



COGNOS Functions

Introduction

Functions in Cognos help you create and customize data items.

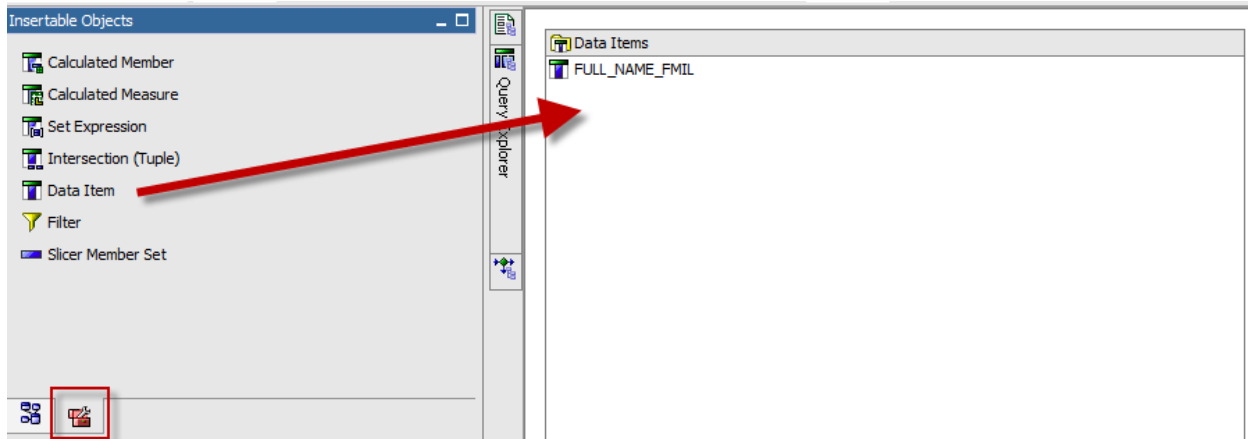
Full Name Phil	LengthOfName	fname	lname	inname	PrefixName	upperName	Name_Concat	Initials_Cat	Initials_Decode	EMAIL_PREFERRED	EMAIL_PREFERRED_ADDRESS	AnyOfEmail	ActiveUser	Today_expiredate	Today_current_date	To
W S S Baker	12	W	S S Baker		W S S Baker	W S S Baker	W S S Baker	Unknown						Mar 12, 2012 10:28:51 AM	Mar 12, 2012	
William J. Bakovich	18	William	Bakovich		William J Bakovich	WILLIAM J BAKOVICH	J Bakovich	Unknown			WILLIAMJ@KENT.EDU	WILLIAMJ@KENT.EDU	WILLIAMJ@KENT.EDU	Mar 12, 2012 10:28:51 AM	Mar 12, 2012	
Roseanna Carrato	15	Roseanna	Carrato		Roseanna Carrato	ROSEANNA CARRATO	Roseanna Carrato	Unknown						Mar 12, 2012 10:28:51 AM	Mar 12, 2012	
Linda L. Hartman	15	Linda	Hartman		Linda Hartman	LINDA L HARTMAN	L Hartman	Unknown						Mar 12, 2012 10:28:51 AM	Mar 12, 2012	
Harry B. Ruggles	15	Harry	Ruggles		Harry B Ruggles	HARRY B RUGGLES	B Ruggles	Unknown						Mar 12, 2012 10:28:51 AM	Mar 12, 2012	

