Oracle BI 11g Reports and Dashboards

Presentation Variables

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Presentation Variables

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Presentation Variables
Overview

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Overview

Session/Repository Variables

- There are 2 types of variables that are supplied as part of your Oracle BI: application:
  - Session Variables : Variables unique to each user's session
  - Repository Variables : Global variables, every user sees the same value

- These Session/Repository Variables are very useful and can be applied in a number of places including:
  - Column Formulas e.g. display the "Username" of the end user
  - Columns Filters e.g. filter records for the "Current Year"

- But there are some limitations with Session/Repository Variables:
  - Session/Repository Variables are release dependent
  - Users are not able to override their values
  - Report Developers are not able to modify their definition
  - Report Developers are not able to specify or override their default value

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Presentation Variables

- Presentation Variables are a 3rd type of Oracle BI variable and offer a flexible way to overcome the limitations that exist with Session/Repository Variables:
  - They provide a mechanism for Report Developers to create their own variables and assign default values to them
  - End users are then able to override the Presentation Variable values simply by making selections using standard dashboard prompts
  - Presentation Variables are not release dependent

- Presentation Variables can be used in a variety of places:
  - Title Views
  - Narrative Views
  - Column Filters
  - Column Formulas
  - Conditional Formatting conditions
  - Dashboard prompts
  - Dashboard Section Headers
  - Chart scale markers
  - Gauge range settings
  - Static text

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Example: Dynamic Request Subtitle

- In this example, the value of "Year" selected in the Dashboard Prompt will be displayed in the subtitle of the Analysis
- When the user selects a different Year, the subtitle will also change!

	Sales Rep	01	02	03	04	05	06	07	08	09	10	11	12
Total Revenue (Millions)	Ambers, Ralph								4.22				
	Crawford, Ms. Pam		5.01								4.97	5.33	4.86
	Manley, Ms. Elaine	4.43	5.62	8.27	9.79		7.64	8.17	6.35		5.65	6.12	6.08
	Palmer, Miss Tara	7.23											5.17
	Pierson, Samuel	9.57		4.98	5.04		4.81	4.99	5.11	5.28	4.72	4.56	6.26
	Recruiter, Ms. Danielle	8.99			4.82		4.96		4.98	4.20	4.24	4.39	6.24
	Schmidt, Mr. Peter		4.94								4.24	4.44	5.03
	Smith, Mr. Joseph	5.19											
	Verma, Mr. Rishi	5.78	5.74			5.28	4.18	4.25	7.09	5.64			5.58
	Williams, Mr. Harold	4.14											
Total Revenue (Millions) Total		**45.34**	**21.31**	**13.26**	**19.65**	**5.28**	**21.59**	**17.41**	**27.76**	**15.12**	**23.82**	**24.83**	**39.22**
RANK	Ambers, Ralph								46				
	Crawford, Ms. Pam		28								32	20	35
	Manley, Ms. Elaine	41	18	4	1		6	5	9		16	12	13
	Palmer, Miss Tara	7											24
	Pierson, Samuel	2		30	26		37	29	25	21	38	39	10
	Recruiter, Ms. Danielle	3			36		33		31	47	44	42	11
	Schmidt, Mr. Peter		34								45	40	27
	Smith, Mr. Joseph	23											
	Verma, Mr. Rishi	14	15			22	48	43	8	17			19
	Williams, Mr. Harold	49											
RANK Total		**1**	**7**	**11**	**8**	**12**	**6**	**9**	**3**	**10**	**5**	**4**	**2**

