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QMF 11 Provides an Orderable Feature to Support IBM DB2 10

Dateline: IBM May 6, 2014. IBM announces support for QMF 11 as an orderable feature to support DB2 10. The general availability date is May 30, 2014.

Many users who reviewed QMF 11 want it right now. However, as a feature of DB2, QMF has always been tied to the version of DB2 with which it is shipped. The overwhelming majority of organizations that use DB2 for z/OS are cautious about upgrades because of the huge impact that DB2 has on their business.

QMF 10 supported DB2 9 as an orderable feature. The idea was to provide a feature that would trigger the shipment and availability of QMF 10 with DB2 9. That has now been extended to provide a feature of QMF 11 to order with DB2 10. You do not have to wait!

For more information, contact your IBM Representative. To order directly from Shop z, go to https://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp

Support for Big Data: IBM InfoSphere BigInsights, Hadoop via Hive Support, and More

The world of Big Data continues to expand. You cannot go anywhere without seeing a reference to it. Nor can we. But lately, far too much emphasis is placed on whatever the newest member of the Big Data family is, causing many to overlook the Big Picture of Big Data.

We define Big Data as the collection of all potential input sources to an enterprise data strategy, including traditional relational sources and more. Does DB2 for z/OS play in the realm of Big Data? Absolutely. IMS? Yes. VSAM? Of course. From a business perspective, any data source that can be electronically searched and queried qualifies as Big Data. The only limitation is the lack of a technology that can access the sources.

Consider how QMF supports emerging technologies within Big Data. QMF 11 supports Apache Hadoop data sources and the Hive interface, as shown in Figure 1.

Figure 1: QMF support for Hadoop and Hive
Keep in mind that we do not define Big Data as Big Data=Hadoop. Big Data encompasses a myriad of data sources and formats. However, given the industry and customer attention that Hadoop receives, it was imperative that QMF provide support for it.

QMF supports IBM InfoSphere BigInsights through the use of the BigSQL driver alternative to Hive, as shown in Figure 2.

DB2 for z/OS® 11 supports direct access to InfoSphere BigInsights data through the HDFS_READ TABLE function, as shown in Figure 3.

Many enterprise accounts use DB2 for z/OS as the hub for all data across the entire enterprise. To expedite queries, DB2 for z/OS provides the IBM DB2 Analytics Accelerator. To support the DB2 Analytics Accelerator, QMF allows users and applications to use a SET CURRENT QUERY ACCELERATION command within a query or procedure. In addition, the database administrator can set the default query acceleration for all QMF users.

For example, the DB2 instance can have one default for all applications; QMF users can have a different default that overrides the DB2 default; and individual users can vary the setting on query-by-query basis and override the DB2 and QMF settings. Figure 4 shows an example of setting query acceleration within QMF.

The accelerator provides a fast load utility that loads data directly from various sources. For example, you might have queries that access IMS data but require significant overhead on IMS itself. Because these types of queries aren’t suitable for a quick in/out look at the data, load the data into the accelerator. Then the queries run very quickly and do not affect IMS at all. QMF also supports a pure Netezza environment and IBM BLU Acceleration, which is available for DB2 10 on Linux and AIX.
QMF includes a new non-SQL function that you use to access HTTP URLs with Javascript calls. You create a JavaScript table that resides in the QMF table lists. When this table is queried, it launches a request and returns data in a typical result set. The data is available for any QMF report or visualization. Figure 5 shows an example of using JavaScript tables. The DB2 query creates a table, populates it with a SELECT statement, queries the table, and then drops the table.

To create this type of query, first store the JavaScript table as a table definition, as shown in Figure 6.

Next, issue a request to populate the table and remove old data, as shown in Figure 7.

The information is just another table that is defined to QMF, as shown in Figure 8.
Figure 9 shows a handy summary of QMF data source support for Big Data. This list will continue to grow as more Big Data technologies emerge. For example, as shown in Figure 9, IBM is collaborating with MongoDB to develop elements that enhance IBM’s Big Data initiative and mobile computing strategy. So keep an eye on QMF and Big Data. Exciting new developments will emerge as Big Data continues to evolve and we continue to innovate.

![Figure 9: IBM announces collaboration with MongoDB](image)

**A Message from the Developers of QMF: Persistence of Global Variable Settings**

QMF for TSO/CICS Version 11 enhancements...DRIVEN BY YOU!