Inserting and Using Functions

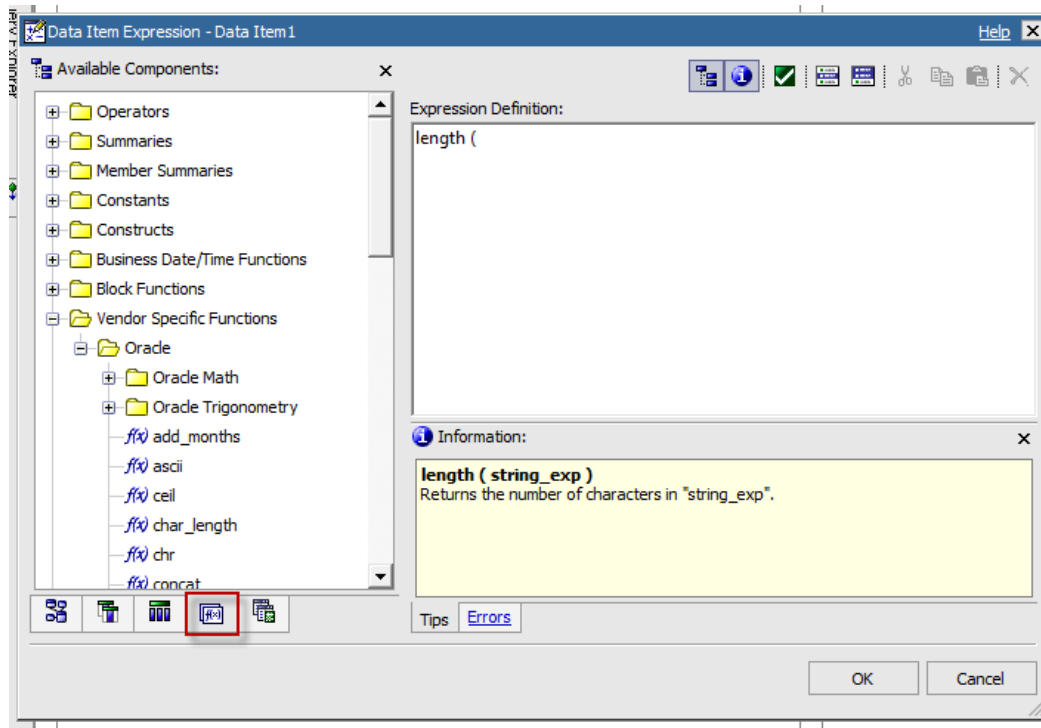
This section illustrates the ways to insert and use functions in Cognos.


Creating a Data Item Using a Function

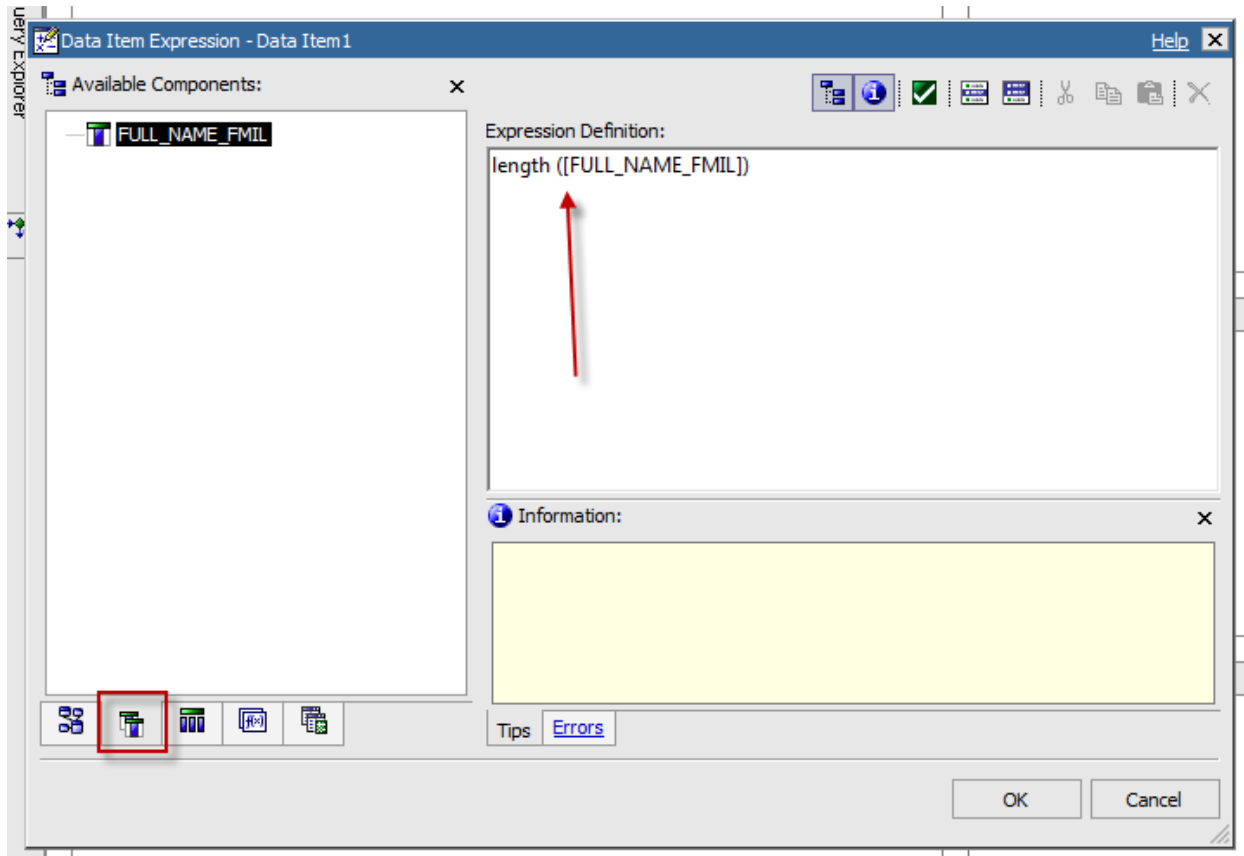
You can create new data items by using functions. This section demonstrates creating such a function.