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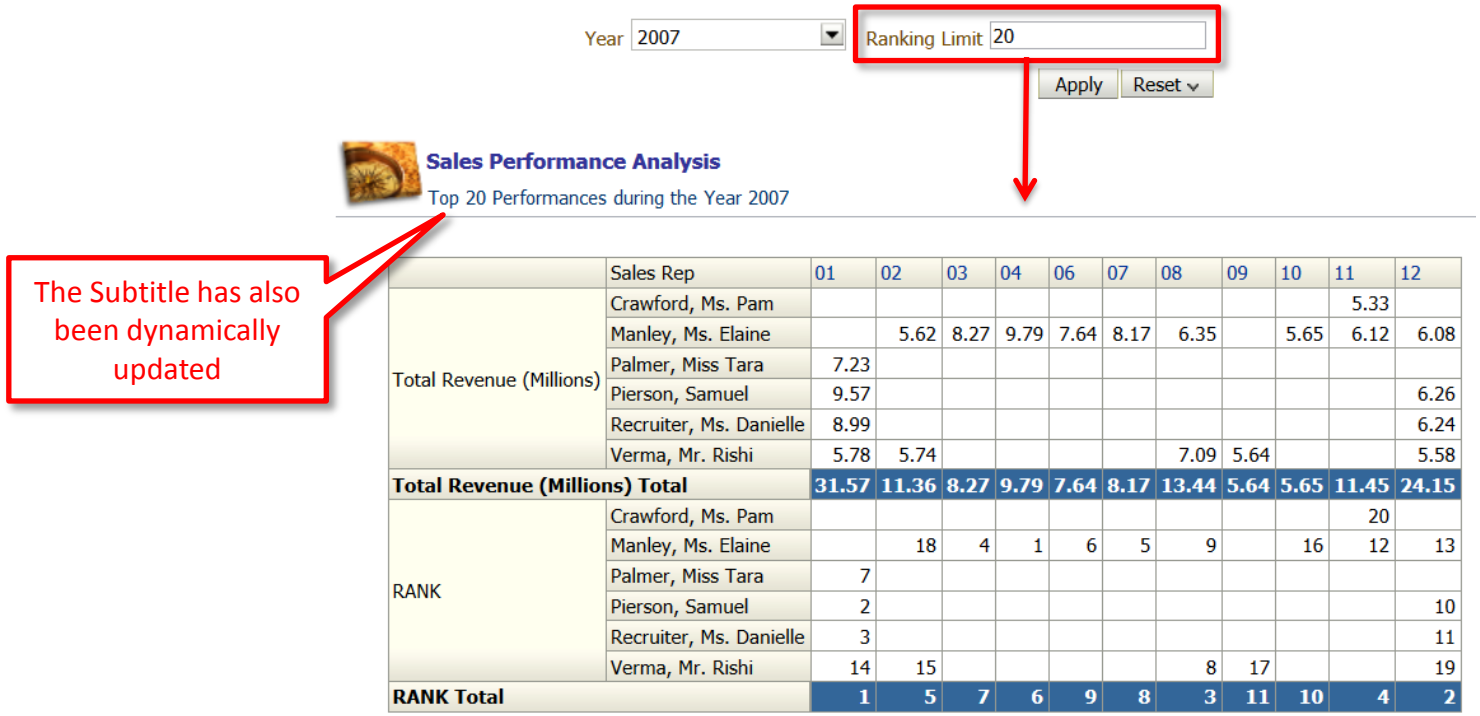
Example: Dynamic Request Filter

- A Presentation Variable can be used to modify the filter criteria of an Analysis on a dashboard page
- The Analysis below will by default return only the “Top 30” best sales performances during the year. However, the user has changed this filter to the “Top 20”:



	Sales Rep	01	02	03	04	06	07	08	09	10	11	12
Total Revenue (Millions)	Crawford, Ms. Pam										5.33	
	Manley, Ms. Elaine		5.62	8.27	9.79	7.64	8.17	6.35		5.65	6.12	6.08
	Palmer, Miss Tara	7.23										
	Pierson, Samuel	9.57										6.26
	Recruiter, Ms. Danielle	8.99										6.24
	Verma, Mr. Rishi	5.78	5.74					7.09	5.64			5.58
Total Revenue (Millions) Total		**31.57**	**11.36**	**8.27**	**9.79**	**7.64**	**8.17**	**13.44**	**5.64**	**5.65**	**11.45**	**24.15**
RANK	Crawford, Ms. Pam										20	
	Manley, Ms. Elaine		18	4	1	6	5	9		16	12	13
	Palmer, Miss Tara	7										
	Pierson, Samuel	2										10
	Recruiter, Ms. Danielle	3										11
	Verma, Mr. Rishi	14	15					8	17			19
RANK Total		**1**	**5**	**7**	**6**	**9**	**8**	**3**	**11**	**10**	**4**	**2**

