

Stylin' with Web Query

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In DB2 Web Query there's usually more than one way to get something done. If you'd like to customize your reports and business intelligence dashboards with an attractive image or company logo, there are several ways you can do it. You can customize a single report, document, or HTML dashboard, or create a default style sheet for use as a company-wide theme. This article explains some options for adding in an image and gives a few tips along the way.

Uploading Your Image

The first step when incorporating a logo into a report is to upload the image into Web Query. There are two places in the BI portal tree where you can upload the image to:

1. A repository folder. If you want to use your image in HTML dashboards created with Developer Workbench, you must upload the image to the repository. You can put the image in your top level folder or a subfolder. If you want to use the image in IA reports, you can also upload the image to the repository, but the image will only be resolved when running the report from the portal.
2. A Reporting Server application folder. For InfoAssist (IA) documents and scheduled reports, you must upload the image to a Reporting Server application or else it won't be resolved at runtime. Uploading the image to the Reporting Server allows the image to be accessible from IA, from Report Broker, and by other server functions.

The best practice when uploading an image is to put it in both places.

You may want to consider if the image should be globally accessible to all report authors or not. To make it available to any report author independent of what folders those authors have access to, place the image in the Common top level folder and the baseapp Reporting Server folder. And keep in mind, the concept of a private or public object exists for images, too – i.e., you don't want to forget to publish the image (right click option) if you want others to be able to use it.

Uploading to the Repository

The proper way to bring an image into the Web Query repository is to right click a folder in the BI portal, click Upload, and then click Image, as shown in Figure 1.

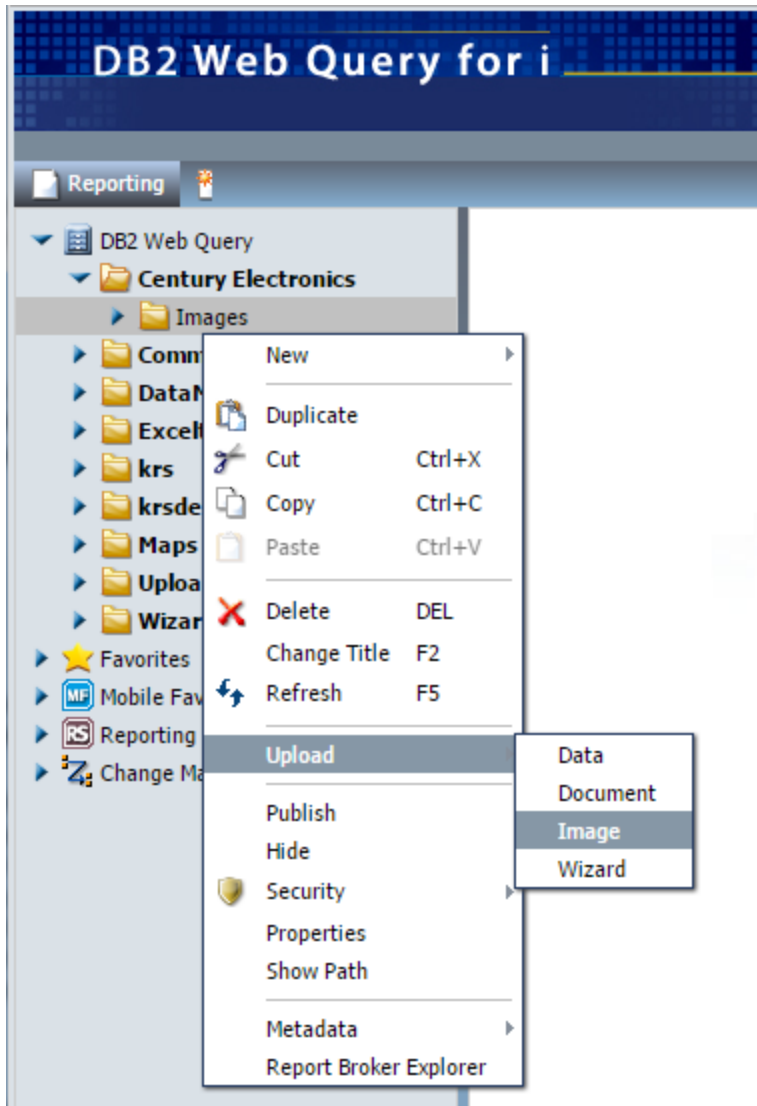


Figure 1: Upload an image into the Web Query repository.

