Storing to and Retrieving Data from Memory

You can use the Memory adapter to store data to and retrieve data from memory.

Storing Data to Memory

Using the **store** operation from the Memory adapter, you can store data. Provide the following parameters:

Name	Type	Direction	Description
key	String	in	Set a key that can be used to access the stored value with the retrieve operation.
value	Any	in	Provide the data that should be stored to the memory.

If an element with the given key already exists in memory, it will be overwritten by the Memory Adapter. In this case, no error is thrown, parameter **oldValue** returns the value that got overwritten.

Name	Type	Direction	Description
oldValue	Any	out	If the provided key is already present in the memory, it gets overwritten. In this case, **oldValue** returns the previous value. If no old value is present, **oldValue** is NULL.

> If you want to store not only single data items to memory but multiple values, we recommend using the Memory adapter with a map. This is much faster as you can store all values with one **store** operation call, and you can still access single values using **retrieve** with **hasMapKey**.

Retrieving Data From Memory

Using the **retrieve** operation from the Memory adapter, you can store data. Provide the following parameters:

Name	Type	Direction	Description
key	String	in	Provide the key of the value that has been stored to memory with store. If no value with this key can be found, the Memory adapter throws error `MEMADSM/9`.

If no data with the given key can be found, the Memory adapter throws an error. In all other cases, **value** contains the data.

Name	Type	Direction	Description
value	Any	out	Returns the stored value.

Related Error Codes

Find a list of all persistent state error codes on System Errors of the Memory Adapter.

Error Code	Description
`MEMADSM/9`	The message is not stored here.

On this Page:

MemoryAdapter_GuessingGame_Example

Click the icon to download a simple example model that shows the usage of the Memory adapter in **Scheer PAS** *Designer*.

Related Pages:

- Removing Stored Data
- Using the Memory Adapter with Maps
- Memory Adapter Reference
- System Errors