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Example: What-If Analysis

- A Presentation Variable can also be used to dynamically modify a column formula within an Analysis
- In the example below, the user has multiplied the "Total Revenue (Millions)" by a factor of 1.2 to simulate a 20% increase in sales:

Year 2007 Ranking Limit 30 Adjustment Factor 1.2 Apply Reset

Sales Performance Analysis

Top 20 Performances during the Year 2007 (Adjustment Factor 1.2)

	Sales Rep	01	02	03	04	05	06	07	08	09	10	11	12
Total Revenue (Millions)	Crawford, Ms. Pam		6.01									6.39	
	Manley, Ms. Elaine		6.74	9.93	11.75		9.16	9.81	7.62		6.78	7.35	7.29
	Palmer, Miss Tara	8.68											6.21
	Pierson, Samuel	11.48		5.98	6.05			5.99	6.13	6.34			7.51
	Recruiter, Ms. Danielle	10.79											7.48
	Schmidt, Mr. Peter												6.04
	Smith, Mr. Joseph	6.23											
	Verma, Mr. Rishi	6.94	6.89			6.33			8.51	6.77			6.69
Total Revenue (Millions) Total		**44.11**	**19.64**	**15.91**	**17.80**	**6.33**	**9.16**	**15.80**	**22.26**	**13.10**	**6.78**	**13.74**	**41.23**
RANK	Crawford, Ms. Pam		28									20	
	Manley, Ms. Elaine		18	4	1		6	5	9		16	12	13
	Palmer, Miss Tara	7											24
	Pierson, Samuel	2		30	26			29	25	21			10
	Recruiter, Ms. Danielle	3											11
	Schmidt, Mr. Peter												27
	Smith, Mr. Joseph	23											
	Verma, Mr. Rishi	14	15			22			8	17			19
RANK Total		**1**	**4**	**6**	**5**	**12**	**10**	**7**	**3**	**9**	**11**	**8**	**2**

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Syntax

- The syntax for a Presentation Variable is as follows:
  - *@{variable name}{default value}*
- For example: The following syntax refers to the Presentation Variable “PR_YEAR” and specifies the default value of “2010” to be used if no value has been assigned:
  - @{PR_YEAR}{2010}

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Further Notes

- Users can only change the Presentation Variable values by using a dashboard prompt
- If you are previewing an Analysis away from a Dashboard, then a default value must be specified to avoid a NULL value appearing
- It is possible to assign multiple values to a Presentation Variable

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Presentation Variables

Defining Presentation Variables

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Defining Presentation Variables

- Creating Presentation Variables is straight forward
- We will show two examples:
  - **Column Prompt**
    - A Presentation Variable that will be populated from a list of values obtained from a Subject Area column
  - **Variable Prompt**
    - Presentation Variable that will be populated from a free-text field

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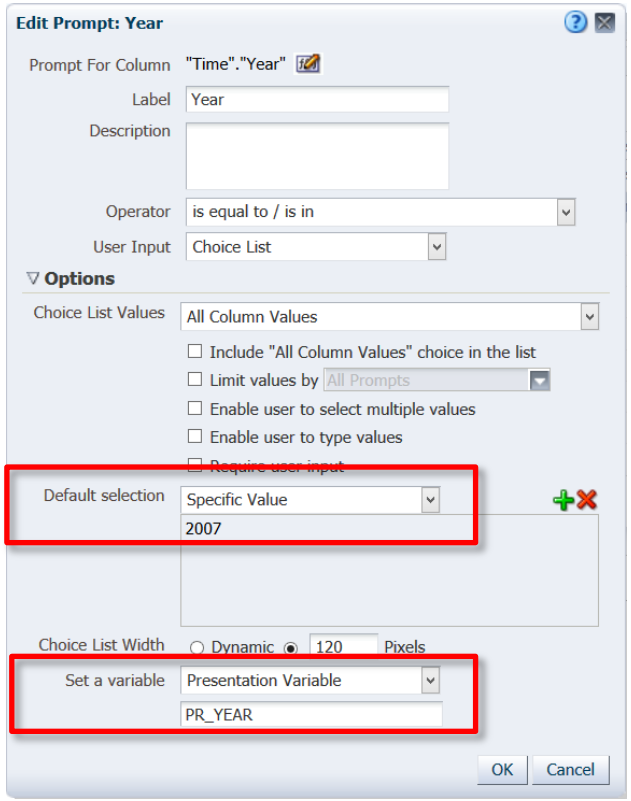
Defining Presentation Variables

