

# TECH TIP

#### INTRODUCTION TO BURST REPORTING FEATURE BI PUBLISHER

BI Publisher has a very powerful reporting feature called Burst Reporting. It allows one Oracle BI report to be automatically generated by the key field and delivered to users associated with the key value. A common use case is a project budget report that can be split into multiple prints by project number and sent to each project manager for review.

Burst Report always works with Task Scheduling engine to automatically distribute the reports. There are multiple distribution channels including email, fax, file, printer, FTP and WebDav. In this article, we will focus on step-by-step instruction for email distribution.

# NOTE: While many Oracle Primavera applications use BI Publisher as the reporting engine, make sure that you have the correct licensing to use this option illustrated here.

To start with, we need to enable the bursting function for a report. In BI Publisher, we locate a report data model and click **Edit** to update the configuration.

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These tech tips are offered free of charge in the spirit of sharing knowledge with others. They do not include technical support, should you have a problem with them. We are always interested in how they can be improved, please do not hesitate to email us your comments. These tips have been thoroughly tested by our consultants in a variety of environments. Please read these tech tips thoroughly and be sure that you understand them before trying to use them. We can not be responsible for issues that develop because of the configuration of your hardware, technical environment or application of the tech memos. If you are not sure, then we urge you to constact Oracle technical support consultant for assistance

At the left page frame, drill down to the last Properties "**Bursting**" and add a bursting configuration.

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The configuration page consists of three essential elements:

Split By: This value should be unique in the Data Model used for report splitting.

Deliver By: This is how deliveries are spread out based upon the value of this key field.

**SQL query**: This gives BI Publisher to construct the delivery XML data file. The query must return the formatting and delivery details.

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Data Model	Bursting	/DATA_DS/DS1/ID /DATA_DS/DS1/PARENT_ID		
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DS1		/DATA_DS/DS1/SCH_STATUS /DATA_DS/DS1/ACTIVITY_STA /DATA_DS/DS1/START_DATE	ATUS	
Event Triggers     Flexfields	Bursting Query	/DATA_DS/DS1/FINISH_DATE		
▲ List of Values		Split By DATA_DS/DS1/PLANNED_ST/	ART  VIBE	
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Burst 1	Enable Consolid	lated Output 🗸		
	SQL Query		c	Query Builde
	se	lect * from uniflerBurstReport_Config		



The BI Publisher bursting engine uses the delivery XML as a mapping table for each Deliver By element. The structure of the delivery XML required by BI Publisher is as follows: <ROWSET>

```
<ROW>
<KEY></KEY>
<TEMPLATE></TEMPLATE>
<LOCALE></LOCALE>
<OUTPUT_FORMAT></OUTPUT_FORMAT>
<DEL_CHANNEL></DEL_CHANNEL>
<TIMEZONE></TIMEZONE>
<CALENDAR></CALENDAR>
<OUTPUT NAME></OUTPUT NAME>
<SAVE_OUTPUT></SAVE_OUTPUT>
<PARAMETER1></PARAMETER1>
<PARAMETER2></PARAMETER2>
<PARAMETER3></PARAMETER3>
<PARAMETER4></PARAMETER4>
<PARAMETER5></PARAMETER5>
<PARAMETER6></PARAMETER6>
<PARAMETER7></PARAMETER7>
<PARAMETER8></PARAMETER8>
<PARAMETER9></PARAMETER9>
<PARAMETER10></PARAMETER10>
</ROW>
</ROWSET>
```



Common elements are defined as follows:

- **KEY** is the Delivery key and must match the **Deliver By** element in the Burst setup page. For instance, if there are 12 distinct values in the Delivery Key field, 12 separate emails will be produced and distributed.
- **TEMPLATE** is the name of the Layout to apply. (Note: this is the template name in BI Publisher, not the file name such as invoice.rtf).
- **OUTPUT\_FORMAT** is the output format. Valid values are: HTML, PDFZ, PDF, RTF, EXCEL, EXCEL2000, MHTML, PPT, PPTX, XSLFO, XML, CSV, ETEXT
- **DEL\_CHANNEL** is the delivery method. Valid values are: EMAIL, FAX, FILE, FTP, PRINT, WEBDAV
- **OUTPUT\_NAME** is the name of the output file in the email attachment.
- **PARAMETER1** is the Primary email recipient(s). Multiple email addresses are supported via comma separators. There is no restriction on the email addresses, as long as they are valid, no matter if the email domain is internal or external.
- **PARAMETER2** is the c.c email recipient(s). Multiple email addresses are supported via comma separators. Same to the above, there is no restriction on the email addresses.
- **PARAMETER3** is the sender's email address.

