

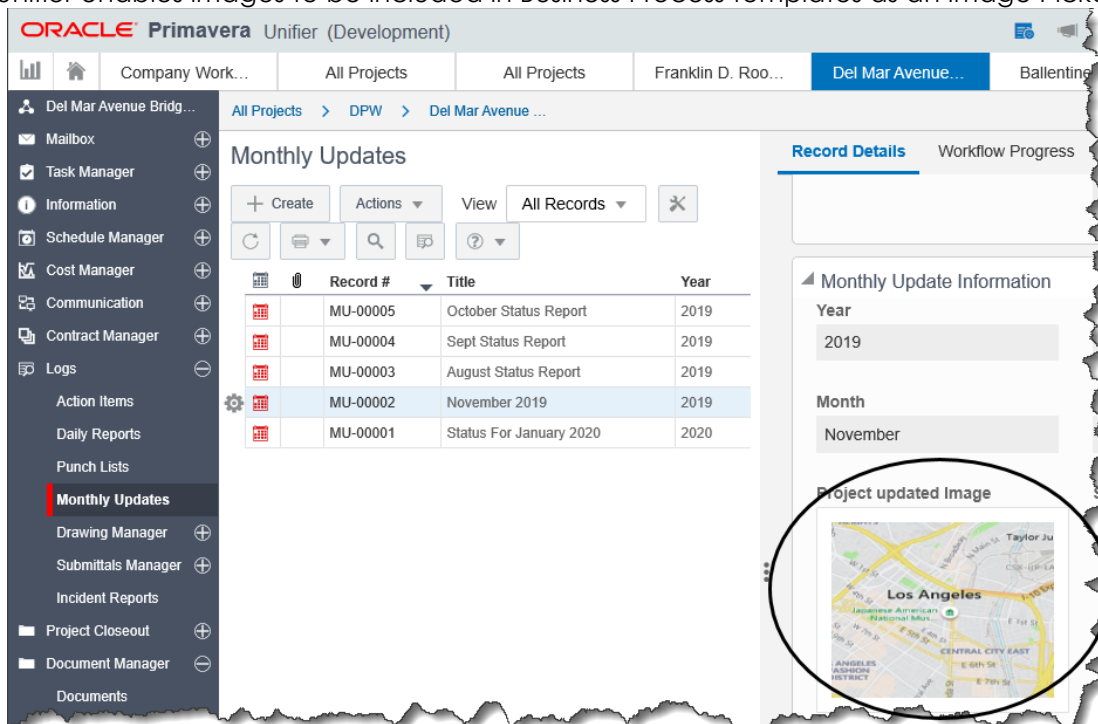
TECH TIP

ADDING UNIFIER IMAGES TO CUSTOM OR EXTERNAL REPORTS IN BI PUBLISHER ORACLE PRIMAVERA UNIFIER & BI PUBLISHER

When creating custom reports it is sometimes desirable to display images in my report which have been inserted into a Unifier record. These could be field images and inserted into daily reports or could be map images for a project status report just to illustrate two examples. This tip shows you the steps to perform this.

Background

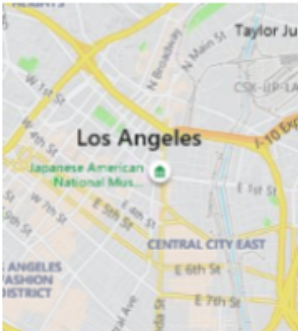
Unifier enables images to be included in Business Process templates as an Image Picker.



The image itself is stored in a directory like [https://\[unifier-server-address\]/bluedoor/rest/image](https://[unifier-server-address]/bluedoor/rest/image) where [unifier-server-address] is the implementation specific server address. What is shown in the Project Update Image field is a number corresponding to the image id.

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The objective is to present that image in a report as shown below.

