

# Creating and Using Data Items

You can create the following data items in a BPMN Process diagram:

- [Data Object](#)
- [Data Store](#)
- [Data Input and Data Output](#)

You can mark a Data Object as a collection.

With a Data Association, you can connect a data item to other elements of the BPMN Process diagram.

To create a data item



Business Analyst perspective provide most popular SubProcess types. Full list of SubProcesses types you can have only in Business Modeler and Full Featured perspectives.

- On the **Process** diagram pallet, click **Data Object** and select needed Data item.

To create a new Data Object, which is typed by a classifier

- Select the classifier in the Containment tree and drag it to a BPMN Process or BPMN Collaboration diagram.

To specify a type of Data Item, do one of the following

- In the Containment tree, select an element and drag it on the Data Item.
- Right-click the Data Item, from the shortcut menu, select Type and choose the needed type.
- Open the Specification window and select a Type.

To mark a Data Object as collection, do one of the following

- Right-click the Data Object and from the shortcut menu choose **Is Collection > true**.
- Open the Data Object Specification window, **Is Collection** property set to true.

To create a Data Association between two data items

1. On the Process diagram pallet, click the **Data Association** button.
2. On the diagram pane
  - Click an element, which will be the source of the Data Association.
  - Click an element, which will be the target of the Data Association.



- The source or target of a Data Association can only be a Data Object, Data Store, Data Input, or Data Output.
- The other end of the Data Association should always be an activity or event.

To display a Data Object directly connected to a Sequence Flow



A Data Object connected to a Sequence Flow is a visual shortcut of two Data Associations. In the model, the Data Associations still exist, and the Data Object connecting to the Sequence Flow will be displayed.

1. Draw a Data Association from an Activity to a Data Object.
2. Draw another Data Association from the Data Object to another Activity.

## Related element

- [Common BPMN Elements](#)

## Related diagrams

- [BPMN Process Diagram](#)
- [BPMN Collaboration Diagram](#)

## Related procedures

- [Creating a Diagram](#)
- [Creating and Using Tasks](#)
- [Creating and Using SubProcesses](#)
- [Using Activities](#)
- [Creating and Using an Event](#)
- [Creating and Using a Sequence Flow](#)
- [Navigation Between BPMN Diagrams](#)

3. Draw a Sequence Flow from the first to the second Activity.
4. Right-click the Data Object and select **Show Connected to Sequence Flow** from the shortcut menu.