

Querying MongoDB

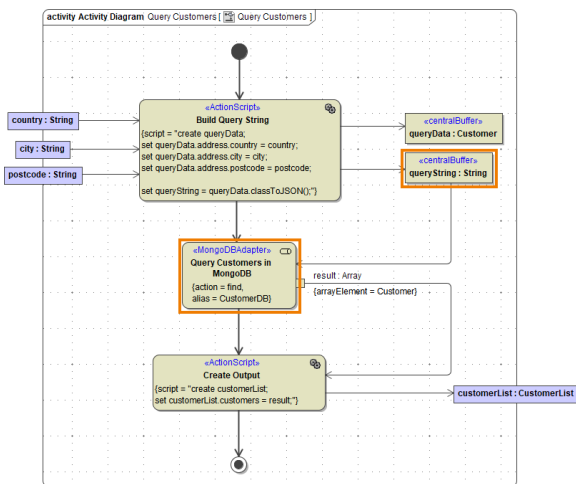
 This page explains the **MongoDB Adapter** in Bridge context. If you were looking for the same information regarding the **PAS Designer**, refer to **MongoDB Adapter** in the Designer guide.

Use stereotype **<<MongoDBAdapter>>** on an action node to interact with a MongoDB and to insert, get and manipulate documents.

Example File (Builder project Add-ons/MongoDB):

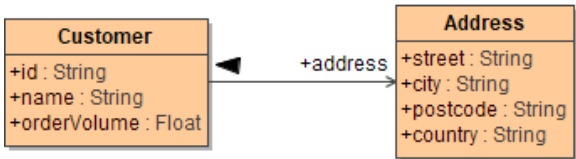


<your example path>\Add-ons\MongoDB\uml\simpleMongoDbAccess.xml



Using action **find** you can retrieve data. MongoDB stores data in form of documents that are depicted in a JSON-like format. Queries always return one or more complete documents.

For all actions that refer to existing documents, you need to provide a query string (**queryString**) to identify them. A query string contains all properties of the document you want to use for selection. The simplest way to create a query string is to create an object having the structure of the document (**queryData** in the example above), and set all query values to this object.



Then, provide this object as **queryString** by converting it to JSON using **classToJson()**.

A **find** action of a **<<MongoDBAdapter>>** returns either a result set or a handle.

Name	Type	Description	
result	Array of String	An array of all resulting documents in JSON format.	The complete set of found documents in an array.
	Array of <document class>	An array of objects of an xUML class representing the document structure.	
 This only makes sense if you know the structure of the documents you are accessing.			

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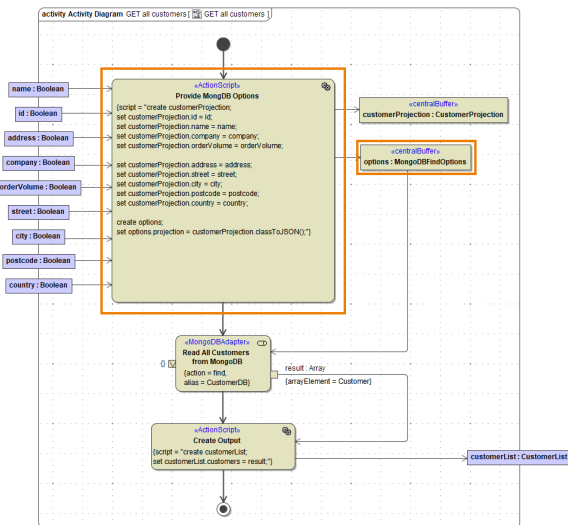
- [MongoDB Components](#)
- [Querying MongoDB](#)
- [Updating MongoDB Documents](#)
- [Aggregating Data](#)
- [Inserting and Deleting Documents](#)
- [MongoDB Adapter Reference](#)
- [classToJson\(\) Operation](#)

handle	MongoDBHandle	A handle to a result set. This is helpful if • you expect a huge amount of documents being returned, and do not want to load the complete result set to the memory • you want to iterate over the result set one by one anyway, and e.g. only regard a subset of the result for further processing.	You need to process the result set one by one using fetch.
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Refer to [Action "find"](#) and [Action "fetch"](#) for a detailed description of all parameters and options.

Selecting Output Data

MongoDB uses the concept of "projection" to define which properties should be selected from a document. The projection is supplied to the adapter call via the **projection** attribute of the [MongoDBFindOptions](#).

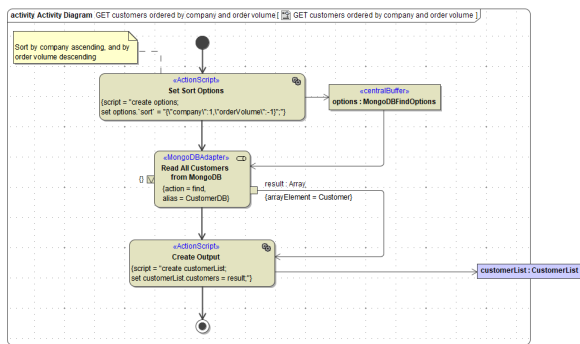


The following rules apply to projections:

Rule	Example
You can select dedicated properties.	{ name: 1 }
You can select all properties and omit dedicated properties.	{ name: 0 }
You cannot mix both above mentioned rules. This will lead to an exception.	{ name: 1, company: 0 }
You can select properties from within a structure.	{ address: { street: 1 } }
You cannot select all properties and omit dedicated properties from within a structure. This will be ignored.	{ address: { street: 0 } }

Sorting

You can sort the document list you get back from an adapter call by providing the **sort** attribute of [MongoDBFindOptions](#).



Parameter **sort** contains the document properties to sort by. Value **1** is ascending sorting, value **-1** is descending sorting. The order of JSON properties reflects the sort hierarchy.



You need to escape the attribute name **sort** because there is an operation having the same name.