



# DOCUMENTATION

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*Viewing MLE Insights Dashboard*

HEAL Software Inc.

MLE automatically identifies the high-impact or most important metrics for an account and an application using AI. Using ML models, MLE finds out the variability of the individual metrics and also the correlation of these metrics with the problems.

You get to know the most important metrics as well as the events and problem counts associated with those metrics. MLE fetches the data from Cassandra tables and saves the results in CSV format.

MLE calculates important metrics using relevance score. MLE calculates relevance scores using impact and significance scores. Relevance score is a combination of impact and significance scores.

The impact score of a metric indicates the likelihood (or conditional probability) of the respective metric to cause a problem signal, given that MLE observes a violation in the metric value.

Significance score on the other hand indicates the frequency with which variations in the metric values cause an event.

MLE normalizes both impact and significance scores in the range of 0 and 1 (with 0 being the least important and 1 being the most important). MLE calculates both these scores from historical data of the past 30 days.

If Impact Score > 0, then Relevance Score = 1 + Impact score else Relevance Score = Significance Score

HEAL displays the most important metrics in a graphical way when you select **ML Insights** at the top.

MLE sorts the services and instances in the descending order of the relevance score. ML Insights dashboard displays the service with the highest relevance score first in the **Service** drop-down. When you select any service, the ML Insights dashboard displays the instance with the highest relevance score first in the **Instances** drop-down.

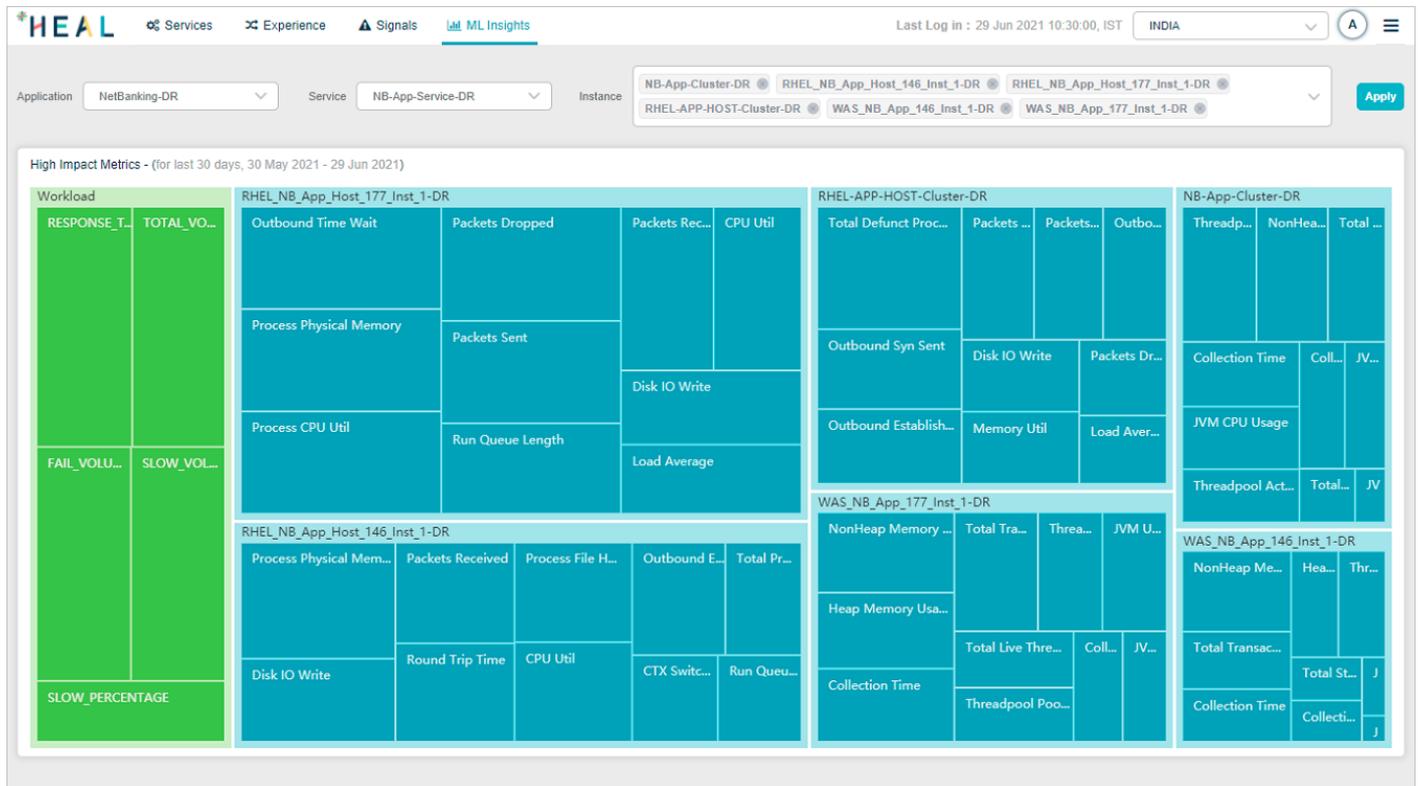
The screenshot shows the HEAL dashboard interface. At the top, there are navigation tabs for Services, Experience, Signals, ML Insights, and Mobile. The user is logged in from India on 28 Oct 2021 at 4:28:16 IST. The main area has three dropdown menus: Application (NetBanking-DR), Service (NB-App-Service-DR), and Instance (listing several instances like RHEL\_NB\_App\_Host\_177\_Inst\_1-DR). A dropdown menu for the Service is open, showing a list of services including NB-App-Service-DR, ENET-DB-Service-DR, NB-Web-Service-DR, CASSANDRA-SVC-1, ENET-App-Service-DR, ENET-Web-Service-DR, IIS-Web-Service-DR, LOS-App-Service-DR, and LOS-DB-Service-DR. The dashboard grid contains various metrics: RESPONSE\_TIME, SLOW\_PERCENTAGE, and TOTAL\_VOLUME on the left; RHEL\_NB\_App\_Host\_177\_Inst\_1-DR, RHEL\_NB\_App\_Host\_146\_Inst\_1-DR, and WAS\_NB\_App\_177\_Inst\_1-DR in the top row; RHEL-APP-HOST-Cluster-DR, NB-App-Cluster-DR, and WAS\_NB\_App\_146\_Inst\_1-DR in the bottom row. Each tile displays specific performance indicators like Read Latency, Ping Status, CPU Util, Process Physical Memory, and Uptime Days.

