

## ICDSST 2015 Conference on Big Data Analytics for Decision Making Proactive Monitoring for Business Intelligence : IBM Cognos

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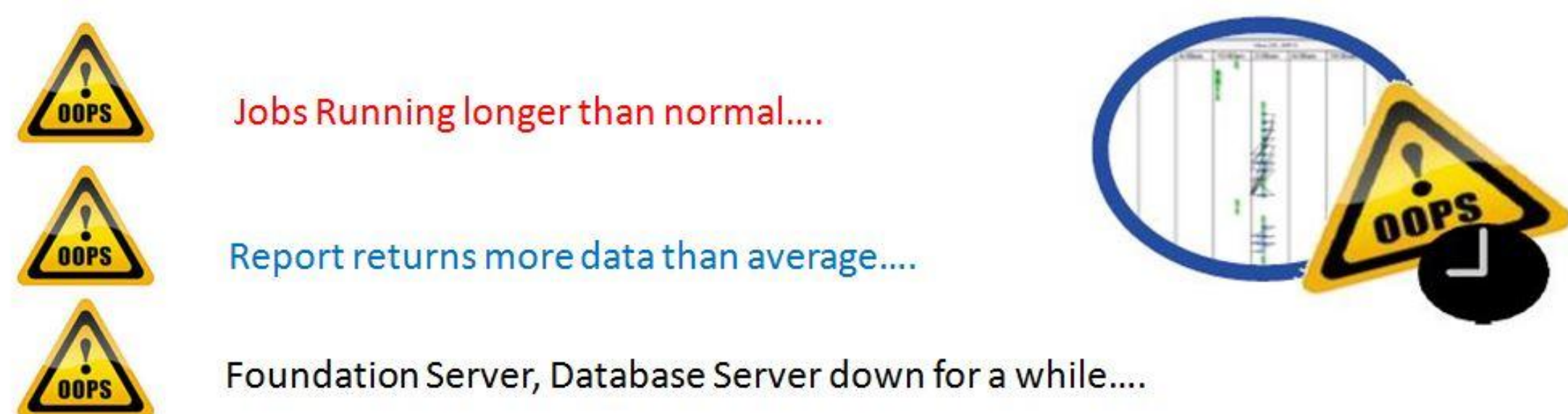
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Business Intelligence tools used for reporting have scheduled jobs which run reports and save them as views or deliver them. Over time the run time of these reports may increase due to excessive data, database slowdown etc. Some reports are created on an ad-hoc need and may not be used in the near future, these reports use up unnecessary resources. Jobs may fail due to delivery issues or database connectivity issues. Some scheduled job takes more memory than expected. Some scheduled job runs for infinite time due to Runtime errors. The entire BI tool itself can go down due to a server crash or system outage, during this it can be important to let the administrators know. Stakeholders must be alerted immediately when such events occur to take action.

Over here, i am presenting solution that monitors health and performance of IBM Cognos Business Intelligence tools and raises alerts as event to the Administrators based on multiple User defined schedule and conditions. Tool monitors design time, run time meta data and audit data for created Jobs in IBM Cognos. it also monitors system level embedded service for IBM Cognos.

### Problem



**Figure 1 : Fraud due to lack of Proactive monitoring in BI tool**



### Technical Solution

#### Proactive Monitoring Rules For IBM Cognos Business Intelligence tool suits

##### Runtime Rules

##### 1) Cognos\_Failed\_Reports:

This rule raises alert whenever a report fails. These reports can be individual reports or a part of jobs.

##### 2) COGNOS\_Failed\_Job

This rule raise an alert when a Cognos job fails.

##### 3) COGNOS\_Most\_Accessed\_Reports

This rule raises monthly alert for most accessed reports (top 5).

##### 4) COGNOS\_Least\_Accessed\_Reports

This rule raises monthly alert for least accessed reports (bottom 5).