- Open the **Query Explorer**
- Select the **Toolbox Tab**
- Insert a **Data Item** into the **Data Items Pane**

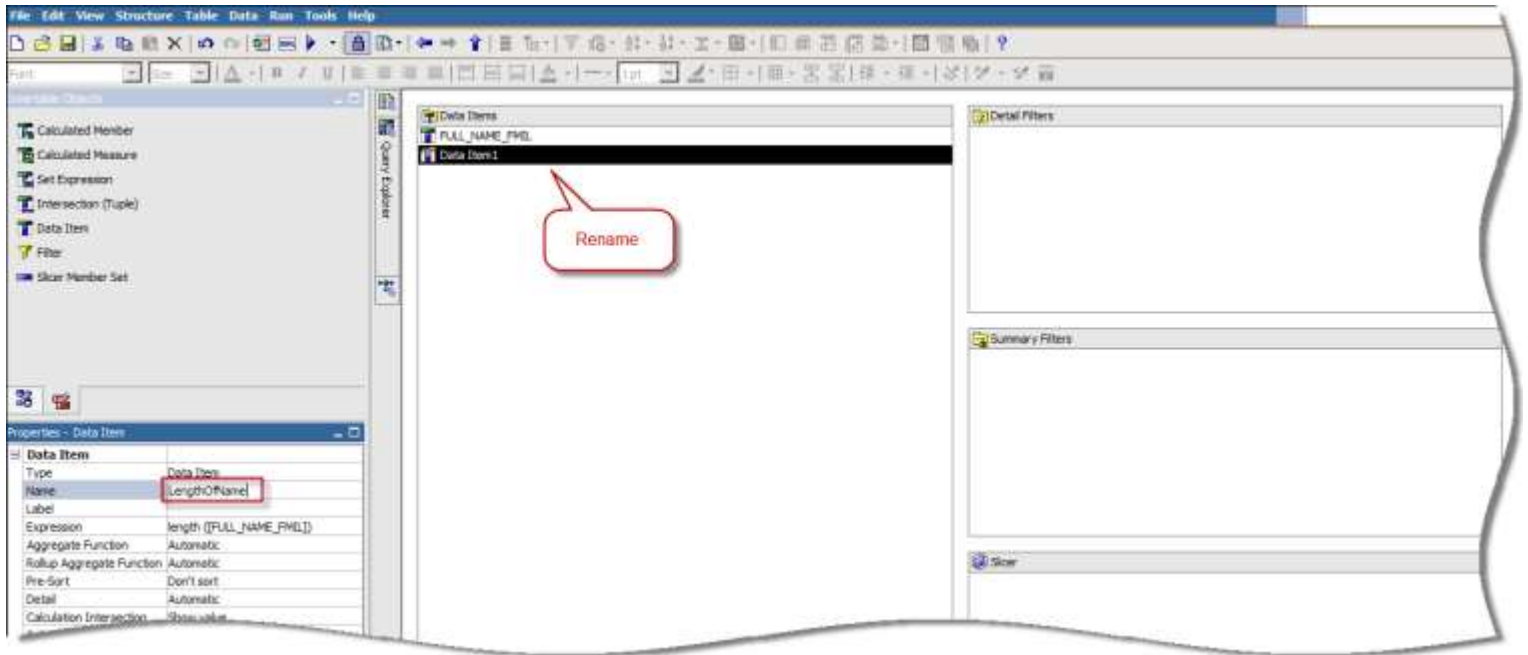


- The **Data Item Expression** window will open
- Select the **Functions Tab** 
- Open the folder that contains the function you want to use
- Locate the function
- Double-click the function to insert it into the **Expression Definition Pane**



