

MongoDB Adapter

The Designer supports MongoDB - a NoSQL and document oriented database. MongoDB support is native and you do not need to install any client tools or drivers. Also, your PAS system comes with a MongoDB **scheer-mongo** pre-installed.

Using the MongoDB adapter, you can

Task	Adapter Action	Description	Documentation Reference
Insert and update documents	insert	Insert new documents to a database.	<ul style="list-style-type: none">Inserting and Deleting Documents
	replace	Replace one or more documents by a new one. The documents are identified by a query.	<ul style="list-style-type: none">Updating MongoDB Documents
	update	Update all or dedicated properties of one or more documents with new values. The documents are identified by a query.	
Retrieve documents /information	find	Get a result set based on a provided query. You can get the result set all at once, or fetch single documents via a handle (see fetch).	<ul style="list-style-type: none">Querying MongoDB
	fetch	Fetch single records from a result set that has been retrieved by find .	
	aggregate	Aggregate data based on a query and MongoDB pipelines.	<ul style="list-style-type: none">Aggregating Data
Remove documents	delete	Remove one or documents from the database. The documents are identified by a query.	<ul style="list-style-type: none">Inserting and Deleting Documents

To use the MongoDB adapter it is helpful if you are familiar with the concepts of MongoDB.



As opposed to standard JSON, with MongoDB the order of keys does matter. Action script statement [classToJSON\(\) Operation](#), however, does not guarantee to preserve the order presented in the class. In many cases that will work but it may behave unexpectedly wrong.

So, with the MongoDB adapter **always** use [classToExtendedJSON\(\)](#).

On this Page:

- [Adding a MongoDB Adapter Operation to a Diagram](#)
- [Configuring the MongoDB Adapter Operation](#)

MongoDBAdapter_CustomerData_Example



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




































Related Pages:

- [Querying MongoDB](#)
- [Updating MongoDB Documents](#)
- [Aggregating Data](#)
- [Inserting and Deleting Documents](#)
- [MongoDB Adapter Reference](#)
- [classToJSON\(\) Operation](#)
- [classToExtendedJSON\(\) Operation](#)

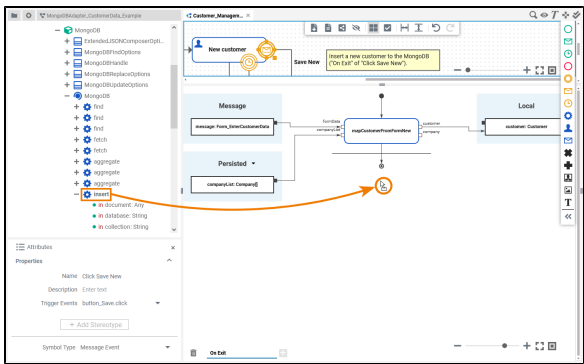
Related Documentation:

- [MongoDB Manual](#)

Adding a MongoDB Adapter Operation to a Diagram

-  Base Types
 -  Bridge Base
 -  Base Components
 -  Add Ons
 - +  FileSystem
 - +  FlatFile
 - +  HTTP
 - +  JSON
 - +  Kafka
 - +  Logger
 - +  Memory
 -  MongoDB
 - +  MongoDBUpdateOptions
 - +  MongoDBReplaceOptions
 - +  MongoDBHandle
 - +  ExtendedJSONComposerOptions
 - +  MongoDBFindOptions
 -  MongoDB
 - +  find
 - +  find
 - +  find
 - +  fetch
 - +  fetch
 - +  aggregate
 - +  aggregate
 - +  aggregate
 - +  insert
 - +  insert
 - +  update
 - +  update
 - +  update
 - +  replace
 - +  delete
- +  REST
- +  SAP

Expand the path to the MongoDB adapter in the service panel (**Base Types /Bridge Base /Base Components /Add Ons /MongoDB**).




You can drag out operations from the data model to any diagram:

- BPMN execution diagram
- mapping diagram
- activity diagram

The example on the left shows how to add a MongoDB adapter operation to a BPMN execution diagram.

Configuring the MongoDB Adapter Operation

Once an operation has been added to a diagram, it needs to be configured as a MongoDB adapter.