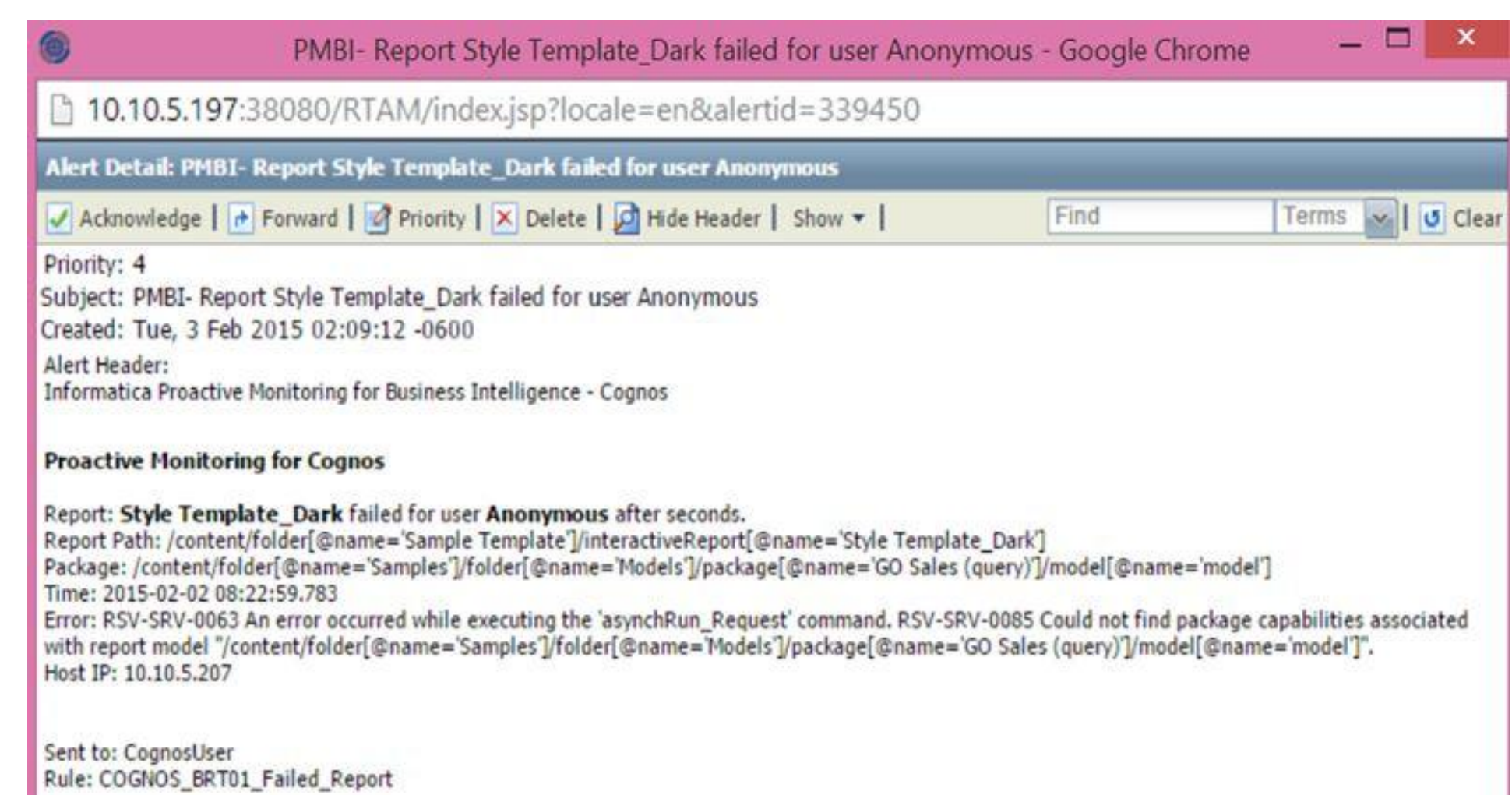
##### 5) COGNOS\_Logon\_Failure

This rule raises an alert when there is a login failure for any user.

##### System Services rule

##### 1) COGNOS\_Services

This rule monitors the Cognos services.



