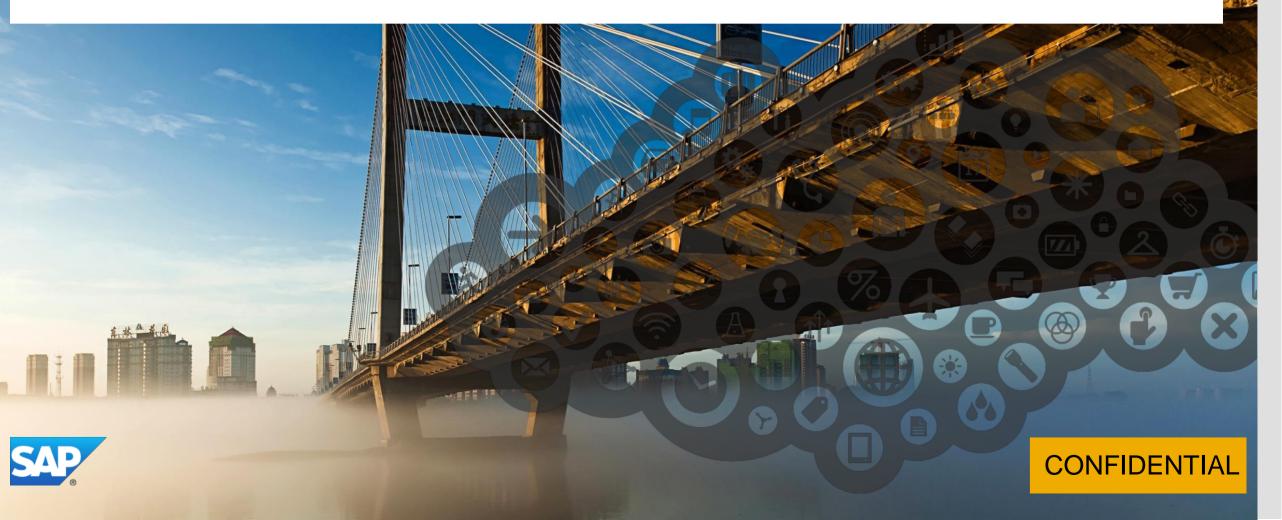
## Advanced Reporting Create Change Reports Manually





## Manual method for Change Reporting

This document aims to guide a user through creating a "manual" Change Report (that is: without using the Change Reporting function made available in the new UI released in Q2 2015.

The current Change Reporting function allows for reporting changes on a single column only. Given this, the main benefit for manually creating these reports (over using the Change Reporting functionality) is to create a Change Report that shows changes in more than one column (which this guide will cover).



### **New vs Classic Advanced Reporting User Interfaces**

This guide assumes a basic level of knowledge in Advanced Reporting and contains two sections, each one describing the manual Change Reporting method for each UI of Advanced Reporting:

- The 'new' Advanced Reporting UI was made available in the May 2015 release and most instances implemented since then will be on this UI, in addition to any existing instance that has requested to be moved to this new UI
- Most instances implemented prior to the May 2015 release will be using the 'classic' Advanced Reporting UI

If you are unsure which UI your instance is using, please refer to the screen shots in each section and choose the section which contains screen shots that match your instance.

This guide splits out how to duplicate the Change Reporting table in each of the UI's (new and classic) – the last section (applying necessary filters) applies to both UI's.

### **Initial Notes**

The manual change reporting method works from the premise of a "base" or anchor table and then joining two instances of the table containing the change reporting columns onto this base table. Two separate instances of a table allows the query to apply a different date filter to each instance, which in turn retrieves the current and previous values.

Other tables unrelated to the change column can be pulled into the query for additional report data if required.

The following slides will refer to "current" and "previous" values – however the same method can apply for historical (rather than the current) values simply by adjusting the date filters on the relevant tables.

This method shows changes that occurred within a "day" timeframe. Should an employee have more than one change in a single day, only the last record in that day will be captured in the results.



# Duplicating the Change Reporting table in the 'new' Advanced Reporting UI

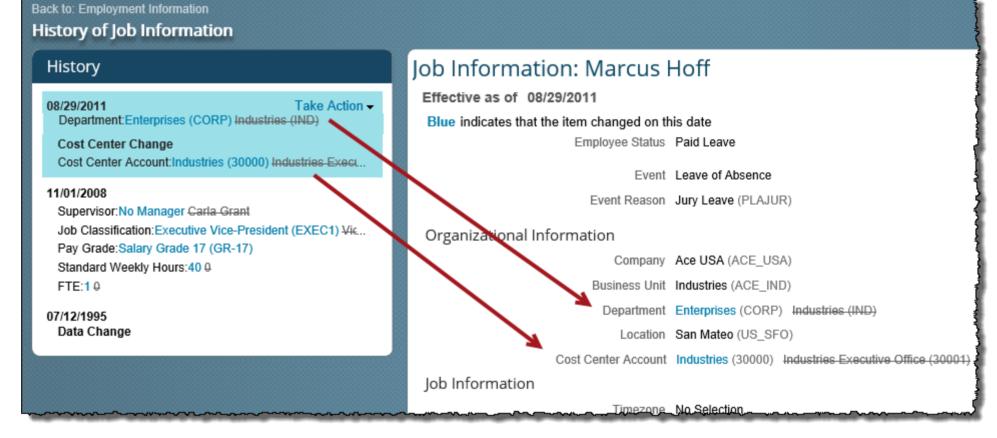
Please skip to the **Duplicating the Change Reporting table in the 'classic' Ul** section if you are not using the b1505 Ul.