Del Mar Avenue Bridge Replacement		PMD Project ID: P-0014																								
		November 2019																								
	Reporting Month:	November 2019																								
	Supervisory District:	02																								
	Project Title:	Del Mar Avenue Bridge Replacement																								
	Specifications No.:	SPEC002																								
	Job Number:	J223405																								
	CEO Analyst:	Rick Reviewer																								
	Fund Manager/Defacto:	Rudy Ising																								
	Project Manager:	Steve Johnson																								
	Address:	1234 Happy Park Ave Suite 250 Los Angeles, CA 90036																								
		<table border="1"><thead><tr><th colspan="2">Non-Capital Project Budget</th></tr></thead><tbody><tr><td colspan="2">\$5,000,592</td></tr><tr><th colspan="2">Capital Project Budget</th></tr><tr><td colspan="2">\$9,485,592</td></tr><tr><td>BL Date:</td><td>01/30/2020</td></tr><tr><td>CP Number:</td><td></td></tr><tr><th colspan="2">Project Delivery Method</th></tr><tr><td colspan="2">Low Bid</td></tr><tr><td>NTP Date:</td><td></td></tr><tr><td>Contractor:</td><td></td></tr><tr><td>NTP Expire Date:</td><td>01/08/2020</td></tr><tr><td>Architect</td><td></td></tr></tbody></table>	Non-Capital Project Budget		\$5,000,592		Capital Project Budget		\$9,485,592		BL Date:	01/30/2020	CP Number:		Project Delivery Method		Low Bid		NTP Date:		Contractor:		NTP Expire Date:	01/08/2020	Architect	
Non-Capital Project Budget																										
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Project Delivery Method																										
Low Bid																										
NTP Date:																										
Contractor:																										
NTP Expire Date:	01/08/2020																									
Architect																										
Project Description: The proposed project will enhance public safety and mobility by replacing and widening the bridge and providing roadway improvements in the immediate vicinity.																										
Current Status:																										

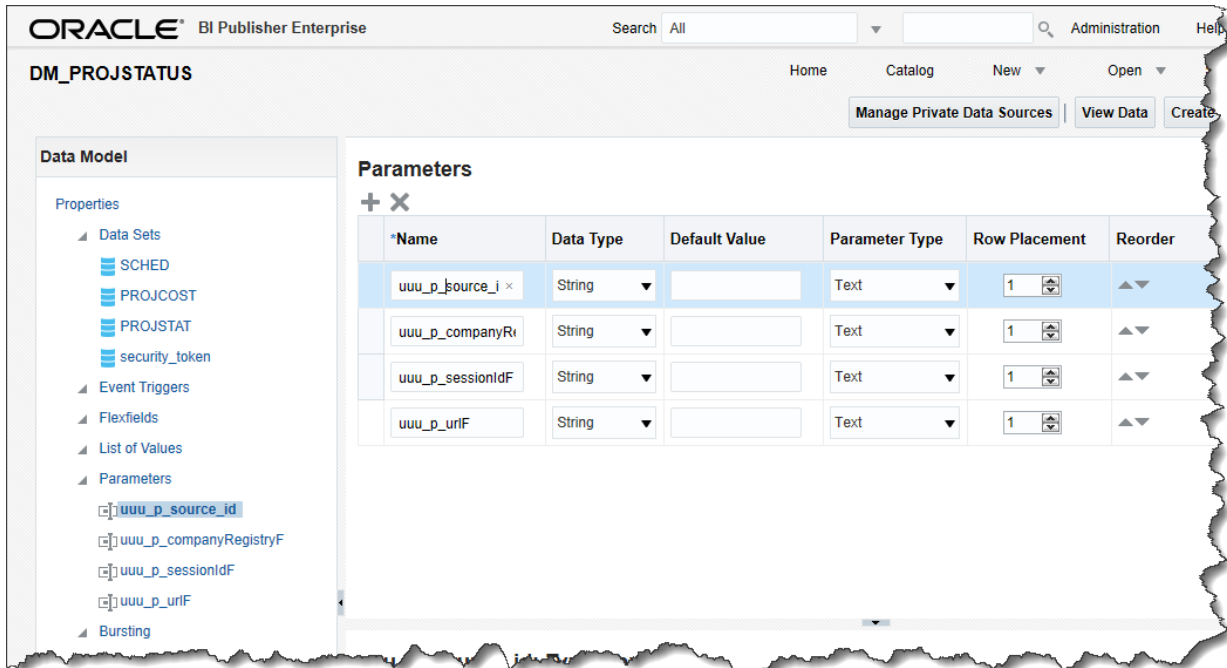
The following steps will walk through managing this using a BI Publisher Rich Text Format (RTF) template:

1. Adding Unifier variables to the BI Publisher Data Model as parameters
2. Defining the "security_token" in the XDM file
3. Creating the variables in the Word document as Text Form Fields
4. Adding an ActiveX Control Image to the RTF

This process assumes the data model and rtf template already exist and you are adding to them.

