

A Powerful Broker

DB2 Web Query for i offers a strong reporting tool

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DB2 Web Query for i provides powerful Web-based reporting and graphing capabilities that let you view data in many different, visually appealing forms. A selection of output options lets you generate reports that automatically populate a spreadsheet, create a PDF or XML file, or generate a DB2 Web Query Active Report that lets end users manipulate the data in a disconnected mode. With IBM's July announcement of DB2 Web Query Report Broker (the product is planned for GA this month), the background reporting capabilities offer significant enhancements.

DB2 Web Query Report Broker (product code 5733-QU3) adds a new level of scheduled report distribution, enabling more report consumers to automatically receive reports in the formats they most prefer. Report Broker enhances the number of output options available when reports are run in a batch mode. The GUI-based scheduler makes it easy to automate the report execution, with many options for running recurring reports. Leveraging e-mail distribution lists, the resulting output of the scheduled report can be distributed automatically. And with intelligent bursting, Report Broker lets you run a report once but distribute portions of it to users based on a key field.

Many customers have found the Active Reports feature a great way to distribute the query result in a format that lets end users see the data in a variety of ways, including adding calculated fields; filtering the data; sorting, pivoting or rolling up the data; or even creating charts on the fly to export into a PC application. Active Reports is just one output option supported by Report Broker, but is a very powerful way to work with a snapshot of data without returning to the server every time you want to view the

data from a different angle. Now, with Report Broker, the creation and distribution of Active Reports can be totally automated.

Report Broker Functions

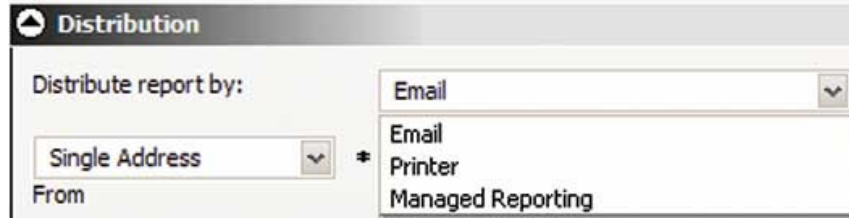
Let's examine how Report Broker works. To schedule a report distribution from within DB2 Web, simply right-click on the report or graph and select "Schedule." You'll be presented with the dialog box shown in Figure 1. From here, you can set all of the attributes that control this scheduled report.

The screenshot shows a web browser window titled "My Report - Windows Internet Explorer". The browser's address bar and menu bar are visible. The main content area displays a configuration dialog for a report. The dialog is organized into several sections, each with a collapse/expand arrow on the left:

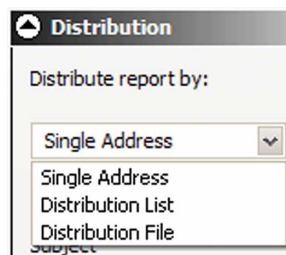
- Description:** A text field containing "My Report".
- Distribution:**
 - "Distribute report by:" dropdown menu set to "Email".
 - "Single Address" dropdown menu.
 - "From" text field: "EndUser@mycompany.com".
 - "Reply Address" text field: "ReportBroker@mycompany.com".
 - "Subject" text field: "My Report".
 - Checkbox "Send Report as an Attachment" (unchecked).
 - "Message" text area: "Please see attachment".
 - Checkbox "Add Reports to Zip File" (unchecked).
 - "Zip File Name" text field.
- Frequency:**
 - "Run Interval" dropdown menu: "Once".
 - "Start Schedule" text field: "May 23, 2008 3:34 PM".
- Report Options:**
 - "Send the Report in this Format" dropdown menu: "HTML - Web Page (*.htm, *.html)".
 - Checkbox "Burst this Report" (unchecked).
 - "Execution ID" dropdown menu: "rdandrew". A "Change Password" button is next to it.
 - Text: "Check and select Parameter to change displayed value."
 - Table with columns "Name" and "Value":

Name	Value
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- Notification:** (Section header, partially visible)
- Advanced:** (Section header, partially visible)

Within Report Broker, you can distribute reports and graphs with three main methods. The first is to send them over e-mail. The second allows for direct printing to a printer. Third, reports may be generated and saved in the IFS for Web-based access (see Figure 2).



If you're sending the report via e-mail, you can address it to one person or a distribution list (see Figure 3). The report can be embedded directly in the body of the e-mail or included as an attachment. When sending as an attachment, you can include a custom message. Report Broker also includes the capability to use ZIP compression to reduce the size of the attachments being sent. The compression is done within Report Broker without any outside tools.

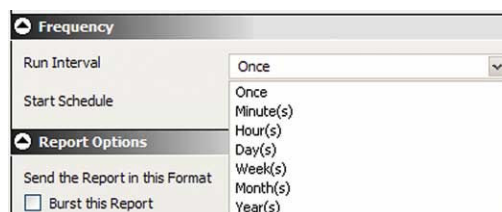


The report or graph can also be sent to a line printer protocol printer. This is a printer on a TCP/IP network that the IBM i system can address. In the address bar, enter `queue@printerserver`, which, for example, may look like `simplexqueue@itprinter.mycompany.com`.

