

Database - Feature #1653

Feature # 1651 (Closed): add support for dynamic database features

add conversion and runtime support for dynamically prepared queries

10/21/2012 05:26 PM - Eric Faulhaber

<b>Status:</b>	Closed	<b>Start date:</b>	04/02/2013
<b>Priority:</b>	Normal	<b>Due date:</b>	06/17/2013
<b>Assignee:</b>		<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Runtime Support for Server Features	<b>version:</b>	
<b>billable:</b>	No		
<b>vendor_id:</b>	GCD		
<b>Description</b>			
<b>Subtasks:</b>			
Feature # 1954: add conversion support for CREATE QUERY statement			Closed
Feature # 2120: add runtime support for dynamically prepared queries			Closed
Feature # 2127: complete runtime support for dynamically prepared queries			Closed

History

#1 - 10/21/2012 05:41 PM - Eric Faulhaber

This feature will require dynamic (runtime) conversion of the CREATE QUERY statement.

#2 - 10/31/2012 04:05 PM - Greg Shah

- Target version set to Milestone 7

#3 - 01/21/2013 12:18 PM - Ovidiu Maxiniuc

- File om\_upd20130121a.zip added

- Status changed from New to WIP

I have wrote more than needed code. As the creation of the query is dynamic, one cannot do much with the created queries, I also added the dynamic manipulation routines (method attributes) for these queries. I did a search on redmine and I did not find any issue created about ADD-BUFFER, SET-BUFFERS, QUERY\_PREPARE, QUERY-OPEN and QUERY\_CLOSE methods, so I added the conversion implementation and stubs for runtime. I believe they will be eventually needed and implemented. I currently added these features to com.goldencode.p2j.persist.AbstractQuery. I am not sure if this is the right place for runtime implementation. Please advise.

Also, I added a stub-implementation for DELETE OBJECT that I needed to get my testcase converted and then compiled into java. Probably this is not the place and not the right way to implement it. Please let me know, I will more / remove the respective code.

#4 - 01/22/2013 12:32 PM - Ovidiu Maxiniuc

- File om\_upd20130122a.zip added

Oops, I forgot to add the new query\_definitions.rules file.

#5 - 01/29/2013 11:59 AM - Ovidiu Maxiniuc

- File om\_upd20130129c.zip added

Changed code to take advantage of new handle implementation.  
In fact some support was already there, written by Constantin. I only merged the code and fix eventually issues.

**#6 - 02/01/2013 11:51 AM - Eric Faulhaber**

Code review 20130129c:

I too am concerned that P2JQuery and AbstractQuery may not be the correct targets for all of the dynamic query methods you have added. The class hierarchy that implements the P2JQuery interface is really about the operation of a query once it has been defined, either statically (in which case the classes in this hierarchy are instantiated directly in the converted code), or dynamically (in which case we will instantiate the appropriate class from this hierarchy behind the scenes, based on the runtime conversion of the string we get in PREPARE-QUERY).

For now, let's leave it as is, because Vadim also is adding query-related methods and attributes to this hierarchy and I don't want these methods to be scattered across multiple classes/interfaces at this time. Ultimately, however, we may want to introduce a new DynamicQuery interface for these and move the static createQuery methods and the implementation of the new instance methods from AbstractQuery into a new class (QueryFactory?). Once we have a chance to integrate and review all the new code, it should be easier to determine where things belong.

BTW, the version of handle.java here is identical with the latest version in bzt. Did you mean to include a different one?

**#7 - 02/01/2013 12:13 PM - Eric Faulhaber**

Also regarding 20130129c: you mentioned a DELETE OBJECT conversion above, but I did not see this in the code. Did I just miss it, or are there files missing?

**#8 - 02/01/2013 12:31 PM - Constantin Asofiei**

Also regarding 20130129c: you mentioned a DELETE OBJECT conversion above, but I did not see this in the code. Did I just miss it, or are there files missing?

The conversion of the DELETE OBJECT statement is implemented part of the [#1920](#)/[#1921](#) work, so there is nothing else to do. This statement can receive as parameter only a handle instance, and gets converted to HandleOps.delete. Here, depending on the resource referenced by the handle, actual resource deletion is performed. Currently, DELETE OBJECT is implemented only for persistent procedures.

**#9 - 04/09/2013 01:16 PM - Eric Faulhaber**

- Subject changed from add conversion and runtime support for CREATE QUERY statement to add conversion and runtime support for dynamically prepared queries

**#10 - 01/07/2014 12:39 PM - Eric Faulhaber**

- Status changed from WIP to Closed

#11 - 11/16/2016 11:42 AM - Greg Shah

- Target version changed from Milestone 7 to Runtime Support for Server Features

Files			
om_upd20130121a.zip	18 KB	01/21/2013	Ovidiu Maxiniuc
om_upd20130122a.zip	18.8 KB	01/22/2013	Ovidiu Maxiniuc
om_upd20130129c.zip	49.9 KB	01/29/2013	Ovidiu Maxiniuc