BI Publisher Parameters

There are 3 Unifier variables that need to be defined as parameters in the BI Publisher Data Model to handle the security and identify the location of the image: `uuu_p_companyRegistryF`, `uuu_p_sessionIdF`, and `uuu_p_urlF`.



Add these three as data type "String". In the example above you will notice uuu_p_source_id which is used to identify the record that initiated the print request and is not needed specifically to display the image.

In the code for the dataset, define the image id field. For our example, we are using the Monthly Update Business Process, and the view contains the ID field K__UMUPROJECTP.

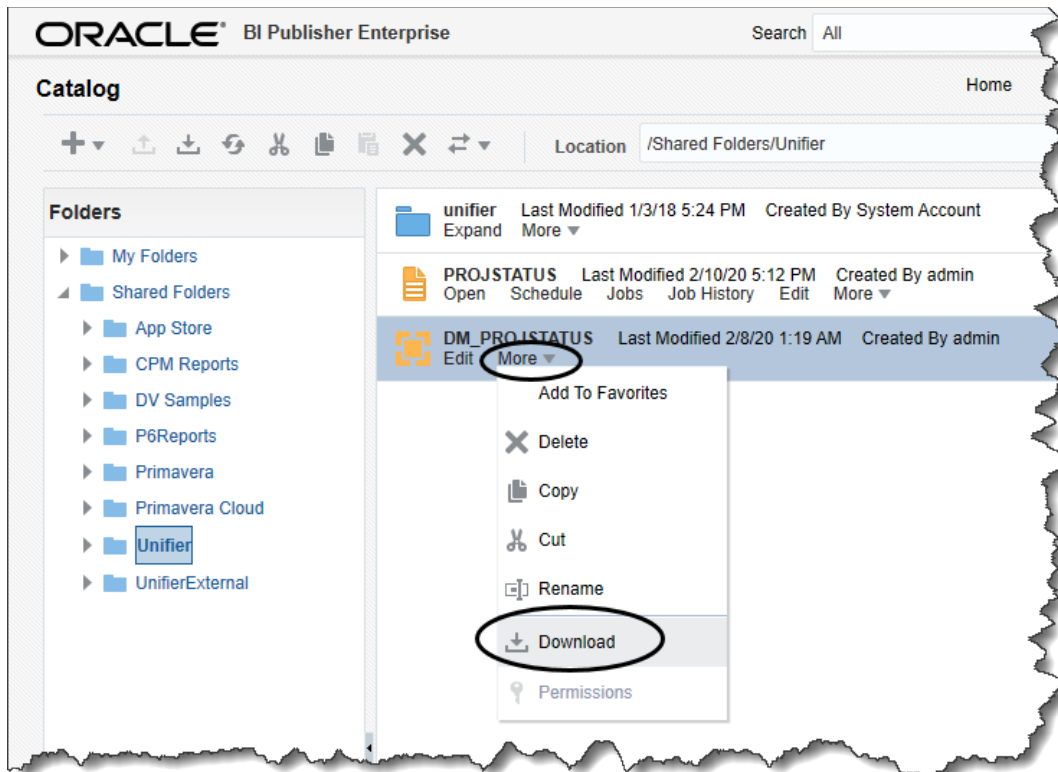
In this example the dataset would contain:

"UNIFIER_UMU_VIEW"."K__UMUPROJECTP" as "PROJIMAGEID"

XDM Define “security_token”

In the XDM code, the “security_token” parameter needs to be defined.

Download the Data Mode and unzip it to access the XDM file and open it using Notepad.



If you search for parameters you will find the items identified in the Data Model.