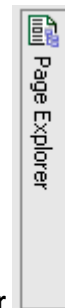
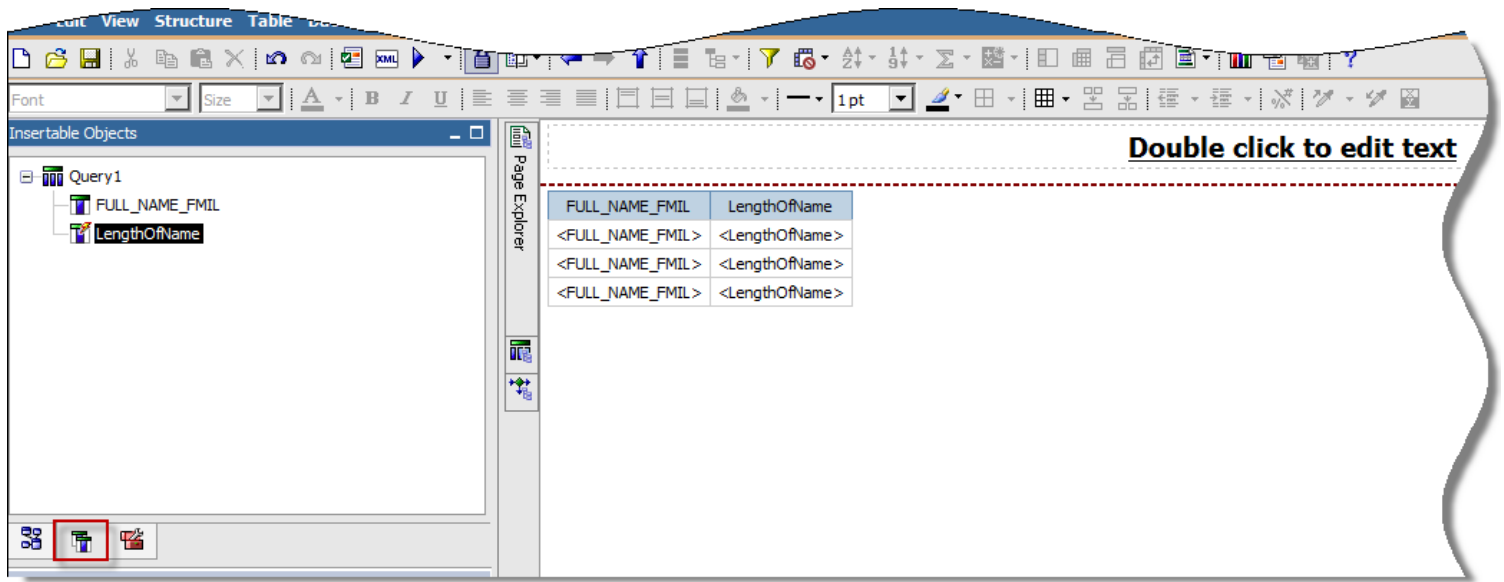
- Open the **Data Items** tab 
- Click inside the **Expression Definition** pane after the open parenthesis "("
- Double-click on the **Data Item** (in this example it is FULL_NAME_FMIL)
- Click inside the **Expression Definition** pane at the end
- Type and close parenthesis ")"
- Click the **OK** button


