

**If you are using a VMimage it is recommended that you take a snapshot of it before you start these activities.**

## Activity A08\_Salary\_Planning.

### Objectives:

This activity is designed to increase your knowledge and experience with TM1 Cognos Insight for modeling. In this activity you are supplied with an existing model in the form of a cdd file.

Work in Cognos Insight to achieve the following:

- Understand the intent and logic of the pre-built model
- Examine a practical application of zero suppression
- Create Cube calculations with both look up and accumulation import links
- Know how to change the scope of a Cube Calculation
- Understand the use of virtual dimensions in import links
- Review the use of picklists and how these can be used as virtual dimensions.
- Use time based functions to move closing headcount to opening headcount for the next time period and populate cells with a value across all subsequent time periods.

### How to use the resources for this activity:

This activity is designed to be used either for

- Initial learning on IBM Cognos Insight
- To practice skills already learnt.

In both cases read the information in this document describing the business scenario, the suggested solution and files that should be used.

Then, if you are **new to IBM Cognos Insight**, you can use both the **accompanying video** and **detailed activity step by step instructions** to guide you through the activity. The video and accompanying commentary shows and explains the steps that were taken to create the suggested solution. The activity outline document gives detailed step by step instructions with screen shots.

If you are **familiar with IBM Cognos Insight** and want to practice skills you already have you can use these student instructions to gain an understanding of the business scenario and what the suggested solution might be. Then you can carry out the activity and compare your solution with the screen shot below. If you require additional assistance at any point you can review the relevant parts of the video or outline document.

In addition, all activities, apart from the first one (A01\_Simple\_Revenue\_Analysis), have a starting cdd file which can be opened with IBM Cognos Insight. In some cases these are identical to the completed cdd of the previous activity. In other cases there will be additional modelling included to allow you to focus on the main objectives of the activity.

Always read the student instructions to gain an understanding of the activity and what has been supplied as a starting point.

### **Additional resources available for IBM internal staff and BA partners:**

At each product release, enablement resources are published on W3 Connections and PartnerWorld. These include a number of product focused videos. These are useful learning resources which support these activities. To assist you to locate appropriate videos for each activity we are undertaking a review and cross reference of these videos. To allow this to remain current, maintain an accurate list of videos and correctly identify which ones support each activity we will create a reference document and included it as part of the program introduction. Please be aware that this document will change at each product release and as extra resources are created between releases.

### **Business Scenario:**

The customer has an unfinished Salary Plan model that a summer intern was working on before they had to return to college. They have asked you if you can explain how the existing model works. Also, to demonstrate ease of modelling, they have invited you to complete the model with Cognos Insight. The finished model must:

- Ensure that when looking at the existing employees only those with data show against a department
- Calculate the salary for existing employees taking into account a pay raise based on performance rating and the pay raise month.
- Calculate the increase in depreciation for each month.
- Calculate Opening headcount for Feb – Dec and Closing headcount for all time periods taking into account joiners and leavers.
- Ensure that the grade changes recorded for existing employees also show in the New Grade item across all months that they are at this new grade.
- Ensure details for New employees are entered into the correct months taking into account their joining month and joining grade.
- Calculate the correct pension contribution using the pension assumptions.

Here are screen shots of the suggested solution for guidance.

First, the whole workspace then a close up of each section.

## IBM Cognos TM1 Enablement Program – Activity A08

A08\_Salary\_Planning.cdd - IBM Cognos Insight

# PayRoll Planning

**Pay Raise By Grade and Performance**

	Good	Average	Poor
A	5.00%	3.00%	0.00%
B	5.00%	3.00%	0.00%
C	4.00%	2.00%	0.00%
D	4.00%	2.00%	0.00%
E	3.00%	1.00%	0.00%

**Existing Employee**

	Current Salary	Current Grade	Performance	Salary After Pay Raise	Leave Month	New Grade	Grade Change Month
<b>Existing Employees</b>	<b>260,000</b>			<b>272,000</b>			
Andy Apple	100,000	A	Good	105,000	Jun		
Dianne Dawkins	60,000	B	Good	63,000		C	Jul
Harry Howard	20,000	D	Poor	20,000			
Kiera Knight	80,000	A	Good	84,000			

**New Employee Details**

	Joiners Month	Joiners Salary	Joiners Grade
<b>New Employees</b>		<b>170,000</b>	
N001	May	100,000	E
N002	Feb	20,000	A
N003	Apr	50,000	C
N004		0	
N005		0	