Column Prompt

- Edit your Dashboard Prompt and open up the settings for the column which will be used to populate the Presentation Variable
- Within the "Options" section, set the "**Set a variable**" option to "**Presentation Variable**"
- Then type in the name of your Presentation Variable in the box underneath e.g. PR_YEAR
- Specify a default value using the "**Default selection**" option as appropriate



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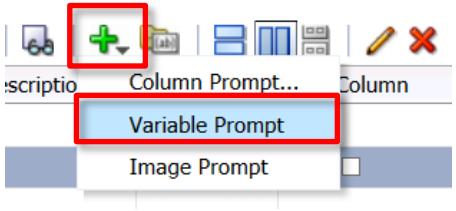
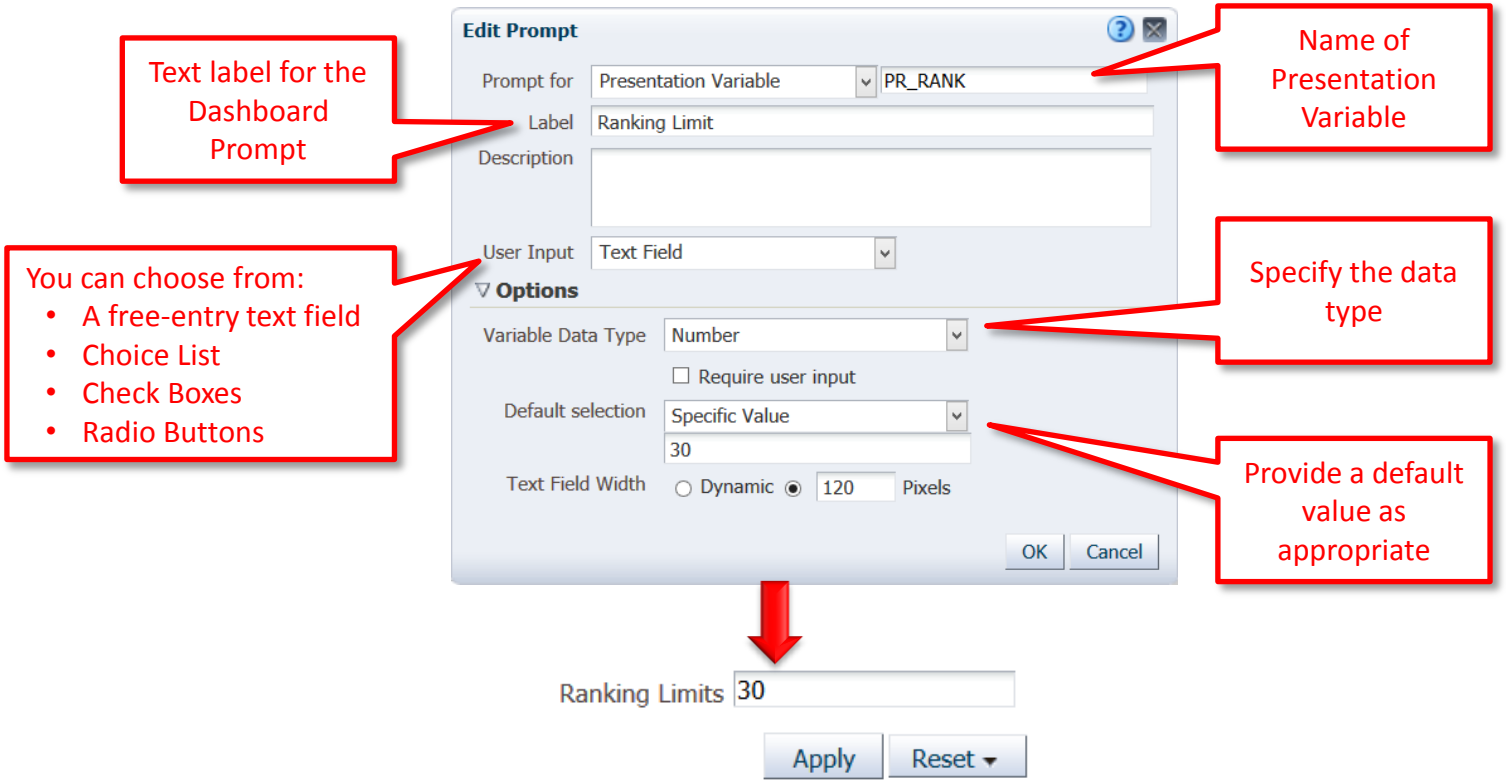
Defining Presentation Variables

