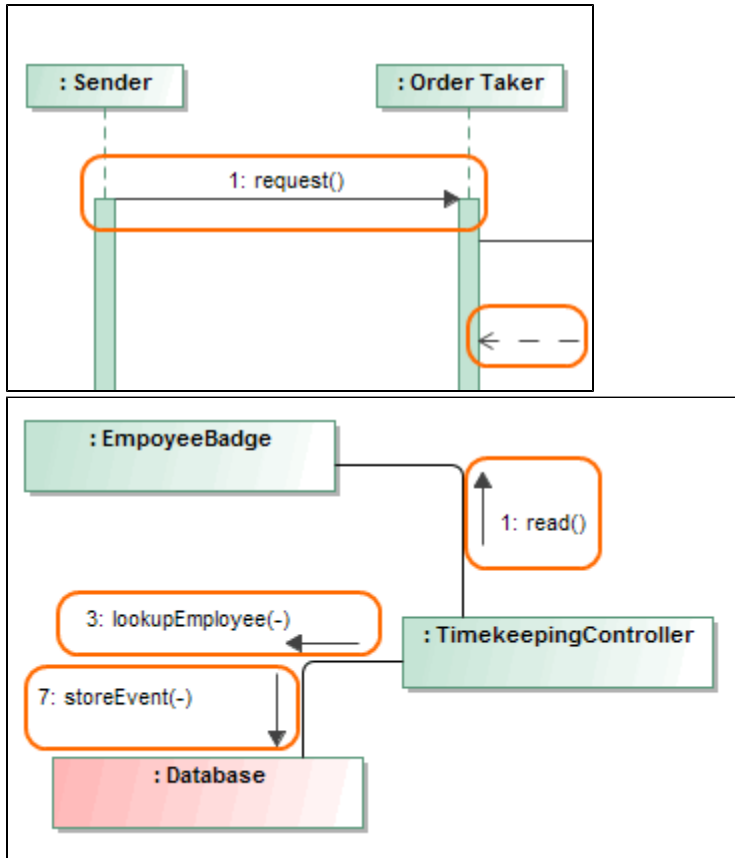


# Message

A Message defines a particular communication between [Lifelines](#) of an [Interaction](#), such as raising a Signal, invoking an [Operation](#), or creating or destroying an Instance. Messages specify the kind of communication, the sender, and the receiver.

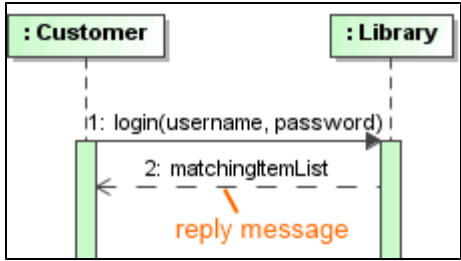
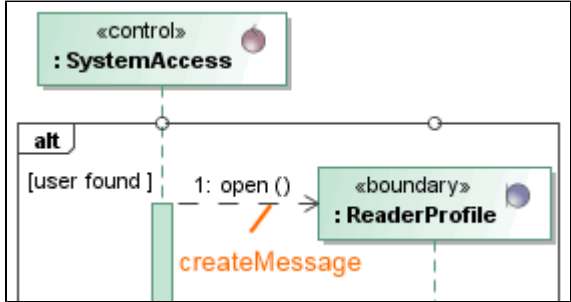
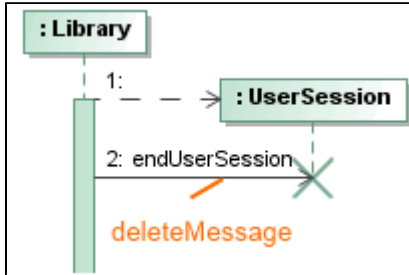
A Message is represented by arrows between the lifelines. The style of the Message line and arrowhead reflect the types of the Message.



You can see the description of a selected property in the description area of the [Specification window](#). To see descriptions, be sure the **Show Description** option is selected.

## Message sorts

Message Sort	Description	Example
synchCall	The Message was generated by a synchronous call to an Operation. Synchronous Messages can overtake each other. When a Message represents an Operation, the arguments of the Message must correspond to the parameters of the Operation.	<pre> sequenceDiagram     participant C as : Customer     participant L as : Library     C-&gt;&gt;L: 1: login(username, password)     activate L     deactivate L   </pre>
asynchCall	Asynchronous means that the caller continues immediately after the call. asynchCall Messages do not have reply Messages.	<pre> sequenceDiagram     participant LM as «control» : LoanManager     participant NS as «control» : NotificationService     LM-&gt;&gt;NS: 1: notifyUser(-)     activate NS     deactivate NS   </pre>
asynchSignal	The Message was generated by an asynchronous send Action. The argument of the Message must correspond to the attributes of the Signal.	

reply	A reply Message to an Operation call.	 <pre> sequenceDiagram     participant Customer     participant Library     Customer-&gt;&gt;Library: 1: login(username, password)     activate Library     Library--&gt;&gt;Customer: 2: matchingItemList     deactivate Library     </pre> <p>reply message</p>
createMessage	The Message designates the creation of another Lifeline object. No other Messages on a given Lifeline in an Interaction operand may appear above a Lifeline.	 <pre> sequenceDiagram     participant SystemAccess as «control» : SystemAccess     alt [user found]         SystemAccess-&gt;&gt;ReaderProfile: 1: open()         activate ReaderProfile         ReaderProfile--&gt;&gt;SystemAccess:          deactivate ReaderProfile     end     </pre> <p>createMessage</p>
deleteMessage	The Message designates the termination of another Lifeline.	 <pre> sequenceDiagram     participant Library     participant UserSession as : UserSession     Library-&gt;&gt;UserSession: 1:      activate UserSession     Library-&gt;&gt;UserSession: 2: endUserSession     deactivate UserSession     </pre> <p>deleteMessage</p>

## Message syntax

The Message name is displayed on the message path on the diagram pane. The syntax of the message name is as follows:

`<messageid> ::= [<attribute> '='] <signal or operation name> ['(' [<argument> ','`

`<argument>]* ')'] ['<return value>]`

`<argument> ::= ([<parameter name> '=' <argument-value>]) / '-'`



### Example

`login(P1='a', P2=True):12`

## Common actions with Messages

To set an action type for a Message

Do one of the following:

- In the Message [Specification window](#), click the **Message Sort** property value cell and select the action type from the drop-down list.
- On the diagram pane, right-click the Message and select a desired action type from the shortcut menu.

To show / hide Message numbers

1. Right-click the diagram pane to open its shortcut menu.
2. Then do one of the following:
  - In a [Sequence](#) or Time diagram, select / clear **Show Message Numbers**.
  - In a [Communication diagram](#), select / clear **Numbering > Show Message Numbers**.

## Related pages

- [Assigning Operations to Messages](#)
- [Message name parsing](#)
- [Assigning Signals to Messages](#)
- [Creating Signal receptions for Messages](#)
- [Messages in Sequence and Time Diagrams](#)
- [Messages in Communication diagrams](#)
  
- [Model Elements](#)
- [Specification Window](#)
- [Lifelines](#)
- [Interaction](#)
- [Operation](#)