**Salary And Benefits**

	Total of months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Opening Headcount	1	1	1	1	1	1	1	1	1	1	1	1	1
Joiners	0	0	0	0	0	0	0	0	0	0	0	0	0
Leavers	0	0	0	0	0	0	0	0	0	0	0	0	0
Closing Headcount	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Grade</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>
Salary	62,250	5,000	5,000	5,000	5,250	5,250	5,250	5,250	5,250	5,250	5,250	5,250	5,250
Pension	4,208	300	300	300	315	315	315	394	394	394	394	394	394
Other Benefits	2,910	200	200	200	210	210	210	263	263	289	289	289	289
Employers Tax	6,540	500	500	500	525	525	525	578	578	578	578	578	578
Employee Cost	75,908	6,000	6,000	6,000	6,300	6,300	6,300	6,484	6,484	6,510	6,510	6,510	6,510
Employee Tax	7,785	600	600	600	630	630	630	683	683	683	683	683	683

**Benefit Assumptions**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pension %</b>	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
<b>Other Benefits %</b>	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%

**Tax Assumptions**

	Jan	Feb	Mar	Apr
<b>Employers Tax %</b>	10.0%	10.0%	10.0%	10.0%
<b>Employees Tax %</b>	12.0%	12.0%	12.0%	12.0%

**Pay Raise By Grade and Performance**

	Good	Average	Poor
A	5.00%	3.00%	0.00%
B	5.00%	3.00%	0.00%
C	4.00%	2.00%	0.00%
D	4.00%	2.00%	0.00%
E	3.00%	1.00%	0.00%

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**Existing Employee**

employees

employee details

Facilities

Budget


	Current Salary	Current Grade	Performance	Salary After Pay Raise	Leave Month	New Grade	Grade Change Month
Existing Employees	260,000			272,000			
Andy Apple	100,000	A	Good	105,000	Jun		
Dianne Dawkins	60,000	B	Good	63,000		C	Jul
Harry Howard	20,000	D	Poor	20,000			
Kiera Knight	80,000	A	Good	84,000			

**New Employee Details**

	Joiners Month	Joiners Salary	Joiners Grade
New Employees		170,000	
N001	May	100,000	E
N002	Feb	20,000	A
N003	Apr	50,000	C
N004		0	
N005		0	

	Budget
Pay Raise Month	Apr
Pay Raise Month Index	4.00

	Budget
Pay Raise Month	Apr
Pay Raise Month Index	4.00

departments 

Facilities

HR

Finance

Marketing

R&D

Support

Sales Support

Sales - Artful Artifacts

Sales - WhackyWidget

Sales - Thoughtful Thing

Sales - Potty Possessi

Sales - Ominous Objec

Salary And Benefits

salary months Dianne Dawkins Facilities Budget

Total of months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Opening Headcount	1	1	1	1	1	1	1	1	1	1	1	1
Joiners	0	0	0	0	0	0	0	0	0	0	0	0
Leavers	0	0	0	0	0	0	0	0	0	0	0	0
Closing Headcount	1	1	1	1	1	1	1	1	1	1	1	1
Grade	B	B	B	B	B	B	C	C	C	C	C	C
Salary	62,250	5,000	5,000	5,000	5,250	5,250	5,250	5,250	5,250	5,250	5,250	5,250
Pension	4,208	300	300	300	315	315	315	394	394	394	394	394
Other Benefits	2,910	200	200	200	210	210	210	263	263	289	289	289
Employers Tax	6,540	500	500	500	525	525	525	578	578	578	578	578
Employee Cost	75,908	6,000	6,000	6,000	6,300	6,300	6,300	6,484	6,484	6,510	6,510	6,510
Employee Tax	7,785	600	600	600	630	630	630	683	683	683	683	683
New Grade							C					
Last NZ New Grade							C	C	C	C	C	C

## IBM Cognos TM1 Enablement Program – Activity A08

Benefit Assumptions													
benefits		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pension %	A	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
	B	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
	C	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
	D	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
Other Benefits %													

Tax Assumptions										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Employers Tax %		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	11.0%	11.0%	11.0%
Employees Tax %		12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	13.0%	13.0%	13.0%

An existing model is supplied in the format of a cdd file which can be opened in Cognos Insight. It is called A08\_Salary\_Planning\_Before.cdd. It is suggested that you do a Save As on the file before starting the activity.