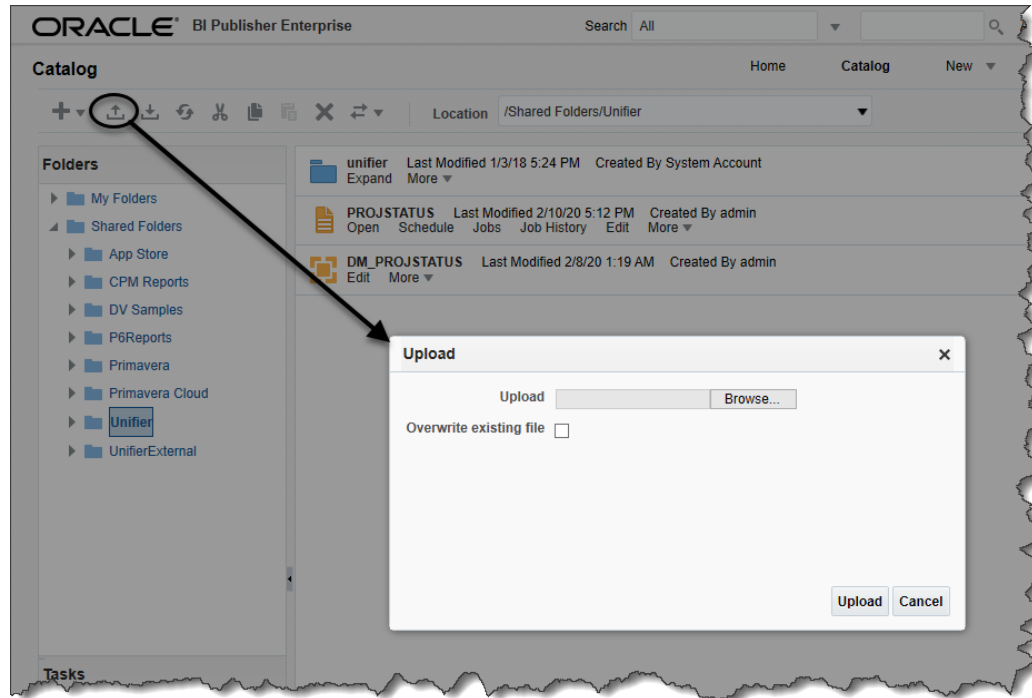
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Return to the top and search for <datasets>. Define "security_token" by adding the following code under that line.

Start copy after - - -

- - - End copy before

Save the changes and archive or zip the file to a file with suffix .xdmz. Import it back into BI Publisher.

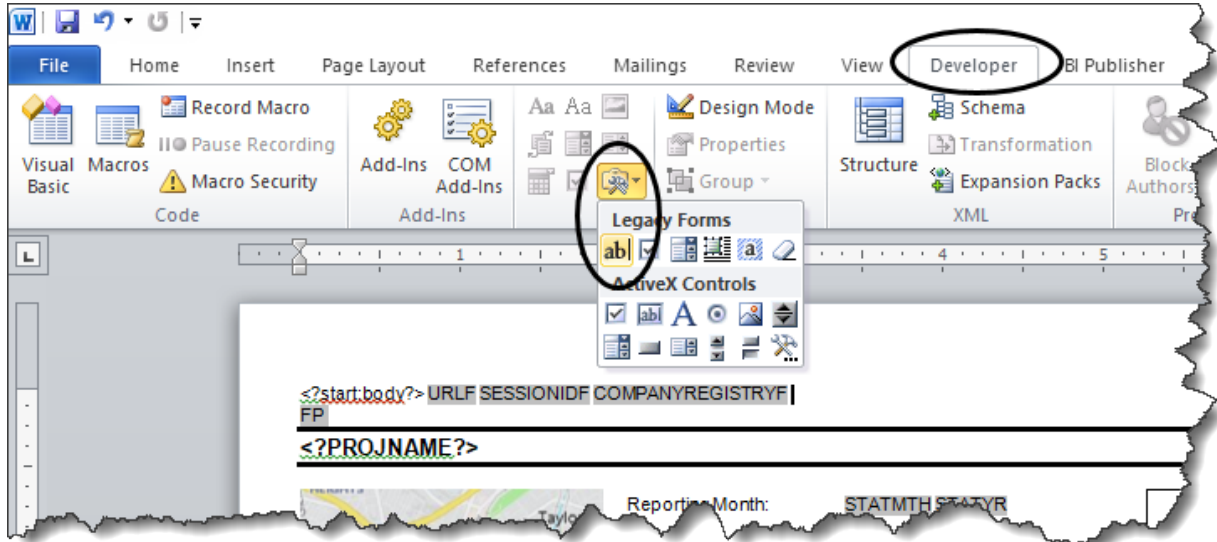


RTF Set Up Text Form Fields

The same 3 variables need to be defined in the RTF template.

