# 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

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

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

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

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- 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

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- 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

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- 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

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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

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⚠ 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.
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.

**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