DB2 Web Query: Creating Dashboards with HTML Composer and InfoAssist

Jacqueline Jansen
Jackie_Jansen@ibi.com
Information Builders
Dashboard Creation Agenda

**HTML Composer**
- Add push buttons, hyperlinks, images and reports
  - Can be used to build an HTML launch page
- Add multiple, chained parameters
- Create a complete dashboard
  - Add pre-existing reports and graphs
  - Create multiple tabs
- Create a Rich Internet Application (RIA) to create an interactive Web page experience inside a browser

**InfoAssist**
- Compound Documents
- Coordinated Fields
- Active Report regular and cascaded controls
- InfoMini
Recorded Webcast

- Step by step demonstration of creating a tabbed dashboard

ibm.com/systems/i/db2/webquery

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Creating a new HTML page

- HTML Composer is part of Developer Workbench
- Navigate to the folder where the HTML page is to be stored and right click on the folder name
Tabs: Optional

- Inserting Initial Tab

- Adding Tabs

- Auto Arranging tabs

- Moving existing graphs/reports into a tab body
  - Use the ALT key when you drag and drop
More on Tabs

- Adding background image/icon (with or without text)

- Tab Positioning
Adding Multiple Reports/Graphs

- Select icon representing your report type
- Drag report location on pallette
Reference Existing Procedure

Required:

- Automatically import parameter(s)
- Automatically run report using default parameters

Not required:

- Delayed display of report (i.e. following parameter selection)
Parameter Selections

- Various control types including radio boxes, sliders, calendar controls and more

- Parameters with or without form elements
Chaining Parameters

- Dashboards or reports with multiple parameters
  - Check the Chain control boxes
  - Move the Separator up and down to force an automatic new line
  - Check the Auto chain controls box

- Select *ALL for the desired parameters

- Automatic HTML Composer output

- Use colors and frames and images to make the prompt screen attractive
Report Properties

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Run button: Executing multiple reports

- Select Hyperlink properties on appropriate RUN button
- Reference the “External Procedure” you want displayed in a given frame or in an external window
- All reports using the same Parameter are hyperlinked to the Run button, any reports not using the parameter have to be added separately

Tip:
- The report shown at initial load time does not need to be the same report executed from a Run button
  - For example, an HTML page could be a menu or launch page, each bullet could be hyperlinked to run a different report
Additional Parameter Controls

- Paging and Searching options

- Body Properties – Global search/paging control

- To control displaying different values than you want to pass to your report i.e. display Product Description but pass Product Number
HTML Composer: Rich Internet Application (RIA)

- Rich Internet Application
  - Look and feel similar to desktop
  - Zero footprint

- To enable RIA select an RIA theme from the Properties dropdown for the DOCUMENT object
HTML Composer: RIA

- Adding an RIA them enables two additional RIA specific objects that can be inserted into the page
  - Windows and Accordions
RIA Window Controls

- End users can move and resize windows
- Insert new Reports/Graphs into window
- Move existing Reports/Graphs into window using the ALT key while dragging and dropping
- Separate properties panels for the window and the embedded report(s)
RIA Accordion Controls

- By default, the Accordion is created with 3 pages
- End users cannot move or resize an accordion window, they can select between the various pages
- Each report and the accordion frame have separate property sheets
- Right click on the frame to move to/add/remove pages
- Page animation properties
Additional Dashboard Hints and Tips

- Can add .SWF files (less than 1 or 2 mb), ActiveX controls and URLs to your dashboard
- To remove the Loading message select Properties for the report Body => Loading screen => Not Set
- Hyperlinks can be inserted, added to push buttons and added to images
- Reset buttons are a valid control that can be added to a dashboard
- Date ranges can be controlled via calendar icons
User Selected Output

- RA/GA/PP output format User
- Import report into HTML Composer
- Standard Control Type options

Select number of columns
Select which entries are included
InfoAssist Compound Documents

- Dashboard features
  - Compound document including multiple reports and graphs
  - Coordinated fields
  - Active Dashboard parameters
  - Cascading parameters
  - InfoMini

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InfoAssist: Coordinated field

- Assign field from any report as a coordinated field
  - Applied to all reports on the page