Below is the example of the SQL script: SELECT <Key Field> KEY, <Report Template Name> TEMPLATE, <Report Template Format, such as 'RTF'> TEMPLATE FORMAT, <Locale, such as 'en-US'> LOCALE, 'PDF' OUTPUT FORMAT, 'EMAIL' DEL CHANNEL, <Report Output Name> OUTPUT\_NAME, '<email addresses1, email address2,...>' PARAMETER1, '<email addressesA, email addressB,...>' PARAMETER2, 'bipublisher@drmcnatty.com' PARAMETER3, -- Sender's email address 'Schedule Report For Project: '| | ugenprojectnumber PARAMETER4, -- Title of the email 'If you receive this message, Scheduled Burst Report is working.' PARAMETER5, -- Message body 'true' PARAMETER6, 'replyto@nowhere.com' PARAMETER7 - reply to email address FROM unifier us p where ugenprojectnumber in ('P-0011', 'P-0019', 'P-0024') order by ugenprojectnumber

For more detail, please refer to Oracle Help Center: <u>https://docs.oracle.com/cd/E21764\_01/bi.1111/e18862/T527073T555155.htm</u>. After completing the bursting configuration, go to the **Report Properties** to enable the Bursting setup, as shown below.



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21-23 Edit i Propertie:	<ul> <li>Run Report Online</li> <li>Show Controls</li> <li>Allow Sharing Report Links</li> <li>Open Links in New Window</li> <li>Auto Run</li> <li>Advanced</li> <li>Enable Bursting Burst 1</li> <li>Report is Controlled by External Application Users cannot run or schedule report from catalog, can view history</li> <li>Enterprise Scheduler Job Package Name</li> <li>Enterprise Scheduler Job Definition Name</li> </ul>	
	OK Cancel	

At this moment, the burst reporting setup is complete. The next job is to configure the automatic delivery for the report. Let's navigate to the main page schedule a report job via **New > Report Job**. Firstly, we pick the bursting-enabled report as shown below.

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Schedule Report Job		Home	С	atalog New	Ŧ	Open 💌
Overview     General Created by jyang     Report Name /unifier/unifier/uuu_21/uuu_21.xd     Schedule Start immediately      General Output Schedule Notification Diag     Iunifier/unifier/uuu_21/uuu_21.xdo     Parameters	Open Catalog My Folders Shared Folders Gomponents Gompo	Name Uuu_21 Description		X Open Cancel		



Under the **Output** tab, check the checkbox "**User Bursting Definition to Determine Output & Delivery Destination**" to connect the burst reporting function to the schedule job.

	Search All	•		0,	Administration
Schedule Report Job	Home	c	Catalog New	*	Open 🔻
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<ul> <li>Use Bursting Definition to Determine Output &amp; Delivery Destination</li> <li>Make Output Public</li> <li>Save Data for Republishing</li> <li>Output</li> </ul>					
Output is determined by bursting definition.   Destination					
Destination is determined by bursting definition.					

Under the **Schedule** tab, we can define the job execution time via **Frequency** options.

• Selecting **Once**, we can run the report immediately or pick a specific time to run.

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Schedule Report Job		Home	Catalog	New 💌	Open 🔻	Signed In As jya	ang 🔻
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Start Jun 26, 2020 7:39:06 AM	GMT-08:00] Pacific Time (US & Ca	nada)					
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• Or, we can schedule the periodical runs to distribute the report. The schedule setup includes Hourly/Minute, Daily, Weekly, Monthly, Annually or Specific Dates, which is very flexible to fit into the various business requirements.

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Schedule Report Job		Home Catalog	New T Open T Si	gned In As jyang
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▲ Define Schedule Time      Frequency     Monthly     Once     Every     Hourly/Minute     Daily     Ust     September     Once     Once     Daily     Ust     September     Once     Daily     Ust     September     Once     Day     D	<ul> <li>[GMT-08:00] Pacific Time (US &amp; Canada)</li> <li>[GMT-08:00] Pacific Time (US &amp; Canada)</li> </ul>			

After the schedule setup is complete, we may click **Open** > **Report Jobs** to verify whether the job is properly configured and in a queue.

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ug 2020 Run	/unifier/unifier/uuu_21/uuu_21.xdo	() Active	Aug 01, 2020 09:18:35 AM	Aug 05, 2020 08:18:35 AM	Repeats Daily	jyang	Private	/ His	tor
		0,000	09:18:35 AM	08:18:35 AM	Daily	JJ 6.1.9			

To know the status of the job after the scheduled runtime, go to **Open** > **Report Job History** to check if the execution is successfully done. If yes, all email recipients(s) should have received the email(s) with the attached report(s) as well.



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In conclusion, Bursting with scheduling setup is a convenient and scalable approach to enable auto distribution and delivery of the BI Publisher report. When the report is in production mode, it brings benefits to business automation by normalizing a reporting process. Furthermore, because the report recipients do not need to be BI licensed users, an organization does not need to pay an extra licensing fee to Oracle, which is a big plus for cost-effectiveness.