### **EC Job Information Changes**

New UI

For this example we will look at the employee Marcus Hoff. He is currently in the *Enterprises* Department and the *Industries* Cost Center, having moved from *Industries* and *Industries Executive Office* respectively.



### **Begin the query**

New UI

To start, we will pull in data from the table which will be the 'anchor' table.

Typically this will be the Person > Personal Information table for queries that are Change Reporting on employee Job data, or reporting on employee Compensation data.

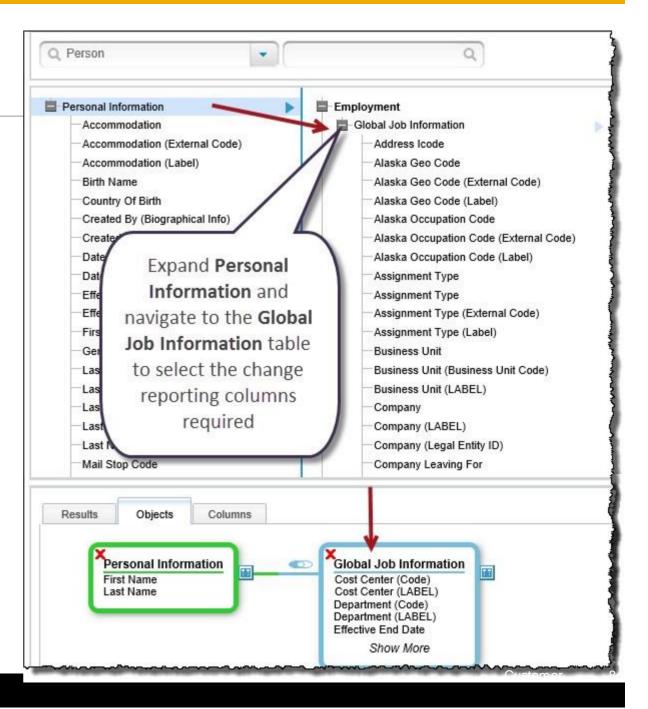
Select the **Person** category from the drop down and open the **Personal Information** table. Pull in the columns required from this table.

Home	
Q Person	
Personal Information     Accommodation     Accommodation (External Code)     Accommodation (Label)	Select the <b>Person</b>
-Birth Name Country Of Birth	category and pull First
-Created By (Biographical Info)	Name & Last Name
—Created By (Personal Info) —Date Of Birth	from the <b>Personal</b>
Date of Death	Information table into
Effective End Date	the query
First Name	
Gender	
Results Objects Columns	
Personal Information First Name Last Name	

# Pull in the first "change" table

Navigate to the **Global Job Information** table from the **Personal Information** table and pull in the columns required for change reporting.

In this example we are looking at changes on the **Department** and **Cost Center** columns. The **Effective Start/End Dates** have also been selected so that we can see the "timeline" in the finished report.



## Duplicate the first "change" table

We now need to create a second instance of the table containing the "change" columns.

Open the column menu for the **Global Job Information** table and click **Duplicate Table**.

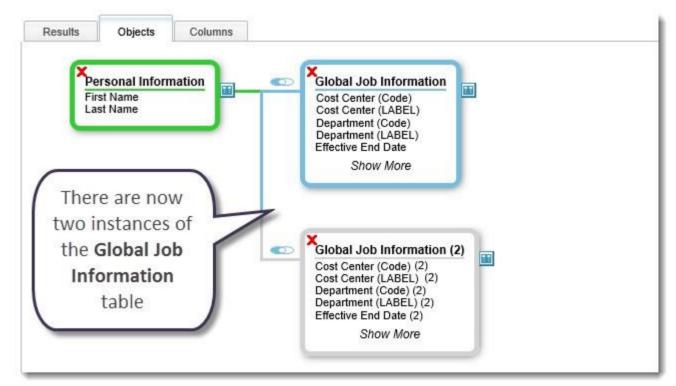
8	Objects	Columns	
× Per	rsonal Inform	nation	C Global Job Information
	t Name t Name		Cost Center (Code) Cost Center (LABEL) Department (Code) Department (LABEL) Effective End Date Show More

1	Select All Address Icode	T	^	
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	Cost Center	T		
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~	Cost Center (LABEL)	T	Α	
1	Department (Code)	T	A	
1	Department (LABEL)	T	Α	
	Division	T		
	Division (Code)	T	А	
	Division (LABEL)	T	A	
1	Effective End Date	T	Α	
1	Effective Start Date	T	A	
	Emp Employment Info Created By	T		
	Emp Employment Info Last Modified	T		
	By Emp Employment Info Last Modified Date	T		
	Emp Job Info T Created By	T		
F	Emp Job Info T Effective Latest Change	Ÿ.	~	

## Second instance of the "change" table is now created New UI

The **Global Job Information** table has been duplicated, with the identical column settings as the original.

**Global Job Information** will be the table retrieving the "current" Job information and **Global Job Information (2)** will be the table retrieving the "previous" Job information. So that we can more easily identify which **Department + Cost Center** is the current and which **Department + Cost Center** is the previous, we will rename the columns in each table appropriately.



