

# Gate

MagicDraw allows for displaying the [messages](#) when leaving or entering a [sequence diagram](#), [interaction use](#), or [combined fragment](#). The Gate is a connection point for representing a [message](#) from the outside to the current [sequence diagram](#), [interaction use](#), or [combined fragment](#).

Gates can be used in three cases:

- For passing and returning arguments to [InteractionUse](#), which calls some Interaction.
- For displaying “exceptions” as [messages](#) that stops an interaction execution and leaves it.
- For “calling” sequence blocks represented as [CombinedFragments](#).

Gate has no notation. Gates are created as [message](#) ends when drawing [messages](#) to/from a diagram frame, an [interaction use](#), or a [combined fragment](#).

To create a formal gate, do one of the following

- Draw a call, send, create, or delete a [message](#) from the diagram frame.
- Draw a reply [message](#) to the diagram frame.
- Draw a call, send, create, or delete a [message](#) from the [combined fragment](#) (inside [combined fragment](#)).



- You can view the created gates of [message](#) in the Message [Specification window](#). In the **Send Event** list box you can see a formal gate. The **Receive Event** lists the actual gate.
- The Gate uses text from the [message](#) as an identification name. For example, a message name or a message operation.

To draw create an actual gate of the formal gate, do one of the following

- Draw a call, send, create, or delete a [message](#) to the [interaction use](#), which refers to the diagram with the formal gates. The **Select Formal Gate** dialog opens.
- Draw a reply [message](#) from the [interaction use](#), which refers to the diagram with the formal gates. The **Select Formal Gate** dialog opens.
- Draw a call, send, create, or delete a [message](#) to the [combined fragment](#) (outside [combined fragment](#)). The **Select Formal Gate** dialog appears.



You can also view the formal and actual gates in the gates Interaction [Specification window](#), Interaction Use dialog, Combined Fragment dialog, and the Actual Gates and Formal Gates panes.

To select a formal gate for the actual gate

1. Do one of the following:
  - Draw a message.
  - From the message shortcut menu, choose **Select Formal Gate**.
2. In the open dialog, select one of the listed formal gates and click **OK**. An actual gate is created.



The **Select Formal Gates** command is available only if there are formal gates.

## Related pages

- [The formal gate and actual gate usage in the sequence diagram](#)

## Related Pages

- [Model Elements](#)
- [Class diagrams](#)
- [Use Case](#)
- [Use Case diagram](#)
- [Sequence diagram](#)
- [Activity diagram](#)