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- Highlight the data item you created (in this example it defaulted to Data Item1)
- Click inside the **Name** field in the **Properties Pane**
- Enter the new name
- Press the **Enter** Key

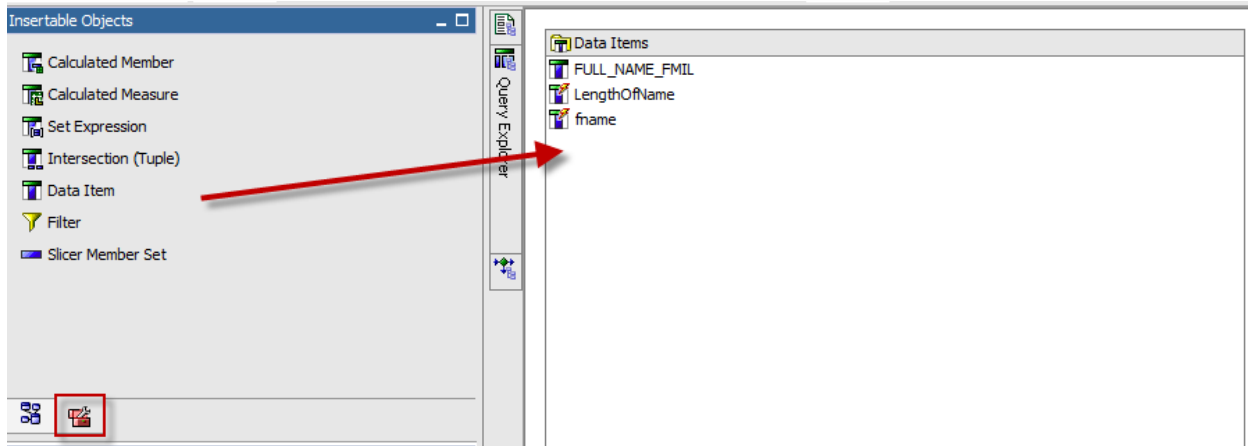
Cognos - Functions



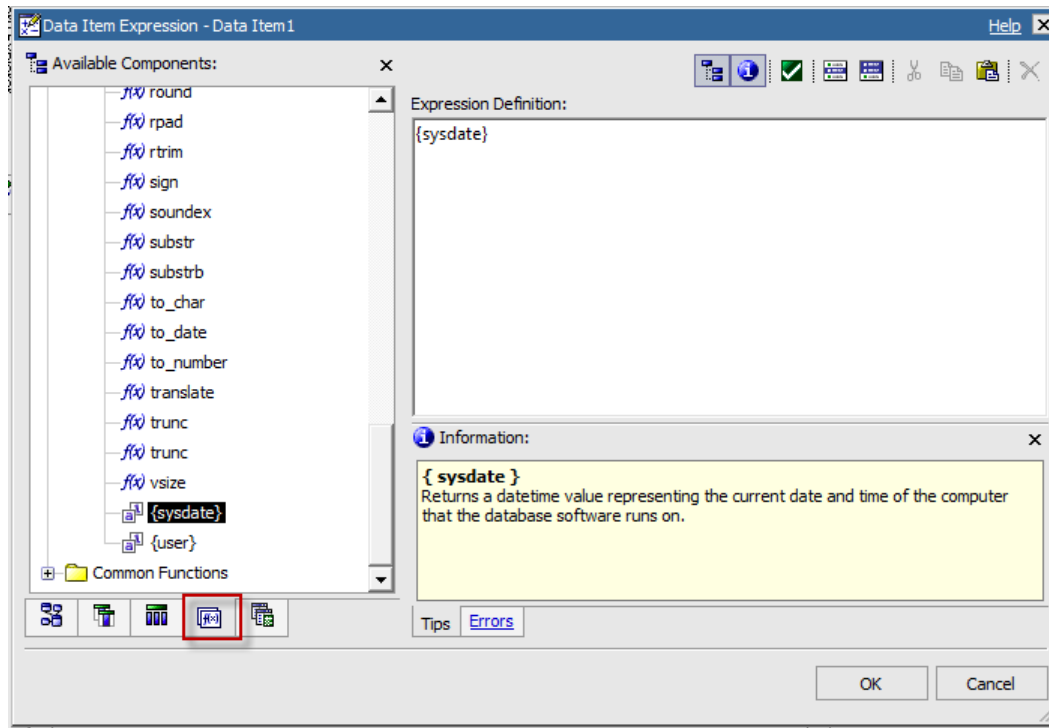
- Navigate back to the report by selecting the **Page Explorer**
- Select the **Data Items Tab** 
- Insert the Data Item you created that contains the function