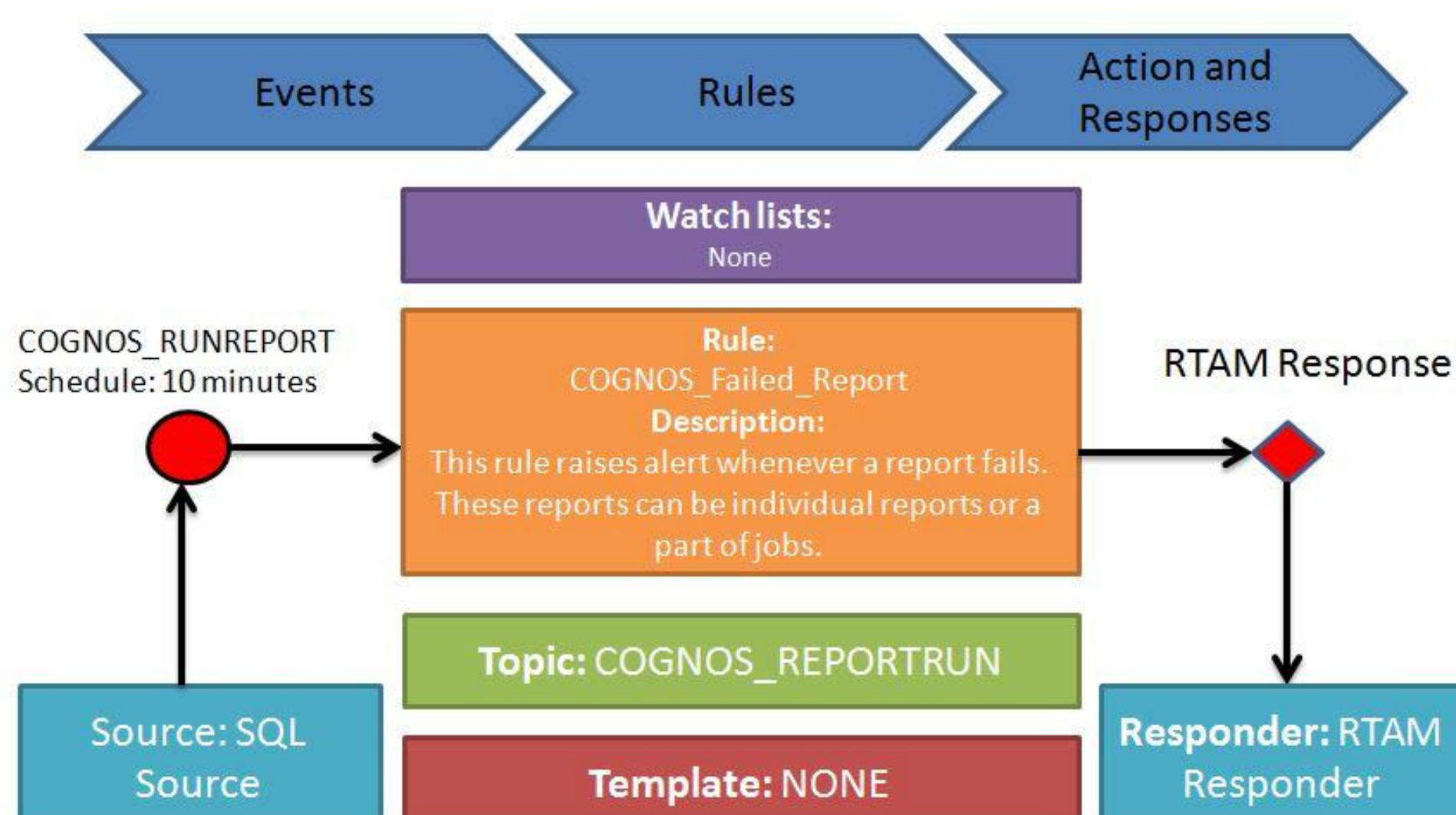
**Figure 3 : Proactive alert to stockholder or administrator**

### CONCLUSIONS & REMARKS:

IBM Cognos Business Intelligence Suite tools take unstructured data from sensors, real time machines, web server logs, Click stream logs. to transforming this unstructured data to structured data in visualization form so Business Intelligence engineer can take Decision based on visualization. where for transforming pre-process Cognos generate & schedule Job, Reports, Documents, Cube using embedded service. there must not be any person who watch BI tools that something is going to wrong inside BI tool or not, so it is mandatory to monitor internal resources of IBM Cognos BI tools, so it can stop disaster before happen. this tool provide alert to stockholder or administrator via email or real time alert to specific system.

### References:

- [1] IBM Cognos Express Download [Online] <http://www-01.ibm.com/software/analytics/cognos/express/downloads.html>
- [2] Downloading Cognos Express 10.1.0 [Online] <http://www-01.ibm.com/support/docview.wss?uid=swg24031399>
- [3] Cognos Business Intelligence 10.2.1 documentation [Online] <http://www-01.ibm.com/support/docview.wss?uid=swg27037021>
- [4] IBM Cognos Business Intelligence, Version 10.2.1 Information Roadmap [Online] [http://www.ibm.com/developerworks/data/roadmaps/roadmap\\_Cognos\\_BI\\_10\\_2\\_1.html](http://www.ibm.com/developerworks/data/roadmaps/roadmap_Cognos_BI_10_2_1.html)
- [5] Cognos Repository table information [Online] <https://www.ibm.com/developerworks/community/forums/html/topic?id=77777777-00000000-0000-000014692216>



**Figure 2 : Runtime IBM Cognos Rule Architecture**