## Checkpoint

We now have a report output that is duplicating the current Department and current Division for each employee. This occurs because both instances of the **Global Job Information** table defaults to the "current date". As you can see in the first record, the columns in Group 1 have identical results as the columns in Group 2.

Please jump to the **Finalize the manual Change Reporting query by adding the required filters** section where we will apply date filters to retrieve the proper current & previous results for Department and Cost Center.





# Duplicating the Change Reporting table in the 'classic' Advanced Reporting UI

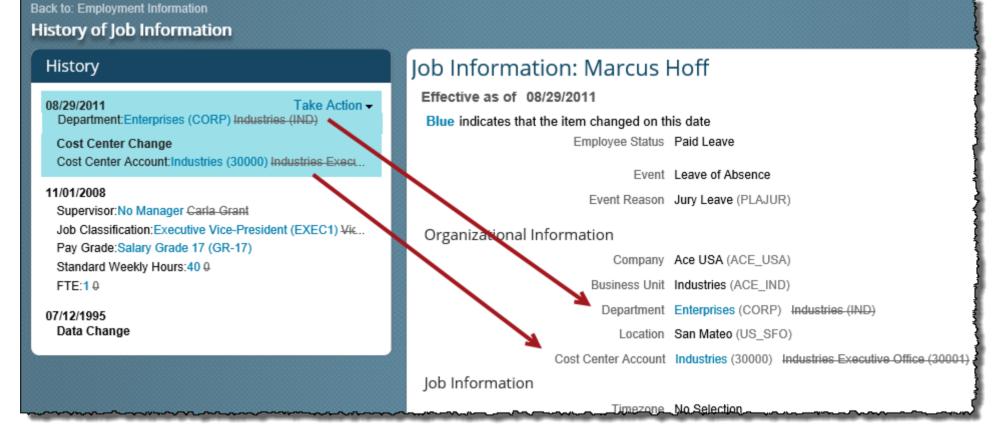
Please jump back to the **Duplicating the Change Reporting table in the 'new' UI** section if you are using the b1505 UI.



## **EC Job Information Changes**

Classic UI

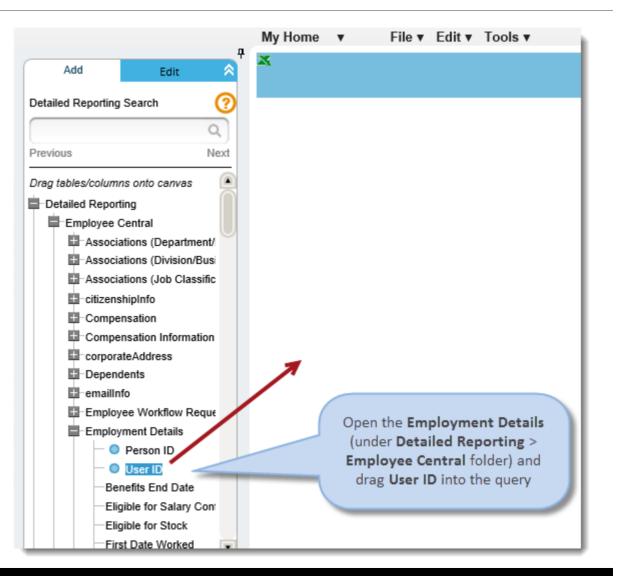
For this example we will look at the employee Marcus Hoff. He is currently in the *Enterprises* Department and the *Industries* Cost Center, having moved from *Industries* and *Industries Executive Office* respectively.



### Begin the query Classic UI

To start, we will pull in data from the table which will be the 'anchor' table. Typically this will be the **Employment Details** table for queries that are Change Reporting on employee Job data, or reporting on employee Compensation data.

Open the **Employment Details** table under **Detailed Reporting** > **Employee Central** and drag on **User ID** (and any other required columns from this table).

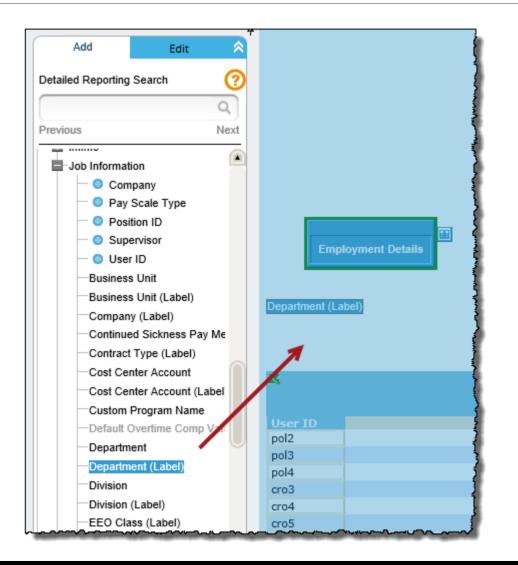


### Pull in the first "change" table Classic UI

Navigate to the **Job Information** table (also under **Detailed Reporting > Employee Central**).