QMF 11 includes significant enhancements in the area QMF global variable management. The last newsletter described enhancements that QMF Administrators can use to initialize and protect global variable settings at the system level. Now let’s focus on enhancements that users can use to manage global variables.

Prior to QMF 11, global variables that a user set during a QMF session were retained until the value was reset or until the user ended the session. In QMF 11, users can set the new global variable DSQEC_USERGLV_SAV to 2 to retain their own QMF and user global variable settings across all sessions.

For example, user PERNAL issues the following QMF command:

```
SET GLOBAL (DSQEC_USERGLV_SAV=2
```

During the same session, user PERNAL sets the following global variables:

```
SET GLOBAL (Company_Name='IBM'
SET GLOBAL (Partner_Name='Rocket Software'
SET GLOBAL (DSQEC_SQLORYSZ_2M=1
```

User PERNAL exits QMF and returns to QMF the next day. When PERNAL issues the SHOW GLOBALS command, the following screens display the previously set global values, which are retained across QMF sessions:

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY_NAME</td>
<td>IBM</td>
</tr>
<tr>
<td>PARTNER_NAME</td>
<td>ROCKET SOFTWARE</td>
</tr>
<tr>
<td>DSQEC_SQLORYSZ_2M</td>
<td>1</td>
</tr>
<tr>
<td>USERQ_TAPOD (QMF)</td>
<td>3 3 3 3 3 3 3 3 3 3 3 3</td>
</tr>
</tbody>
</table>

![Screens displaying QMF global variables settings](image)
Valid values for DSQEC_USERGLV_SAV are:

- **0** = Delete all global variables that are associated with the user ID from the Q.GLOBAL_VARS table.
- **1** = Retain all global variables that are associated with the user ID in the Q.GLOBAL_VARS table, but do not write any new values that the user sets during the current QMF session.
- **2** = Save the values of all updateable global variables to the Q.GLOBAL_VARS table.

User global variable settings are saved in the new QMF 11 catalog table Q.GLOBAL_VARS. To enable the persistence feature for all users, the QMF Administrator inserts a SYSTEM row for DSQEC_USERGLV_SAV in the Q.GLOBAL_VARS table.

For a video that demonstrates this feature, click the following link to go to the DB2 for z/OS Best Practices Community on IBM developerWorks. Search for the title “QMF Best Practice - QMF 11 Classic…Saving Session Settings.”

https://ibm.biz/BdRYTb

For more information on the DSQEC_USERGLV_SAV global variable and on QMF Version 11, click the following link to go to the IBM Knowledge Center:

http://www.ibm.com/support/knowledgecenter/

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**QMF Publications Transition to the IBM Knowledge Center**

QMF publications have a new home! All documents are now available in the IBM Knowledge Center, which is where you can find product documentation for all IBM products in one place. The IBM Knowledge Center is at https://ibm.biz/IBMKCgo.

If you are not yet familiar with IBM Knowledge Center, now is a great time to get acquainted. Here are a few tips for getting started:

1. **Start using it!** Navigate to information that you regularly use. Search for a command whose syntax you always forget. Create a personalized collection of the topics that you refer to frequently. Because all IBM product documentation is now in one place, the collection can include topics about several different IBM products.
2. **Skim the blog posts on the IBM Technical Content blog at** https://ibm.biz/IBMKCTCBlog. In a recent post, Jamie Roberts, IBM Knowledge Center Product Manager and User Experience Lead, answered frequently asked questions that were raised during the open beta period for the IBM Knowledge Center. Earlier posts explain the differences between Information Centers and the IBM Knowledge Center and share tips for searching the IBM Knowledge Center to find what you need as quickly as possible.
3. **Watch this 14-minute video,** which includes a demo of the unique features of the IBM Knowledge Center: http://www.youtube.com/watch?v=R55_FZjk8XE.

Want to schedule a demo? Want to schedule a product update? Contact us!


**Send inquiries and comments to:** MBiere@rocketsoftware.com

**Resources:**

- QMF 11 Best Practices Videos: [https://ibm.biz/BdDG3N](https://ibm.biz/BdDG3N)
- Try QMF 11 Workstation/WebSphere free for 60 days: [https://www.ibm.com/services/forms/preLogin.do?source=swg-im-qmf](https://www.ibm.com/services/forms/preLogin.do?source=swg-im-qmf)