Select the newly added MongoDB adapter operation and switch to the **Attributes** panel. Depending on the diagram type you can see the following information (example BPMN execution diagram):

Attribute	Description	Allowed Values / Example
Name	The name of the MongoDB adapter operation.	<code>insert</code>
Symbol Type	Operations added to an execution diagram are execution steps.	Execution Step

All this is predefined and cannot be changed.

☰ Attributes ×

Properties ^

Name insert

+ Add Stereotype

Symbol Type Execution Step

Click **Add Stereotype** to define the selected operation as to be a MongoDB adapter.

Select Stereotype

- ☐ File System Adapter
- ☐ Flat File Adapter
- ☐ Kafka Producer Adapter
- ☐ Logger
- ☐ Memory Adapter
- ☒ MongoDB Adapter
- ☐ REST Adapter
- ☐ S3
- ☐ SAP IDoc Composer
- ☐ SAP IDoc Parser
- ☐ SAP IDoc Record Composer
- ☐ SAP IDoc Record Parser
- ☐ SAP RFC Adapter
- ☐ SAP TRFC Adapter
- ☐ SAP TRFC Confirm Transaction
- ☐ SAP TRFC Create Transaction
- ☐ SAP XML IDoc Composer
- ☐ SAP XML IDoc Parser
- ☐ SQL Adapter
- ☐ UIPI Adapter

Save Cancel

Select **MongoDB Adapter** from the list of available adapter stereotypes.
Click **Save**.

☰ Attributes ×

Properties ^

Name insert

MongoDBAdapter ⌵

+ Add Stereotype

Symbol Type Execution Step

The **Attributes** panel shows the added adapter stereotype. Now you still need to configure the adapter.

Expand the stereotype by clicking the arrow on the right.

Attributes

Properties

Name insert

MongoDBAdapter

alias Select alias

database +

collection +

action +

+ Add Stereotype

Symbol Type Execution Step

A MongoDB adapter is configured via its **alias** (see [Aliases](#) for more information on aliases).

Additionally, you can insert

- **database**
- **collection**

See further information [below](#) and on page [Mongo DB Adapter Reference](#). The adapter option **action** derives from the used operation. Do not configure this.

Attributes

Properties

Name insert

MongoDBAdapter

alias

database

collection

action

+ Add Stereotype

Symbol Type Execution Step

You can select an existing alias from a drop-down list by clicking the text **Select alias**.

If you want to remove an added alias, select **None** from the drop-down list:

None

CustomerDB

ProductDB

OrderDB

Attributes

Properties

Name insert

MongoDBAdapter

alias CustomerDB

database +

collection +

action +

+ Add Stereotype

Symbol Type Execution Step

You can also create and add a new alias by clicking the corresponding **+** icon.

Refer to [Aliases](#) for more information on how to create a new alias.

<div> <h3>Add Alias</h3> <div> Name: <input type="text" value="NewAlias"/> </div> <div> Standard ▼ Authentication ▼ TLS ▼ Timeout ▼ Compression ▼ Pooling ▼ Read/write ▼ Server selection & discovery ▼ Misc ▼ </div> <div> Save Cancel </div> </div>	<p>A dialog opens where you can name and configure the new alias. Refer to MongoDB Adapter Reference for more information on the configuration options of this adapter.</p> <p>Click Save to create and add the new alias.</p>
<div> <div> Attributes </div> <div> <h3>Properties</h3> <div> Name insert </div> <div> MongoDB Adapter <div> alias Select alias ▼ + <div> <div>database myDatabase</div> <div>collection +</div> <div>action +</div> </div> <div> + Add Stereotype </div> </div> </div> </div> </div>	<p>To add a database, click the corresponding + icon. Enter the name of the default database to be used.</p> <p>To remove a database, click the corresponding − icon.</p>
<div> <div> Attributes </div> <div> <h3>Properties</h3> <div> Name insert </div> <div> MongoDB Adapter <div> alias Select alias ▼ + <div> <div>database +</div> <div>collection myCollection</div> <div>action +</div> </div> <div> + Add Stereotype </div> </div> </div> </div> </div>	<p>To add a collection, click the corresponding + icon. Enter the name of the default collection to be used.</p> <p>To remove a collection, click the corresponding − icon.</p>