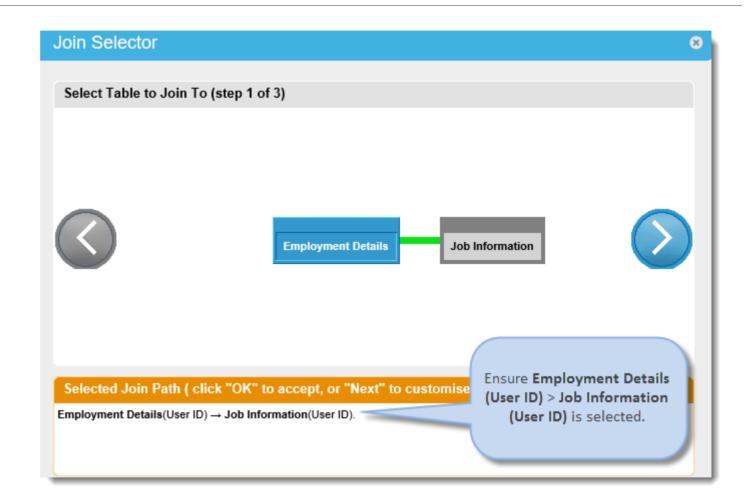
In this example we are looking at changes on the **Department** and **Cost Center** columns.

Ensure the **Advanced** view is enabled and pull the **Department (Label)** column onto the canvas to add the **Job Information** table into the query.



# Configure the join for the first "change" table

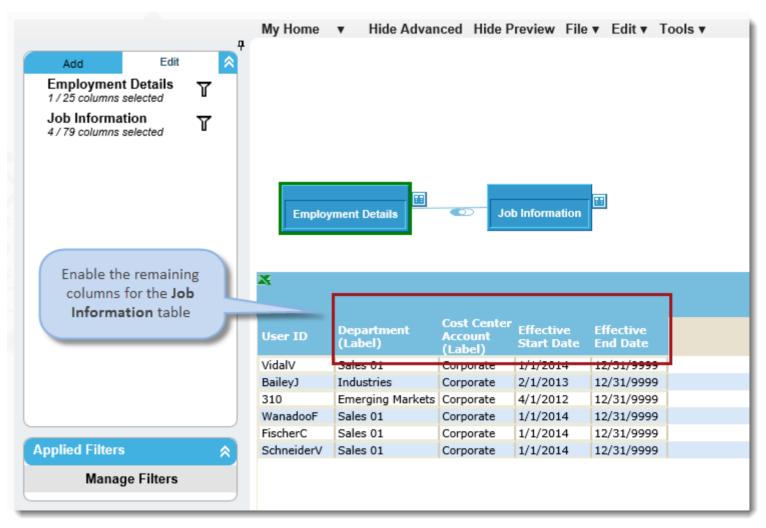
As we are in **Advanced** view, the **Join Selector** dialog will open – ensure the User ID > User ID join is selected and click **OK**.



### **Configure the columns for the first "change" table** Classic UI

Enable the remaining required columns for the **Job Information** table:

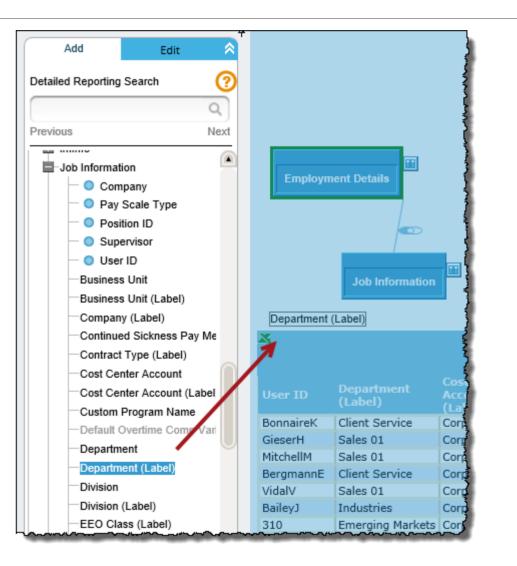
- Effective Start Date
- Effective End Date
- Cost Center (Label)



### Duplicate the first "change" table Classic UI

We now repeat the process of pulling in the **Job Information** table to create a second instance of the table containing the "change" columns.

Return to the column menu and drag the **Department** (Label) column again onto the canvas.

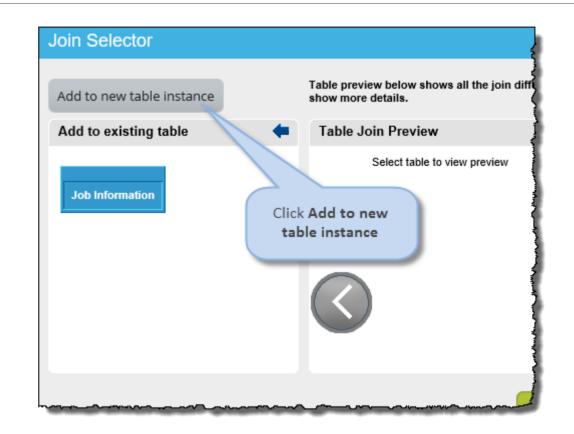


18

### Make a new instance (duplicate) of the "change" table Classic UI

When columns from a table that already exists in the query are pulled into the query, you will be offered the choice to add those columns to the existing table – or to create a new instance of the table.

