# **Business Unit vs CPU Usage Result [Kyligence]**

## 1.1. Data Source

- 1. Oracle Nimbus DB VMS\_TEMP (VMS\_TIMESTAMP From 2018/4/14 2018/6/29)
- 2. Total of 9,454,179 Rows of Data (VMs) Cube Size 1.54 GB

# 1.2. Finding CPU Usage Pattern of Different Business Unit on Tableau

- 1. Method One: Directly Fetch Data From Oracle
  - a. Download Tableau ODBC
- 2. Method Two: Import OLAP Cube From Kyligence Enterprise
  - a. Build Model:
    - i. Import VMS\_TEMP and Select it as Fact Table

    - ii. Create New Column Using "Computed Columns" Function
      1. VMS\_USAGE\_CPU\_USAGE\_GHZ = VMS\_USAGE\_CPU\_USAGE / 1000
    - iii. Select Below Columns and Mark as Dimension or Measure Columns
      - 1. VMS\_USAGE\_CPU\_USAGE\_GHZ (Measure)
      - 2. VMS\_ANNO\_TESTSUITE (Dimension)
      - 3. VMS\_TIMESTAMP (Dimension)
      - 4. VMS\_ANNO\_MANAGER\_STR\_(0-7) (Dimension)
    - iv. Set Incremental Build Build By Time
      - 1. Using VMS\_TIMESTAMP as Time Partition Column
  - b. Build Cube:
    - i. Select All Dimension Columns For Cube Building
    - ii. Optimize Cube's Storage Size and Improve query performance by Setting "Dimension Optimization"
    - iii. Edit pre-calculate Measure
      - 1. SUM(VMS USAGE CPU USAGE GHZ)
      - 2. COUNT(VMS\_ANNO\_TESTSUITE)
      - 3. COUNT(VMS\_ANNO\_MANAGER\_STR\_(0-7))
      - 4. COUNT(VMS\_TIMESTAMP)
    - iv. Set Table Index For Cube
      - 1. Set "Sort By" For VMS\_TIMESTAMP
    - v. Build Cube
      - 1. Set Build Start Time and End Time (VMS\_TIMESTAMP)

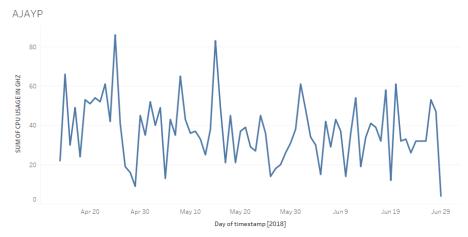
# 1.3. Time Comparison For Importing Data

	Import VMS_TIMESTAMP	Calculate and Import Sum of CPU Usage	Add Business Filter
Oracle	42s	29s	16s
Kyligence Cube	<1s	<1s	<1s

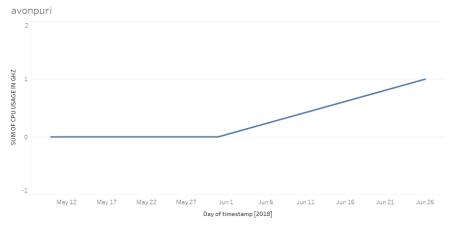
# 1.4. Result

Column - Timestamp from 2018/4/14 to 2018/6/29

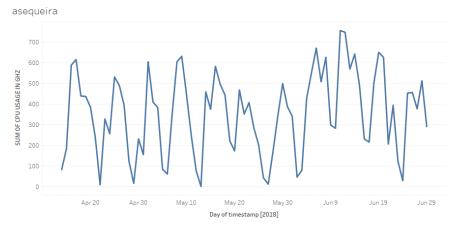
Row - Sum of CPU Usage in GHZ



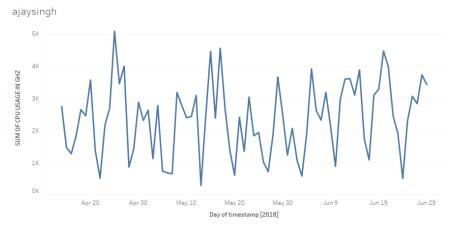
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps a jayp. The minimum of timestamp filter ranges from 4/14/201812:00:00 AM to 6/30/201812:00:00 AM to 6/30/201812:00:00