Variable Prompt

- Open your Dashboard Prompt and choose to create a new "**Variable Prompt**"



- Then configure as follows:



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Presentation Variables

Using Presentation Variables

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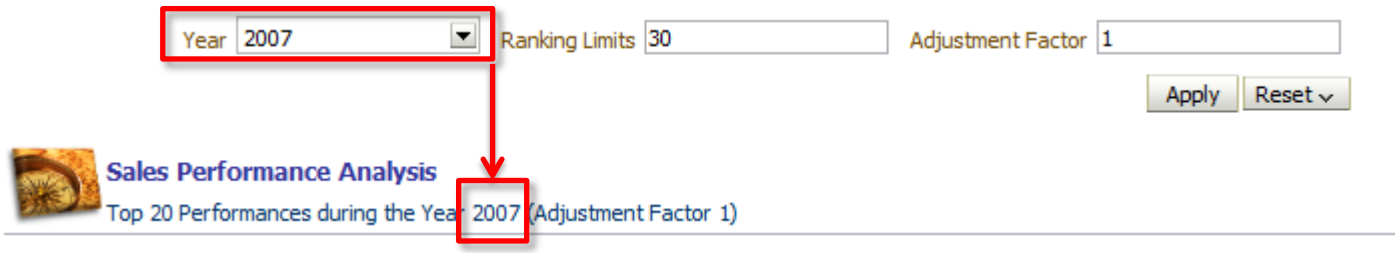
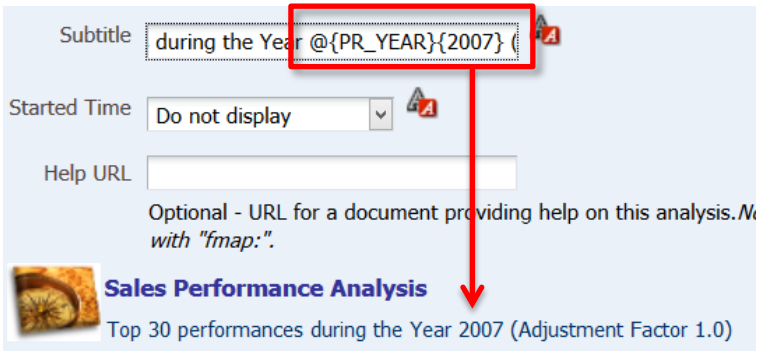
Using Presentation Variables