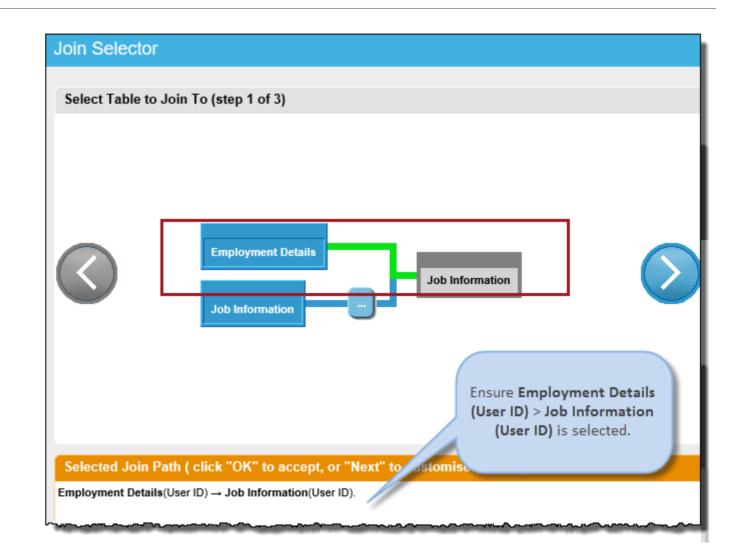
For Change Reporting purposes we need to create a new instance of the **Job Information** table, so in the **Join Selector** dialog click **Add to new table instance**.



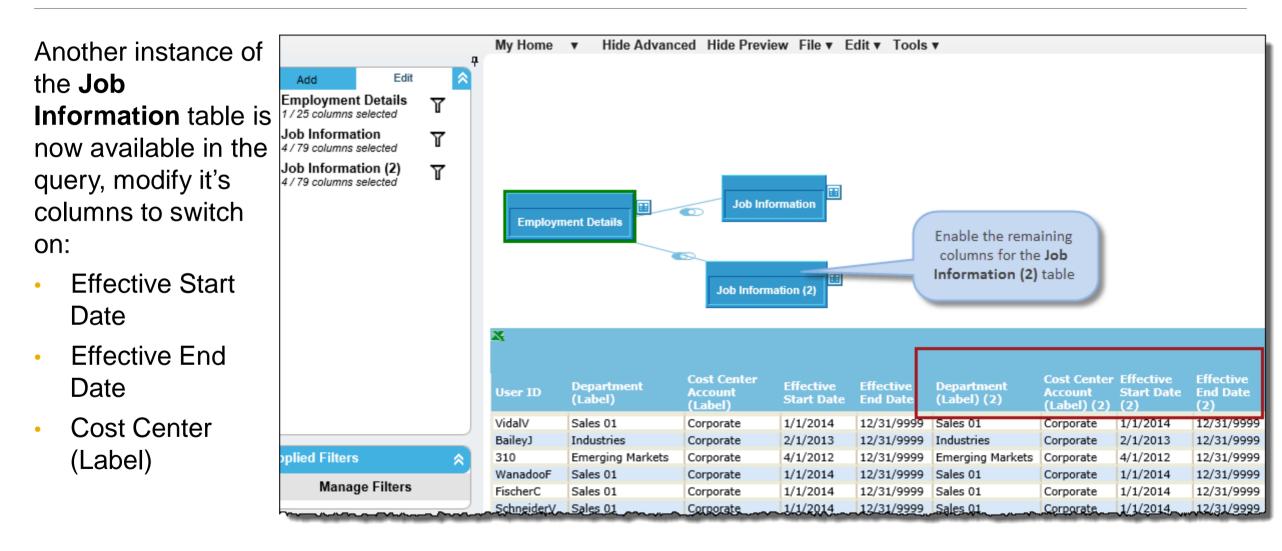
### **Configure the join for the duplicate "change" table** Classic UI

Ensure the same join is configured as for the first change table. Here we will again ensure the User ID > User ID join is selected and click **OK**.

Note the table layout graphic is slightly different here, showing the first **Job Information** table that we have already pulled into the query.



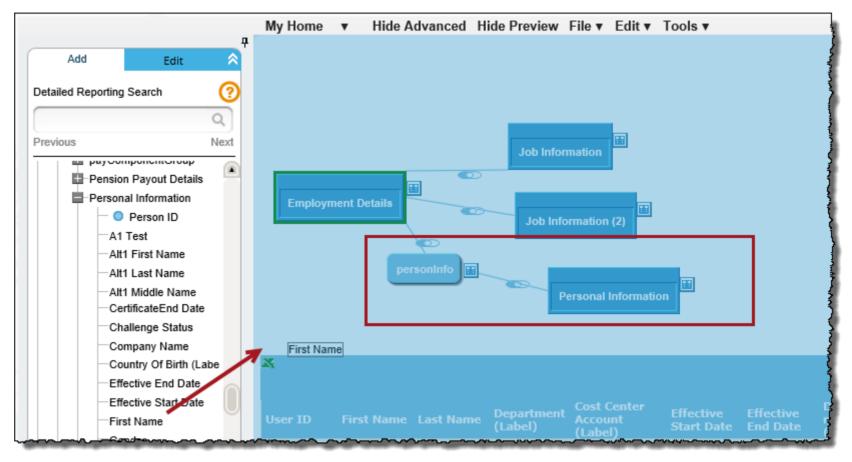
### Second instance of the "change" table is now created Classic UI