Web Query will prompt you to locate the image and will store it into the repository, making it visible in the portal tree. The object type for an image is easily identified by an icon, as shown in Figure 2, but another best practice is to organize images under a subfolder to avoid confusing them with reports and schedules. Both .gif and .jpg formats are supported.



Figure 2: An image is uploaded for Web Query's sample business Century Electronics.

Uploading to the Reporting Server

There are two ways to upload an image to a Reporting Server application folder. Following are detailed steps.

Method 1: Copy the image.

A Web Query administrator can upload the image to the repository folder and then copy it to the Reporting Server application folder, all within the BI portal. To do that, right click on the image in the portal tree and select Copy. Then expand Reporting Servers, right click the folder where you want to put it, and click Paste, as in Figure 3.

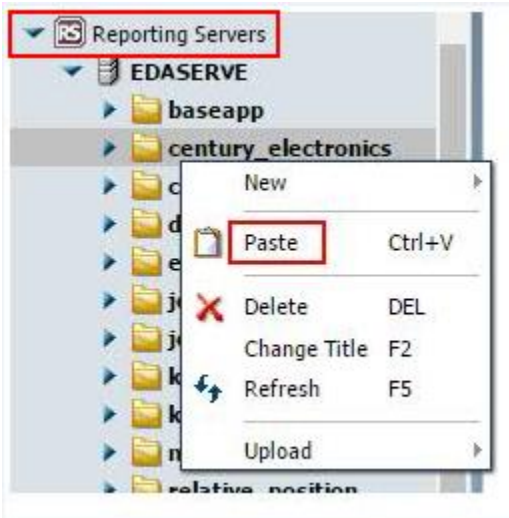


Figure 3: Copy the image to the Reporting Server.

Method 2: Directly upload the image.

A Web Query administrator, or a user who is a member of a folder-DBA group in Security Center, can upload an image directly to the Reporting Server application. Right click on the folder and select Metadata, then select Edit as shown in figure 4.

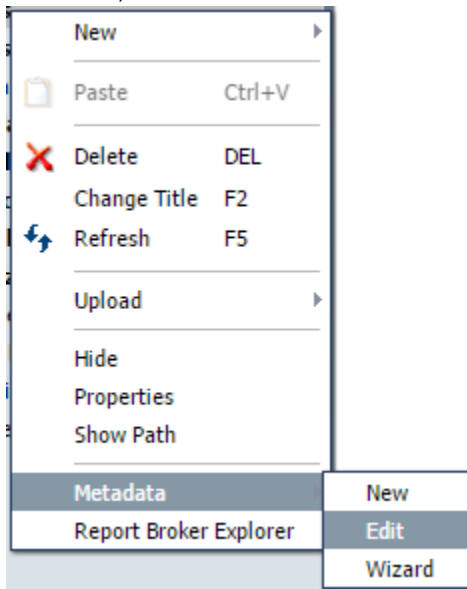


Figure 4: Select the metadata Edit option.

Right click on the application folder and select New, then select Upload File.