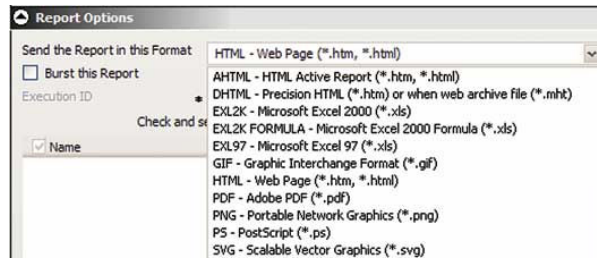
The final method of report distribution is known as managed reporting. With this method, the report is generated and stored in the IFS on the server running i. Any end user with access to that domain can then view the generated report online, which is especially useful if you need a consistent place for users to see recurring reports. Users won't need to wait for the report to generate. Plus, if it's a long-running report, this is a way to do a run-once-and-view-many-times report, avoiding several users all running a resource-intensive report on the system.

Report Options

You have several choices on how often a report is run (see Figure 4). Basic options include every day or every week. You can choose which day or days of the week to run it. This could mean running a report on Monday, Wednesday and Friday. For options such as monthly, you can choose a particular day, say always the first of the month, or an occurrence of a day, such as the first Monday or last Friday of the month.

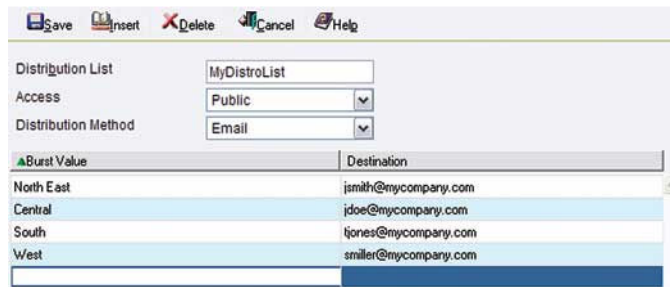


You have several formatting options for either sending the report to an e-mail address or storing on the server. These include report-viewing options such as HTML, Active Reports, Excel (with or without formulas) and PDF (see Figure 5). For graphs, standards such as PNG and GIF are also available.

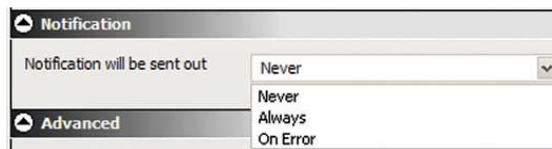


One of the most advanced features of Report Broker is its capability to do intelligent bursting. This is the concept of taking one report and segmenting it so individuals get only their particular data. When bursting, the report header and footer are attached to the rows that each user receives, so it looks like a complete report but only contains the data that user is authorized to see.

You'll decide how to segment and send the data based on the first Sort By column in the report. When the distribution list is created, the e-mail addresses as well as the segment keywords are listed. With bursting enabled, the report will automatically segment for everyone on your distribution list. One example of when bursting is useful is a sales report in which each region's manager only sees data for his or her region. You can reuse a single report yet distribute different content (see Figure 6).



Report Broker also contains a notification system that can be used to notify someone that a report was successful or failed. The choices allow for no notification, notify only on failure or always notify (see Figure 7).



In addition to the time-based scheduling for distribution, Report Broker lets you trigger report sending instantly from a CL command. Let's assume you have an inventory report that runs every Friday afternoon. That's great by itself, but what happens if inventory is running low on Wednesday morning? You could have a monitoring program or even a trigger program on your inventory file. When it detects

a low inventory status, it could trigger the report to fire immediately. That report would then be e-mailed or printed to alert you to a potential problem.

Help for Administrators

Besides the front-end scheduling capabilities, several back-end utilities can assist administrators. A log tracks every report that's sent. The information is viewable online but can also be e-mailed using the notification option. The retention period defaults to 30 days but can be modified.

Report Broker also has an interface for making global changes. Assume Fred changes jobs and now all of his reports should go to Steve. Using Global Updates, you can instantly change the ownership of all of Fred's schedules to Steve and point them to Steve's e-mail address.

Built into the administration side is a change-management facility. This lets schedules and distribution lists be pushed or updated to a second system. Using this facility, administrators can create all of the schedules on the development system and, once set, can push them over to the production system. If changes are necessary, you can make them on the development system and then update the production system. This lets all of the development work be done on the development system and then be deployed to the production system.

To prevent reports from running on particular dates, a blackout calendar lets administrators restrict execution. If a date is blacked out, scheduled reports won't run until their next scheduled execution. If notifications were enabled, they'll be sent stating that the report didn't run.

Report Broker has a built-in Scan Back feature in case it goes down. When Report Broker comes back online, it will look for report executions that weren't run while it was down. By default, any report meant to run in the prior 15 24-hour periods that wasn't run will be run immediately. Older reports will run at their next execution time. The administrator can set the number of 24-hour periods that Scan Back will go back.

A Complete Package

Overall, Report Broker provides a complete set of report-scheduling tools. Reports can be distributed via e-mail, printers or a server. Larger reports can be intelligently burst to several users. Plus, a set of administration tools allows for simple global updates as well as change management. Report Broker will truly help complete your enterprise-reporting environment with DB2 Web Query.