Frequently Asked Questions

DQ*broker* and DQ*admin*

Installation, configuration and setup

Question

Where is the DARGAL configuration file and how do I modify it to specify a host?

Resolution

The file **DARGAL/CONFIG** is on the same usercode and pack as the DARGAL software. There is a section marked '< >DQBROKER' (or '< >UNIXSQL') in this file. It contains a sample entry for a host file:

EXAMPLE 0000

Get this file in CANDE and add an entry for each UNIX or NT host you want to access. (You can replace the sample entry.) The host name and network address (socket number) can occupy 35 spaces each. Separate them with a space. The entire entry can occupy only one line (including domain name). For example, the following entry is for a host named TEMP whose socket number is 5999:

TEMP 5999

See chapter 7 in the *File Description Subsystem Manual* if you need more detailed information.

Question

When I try to connect to DQvista from a web browser by entering an URL in this form:
***http://<host>:<port>/dqvista.html**, I get an error message about dqlistener followed by copyright information. What could be wrong?*

Resolution

Make sure that you are using the correct server name for the host and the correct port number. To verify the port number, follow these steps:

- Run DQadmin.

- Choose the **Settings** command (DQvista menu).

  The **Global Settings** dialog box appears.

- Check the port number beside DQvista server port.
- Choose **Cancel**.

Also make sure that you have started the DQvista server service:

- Run **Services** from Control Panel.
- Start the **DQvista Server** service.

Question

While I was trying to view an A Series table in DQadmin, I got the message "DMSUPPORT LIBRARY NOT FOUND." What does this mean?

Resolution

The DMSUPPORT library is probably saved with the security type attribute PRIVATE. Change the security to PUBLIC IN. You'll then be able to view the table in DQ*admin*.

Question

How and where do I set up my DQbroker port and register with DSS?

Resolution

You can specify these settings in EZINSTALL and you must be a system privileged user. Follow these steps:

1. Choose **SETTINGS** on the EZINSTALL Main Screen.
2. Choose **ODBC FOR TCP/IP** on the Settings Menu Screen.
3. If you use DQ*broker* via TCP/IP, enter the socket numbers for the command port and the data port.
4. Register the server host program with Distributed System Services (DSS) by providing values for **ENDPOINT**, **DSS**, **PROVIDER**, and **PRIORITY**.

   See the *EZINSTALL Administrator's Guide* if you need more information.

Question

When I try to create an FD for a DQbroker file, I get the error message "NO DQBROKER HOST: <host name> (RESULT=<hex number>)." What's wrong?

Resolution

Before trying to create DARGAL file descriptions for DQ*broker* files, make sure you have done the following:

- DQ*broker* must be installed and configured on the UNIX or NT host.
- You must have a user ID for the file server.
- You must have a password for the file server.

On the A Series side of the system, you must configure DARGAL as follows:

- Make an entry in the configuration file (**DARGAL/CONFIG** on the same usercode and pack as the DARGAL software) to name any SQL hosts and their network addresses. (See below for more information.)
- Set the **Setup** command option **TCPType** to either **BNA** or **UPstanding**, depending on your network.

A file called **DARGAL/CONFIG** is on the same usercode and pack as the DARGAL software. There is a section marked
'< >DQBROKER' in this file. It contains a sample entry for a host file:

EXAMPLE 0000

Get this file in CANDE and add an entry for each UNIX or NT host you want to access using DARGAL. (You can replace the sample entry.) The host name and network address (socket number) can occupy 35 spaces each. Separate them with a space. The entire entry can occupy only one line (including domain name — see note below). For example, the following entry is for a host named TUT whose socket number is 5999:

TUT 5999

This number is treated as a starting port number, since the service on the NT may be in use. When a user tries to connect to DQ*broker*, the port number the user enters is compared to the port number in **DARGAL/CONFIG**. If the numbers are the same, there is a match. If there is not a match, the port number is incremented by one and the process is repeated. DQ*broker* tries five times before stopping.

Note: If you use a domain name (a function of TCP/IP server software), enter it after the socket number. Separate the socket number and domain name with a space. The domain name can be up to 59 characters. An example follows:

TUT 5999 DSINC.COM

An option called **DEFAULTPORT** in **DARGAL/CONFIG** allows you to set the default port for

DQ*broker*. If a host is not named in the configuration file, DQ*broker* tries to connect using the default port. You no longer need to identify hosts running DQlistener. Only hosts running DQlistener on ports other than the default port need to be identified in the configuration file. DQ*broker* has an internal default port number of 8000. This means that DQ*broker* can run even if there is no configuration file — as long as all DQlisteners are running on port 8000.

Beginning with DARGAL Version 59.140, you can specify a port number in a DQ*broker* FD by using EZFD or FDSYS. In EZFD, you can use the following syntax in the **DQBROKER HOST OR IP ADDRESS** form on the DQ*broker* Information Screen:

<host name>:<port number>

In FDSYS, use the following syntax when creating a DQ*broker* FD:

MAKE <nickname> FROM DQBROKER FOR <table name spec> (SQLINFO = "<host name>:<port number>", "<ID>", "<password>")

To modify an existing FD, get the FD and use the following syntax:

FILE SQLINFO="<host name>:<port number>", "<ID>", "<password>"

If you specify a port number in the DQ*broker* information, this port number overrides all settings in the **DARGAL/CONFIG** file including the default port.

Question

What type of PC do you recommend I use to run DQadmin?

Resolution

DQ*admin* runs on just about any Windows-based PC that is running Windows 95 or higher. DQ*admin* requires very little disk space (about 12M) and very little memory (about 2M). A character-based version of DQ*admin* runs on Windows NT and UNIX machines. An HTML version of DQ*admin* as well as a Java version are currently in the works. The Java version will replace the current GUI version.