Titles and Subtitles

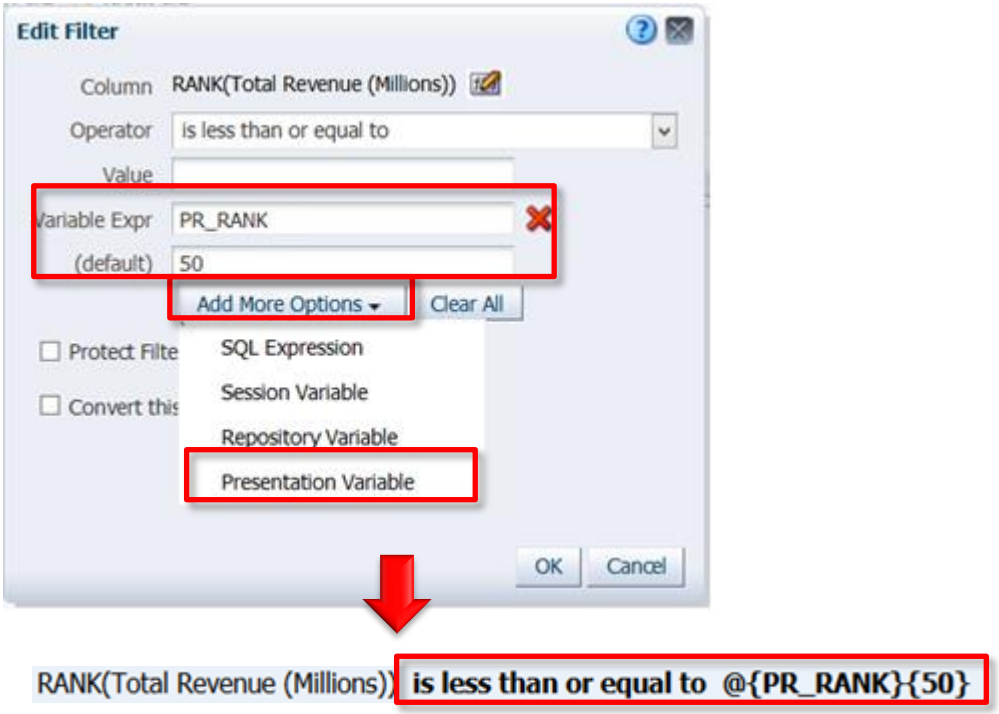


- Open up the Analysis for editing
- On the Results tab, open up your Title view for editing
- Enter the desired text for your Title or Subtitle with the following syntax to reference your Presentation Variable:
  - *@{variable}{default value}* e.g. @{PR_YEAR}{2007}



Using Presentation Variables
Column Filters

- Open up the Analysis for editing
- On the Criteria tab, add a new filter for the desired column
- Specify an operator e.g. “Is less than or equal to”
- Click on “Add More Options” and select “Presentation Variable”
- Enter the Presentation Variable name and a default value:



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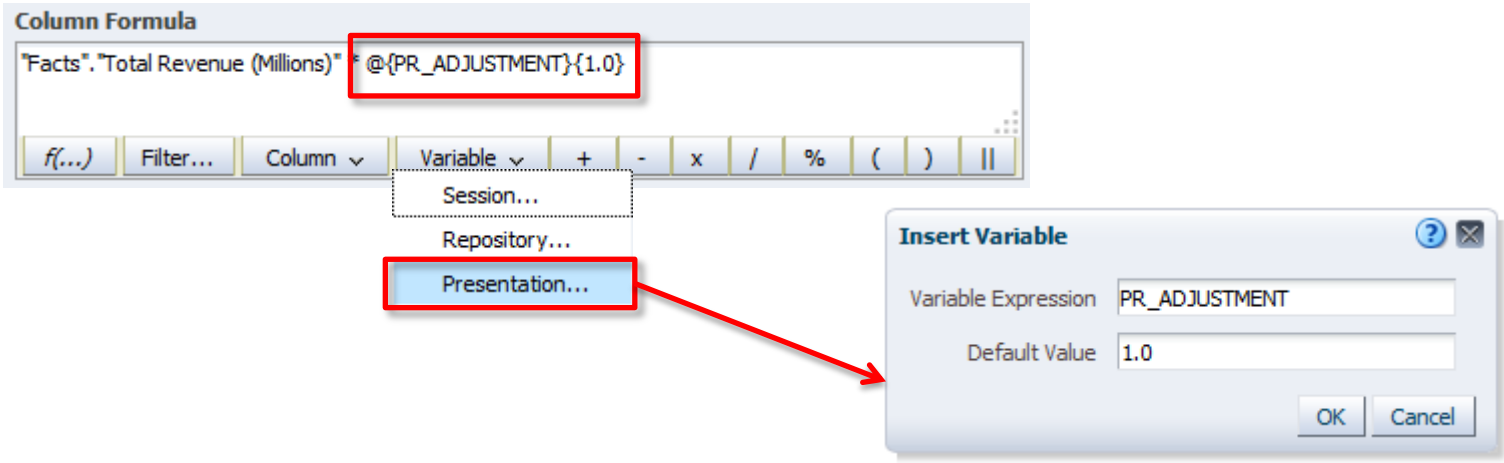
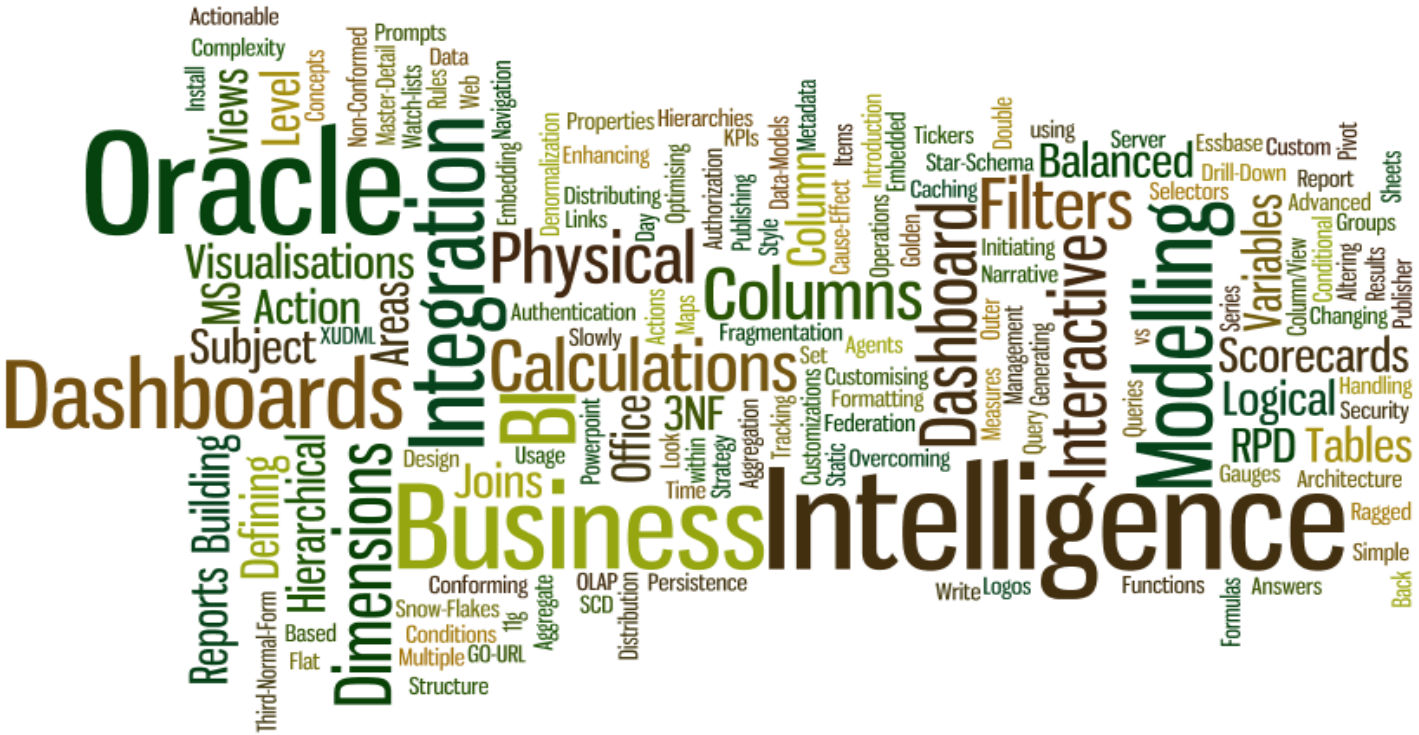
Using Presentation Variables

Column Formulas

- Open up the Analysis for editing
- On the Criteria tab, open up the Column Formula for the desired column
- Position the cursor where you wish to insert the Presentation Variable
- Choose the option Variable > Presentation
- Specify the name of the Presentation Variable
- Enter a default value in the box provided



Questions?



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