This screenshot is similar to the first one but with a different instance selection. The Instance dropdown menu is open, showing a list of instances with checkmarks: RHEL\_NB\_App\_Host\_177\_Inst\_1-DR, RHEL-APP-HOST-Cluster-DR, RHEL\_NB\_App\_Host\_146\_Inst\_1-DR, WAS\_NB\_App\_177\_Inst\_1-DR, NB-App-Cluster-DR, and WAS\_NB\_App\_146\_Inst\_1-DR. The dashboard grid layout is consistent with the previous image, showing various performance metrics for the selected application and service.

Select the application, service belonging to that application, instance(s) belonging to the service.

Select **Apply**.

HEAL displays top 10 most important metrics related to the instances you select. HEAL displays one instance as one pod. HEAL displays top 10 behavioral metrics related to every instance separately. HEAL also displays top 10 Workload metrics.



**Hover on a specific metric section to view the details about it.**

## Workload Metrics

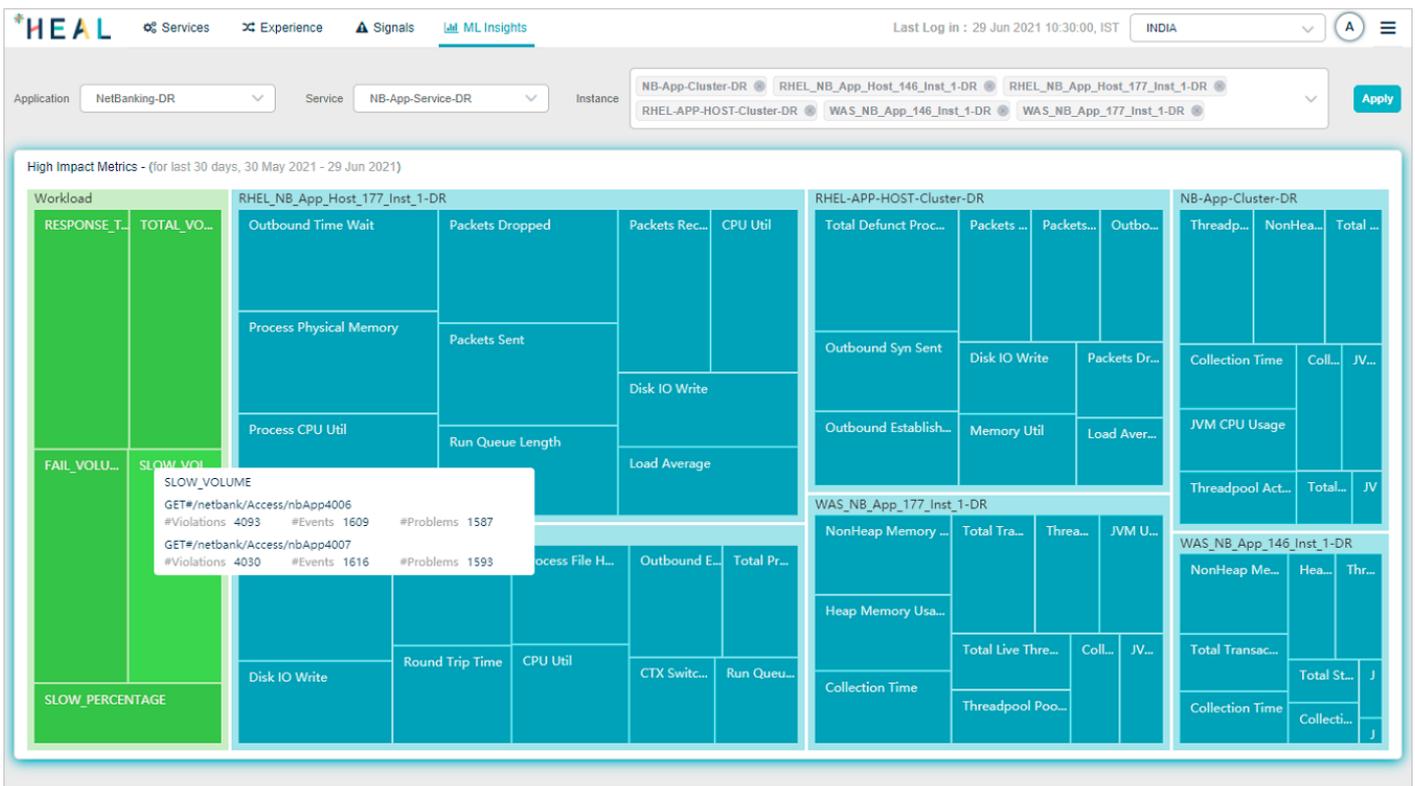
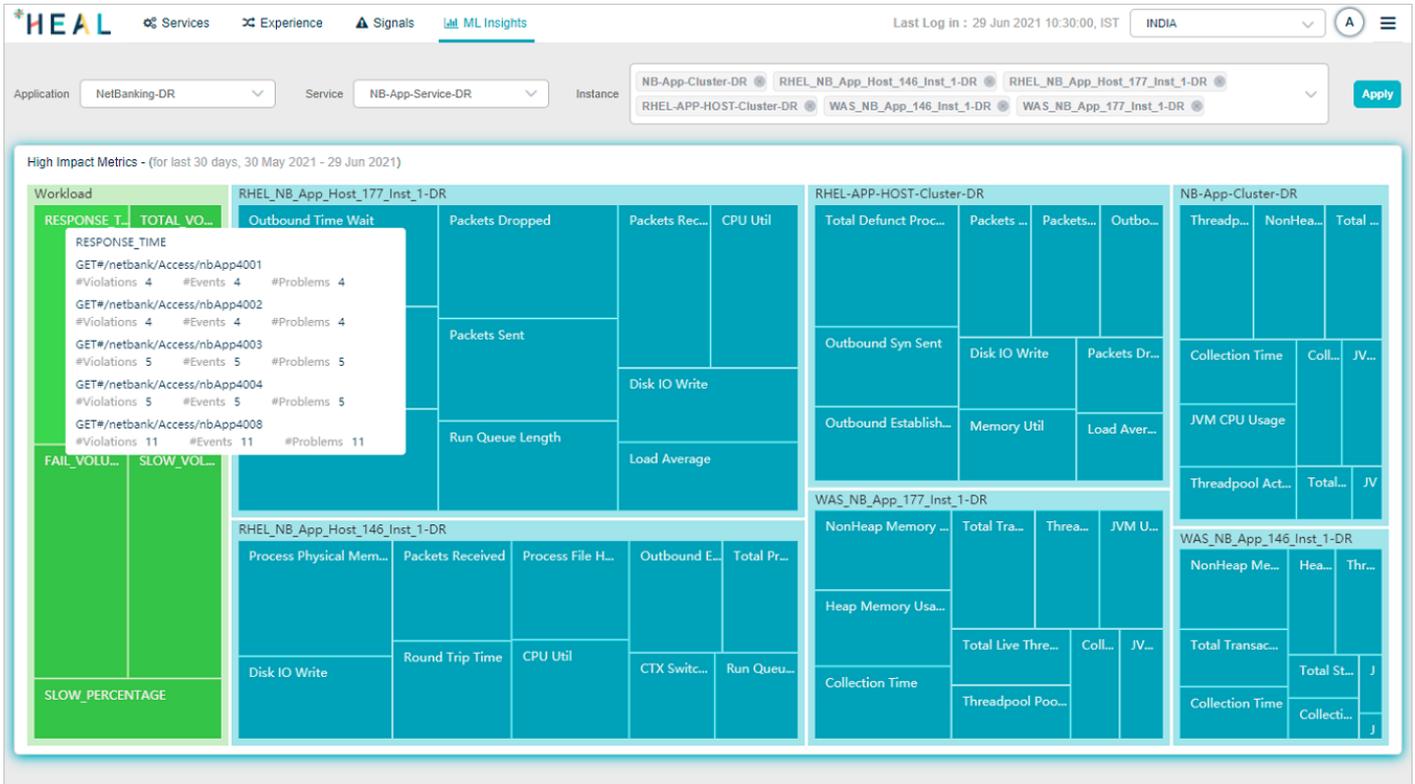
**Total Volume:** This displays top five success transactions which have high impacted value.