System Functions

System functions are functions that only require the use of that specific function to create a new data item.

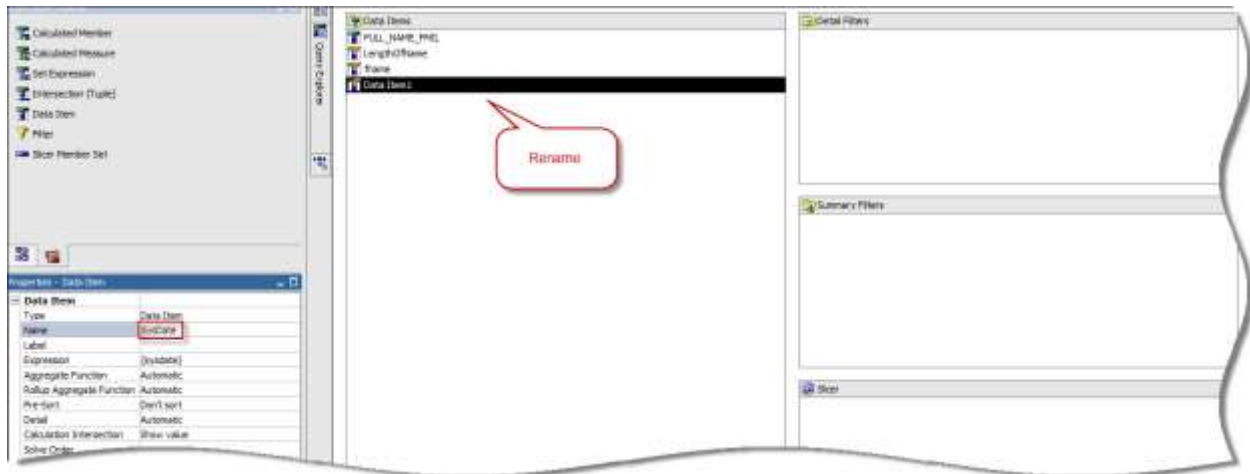


- Open the **Query Explorer**
- Select the **Toolbox Tab**
- Insert a **Data Item** into the **Data Items Pane**