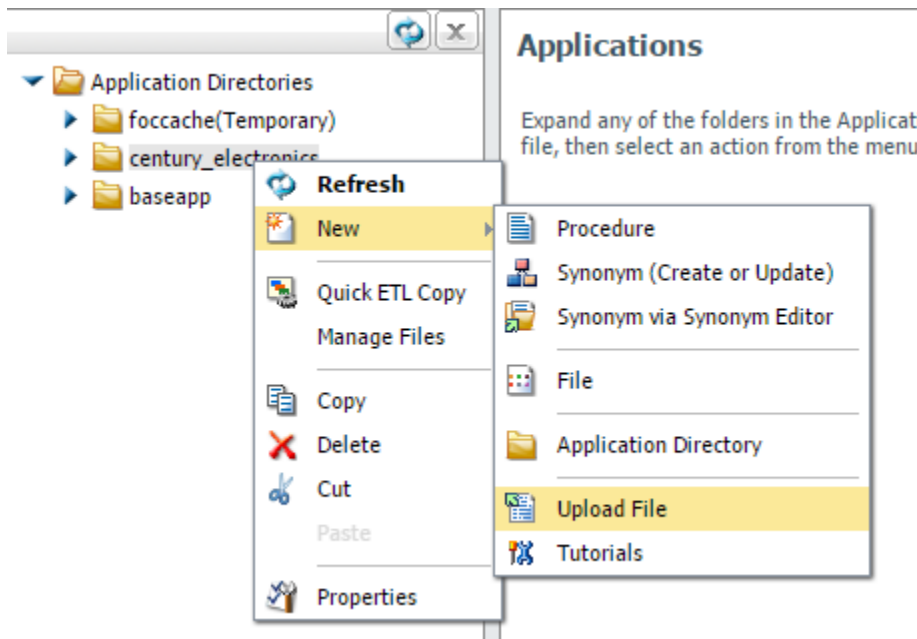


Figure 5: Uploading a file directly to the Reporting Server.

Drag or drop the image you wish to upload using the Upload dialog in Figure 6.

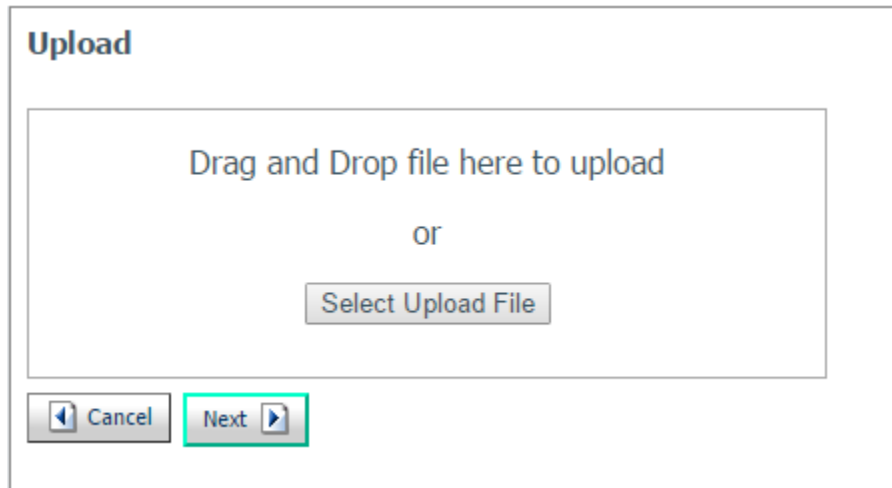


Figure 6: Identify the image file.

After a successful upload you will see, as in Figure 7, the image in the application folder.

