

CREATING AN IF-THEN-ELSE FIELD

Use an If-Then-Else calculation to create a new field based on existing information in another field.

SCENARIO

Here's a simple example of a report that has used an If-Then-Else condition. In it, we created a new field called Size-Flag to describe rooms as small or large. The condition was, **if** the room has less than 500 square feet, **then** it is 'small' room **else** it is a 'large' room.

Space Management Report								
HR_DEPARTMENT_NAME	BUILDING_NUMBER	BUILDING_NAME	ROOM_NUMBER	ROOM_SQUARE_FOOTAGE	Size flag			
AMPS-Libraries 1	10	Richard Cockburn MacLaurin Buildings (10)	01	2,816.91	large			
			04	1,359.82	large			
			04A	5.09	small			
			05	131.13	small			
			06	129.3	small			
			06A	112.81	small			
			06B	549.16	large			

CREATE THE INITIAL REPORT

- 1. Create a training query in Report Studio using the Space Management Package.
- 2. Create columns for HR_DEPARTMENT NAME, BUILDING_NUMBER, BUILDING_NAME, and ROOM_SQUARE_FOOTAGE
- 3. Group HR_DEPARTMENT NAME, BUILDING_NUMBER, and BUILDING_NAME.
- 4. Sort Ascending on ROOM_NUMBER.
- 5. Change the report title to Space Management Report. In Report Studio, your report should now look like this:

Pa	Space Management Report						
ige E	HR_DEPARTMENT_NAME	BUILDING_NUMBER	BUILDING_NAME	ROOM_NUMBER A	ROOM_SQUARE_FOOTAGE		
plorer	<	< BUILDING_NUMBER>	< BUILDING_NAME>	<room_number></room_number>	<room_square_footage></room_square_footage>		
			<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
		<building_number></building_number>	<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
			<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
	<pre><hr_department_name></hr_department_name></pre>	<building_number></building_number>	<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
			<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
1		<building_number></building_number>	<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		
			<building_name></building_name>	<room_number></room_number>	<room_square_footage></room_square_footage>		



CREATE THE NEW IF-THEN-ELSE CONDITIONAL FIELD

6. Click Query Explorer button to display the Query Explorer panel

- 0		Query Explorer X	Space	Manac
		□- 📾 Queries		
	ę		BUILDING_NAME1	ROOM_NUM
	ery E		BUILDING_NAME1>	<room_nu< td=""></room_nu<>
	Xplor		BUILDING_NAME1>	<room_nu< th=""></room_nu<>
	đ		BUILDING_NAME1>	<room_nu< th=""></room_nu<>

7. Click on Query 1 – you will now see the report's Data Item on the right side of the window.



8. Click **Toolbox** button (shown above) to display the Toolbox – note the tool option now available.

Toolbox _ 🗖		-
	==	
Cuery Calculation		📅 Data Items
		T HR_DEPARTMENT_NAME
Intersection (Tuple)	Q	BUILDING_NUMBER
T Data Item		T BUILDING_NAME
Y Filter	I₽	
	ĕ	ROOM_SQUARE_FOOTAGE
Slicer Member Set	l d	
38 嘴		

9. Drag the Data Item icon into the Data Items Area – as you do, note that a black 'positioning' bar will appear to show you where the new data item will appear on the report- release the Data Item icon when the black bar is beneath the ROOM_SQUARE_FOOTAGE data item.. When you do, the Data Item Expression dialog box displays:

IST Infor	nation Services & Technology	COGNOS REPORTING	Massachusetts Institute of Technology
	🚰 Data Item Expression - Data Item 1		<u>Help</u> ×
	Read Available Components:	1	Z 🖻 🖩 🐰 🖻 🛍 🗙
		Expression Definition:	
	— স্ট্রিষ্ট Buildings & Rooms ় ⊕ স্ট্র Space Reporting		
		Information:	
		Tips Errors	
			OK Cancel

10. Click the **Functions** button (as pointed at in the above illustration). A series of function options will now display, as shown below.

The information box displays the construction of a valid if-then-else statement.

- 11. Click the plus sign before **Constructs**.
- 12. Double click on **if-then-else**.





- Information Services & Technology
 - 13. Change the **<condition>** to read **[ROOM_SQUARE_FOOTAGE] < '500'** (be careful to use the correct brackets around the fieldname and single quotes around the data value
 - 14. Customize the THEN <expression> to read THEN ('small')
 - 15. Customize the ELSE <expression> to read ELSE ('Large')
 - 16. The revised statement should now look like this:

IF ([ROOM_SQUARE_FOOTAGE] < '500') THEN ('small') ELSE ('large')

- 17. Click the green check **Validate** button to check statement if errors, messages will display describing them. If no errors, a message will display confirming such.
- 18. Click **OK** to complete the if-then-else definition the new field now displays in the Query Item list as **Data Item 1**
- 19. The field should now be named.
- 20. In the Properties section, go to the **Data Item** area and in the **Name** field, enter a name for the new field: **Size Flag**.
- 21. To add the new field, to your report layout, switch page to **Page Explorer** (it's the top most button in the mid-screen fence area, and choose **Page 1**.
- 22. In the bottom of the Source panel, click the **Data Items** button to display the Query's Data Items.

Data Items _	Pa			
	ige E	HR_DEPARTMENT_NAME	BUILDING_NUMBER	BUILDING_NAME
	plore	<	< BUILDING_NUMBER>	< BUILDING_NAME>
				<building_name></building_name>
- ROOM_SQUARE_FOOTAGE			<building_number></building_number>	<building_name></building_name>
				<building_name></building_name>
		<hr department_name=""/>	<building_number></building_number>	<building_name></building_name>
				<building_name></building_name>

- 23. Drag Size Flag onto the report layout and run the report.
- 24. REMEMBER TO SAVE YOUR REPORT!