

Schedule a BI Publisher Report Based on Custom Fast Formula

Introduction

Many a times we may have a requirement that we would like to execute a BI Publisher Report on a custom schedule which does not falls into any of the daily, monthly, annual or any other delivered schedules available under the frequency option of a BI Publisher Report.

One most common requirement is “Running a Report on Last Day of Every Month”. Since the last day of every month will vary with possible values being 28 , 30th and 31st and don’t forget 29th for a leap year.

In such scenarios one would have to manually choose the dates and submit the ESS job using the specific dates.

Imagine you need to do the same for 100 BI Reports. Then this definitely is going to take a lot of time.

You can get through this problem by creating a Custom Payroll Flow Pattern to submit your report. This custom payroll flow pattern can make use of “Custom Flow Schedule” Fast Formula to automate the schedule run time of report.

In this example, we will demonstrate the same.

Pre-requisite

There are two major pre-requisites to accomplish this task namely:

- 1) A Ready to use BI-Publisher Report
- 2) A Custom Payroll Flow Pattern based on the BI-Publisher Report used above

Ready to use BI-Publisher Report

For this example, we will use a BI Publisher Report which has following details:

Report Name: EmployeeAbsencePlanBalanceReport

Report Path: /Custom/Practice Samples/EmployeeAbsencePlanBalanceReport.xdo

We should run the report once to ensure it is working fine

EmployeeAbsencePlanBalanceReport

Home Catalog Favorites Dashboards New

** Absence Plan Name All
 ** Person Number All
 * Threshold Date 2020-05-28 Apply

EmployeeAbsencePlanRepo... 1 / 90

Report Run Date 28-May-2020 5:52 AM
 Report Name Employee Absence Plan Balance Report
 Report Parameters If left blank will return data for all
 ** Absence Plan Name
 ** Person Number
 * Threshold Date 28-May-2020

Person#	Absence Plan Name	Hire Date	Assignment Type	Assignment Status	Plan Enrollment Start Date	Balance Calculation Date	Balance
10	Sick	05-Nov-2007	Employee	Active - Payroll Eligible	01-Jun-2015	29-Feb-2020	80
10	Vacation	05-Nov-2007	Employee	Active - Payroll Eligible	01-Jun-2015	29-Feb-2020	210
100	Director Block Leave US	12-Dec-2004	Employee	Active - Payroll Eligible	01-Jun-2013	29-Feb-2020	10
100	Sick	12-Dec-2004	Employee	Active - Payroll Eligible	01-Jun-2015	29-Feb-2020	72
100	Vacation	12-Dec-2004	Employee	Active - Payroll Eligible	01-Jun-2015	29-Feb-2020	206
1006	Sick	01-Jul-1997	Employee	Active - Payroll Eligible	01-Jun-2015	29-Feb-2020	80

Custom Payroll Flow Pattern based on BI-Report

We should also make sure that there is a pre-existing flow pattern based on the BI-Report.

If you are not aware how to create a Payroll flow pattern for a BI Report please refer this [link](#).

We have “Run Employee Absence Plan Balance Report”

Navigation: **My Client Groups->Payroll->Administration->Payroll Flow Patterns(Search for Run Employee Absence Plan Balance Report)**

Payroll Flow Patterns

Search Advanced Saved Search Search Flow Patterns

Flow Pattern Run Employee Absence Plan Balance Report

Flow Submission Type

Legislative Data Group

Search Reset Sav

Search Results

Actions View » Detach

Flow Pattern	Base Flow Pattern	Flow Status	Legislative Data Group	Edit
Run Employee Absence Plan Balance Report	RUN EMPLOYEE ABSENCE PLAN BALANCE REPORT	Active.Process or R...		

We will quickly run this payroll flow pattern once to check its working fine.

Navigation: **My Client Groups->Payroll->Flow Submission and Results->Submit a Flow-> Search for Run Employee Absence Plan Balance Report**

Submit a Payroll Flow

Run Employee Absence Plan Balance Report

Submit

General Information

*Payroll Flow:

S001

Flow Parameters

Absence Plan Name

*Threshold Date

5/28/20

Person Number

Once we submit, we should be able to see that the Report output is generated.