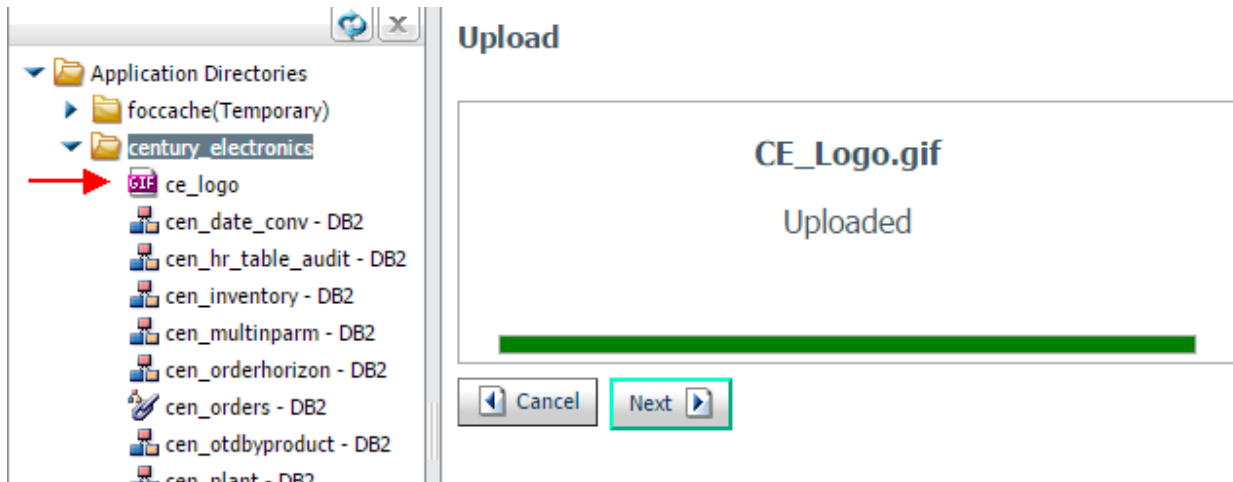


Figure 7: Verify your image in the Reporting Server application folder.

Once uploaded, the image is ready to go! Now let's look at how you can insert it into an IA based compound document or an HTML Composer dashboard with Developer Workbench, or text edit it into an individual report or custom style sheet. Note that text editing a fex, which is the term for a report, is generally not recommended, however, this edit is fairly simple with minimal risk.

Inserting an Image into an IA Document or IA Dashboard

The easiest and preferred method for adding an image to a single report or chart is to create an IA document. To do that from the BI portal, click a folder, click New, and then click Document.

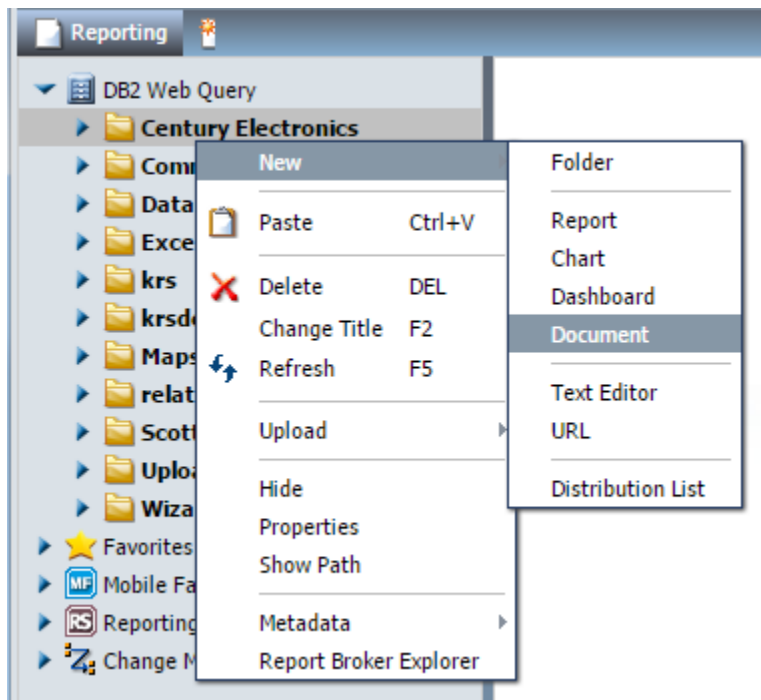


Figure 8: Create an IA document.

You can also modify an existing document to add an image. Select the Insert tab on the ribbon, then click the Image icon in Figure 9.

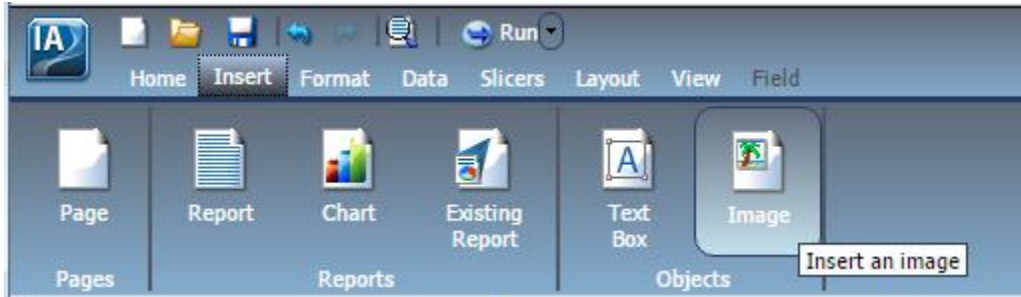


Figure 9: Insert an image into an IA document.