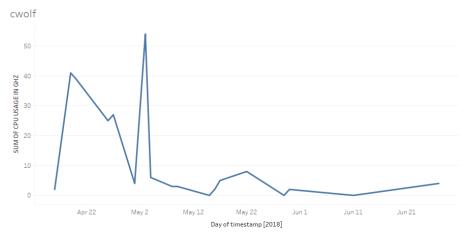
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on minimum of timestamp and VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps avonpuri.



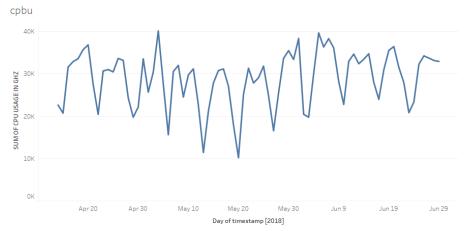
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on minimum of timestamp and VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps asequeira.



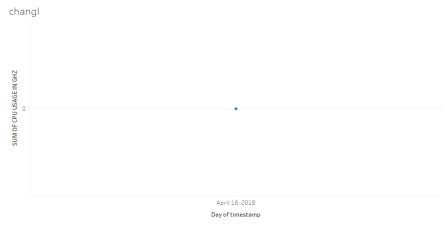
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on minimum of timestamp and VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps alaysingh.



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps cwolf. The minimum of timestamp filter ranges from 4/14/201812:00:00 AM to 6/30/201812:00:00 AM to 6/30/201812:00:00



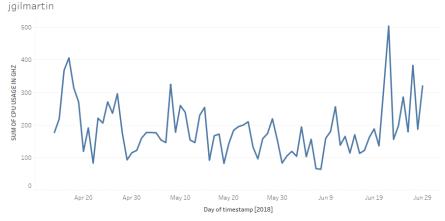
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps cpbu. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



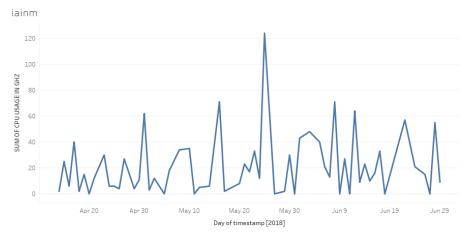
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps changl. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



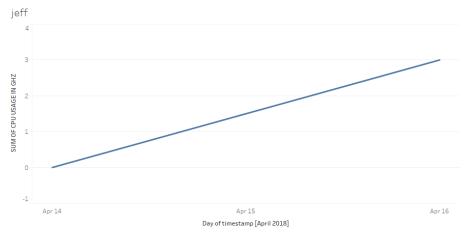
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps jconyard. The minimum of timestamp filter ranges from  $4/14/2018 \, 12\cdot 00\cdot 00$  AM.



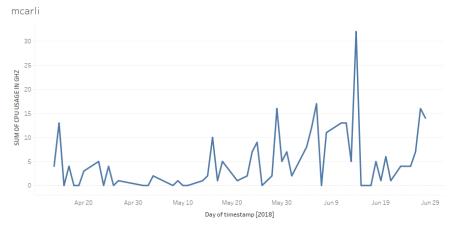
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps jgilmartin. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



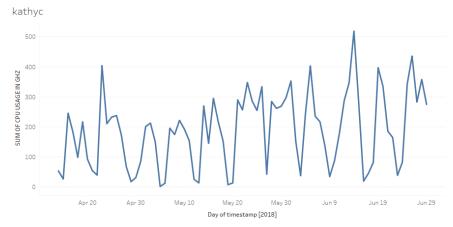
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps iainm. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM to 6