**Response Time:** This displays top five transactions with highest response time and impacted value.

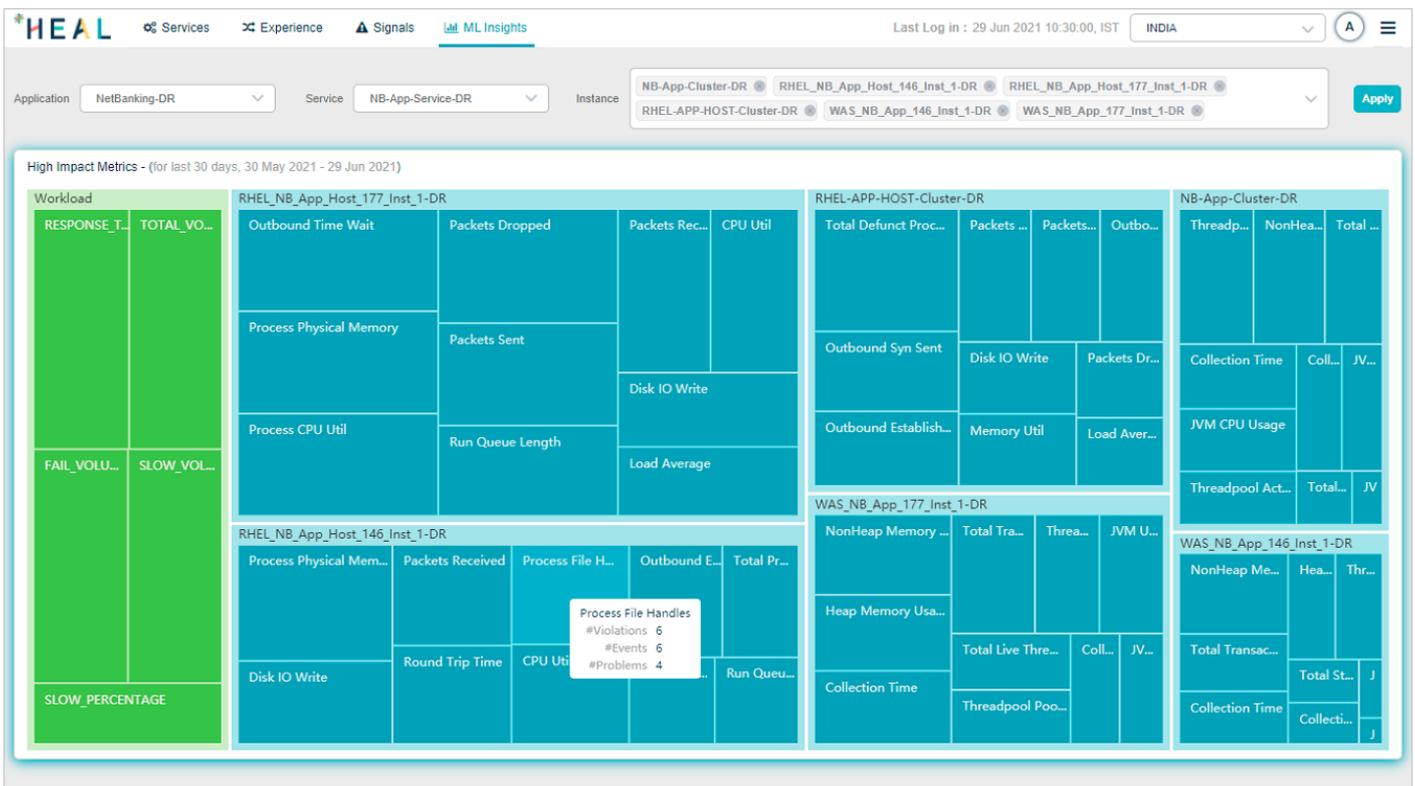