A dialog in Figure 10 will appear prompting for the image you want to use in the document. Make your selection and click OK.

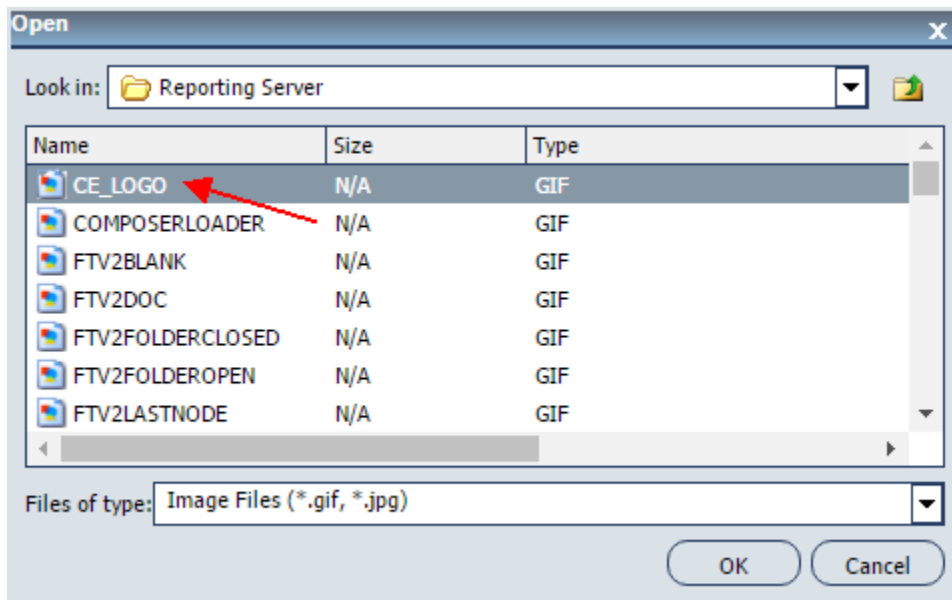


Figure 10: Navigate to the image and select it.

At this point, the image appears on a ruled canvas, and you can easily resize and reposition it by dragging it with your mouse. Figure 11 shows the image being centered as a letter head above the report.

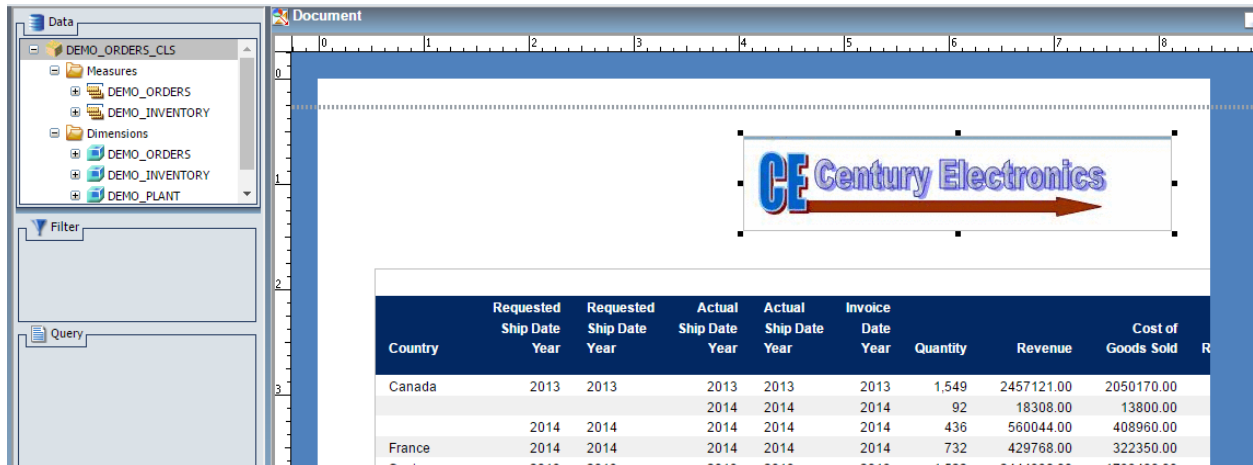


Figure 11: Easily resize or reposition the image on the canvas.