### Pull in other tables as required Classic UI

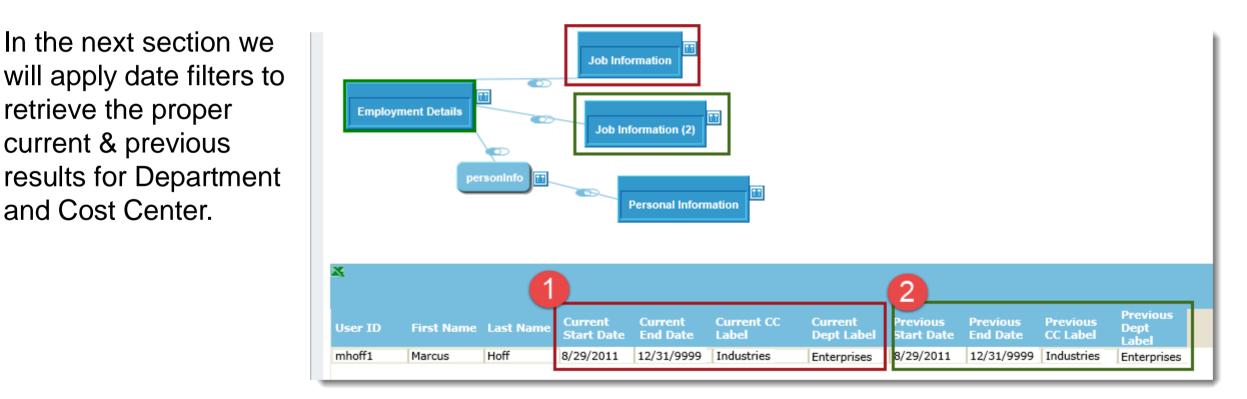
We would also like the **First** and **Last Name** in this query.

Pull these in from the **Personal Information** table, joining to the **Employment Details** table via the **Person** (or **Biographical**) **Info** table on the **Person ID**.



## Checkpoint

We now have a report output that is duplicating the current Department and current Division for each employee. This occurs because both instances of the **Job Information** table defaults to the "current date". As you can see in the first record, the columns in Group 1 have identical results as the columns in Group 2.





# Finalize the manual Change Reporting query by adding the required filters

Please note that the following section contains screen shots from the xx UI, however the methodology remains the same when using the "classic" UI.

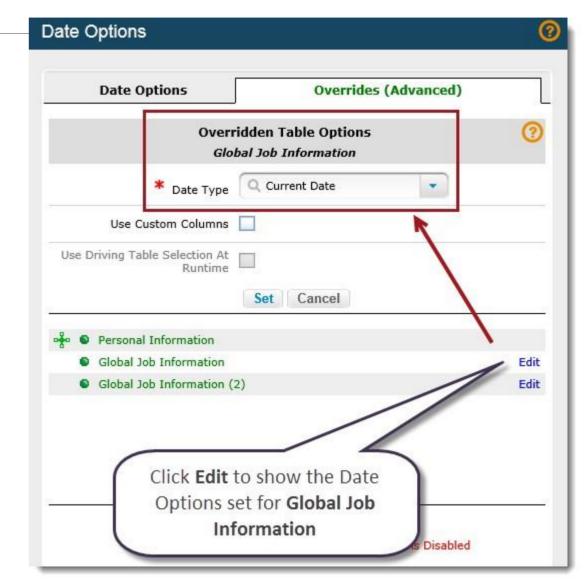


### **Apply the Date Filters for Current Values**

Open the **Date Options** function and click on the **Overrides (Advanced)** tab.

Click Edit on the Global Job Information table and note that this table is currently set to Current Date. In this example we would like to report on the current Department and current Division from this table – so we will not make any changes here.

Note that should you wish to report on historical values, here is where you will apply the date or date range relevant to the history you wish to capture.



### **Apply the Date Filters for Previous Values**

Remain in the **Date Options** function on the **Overrides (Advanced)** tab.

Click Edit on the Global Job Information (2) table and note that this table is currently set to Current Date. Change this setting to Show All and click Set (note the Set button is obscured in this screen shot by the Date Type drop down).

Date Options		0
Date Options	Overrides (Advanced	)
	idden Table Options I Job Information (2)	<b>V</b>
Gioba		
* Date Type	Q Show All × ▼	
Use Driving Taple Selection At	Show All	
Runtime	Current Date	
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	Driving Table Start Date	
		_
🛉 🌑 Personal Information		
Global Job Information		Edit
Global Job Information (	2)	Edit
Click Edit t	to show the Date	
Options s	et for Global Job	
Infor	mation (2)	
	📲 Driving Table	
No Override	<ul> <li>Oriving Table</li> <li>Overridden</li> <li>Date Options Disable</li> </ul>	ed
		_

### Apply the Date Filters for Previous Values (continued...)

When the Show All override for the Global Job Information (2) table has been Set, the Overrides (Advanced) tab will show this table in red, with a Clear option next to Edit.

Click **Save** to exit the function.

Date Options	(2)
Date Options Overrides (Advanced)	
Overridden Table Options	(?)
<ul> <li>Personal Information</li> <li>Global Job Information</li> </ul>	Edit
Global Job Information (2)	Clear Edit
Priving Table No Override Overridden Date Options Disabled	

### Checkpoint

We now have a set of results that shows the current record (1) against all the previous records (2):

Results	Objects	Columns											
🛎 zSF Test	- Change Re	orting Doco						2				Page 1 of 1 Rows	1 ≥ 1 per page: 100
First Name	Last Name	Current Start Date	Current End Date	Current CC Code	Current CC Label	Current Dept Code	Current Dept Label	Previous Start Date	Previous End Date	Previous CC Code	Previous CC Label	Previous Dept Code	Previous Dept Label
Marcus	Hoff	8/29/2011	12/31/9999	30000	Industries	CORP	Enterprises	7/12/1995	10/31/2008	30001	Industries Executive Office	IND	Industries
Marcus	Hoff	8/29/2011	12/31/9999	30000	Industries	CORP	Enterprises	11/1/2008	8/28/2011	30001	Industries Executive Office	IND	Industries
Marcus	Hoff	8/29/2011	12/31/9999	30000	Industries	CORP	Enterprises	8/29/2011	12/31/9999	30000	Industries	CORP	Enterprises

