Cognos Analytics and how to use Triggers effectively

Without wanting to sound like Sir Tom Jones, it's not unusual for reports to run before a data refresh of a data warehouse has completed (duh na na na na).

A very typical scenario is that you have a set time for your daily Cognos Analytics reports to run based on a guess and/or estimate of when the data warehouse has finished its refresh. The data refresh will be on a Database (DB) Server and reports on your Business Intelligence (BI) Server so there is a disconnect that can cause problems.

What if the data refresh has failed or is delayed?

Cognos reports will still run, get sent out and puzzled recipients will wonder why things have not changed or look so strange. It is at this point the emails come flooding in and phone calls are received with the same questions... “Why does my report look odd?”

These Cognos Analytics reports may have taken 3-4 hours to run and email out. That's acceptable if they start at 2am and are in users' email Inbox when they logon the next morning. However, if the server refresh has run over by say half an hour, and you have to run the reports again, they won't be complete until the early afternoon, which may be too late for recipients to receive.

But, there is a solution to remove the disconnect between data refresh and Cognos reports, which are typically on different servers. If you have managed to get "It's Not Unusual" out of your head, then read on with a guide on setting up Triggers in Cognos Analytics.
Guide to Setting up Triggers in Cognos Analytics

For this example we want to trigger reports on the Cognos Server (BISERVER) from SQL Server (SQLSERVER).

There are a few pre-requisites:

1) Install Java Runtime Environment on SQLSERVER. Any location can be used but needs to be noted for later.

2) Certain .jar files are required on SQLSERVER. From BISERVER copy folder webapps\p2pd\WEB-INF\lib from where you have installed Cognos e.g. C:\Program Files\ibm\cognos\c10_64\webapps\p2pd\WEB-INF\lib. For this example I am copying this into a folder called C:\CognosJar
Setup Batch Files

- Edit trigger.bat and amend JAVA_HOME and JAR_HOME as per your setup
  - set JAVA_HOME=C:/Program Files (x86)/Java/jre1.8.0_60/
  - set JAR_HOME=C:/CognosJar/lib
  - set CRN_HOME can be remarked out
- Create a new batch file as per below changing the variables to match your environment. For this example we will call this run_cognos_reports.bat

```bash
@echo ON
SET COGNOSSERVER=BISERVER
SET PRIMARYDISPURL=http://biserver.triangle.local:9300/p2pd/servlet/dispatch
SET TRIGGERLOCATION=C:\CognosJar
SET USER=snaveen
SET PASSWORD=password_here
SET NAMESPACE=triangle.local

c: change this to whatever drive your trigger.bat is located
cd\
ccls
c

cd %TRIGGERLOCATION%
call TRIGGER.BAT %PRIMARYDISPURL% %USER% %PASSWORD% %NAMESPACE% %1%
GOTO END

:end
SET COGNOSSERVER=
```
SET PRIMARYDISP=
SET PRIMARYDISPURL=
SET TRIGGERLOCATION=
SET USER=
SET PASSWORD=
SET NAMESPACE=

Notes

1) The %1% parameter will be the name of the Trigger setup in Cognos. This is explained later.

2) The Namespace can be found in the Cognos Configuration. Please match the case when setting up the batch file.
Setup Trigger

For this example there are 3 daily sales reports that need to be triggered from SQLSERVER. These will be setup in one Job which will have the Trigger set.

1. Setup a Schedule for the Daily Sales Reports job
2. In Frequency select By Trigger
3. Enter a Trigger name
4. Click OK
Test Trigger

1. Logon to SQLSERVER
2. Open a Command Window
3. Browse to the run_cognos_reports.bat file setup earlier
4. Type run_cognos_reports.bat “Daily Sales Reports”
5. The following message should be displayed:

   **Trigger: Daily Sales Reports fired successfully**

Run Trigger from SQL Job

Once the trigger has been tested successfully it is a simple task of adding it to a SQL Server job.

1. Find the SQL job that will trigger reports
2. Add a step to the end
   - Name – Trigger Daily Sales Reports
   - Type – Operating system (CmdExec)
   - Command - C:\CognosJar\run_cognos_reports.bat "Daily Sales Reports"

If you have any questions or queries about how to set up Triggers for Cognos reports, please contact Triangle Information Management (www.triangleinformationmanagement.com) for one of our expert business intelligence consultants to help you.