The IA tool supports both documents and dashboards. Use a similar method to insert an image into an IA dashboard.

Inserting an Image into an HTML Composer Dashboard

Speaking of dashboards, if you prefer creating dashboards using the HTML Composer feature of Developer Workbench, then this is also an option available to you. To add an image to an HTML dashboard, right click the HTML document of interest and select Edit in Composer. You can then click the Image icon on the ribbon in Figure 12.

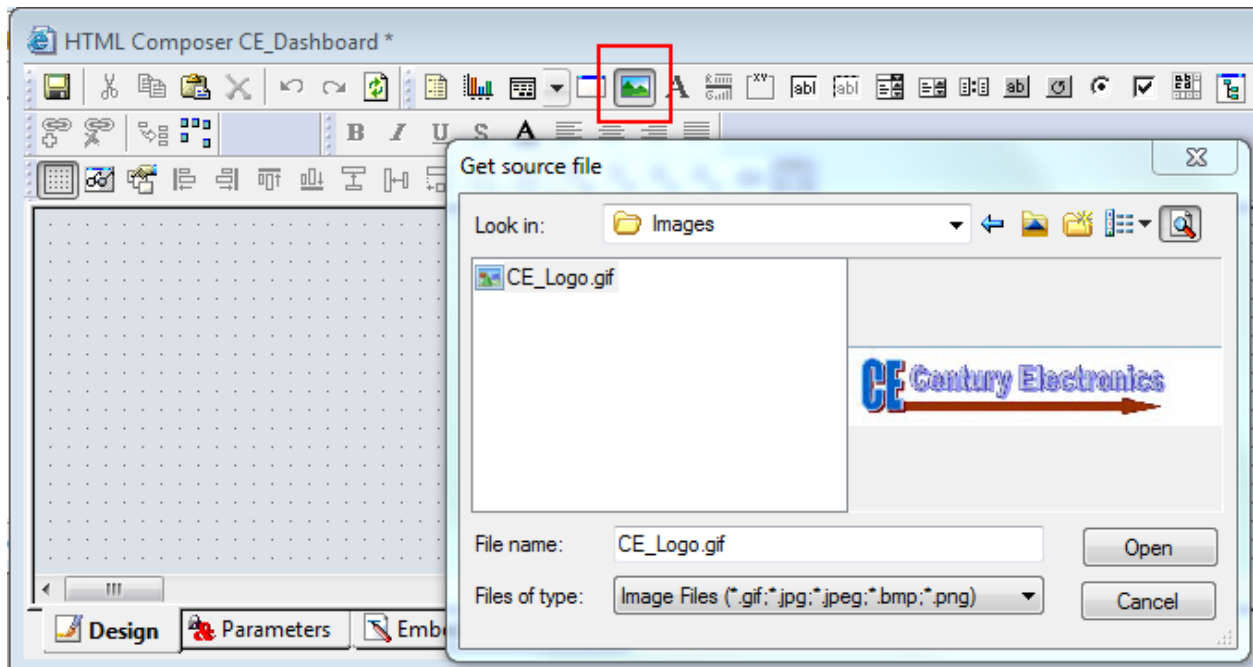


Figure 12: Add an image to an HTML Composer dashboard.

Locate and open the image you want, then position it onto your dashboard. Note that HTML Composer additionally supports .jpeg, .bmp, and .png formats.

Inserting an Image Directly into a Report

An image can be directly edited into a report via the text editor. Note again that editing a fex with a text editor can be risky business, so you really should make a copy of your report first before editing.

To edit the report, right click on the report, then click Edit With..., and then click Text Editor. You can do this from either the BI Portal or Developer Workbench. Scroll down in the report source, referred to as a fex, and update the styling section to add in the path location of the image. To find the location of an image in the repository, right click the image in the portal, and select Show Path. Figure 13 shows example syntax to edit a repository image into a report.

```
ON TABLE SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/javaassist/intl/EN/ENIADefault_combine.sty,$
TYPE=REPORT, TITLETEXT=&WF_TITLE.QUOTEDSTRING, SUMMARY=&WF_SUMMARY.QUOTEDSTRING,
HFREEZE=OFF, $
TYPE=REPORT, IMAGE=IBFS:/WFC/Repository/Century_Electronics/Images/CE_Logo.gif, $
ENDSTYLE
```

Figure 13: Example syntax to insert a repository image into a fex.