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps jeff. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



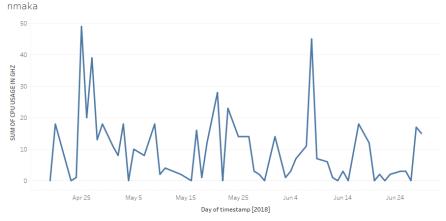
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps moarli. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps kathyc. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps krishp. The minimum of timestamp filter ranges from  $4/14/2018 12 \cdot 00 \cdot 00$  AM to  $6/30/2018 12 \cdot 00 \cdot 00$  AM.



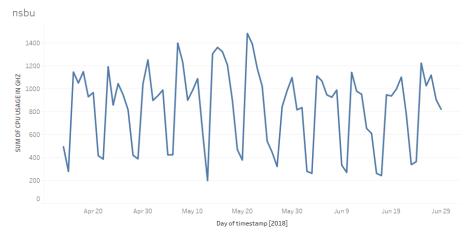
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps nmaka. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



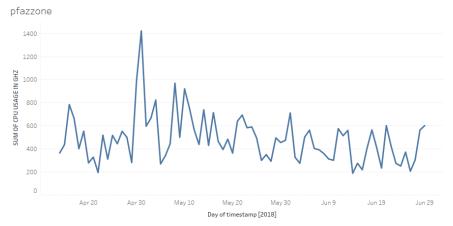
April 17, 2018

Day of timestamp

. The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps mlohmeyer. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps nsbu. The minimum of timestamp filter ranges from 4/14/201812:00:00 AM to 6/30/201812:00:00 AM.



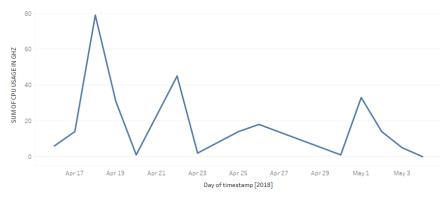
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps pfazzone. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.

## sandeep



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps sandeep. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM.

## sdhawan



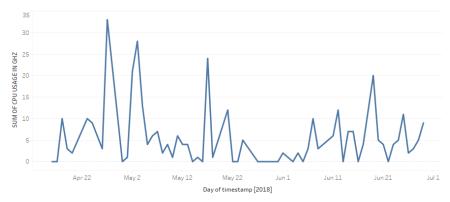
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps adhawan. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.

# pweideling



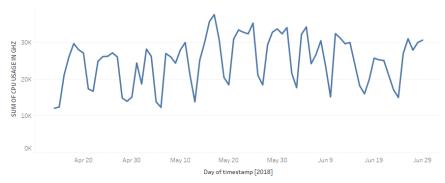
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps pweideling. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.

## sbajtos



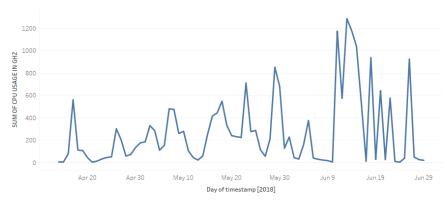
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps shajtos. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.

## yanbingl



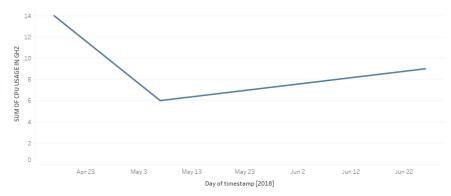
The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps yanbing. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM.

## velchamy



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps velchamy. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM:

## smurari



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps smurari. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.

## swehrend



The trend of SUM OF CPU USAGE IN GHZ for timestamp Day. The data is filtered on VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 and minimum of timestamp. The VMS\_ANNO\_MANAGERS\_CHAIN\_STR\_2 filter keeps swehrend. The minimum of timestamp filter ranges from 4/14/2018 12:00:00 AM to 6/30/2018 12:00:00 AM.