- Results differ based on output format
  - Non Active formats (HTML, PDF)
    - One page for each coordinated value
  - Active formats (Active Reports, Active Flash, Active PDF)
    - Single page with a drop down filter that filters all reports on the page
InfoAssist: Active Dashboard Prompts

- When document output format is changed to an Active format additional controls appear on the insert ribbon
- When an Active Dashboard control is used then the output formats are restricted to Active formats only
- Insert an Active Control and then drag and drop a column from one of the reports into the control
InfoAssist: Active Dashboard Prompts cont’d

- Right click on the Active Control and select which reports on the page this control will be linked to
- “ALL” can be included in list
Active Dashboard Prompts: Cascading Parameters

- When inserting more than one prompt you can have InfoAssist automatically cascade the selection in the first prompt to filter the choices in the following prompts.
InfoAssist: InfoMini

- The report developer selects the fields that the user can slice their data with
- Fields are grouped and cascaded within a group
- End user can filter their report various ways and then select the format that they want to output the results in i.e. Excel
Recorded Webcast

- Step by step demonstration of creating a tabbed dashboard
- Extra
  - Overview of Creating a Highly Parameterized Report

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Questions?

Anyone? Anyone? Anyone? Anyone?
HTML Layout Painter

- Merge multiple reports and graphs into a single dashboard
- Add pictures, animation, URLs to web page
- Add parameters as drop down lists, radio buttons, sliders and more
- Chain multiple parameters

- Create Active Report controls
- Control tab sequence
- Create a highly parameterized report
Highly Parameterized Reports

Revenue and Gross Profit Report

<table>
<thead>
<tr>
<th>RANK</th>
<th>Product Category</th>
<th>Product Type</th>
<th>Revenue</th>
<th>Rev %</th>
<th>Gross Profit</th>
<th>GP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DVD Camcorders</td>
<td>Camcorders</td>
<td>$379,376,637.00</td>
<td>24%</td>
<td>79,003,287.00</td>
<td>18.26</td>
</tr>
<tr>
<td>2</td>
<td>DVD</td>
<td>Video</td>
<td>$329,872,045.00</td>
<td>21%</td>
<td>81,103,145.00</td>
<td>18.74</td>
</tr>
<tr>
<td>3</td>
<td>Digital Cameras</td>
<td>Cameras</td>
<td>$184,103,867.00</td>
<td>11%</td>
<td>60,274,997.00</td>
<td>11.73</td>
</tr>
<tr>
<td>4</td>
<td>TV</td>
<td>Video</td>
<td>$168,799,539.00</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Audio Systems</td>
<td>Audio</td>
<td>$122,345,680.00</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Speakers</td>
<td>Audio</td>
<td>$84,717,053.00</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CD Players and Recorders</td>
<td>Audio</td>
<td>$53,847,459.00</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>MiniDV Camcorders</td>
<td>Camcorders</td>
<td>$51,539,451.00</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>MP3</td>
<td>Audio</td>
<td>$43,491,588.00</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Amplifiers/PreAmps/Tuners</td>
<td>Audio</td>
<td>$42,374,428.00</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Receivers</td>
<td>Audio</td>
<td>$35,907,113.00</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>VCR</td>
<td>Video</td>
<td>$21,888,621.00</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Handheld and PDA</td>
<td>Office</td>
<td>$18,533,190.00</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Digital8 Camcorders</td>
<td>Camcorders</td>
<td>$13,814,953.00</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Organizers</td>
<td>Office</td>
<td>$11,712,495.00</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Screening conditions:

- WHERE (COUNTRY) EQUAL to
- WHERE (REGION) EQUAL to
- WHERE (STATE) EQUAL to
- WHERE (PRODUCTTYPE) EQUAL to
- WHERE (PRODUCTCATEGORY) EQUAL to
- WHERE (STORENAME) EQUAL to
- WHERE (SALESREP) EQUAL to
- WHERE (PLANTNAME) EQUAL to
- WHERE (ORDERDATE) GREATER THAN or EQUAL to
- WHERE (ORDERDATE) LESS THAN or EQUAL to