< S001

Run BI Publisher Report - Report

Refresh

0
Records

0
Errors and Warnings

Person Process Results

Output and Log Files

Outputs

Default



ESS_BI_183363_OP
Default Document.pdf

Process Log

ProcessId	Name	Status	StartTime	FinishTime	ElapsedTime	VI
1804960	FlowEssJobDefn	Succeeded	5/28/20 6:05 AM	5/28/20 6:06 AM	+000000000 00:00:44.124...	
1804961	ElevatedFlowEssJob...	Succeeded	5/28/20 6:05 AM	5/28/20 6:06 AM	+000000000 00:00:23.242...	

Now all the pre-requisite steps are complete.

We will now create a Custom Fast Formula of “Flow Schedule” Type

Creating Custom Fast Formula

In this step we will create a custom Fast Formula of “Flow Schedule” type.

Formula Text

/*****
*****/p>

FORMULA NAME:

LAST_DAY_OF_MONTH_FLOW_SCHEDULE

FORMULA TYPE: Flow Schedule

DESCRIPTION: Next Scheduled Date will be the last day of upcoming month

Formula Results :

NEXT_SCHEDULED_DATE This will be a date time value with yyyy-MM-dd HH:mm:ss format.

Change History:

Created By	Version	Comments	Date
Ashish Harbhajanka	1.0	28-May-2020	Draft

*****/

/* Inputs */

INPUTS ARE SUBMISSION_DATE(DATE),
SCHEDULED_DATE(DATE)

/* Calculations */

NEXT_SCHEDULED_DATE =
LAST_DAY(ADD_MONTHS(SCHEDULED_DATE,1))

/* Returns */

RETURN NEXT_SCHEDULED_DATE

/* End Formula Text */

Fast Formulas: LAST_DAY_OF_MONTH_FLOW_SCHEDULE

*Formula Name LAST_DAY_OF_MONTH_FLOW_SCHEDULE

Effective As-of Date

Type Flow Schedule

Formula Overview

Formula Details

► Formula Name

Effective Start Date 1/1/00

Effective End Date

Descri

Cor
S

Formula Details ?

Formula Text

```
1  /**
2  FORMULA NAME: LAST_DAY_OF_MONTH_FLOW_SCHEDULE
3  FORMULA TYPE: Flow Schedule
4  DESCRIPTION: Next Scheduled Date will be the last day of upcoming month
5  Formula Results :
6  NEXT_SCHEDULED_DATE      This will be a date time value with yyyy-MM-dd HH:mm:ss format.
7  Change History:
8  -----
9  Created By      Version      Date      Comments
10 -----
11 Ashish Harbhajanka  1.0      28-May-2020      Draft Version
12 *****
13 /* Inputs */
14 INPUTS ARE      SUBMISSION_DATE (DATE), SCHEDULED_DATE (DATE)
15
16 /* Calculations */
17 NEXT_SCHEDULED_DATE = LAST_DAY(ADD_MONTHS(SCHEDULED_DATE,1))
18
19 /* Returns */
20 RETURN NEXT_SCHEDULED_DATE
21
22 /* End Formula Text */
23
```

Running the Custom Payroll Flow Pattern using Flow Schedule Formula

We would now run the Custom payroll flow pattern using the Flow Schedule Formula we just created.

Details are:

Flow Pattern Name: Run Employee Absence Plan Balance Report

Flow Instance Name: B001

Absence Plan Name: <BLANK>

Person Number: <BLANK>

Threshold Date: 5/28/2020

Schedule: Using a Schedule

Frequency: LAST_DAY_OF_MONTH_FLOW_SCHEDULE

Start Date: 5/28/20 6:21 AM

End Date: 7/15/20 6:21 AM

Submit a Payroll Flow

Run Employee Absence Plan Balance Report

General Information

*Payroll Flow

B001

Flow Parameters

Absence Plan Name

*Threshold Date

5/28/20

Person Number

Schedule

*Schedule

Using a schedule

*Start Date

5/28/20 6:21 AM

*Frequency

LAST_DAY_OF_MONTH_FLOW_SCHEDULE

*End Date

7/15/20 6:21 AM

We can verify the result

< B001
Run BI Publisher Report · Report Refresh

0
Records

0
Errors and Warnings

Person Process Results

Output and Log Files

Outputs

Default

ESS_BI_183364.OP
Default Document.pdf

Process Log

ProcessId	Name	Status	StartTime	FinishTime	ElapsedTime	Vi
1804966	FlowEssJobDefn	Succeeded	5/28/20 6:35 AM	5/28/20 6:36 AM	+000000000 00:00:40.679...	
1804967	ElevatedFlowEssJob...	Succeeded	5/28/20 6:35 AM	5/28/20 6:36 AM	+000000000 00:00:23.367...	
1804968	Generate Output	Succeeded	5/28/20 6:35 AM	5/28/20 6:36 AM	+000000000 00:00:13.977...	

Verification

We can verify the details of all job schedule which was created based on Payroll Flow: B001

SQL

```
SELECT (select req_property2.value
        from fusion.ess_request_property req_property2
        where req_property2.requestid =
req_property.requestid
        and req_property2.name =
'FlowParam_flowInstanceName') flowinstancename,
(CASE
  WHEN state = 1 THEN 'Wait'
  WHEN state = 2 THEN 'Ready'
  WHEN state = 3 THEN 'Running'
  WHEN state = 4 THEN 'Completed'
  WHEN state = 9 THEN 'Cancelled'
  WHEN state = 10 THEN 'Error'
  WHEN state = 12 THEN 'Succeeded'
  WHEN state = 13 THEN 'Paused'
  ELSE TO_CHAR (state)
END) REQUEST_STATE,
req_history.requestid,
req_history.processstart,
req_history.processend,
req_history.requestedstart,
req_history.requestedend,
req_history.submission,
req_history.scheduled,
req_history.submitter,
req_history.completedtime,
req_history.preprocess_status,
req_history.postprocess_status,
req_history.executable_status
FROM fusion.ess_request_history req_history,
fusion.ess_request_property req_property
WHERE 1 = 1
AND req_history.requestid = req_property.requestid
AND req_property.name = 'FlowParam_actionType'
AND req_property.value = 'START_FLOW'
AND req_history.requestid IN (select req_property1.requestid
                             from fusion.ess_request_property
req_property1
                             where req_property1.value LIKE 'B001%')
ORDER BY req_history.requestid asc
```

FlowSchedule_dm									
<div> Home Catalog Favorites Dashboards New </div>									
<div> Validate Manage Private Data Sources View </div>									
<div> Diagram Structure Data Code </div>									
<div> Rows 5 View Export Save As Sample Data View Engine Log Generate SQL Monitor Report </div>									
<div> Tree View Table View </div>									
<div> <div>Oracle BI Publisher</div> <div>Date: May 28, 2020 6:48:42 AM Page 1 Of 1</div> </div>									
FLOWINSTANCENAME	REQUEST_STATE	REQUESTID	PROCESSSTART	PROCESSEND	REQUESTEDSTART	REQUESTEDEND	SUBMISSION	SCHEDULED	SUBMITTER COMPLI
B001	Succeeded	1804964	2020-05-28T06:35:26.596+00:00	2020-05-28T06:35:33.969+00:00	2020-05-28T06:21:00.000+00:00		2020-05-28T06:35:22.264+00:00	2020-05-28T06:35:22.264+00:00	HCM_IMPL 2020-05-28T06:3
B001 2020-06-30 06:21:00.0	Wait	1804965			2020-06-30T06:21:00.000+00:00		2020-05-28T06:35:27.846+00:00	2020-06-30T06:21:00.000+00:00	HCM_IMPL

From the above screenshot that there are two occurrences of Payroll Flow one of which has been schedule to run on current date and its status is Succeeded while the other which is scheduled on 2020-06-30 is in wait state.

One thing to note is that while submitting the flow schedule we chose start date as 5/28/2020 and end date as 7/15/2020 so the last schedule will be 30st June 2020.

Summary

So, this is an example of using a custom flow schedule fast formula to run a BI Report. Hope this was a good read and it was helpful.

Thanks all for your time and have a nice day.