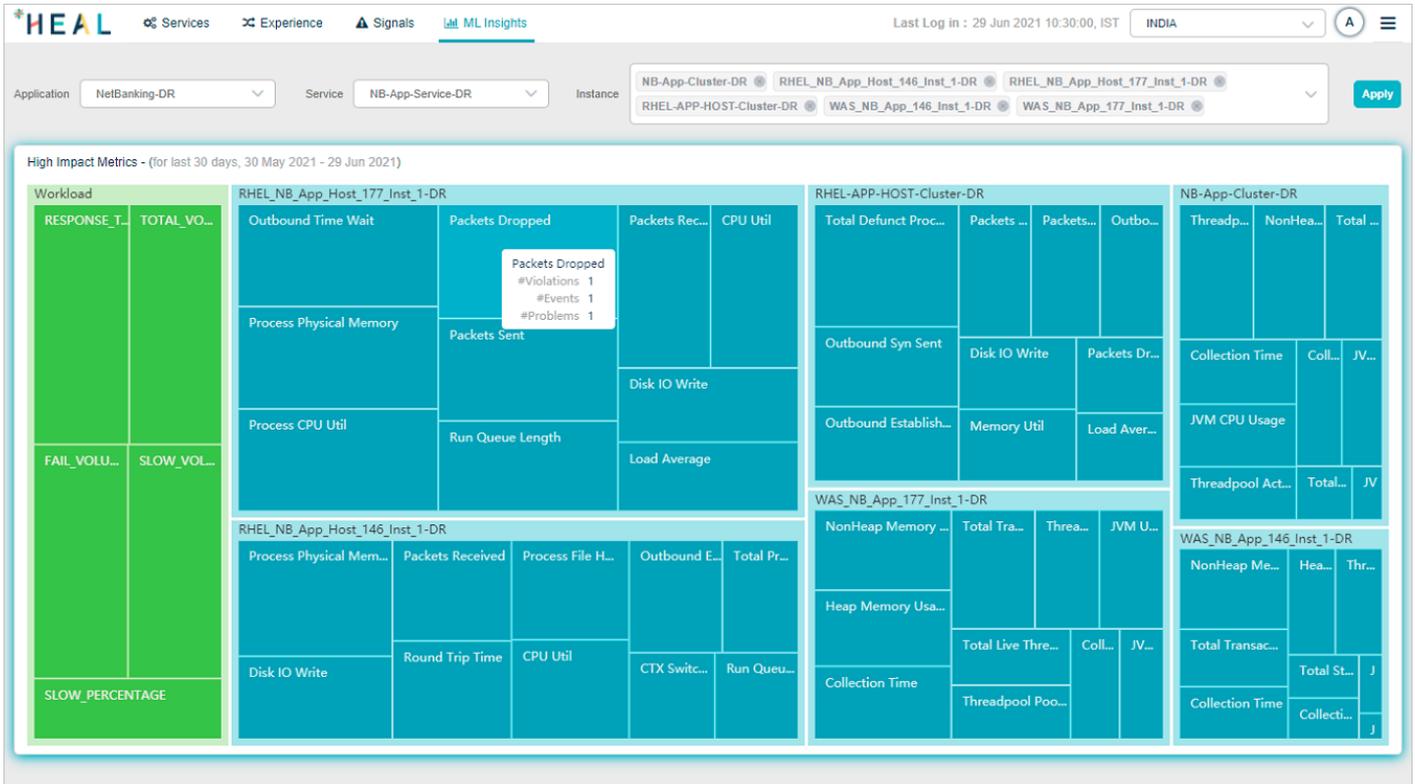
**Failed Volume:** This displays top five failed transactions which have high impacted value.

