



NXP

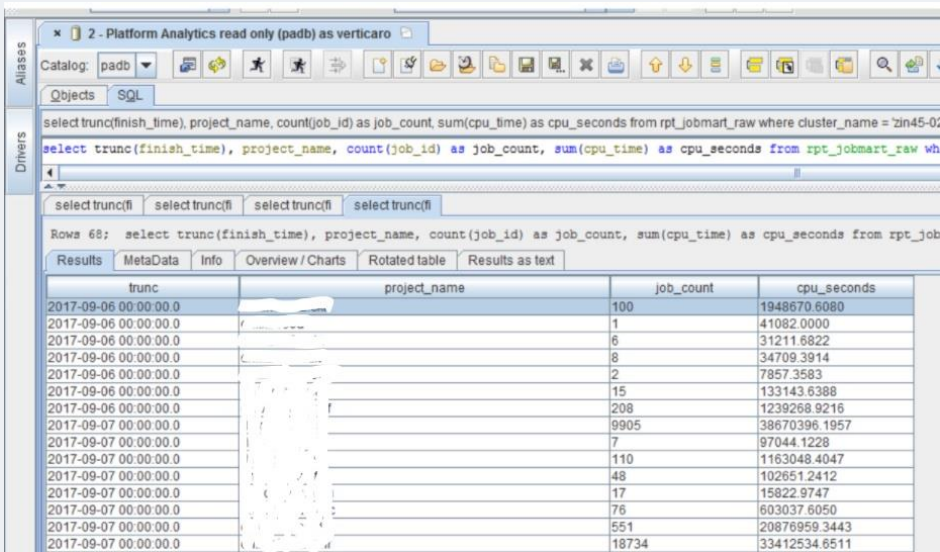
Vertica

10-06-2021
By Mark Jones
Danial Zarei

INSTRUCTIONS

In this report, I'm going to show one of our team calls with Mark Jones. He's from the US and we use to have 1 or 2 meetings with him per month (International communication). Due to confidentiality policy, I'm not allowed to share the slides presented by him since they are NXP's property. Below you can see a snapshot of one of our calls which I think was highly educational.

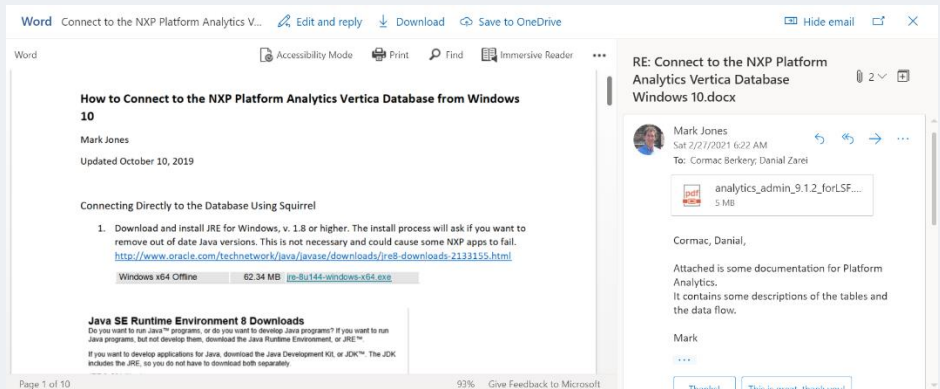
During this session, he taught us on how to connect to the NXP Platform Analytics Vertica Database where we can access the RTM data lake and query data.
In the figure 1 below, you can see a snapshot of my SQL code in the Vertica environment. Project_names are censored due to confidentiality.



trunc	project_name	job_count	cpu_seconds
2017-09-06 00:00:00.0		100	1948670.6080
2017-09-06 00:00:00.0		1	41082.0000
2017-09-06 00:00:00.0		6	31211.6822
2017-09-06 00:00:00.0		8	34709.3914
2017-09-06 00:00:00.0		2	7857.3583
2017-09-06 00:00:00.0		15	133143.6388
2017-09-06 00:00:00.0		208	1238268.9216
2017-09-07 00:00:00.0		9905	38670396.1957
2017-09-07 00:00:00.0		7	97044.1228
2017-09-07 00:00:00.0		110	1163048.4047
2017-09-07 00:00:00.0		48	102651.2412
2017-09-07 00:00:00.0		17	15822.9747
2017-09-07 00:00:00.0		76	603037.6050
2017-09-07 00:00:00.0		551	20876959.3443
2017-09-07 00:00:00.0		18734	33412534.6511

Figure 1

Below are two snapshots of the materials he discussed with us during this meeting. Figure 2 and 3.