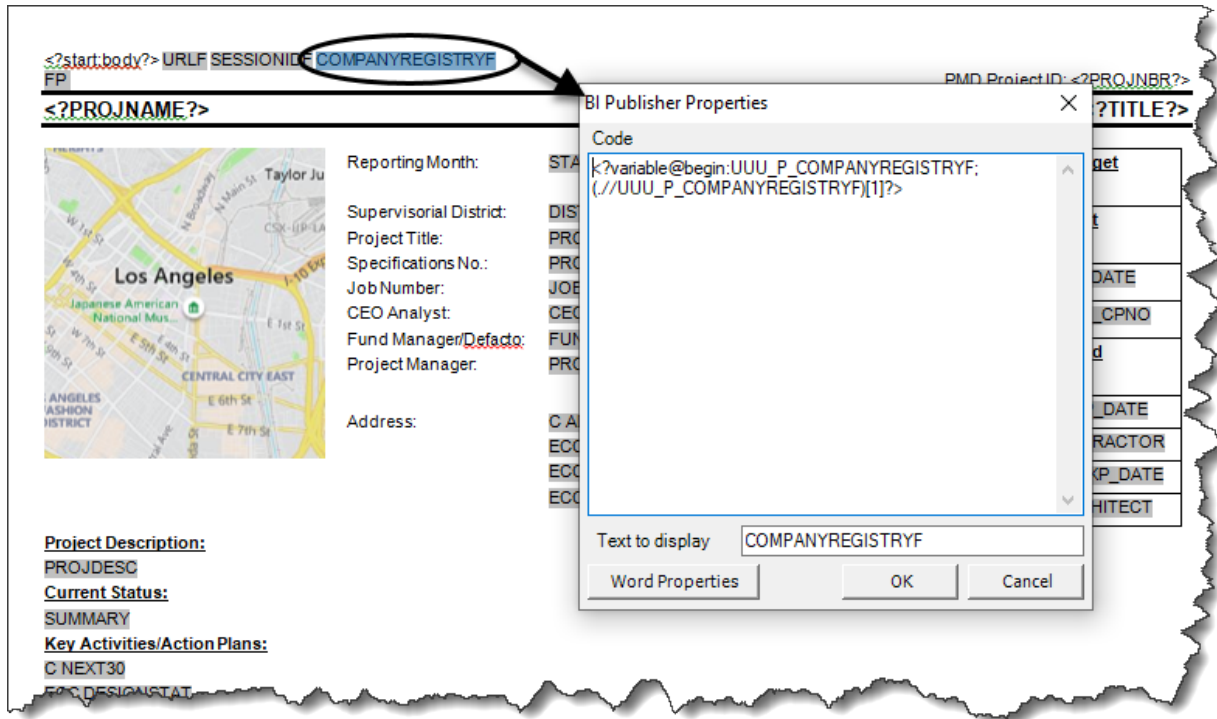
Export sample data and import it into the RTF template.

Insert and define 3 Text Form Fields using the Developer tab and selecting Legacy Tools / Text Form Field.



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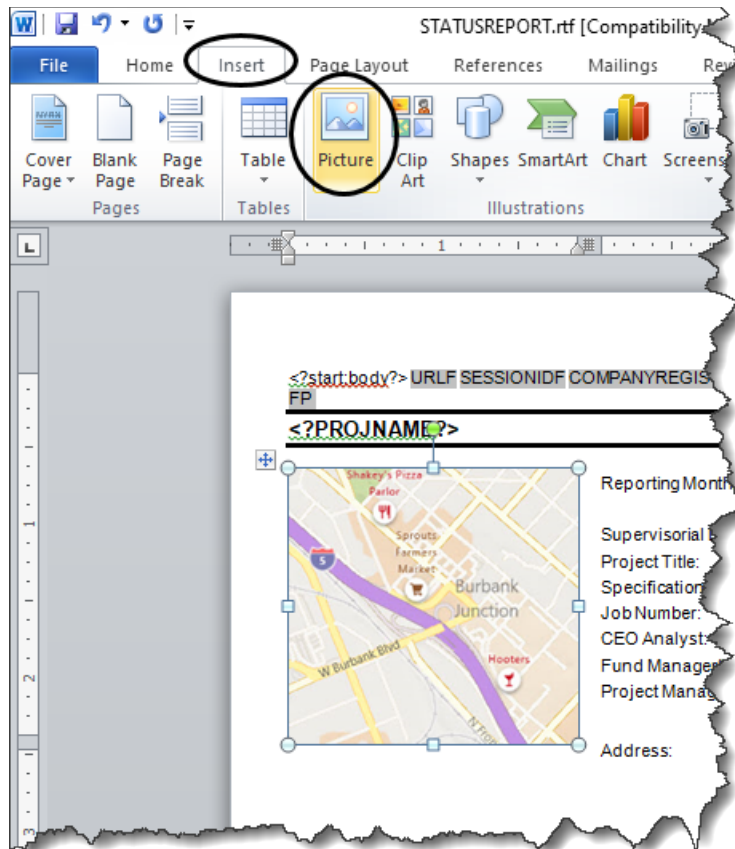
Once created, double click each field and define the code for each one as follows:



URLF : `<?variable@begin:UUU_P_URLF;(//UUU_P_URLF)[1]?>`
SESSIONIDF: `<?variable@begin:UUU_P_SESSIONIDF;(//UUU_P_SESSIONIDF)[1]?>`
COMPANYREGISTRYF:
`<?variable@begin:UUU_P_COMPANYREGISTRYF;(//UUU_P_COMPANYREGISTRYF)[1]?>`

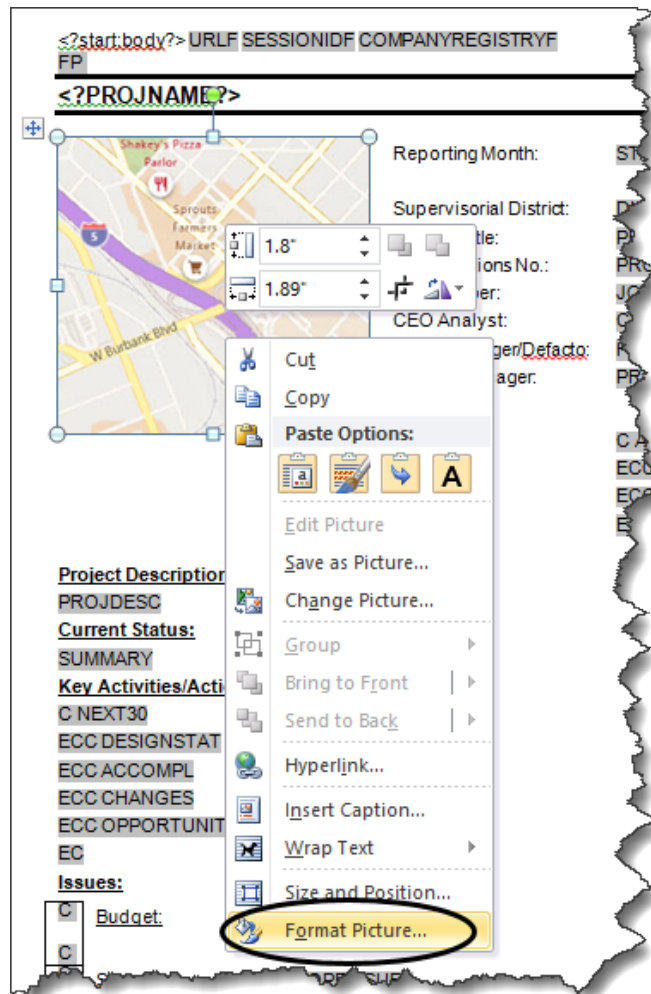
Adding ActiveX Control Image to RTF

Insert a picture by selecting Insert / Picture and browsing to an image similar in size to the one that will be replacing it.



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Right-click on the image and select Format Control.