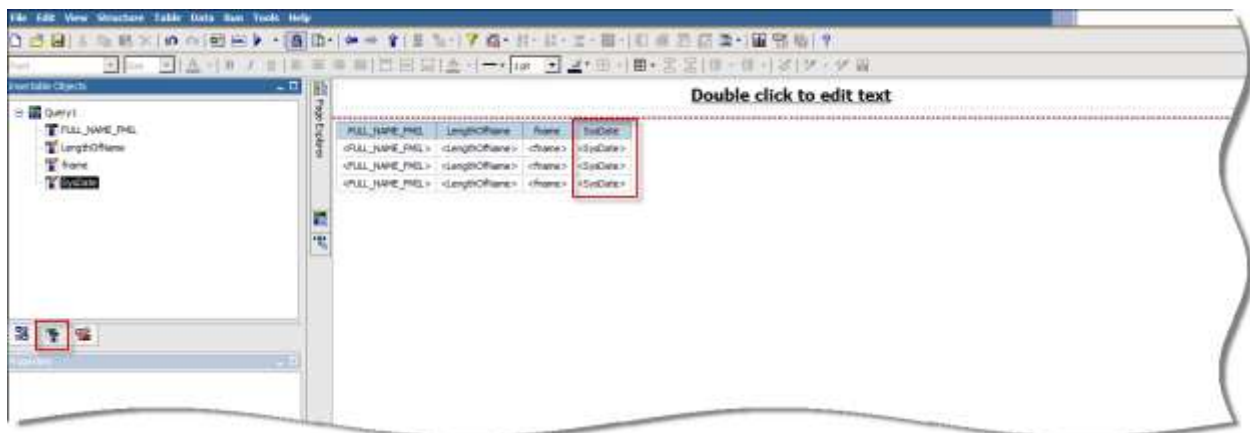


- The **Data Item Expression** window will open
- Select the **Functions Tab** 
- Open the folder that contains the function you want to use
- Locate the function
- Double-click the function to insert it into the **Expression Definition Pane**

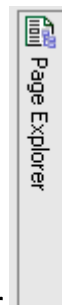
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- Highlight the data item you created (in this example it defaulted to Data Item1)
- Click inside the **Name** field in the **Properties Pane**
- Enter the new name
- Press the **Enter** Key



- Navigate back to the report by selecting the **Page Explorer**
- Select the **Data Items Tab**
- Insert the Data Item you created that contains the function



Functions Definitions

<u>Function</u>	<u>Description</u>	<u>Format/Example</u>	<u>Location/Folder</u>
<ul style="list-style-type: none"> case (simple) case (search) 	<p>Simple – field defined base on specified field1 values.</p> <p>Search – field defined based on specified ‘when’ field1 conditions</p>	<p>WhichEmail_Case</p> <pre>case when [Person Supplemental].[Person Detail].[EMAIL_PREFERRED] = 'U' then 'University' when [Person Supplemental].[Person Detail].[EMAIL_PREFERRED] = 'P' then 'Personal' else 'Unknown' end</pre>	Constructs
<ul style="list-style-type: none"> concat 	Combines field1 through fieldx together. May also include constants ('abc' or '-')	<p>PrettyName</p> <pre>[fname] ' ' [mname] ' ' [lname]</pre>	Vendor Specific Functions – Oracle
<ul style="list-style-type: none"> current_date 	Returns current date	<p>Today_current_date</p> <pre>Current_date</pre>	Common Functions
<ul style="list-style-type: none"> decode 	Evaluates field1 and converts each ‘expression’ to the ‘replaced with’ value that follows.	<p>WhichEmail_Decode</p> <pre>decode ([Person Supplemental].[Person Detail]. [EMAIL_PREFERRED], 'U', 'University', 'H', 'Home', 'P', 'Personal')</pre>	Vendor Specific Functions – Oracle
<ul style="list-style-type: none"> instr 	Returns the position of the nth (normally 1) occurrence of a specified character within field1	<p>FlashlineUser</p> <pre>substr([EMAIL_PREFERRED_ADDRESS],1,instr([EMAIL_PREFERRED_ADDRESS], '@',1)-1)</pre>	Vendor Specific Functions – Oracle
<ul style="list-style-type: none"> length 	Returns the length of field1	<p>LengthOfName</p>	Vendor Specific Functions –

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		length([FULL_NAME_FMIL])	Oracle
• nvl	If field1 is null, replaces the null with whatever you like	EMAIL_PREFERRED_ADDRESS nvl([Person Supplemental].[Person Detail].[EMAIL_PREFERRED_ADDRESS], 'No Email')	Vendor Specific Functions – Oracle
• substr	Returns only part of field1 you specify	fname substr([FULL_NAME_FMIL], 1, instr([FULL_NAME_FMIL], ' ', 1)-1)	Common Functions
• {sysdate}	Returns current date and time at report runtime	Today_sysdate {sysdate}	Vendor Specific Functions – Oracle
• to_char	Most commonly used to convert date to a character format	Today_MMDDYYYY to_char({sysdate}, 'MMDDYYYY')	Vendor Specific Functions – Oracle
• upper	Converts field1 to uppercase	UpperName upper([FULL_NAME_FMIL])	Common Functions