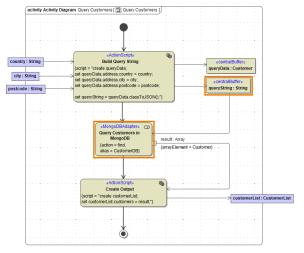
# **Querying MongoDB**



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.





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 classToExtendedJSON().

A find action of a << Mongo DBA dapter>> returns either a result set or a handle.

Name	Туре	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&gt;</document 	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.	

#### On this Page:

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### **Related Pages:**

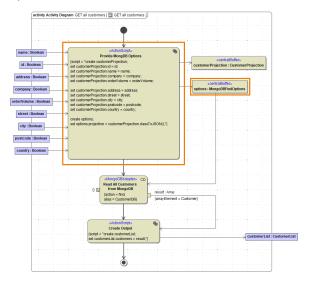
- MongoDB Components
- Querying MongoDB
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- Aggregating Data
- Inserting and Deleting Documents
- MongoDB Adapter Reference
- classToExtendedJSON()
   Operation

handle	MongoDBH andle	A handle to a result set.  This is helpful if	You need to process the result set one by one using fetch.	
		<ul> <li>you expect a huge amount of documents being returned, and do not want to load the complete result set to the memory</li> <li>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.</li> </ul>		

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 MongoDBFind Options.

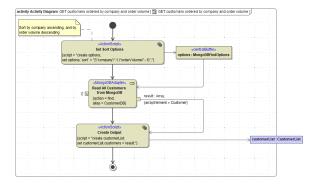


The following rules apply to projections:

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 }
u can select properties from within a structure.	{ address. street: 1 }
You <b>cannot</b> 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 Mongo DBFindOptions.



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.