In the Alt Text field enter the following in the Description section:

Start copy after - - -

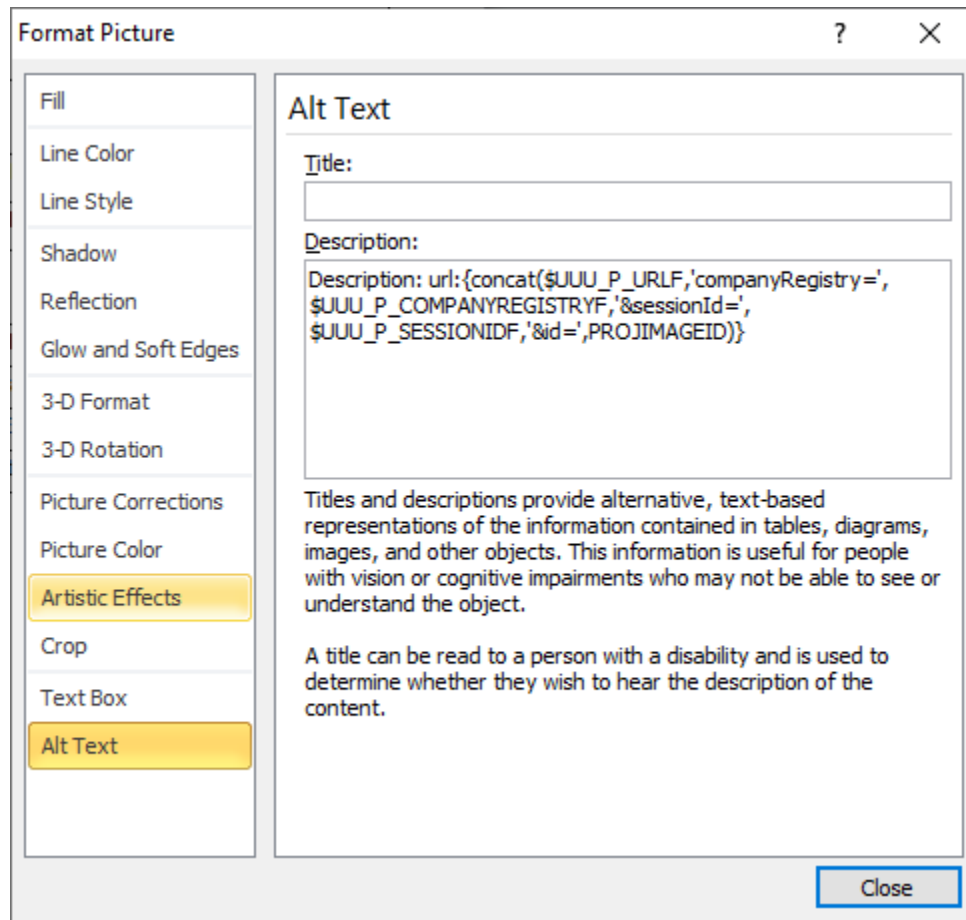
Description:

```
url:{concat($UUU_P_URLF,'companyRegistry=', $UUU_P_COMPANYREGISTRYF, '&sessionId=', $UUU_P_SESSIONIDF, '&id=', PROJIMAGEID)}
```

- - - End copy before

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Replace **PROJIMAGEID** with the data model field containing the image id.



The image shows a 'Format Picture' dialog box with a sidebar on the left and a main content area on the right. The sidebar contains a list of formatting options: Fill, Line Color, Line Style, Shadow, Reflection, Glow and Soft Edges, 3-D Format, 3-D Rotation, Picture Corrections, Picture Color, Artistic Effects, Crop, Text Box, and Alt Text. The 'Alt Text' option is highlighted in yellow. The main content area is titled 'Alt Text' and contains a 'Title:' label with an empty text box below it. Below the title box is a 'Description:' label with a text box containing the following text: 'Description: url:{concat(\$UUU_P_URLF,'companyRegistry=', \$UUU_P_COMPANYREGISTRYF,'&sessionId=', \$UUU_P_SESSIONIDF,'&id=',PROJIMAGEID)}'. Below the description box is a paragraph of text: 'Titles and descriptions provide alternative, text-based representations of the information contained in tables, diagrams, images, and other objects. This information is useful for people with vision or cognitive impairments who may not be able to see or understand the object.' Below this paragraph is another paragraph: 'A title can be read to a person with a disability and is used to determine whether they wish to hear the description of the content.' At the bottom right of the dialog box is a 'Close' button.

Save the file and load it back into BI Publisher.

NOTE: You won't be able to see the image by running the PDF directly from the RTF. It will need to be run through Unifier to pull the parameter values and link to the actual image.

Wrap Up

If this is an External Report, moving the RTF back into an existing BI Publisher Template will automatically make it available to Unifier. If it is a Custom Report, the Data Model and Template will need to be downloaded and imported back into Unifier.