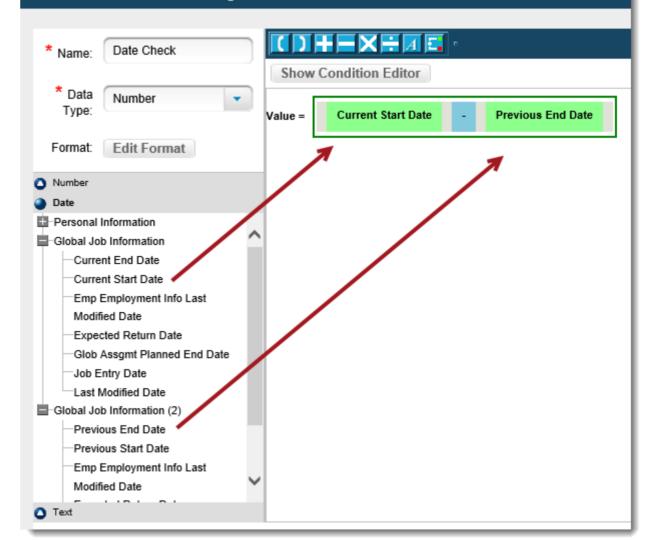
### **Find 'Previous' Record**

We now need to identify the record that is "previous" to the current record.

Create a **Calculated Column** which uses the formula: *Current Start Date – Previous End Date*.

Ensure the **Data Type** is a number and click **OK** to save.

#### Calculated Column Designer



### **Find 'Previous' Record**

Set a query filter where the **Calculated Column** = 1.

This will include any records in the query where there is one day between the beginning of the **Current** record and the end of the **Previous** record and ensures that we are only retrieving records that align on the timeline with no gaps.

ilter Designer		
Filter Field	Operator Equal to	Value
Global Job Information Global Job Information (2) Calculated Columns	<ul> <li>Not equal to</li> <li>Greater than</li> <li>Greater than or equal to</li> <li>Less than</li> <li>Less than or equal to</li> <li>Like</li> <li>Between</li> </ul>	Custom filter Report values Field comparison Use Dynamic Number Variable 1 ×

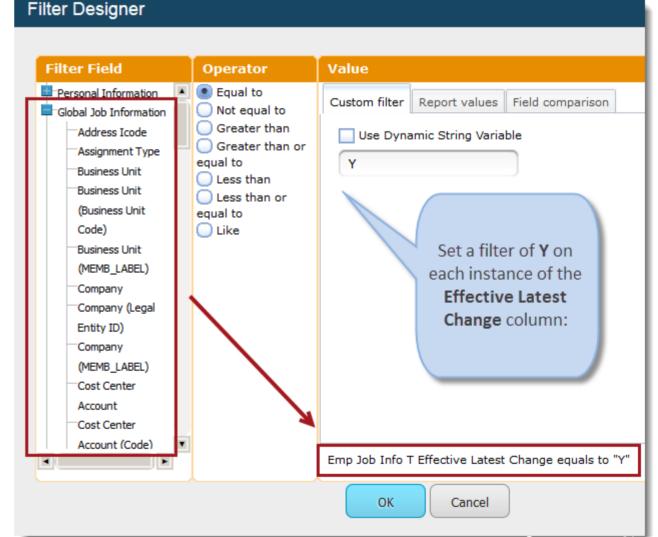
## Ensure only final record in a day is captured

New UI

If an employee has had more than one change in a single day, they will appear with multiple records in the results. To ensure we only retrieve one record per employee per timeframe, set a filter on the **Effective Latest Change** column in each of the two table instances.

In this example, we are using two instances of the **Global Job Information** table to retrieve changes in columns in this table, so we have set this filter on the **Effective Latest Change** column in each of the instances of this table.

Please Note! This filter is only applicable for the New UI. The **Effective Latest Change** column is not available in the Classic UI.



### Checkpoint

The results will now show the current record with the previous record (that is: the record dated one day prior to the current record):

Results	Objects	Columns											
🛎 zSF Test	- Change Re	1 ng Doco						2					1 ≥ 1 Der page: 100
First Name	Last Name	Current Start Date	Current End Date	Current CC Code	Current CC Label	Current Dept Code	Current Dept Label	Previous Start Date	Previous End Date	Previous CC Code	Previous CC Label		Previous Dept
Marcus	Hoff	8/29/2011	12/31/9999	30000	Industries	CORP	Enterprises	11/1/2008	8/28/2011	30001	Industries Executive Office	IND	Industries