Question

How does the client PC that is running DQadmin connect to the DQbroker server?

Resolution

The client PC connects to the server using TCP/IP. The four items it uses to make the connection are: a user name, a password, a DQ*broker* server, and a domain port number.

Once you have these four items set, you can connect to any machine on the network that has DQ*broker* on it.

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Question

Can DQvista and DQbroker co-exist with IIS on the same server?

Resolution

This configuration is possible if you have DQ*broker* on a web platform serving as a web access point and if it meets specific configuration requirements. DQvista query processing would be performed on this server as well, so the number of simultaneous queries running on that server could create a bottleneck if you don't have a robust machine. Using mutiple CPUs would eliminate the problem. There is no concrete limit to the number of simultaneous queries allowed.

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Question

If I decide to access multiple data sources from one DQbroker initially, can I use DQadmin to administer all of them?

Resolution

Yes, you can use DQ*admin* to administer all of them. You can use DQ*admin* from any UNIX or Windows-based machine (from anywhere on the network) to administer any data source in your DQ*broker* domain.

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Question

Should a server running DQbroker for DB2 be located physically near the mainframe?

Resolution

DQ*broker* connects to the mainframe through an NT box. When DQ*broker* sends a query or subquery to DB2 on the mainframe, a DQ*broker* result set is sent back to the DQ*broker* with the DB2 data source definition on it. If DQ*broker* sends a complete query to DB2 (that is, DQ*broker* did not need to modify the user's query and passed it directly "as is" to the database), it does not matter where the NT box is. The result set is the same and DQ*broker* sends it back to the user "as is." If this is the case, it is more important where the end user is located, not the DB2 DQ*broker* data source definition. In other situations, location is important. If DQ*broker* needs to do something with the result set (for example, join it to data

from another database, perform a function not supported by DB2, etc.), it's best to have the DB2 DQ*broker* as "network close" to the mainframe as possible. Therefore, put the DB2 DQ*broker* on the smallest, fastest sub-net that the Mainframe is on. It's best if this sub-net is separated from the rest of your LAN by an Ethernet switch to keep the traffic as local to these machines as possible. Regardless of the DB2 DQ*broker* location, there is little difference in load on the mainframe.

Views, administrative functions, general information

Question

How do I add an SQL view to a user's catalog?

Resolution

1. In DQ*admin*, right-click on **Views** in the **All Folders** window.

2. Choose the **New** command.

   The **New View** dialog box appears.

3. Enter a new name beside **View Name**.

4. Choose **OK**.

5. Enter the SQL statement that defines the view and choose **OK**.

6. Choose **OK** again.

See the DQ*admin* online help if you need more detailed information.

Question

Can I allow one of my users to create views in DQadmin, but not do anything else?

Resolution

A user must have access to DQ*admin* to create views. Non-administrative users should not create views or have access to data sources. The user can, however, save the SQL SELECT statement in a file and then have the administrator paste the information into the view in the **Properties** dialog box (**SQL** tab).

Question

Can I delete or modify the view name that appears in front of all field names in my DQbroker files?

Resolution

In FDSYS, you can modify the table name to make it shorter by assigning an alias. You can set this up when you make file descriptions for DQ*broker* files. You can then reference fields using shorter names. For example, the following instruction allows you to refer to the table **accounts** as **a**:

MAKE ACCOUNTS! FROM DQBROKER FOR a=accounts (SQLINFO = "TEMP", "dev", "pw")

You can then refer to the field called **name** in the table **accounts** as follows:

#a.name

Question

How do I use DQbroker without an A Series machine? What would I use as my reporting tool?

Resolution

If all your data resides on a UNIX or NT box, you do not need to have an A Series machine. You can use DQvista as your reporting tool. DQvista and DQ*broker* have a relationship that is similar to URSA and the DARGAL reporting engine. DQ*broker* is the middleware server that provides access to the data you want to use in reports you create in DQvista.

Question

How do result sets move around in a DQbroker domain?

Resolution

Theoretically, we stream result sets byte by byte. To be more precise, we actually stream them in buffers of bytes (packets). These packets might contain a partial record or multiple records. Within a row, a blob field is represented by a token. When the final destination reads the record up to the blob, a separate connection is opened back to the source to retrieve the blob. This eliminates the need to hold the entire blob anywhere along the chain. It also allows the client to request the blob in pieces; then we read it in pieces from the database. The blob is streamed within its own connection - the in and out pieces do not need to be the same size

or in any other relationship. A blob can be any size - we cannot assume we can hold a whole one. If we needed to perform a sort, the token is sorted with the record. We do not do any processing on the blob itself - no sorting or selecting. Since the data type of a blob is unknown, databases do not process them either.

Join-related information

Question

How do I get to the area in DQadmin that allows me to edit a join?

Resolution

To edit a join in DQ*admin* follow these steps:

1. Right-click on the view in the main window.
2. Choose the **Properties** command.
3. Select the **SQL** tab.
4. Choose the **Edit** button.
5. Choose the **SQL Builder** button.
6. Select the **Join Properties** tab.
7. Make your changes to the join definition in the **Table Relationships** dialog box.

Question

When I try to access an SQL file that contains two joined tables in the view, I get an error message about ambiguous column names. What does this mean?

Resolution

The two tables in the view contain a column with the same name. Since the view name is included with the column name, you end up with ambiguous names. Change the SELECT statement in the view to give one of the columns a different name. Follow these steps in DQ*admin*:

1. Right-click on the view in the main window.
2. Choose the **Properties** command.
3. Select the **SQL** tab.
4. Choose the **Edit** button.
5. Enter text to change the name, for example:

   SELECT **CLASS AS PRODUCTS_CLASS** . . .

6. Choose **OK**.