Word Connect to the NXP Platform Analytics V... Edit and reply Download Save to OneDrive Hide email X

Word Accessibility Mode Print Find Immersive Reader

How to Connect to the NXP Platform Analytics Vertica Database from Windows 10

Mark Jones
Updated October 10, 2019

Connecting Directly to the Database Using Squirrel

1. Download and install JRE for Windows, v. 1.8 or higher. The install process will ask if you want to remove out of date Java versions. This is not necessary and could cause some NXP apps to fail.
<http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>
Windows x64 Offline 62.34 MB jre-8u144-windows-x64.exe

Java SE Runtime Environment 8 Downloads
Do you want to run Java™ programs, or do you want to develop Java programs? If you want to run Java programs, but not develop them, download the Java Runtime Environment, or JRE™.
If you want to develop applications for Java, download the Java Development Kit, or JDK™. The JDK includes the JRE, so you do not have to download both separately.

Page 1 of 10 93% Give Feedback to Microsoft

RE: Connect to the NXP Platform Analytics Vertica Database Windows 10.docx

Mark Jones
Sat 2/21/2021 6:22 AM
To: Cormac Berkeny; Daniel Zarei

analytics_admin_9.1.2_forLSF... 5 MB

Cormac, Daniel,

Attached is some documentation for Platform Analytics. It contains some descriptions of the tables and the data flow.

Mark

Thank You This is most thank you!

Figure 2

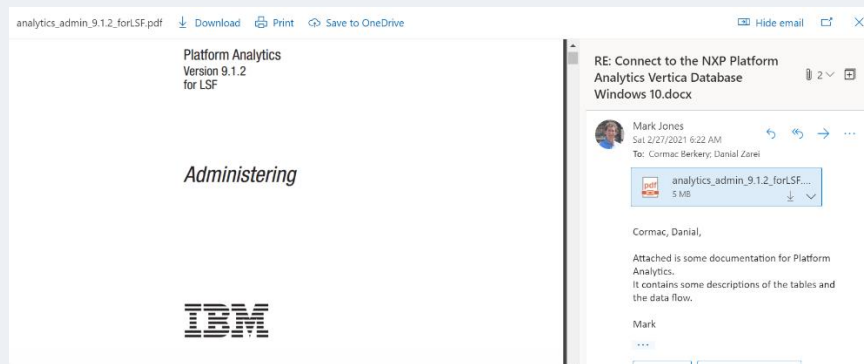


Figure 3

We also had a session on the pdf report above figure 3. Below I've selected a few subjects we discussed with a brief description on this pdf.

1. **Introduction to platform analytics:** Platform Analytics is an advanced analysis and visualization tool for analyzing massive amount of IBM Platform LSF (load sharing facility) workload data. This helps managers, planners, and administrators to easily correlate consumer, session and task data form one or multiple clusters for t data-driven decision-making. This platform is a workload intelligence solution for LSF clusters, FlexNet licenses, a FlexNet Manager license data. The platform collects LSF and license data, then assembles it into reports for analysis steps.
2. **Architecture overview:** The Platform Analytics architecture is based on the Platform Enterprise Reporting Framework (PERF) architecture. It adopts and extends the PERF technology to cover all the data collection requirements and to improve the data collection reliability. Most of our data used during the internship project has been fetched from this platform.
3. **Major components of the platform analytics:** The platform has 6 major components Here, I'll discuss the first 3 which we interacted with the most. 1. Analytics node which is a host that runs the data loaders, known as the Collectors for LSF. It basically collects and loads the data from their clusters into the database. Then we have, 2. The database. The platform is designed to support the Vertica Analytics Database (as explained briefly before). This helps to provide improvements in query and data loading performance over traditional technologies. This way the data is neatly organized into tables for reporting and analysis. Then, 3. We have a Server which communicates between the data loaders and the database.

The end