### Reporting only on employees who have had a change

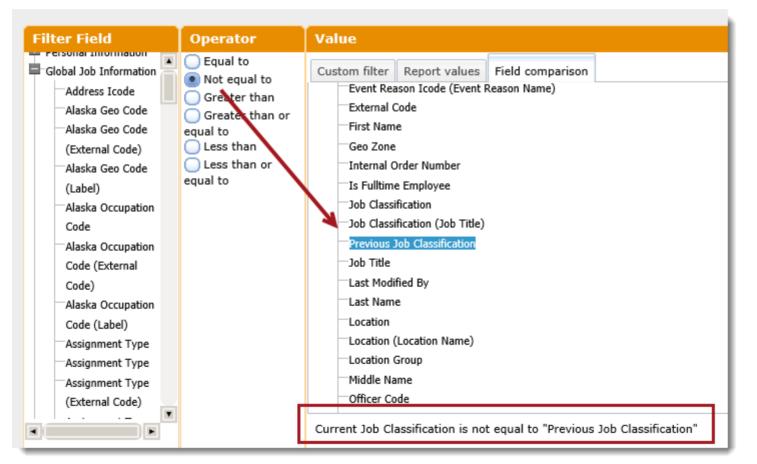
To more easily show the manual method to creating a change report, the example so far has been filtered on a single employee. If you wish to show a list of employees who (for example) have changed Job Classification the method remains the same with the addition of a filter to only show those employees whose Job Classification changed.

First generate a list of employees current and previous Job Classifications:

Results	Objects	Columns					
🖌 zSF Test	- Change Rep	oorting Doco					
First Name	Last Name	Current Start Date	Current End Date	Current Job Classification	Previous Start Date	Previous End Date	Previous Job Classification
James	Riba	7/11/2011	12/31/9999	Recruiter	4/1/2002	7/10/2011	
Marcus	Hoff	8/29/2011	12/31/9999	Executive Vice-President	4/1/2010	8/28/2011	Executive Vice-President
Grace	Griffin	5/9/2011	12/31/9999	Executive Vice-President	7/1/2008	5/8/2011	Executive Vice-President
Natalie	Cook	7/25/2011	12/31/9999	Executive Vice-President	4/1/2001	7/24/2011	Executive Vice-President
Admin	User	7/30/2011	12/31/9999	Director, Finance	7/26/2011	7/29/2011	Engineering Director
Rick	Bauer	7/11/2011	12/31/9999	Engineering Director	11/1/2010	7/10/2011	Mechanical Engineer
Richard	Maxx	7/11/2011	12/31/9999	Product Manager	5/14/2008	7/10/2011	Executive Vice-President
Carla	Grant	8/31/2009	12/31/9999	General Manager, Industries	6/15/2009	8/30/2009	General Manager, Industries
Brett	Colbert	12/1/2007	12/31/9999	Vice President of Marketing	12/1/2006	11/30/2007	Director, Marketing
Joseph	Selinger	9/28/2011	12/31/9999	Director, Marketing	9/26/2011	9/27/2011	Director, Marketing
Cheryl	Wang	5/7/2011	12/31/9999	Product Manager	10/1/2010	5/6/2011	Product Manager

### Add Filter to check for a change

Using the **Field Comparison** option in the **Filter** function – set a filter where Current and Previous Job Classifications do not match:



### Reporting only on employees who have had a change

Our list is now filtered to only those employees who had a change between current and previous Job Classifications:

Objects	Columns					
Change Rep	orting Doco					
Last Name	Current Start Date	Current	Current Job Classification	Previous Start Date	Previous End Date	Previous Job Classification
	7/30/2011	12/31/9999	Director, Finance	7/26/2011	7/29/2011	Engineering Director
Bauer	7/11/2011	12/31/9999	Engineering Director	11/1/2010	7/10/2011	Mechanical Engineer
Maxx	7/11/2011	12/31/9999	Product Manager	5/14/2008	7/10/2011	Executive Vice-President
Colbert	12/1/2007	12/31/9999	Vice President of Marketing	12/1/2006	11/30/2007	Director, Marketing
UB	Change Rep Last Name Jser Bauer Maxx	Change Reporting DocoLast NameCurrent Start DateJser7/30/2011Jauer7/11/2011Jaxx7/11/2011	Change Reporting DocoLast NameCurrent Start DateCurrent End DateJser7/30/201112/31/9999Bauer7/11/201112/31/9999Maxx7/11/201112/31/9999	Change Reporting DocoLast NameCurrent Start DateCurrent End DateCurrent Job ClassificationJser7/30/201112/31/9999Director, FinanceBauer7/11/201112/31/9999Engineering DirectorMaxx7/11/201112/31/9999Product Manager	Change Reporting DocoLast NameCurrent Start DateCurrent End DateCurrent Job ClassificationPrevious Start DateJser7/30/201112/31/9999Director, Finance7/26/2011Bauer7/11/201112/31/9999Engineering Director11/1/2010Maxx7/11/201112/31/9999Product Manager5/14/2008	Change Reporting DocoLast NameCurrent Start DateCurrent End DateCurrent Job ClassificationPrevious Start DatePrevious End DateJser7/30/201112/31/9999Director, Finance7/26/20117/29/2011Bauer7/11/201112/31/9999Engineering Director11/1/20107/10/2011Maxx7/11/201112/31/9999Product Manager5/14/20087/10/2011

### **Reporting Changes on Multiple Columns**

The same method can be used to report on changes across multiple columns by adjusting the filtering as appropriate. Here we are only showing employees who have had a change in both Business Unit **and** Job Classification:

Filter Designer
Edit, Delete or Add filters here. Click grouped conditions to toggle between AND / OR Current BU Label is not equal to "Previous BU Label" Edit   Delete   Add Current Job Classification is not equal to "Previous Job Classification" Edit   Delete   Add Date Check equals to "1" Edit   Delete   Add
OK Cancel

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