IBM DB2 Web Query for System i
## Highly Parameterized Reports

**Revenue and Gross Profit Report**

<table>
<thead>
<tr>
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<td>21%</td>
<td>81,103,145.00</td>
<td>18.42</td>
</tr>
<tr>
<td>3</td>
<td>Digital Cameras</td>
<td>Cameras</td>
<td>$184,103,868.00</td>
<td>18%</td>
<td>31,710,570.00</td>
<td>17.24</td>
</tr>
<tr>
<td>4</td>
<td>TV</td>
<td>Video</td>
<td>$168,799,533.00</td>
<td>16%</td>
<td>27,268,086.00</td>
<td>16.38</td>
</tr>
<tr>
<td>5</td>
<td>Audio Systems</td>
<td>Audio</td>
<td>$122,345,688.00</td>
<td>12%</td>
<td>21,126,345.00</td>
<td>17.19</td>
</tr>
<tr>
<td>6</td>
<td>Speakers</td>
<td>Audio</td>
<td>$84,717,187.00</td>
<td>8%</td>
<td>12,802,177.00</td>
<td>15.09</td>
</tr>
<tr>
<td>7</td>
<td>CD Players and Recorders</td>
<td>Audio</td>
<td>$53,847,456.00</td>
<td>5%</td>
<td>8,934,724.00</td>
<td>16.50</td>
</tr>
<tr>
<td>8</td>
<td>MiniDV Camcorders</td>
<td>Camcorders</td>
<td>$51,539,456.00</td>
<td>4%</td>
<td>7,908,475.00</td>
<td>15.17</td>
</tr>
<tr>
<td>9</td>
<td>MP3</td>
<td>Audio</td>
<td>$43,491,587.00</td>
<td>4%</td>
<td>6,665,123.00</td>
<td>15.07</td>
</tr>
<tr>
<td>10</td>
<td>Receivers</td>
<td>Audio</td>
<td>$42,374,422.00</td>
<td>4%</td>
<td>5,480,095.00</td>
<td>13.03</td>
</tr>
<tr>
<td>11</td>
<td>Receivers</td>
<td>Audio</td>
<td>$35,907,111.00</td>
<td>3%</td>
<td>3,321,581.00</td>
<td>9.26</td>
</tr>
<tr>
<td>12</td>
<td>VCR</td>
<td>Video</td>
<td>$21,688,622.00</td>
<td>2%</td>
<td>2,304,786.00</td>
<td>10.66</td>
</tr>
<tr>
<td>13</td>
<td>Handheld and PDA</td>
<td>Office</td>
<td>$18,533,191.00</td>
<td>2%</td>
<td>1,948,276.00</td>
<td>10.45</td>
</tr>
<tr>
<td>14</td>
<td>Digital8 Camcorders</td>
<td>Camcorders</td>
<td>$13,614,956.00</td>
<td>1%</td>
<td>1,629,531.00</td>
<td>11.98</td>
</tr>
<tr>
<td>15</td>
<td>Organizers</td>
<td>Office</td>
<td>$11,712,432.00</td>
<td>1%</td>
<td>1,184,488.00</td>
<td>10.23</td>
</tr>
</tbody>
</table>

**Select Date Range**

- From Date: 06/01/2006
- To Date: 09/24/2007

**Select the output format to submit your report**

- Active Report
- PDF
- Excel

**Geography**

- Country:
  - ALL
  - Canada
  - France
  - Germany

- Region:
  - ALL
  - Andalucia
  - Cataluna
  - East North Central

- State:
  - ALL
  - Alabama
  - Arizona

**Product**

- Type:
  - ALL
  - Audio
  - Camcorders

- Category:
  - ALL
  - Amplifiers/PreAmps/Tuners
  - Audio Systems
  - CD Players and Recorders

**Additional Filters**

- Store Name:
  - ALL
  - Almacen De La Alta Fidelidad
  - Audio Expert

- Sales Rep:
  - ALL
  - Adriano Prefumo
  - Akinori Imai

- Plant Name:
  - ALL
  - Boston
  - Dallas

**IBM DB2 Web Query for System i**
Highly Parameterized Reports

Steps:

- Create and test basic report
- Add multiple parameters
- Create HTML layout and reference parameterized report
- Assign hyperlink controls
  - Select control types
    - Use calendars for dates
  - Link appropriate parameters
    - country -> state -> city
- Output report in separate window
- Enhance appearance of parameters
  - Frames, panels, images
- Delete initial report box
  - Report will output to a separate window