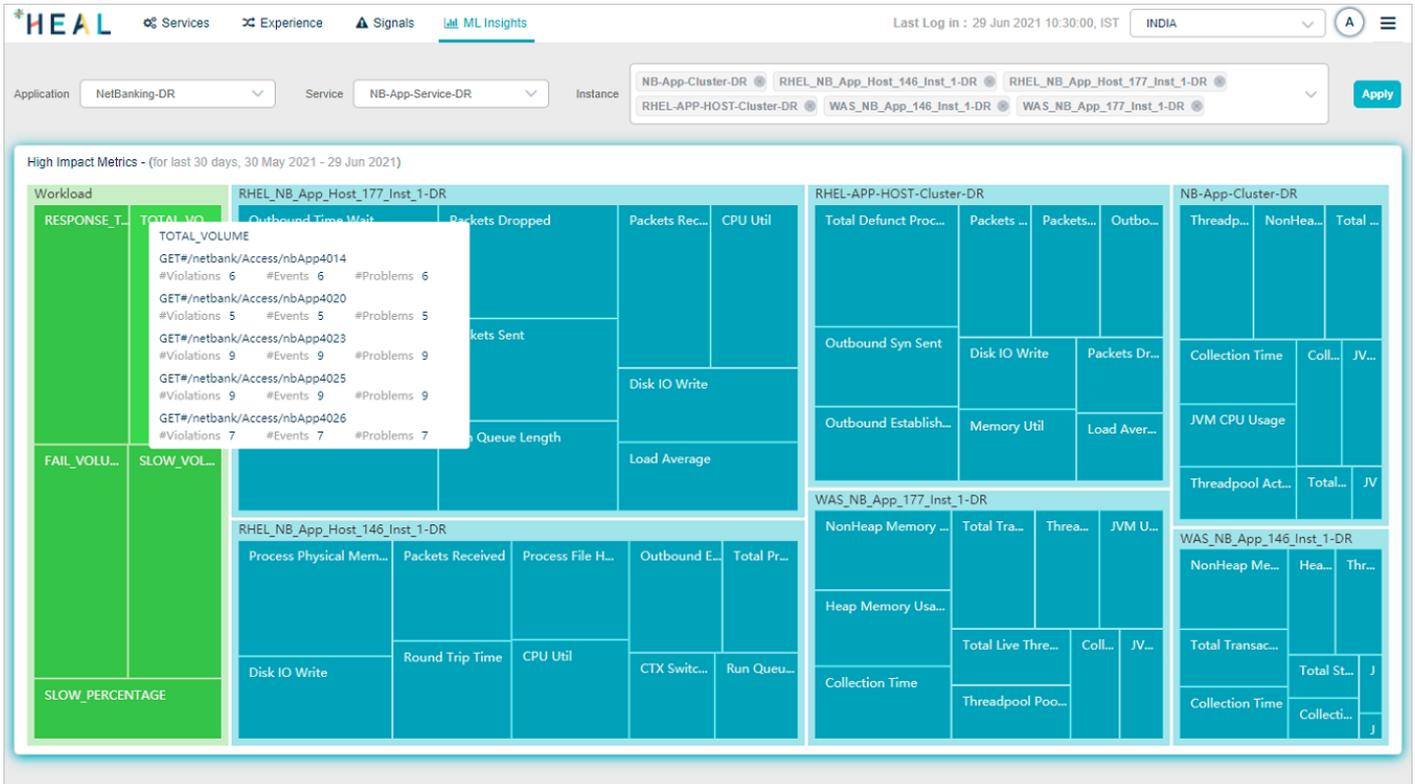
**Slow Volume:** This displays top five slow transactions which have high impacted value.

**Slow Percentage:** This displays top five transactions with highest slowness percentage and impacted value.



Hover on a behavior metric section in an instance pod to view the number of violations, events, and problems associated with the respective metric.





If there are no high impact metrics for the instances you select, HEAL displays following screen.