If the image is stored in baseapp or another application path available to the Reporting Server, then you only need to specify the name of the image, CE_Logo.gif. Else, if your image is stored in a Reporting Server folder, use this example path instead:

```
TYPE=REPORT, IMAGE=IBFS:/EDA/EDASERVE/Century_Electronics/CE_Logo.gif, $
```

An image is inserted into a report at original size by default. Size and position parameters are therefore optional. The syntax is SIZE=(height width) and POSITION=(x y), where x and y are distances from the margins. Measurements are in terms of units defined in the report. Here is one last example of syntax:

```
TYPE=REPORT, IMAGE=CE_Logo.gif, POSITION=(0.5000 0.25), SIZE=(3.0625 0.50), $
```

This method of directly editing an image into a report is included here for completeness, but the recommended method for including an image into a single report is to create an IA document. Beware that if you reopen the text edited report with IA and save it, the image may be lost and you will have to re-edit it. Also note that while text editing is an option for reports, it won't work for charts.

Inserting an Image into a Custom Style Sheet

To standardize your logo across multiple reports or multiple developers, or to create a theme for your company, you can simplify the task with a style sheet. Style sheets improve the appearance of your report through use of images, color, and other detail.

It is easier to start with one of the existing style sheets shipped with DB2 Web Query rather than try to create one from scratch. Take a look at some of the style sheets to see if one is close to what you're looking for by applying them to an existing report in IA.

Style sheets shipped with the Web Query product have file extension .sty and are located in the IFS directory /qibm/proddata/qwebqry/base80/ibi_html/javaassist/intl/EN/combine_templates. Do not modify a shipped style sheet or copy a style sheet into this directory because it will be overlaid when PTFs are

applied. Instead, copy the style sheet to your PC and modify it there.

The proper way to bring a style sheet into Web Query is to right click a folder on the BI portal, click Upload, and then click Document. The same considerations mentioned earlier for organizing, accessing, and publishing an image also apply to a style sheet.

To include an image in a style sheet, simply add the same IMAGE statement described in Figure 13. A tip is to create an IA document to initially size and position the image how you want it, then copy the IMAGE statement from that fex into the style sheet.

To apply a style sheet to an IA report or dashboard, click the Theme icon on the Home tab of the IA ribbon, as shown in Figure 14. You can choose one of the many style sheets provided with the Web Query product, or navigate the tree to find and select the one you created with your image. Save the report.



Figure 14: Associate a style sheet with a report.

If you want, the Web Query administrator can configure your new style sheet to be the default theme for all Web Query users. The administrator should follow these steps:

1. Sign into Web Query with the QWQADMIN profile.
2. Go to the Administration Console.
3. Click Configuration, then click InfoAssist Properties.
4. Scroll down to the Tool Options and edit the InfoAssist StyleSheet setting with the path to your style sheet. (The administrator can right click the style sheet in the BI portal to copy/paste the path.)
5. Click Save.

It's not necessary to restart Web Query for the change to take effect. New reports will pick up the new default style sheet. Existing reports will be unaffected and will continue to use the style sheet they were created with. Style sheet information is saved in the fex when the report is created, not dynamically resolved at runtime.

There is a distinction between document formats and an HTML report. Styling can be different between them because of positioned versus table based approaches. There may be a need to create separate style sheets if you're not satisfied with the way your image renders in each format.

And that's a Wrap!

That covers the basic options for inserting an image into your Web Query output. There are methods to serve up images that reside in the IFS if you were, for instance, interested in just pointing to an existing image that could change over time versus embedding the image in a report or style sheet. But that is an advanced topic best left for another article!

Web Query is a BI analytics tool, rich in features for visually representing your critical business data. Use images to further exploit the presentation of that data for all your business needs - executive dashboards, business updates, and even marketing material.

Visit the Web Query website at <http://ibm.biz/db2webqueryi> to learn about more product features. If you're interested in getting training or assistance in implementation, send an email to qu2@us.ibm.com.