APPDYNAMICS

What is an APM ?

APM - Application performance management

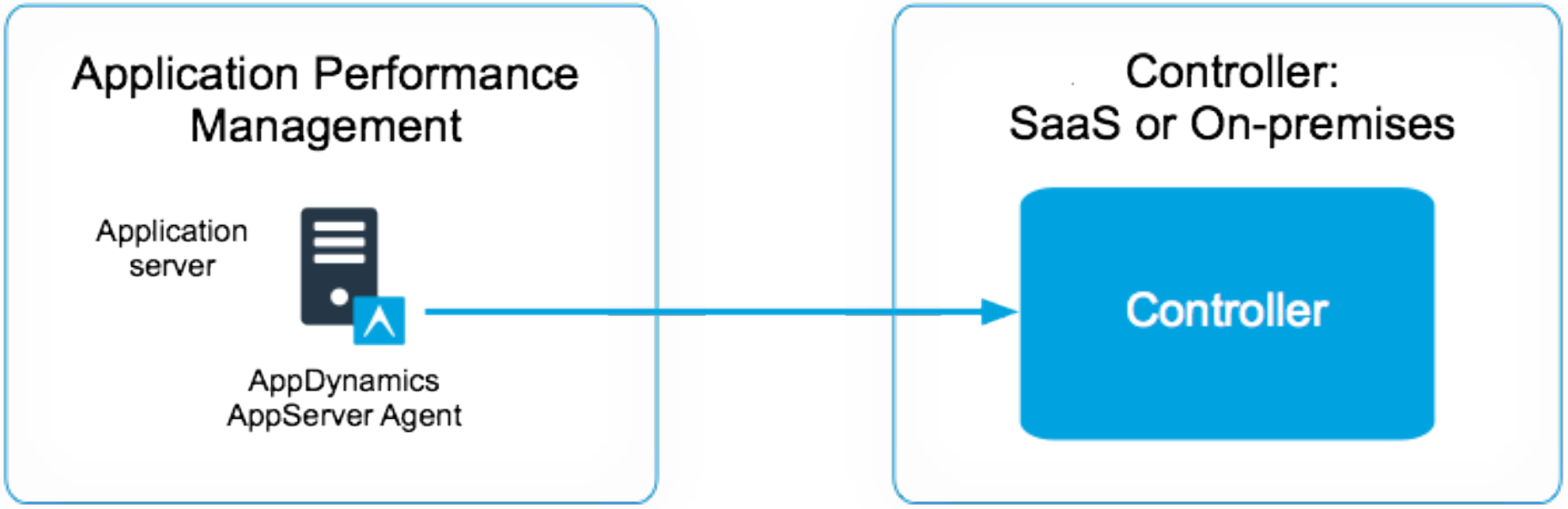
Monitoring and Management of performance of the Applications

To minimize the risk of outage of the Application

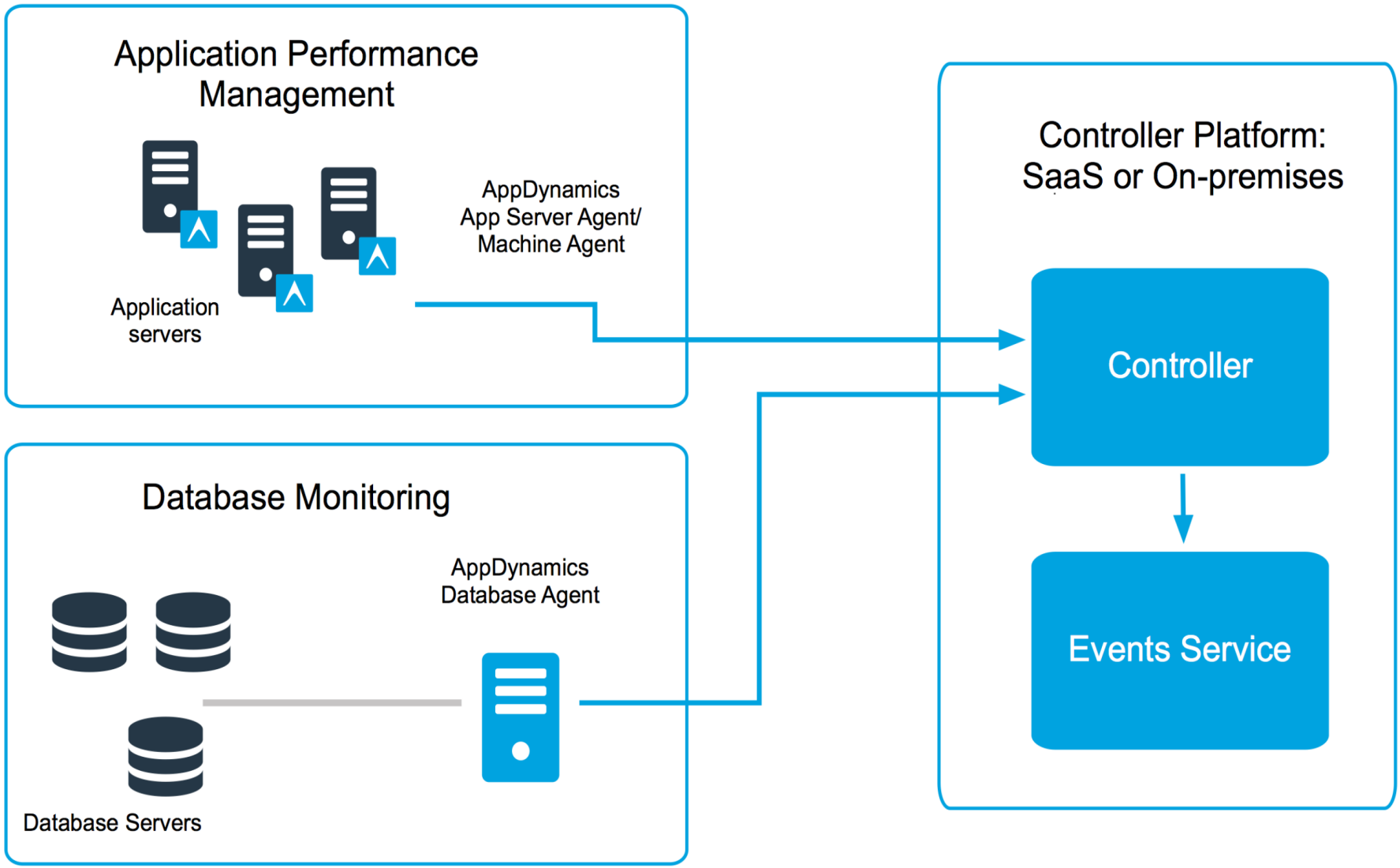
To Enhance the performance of the Application

APPDYNAMICS OVERVIEW

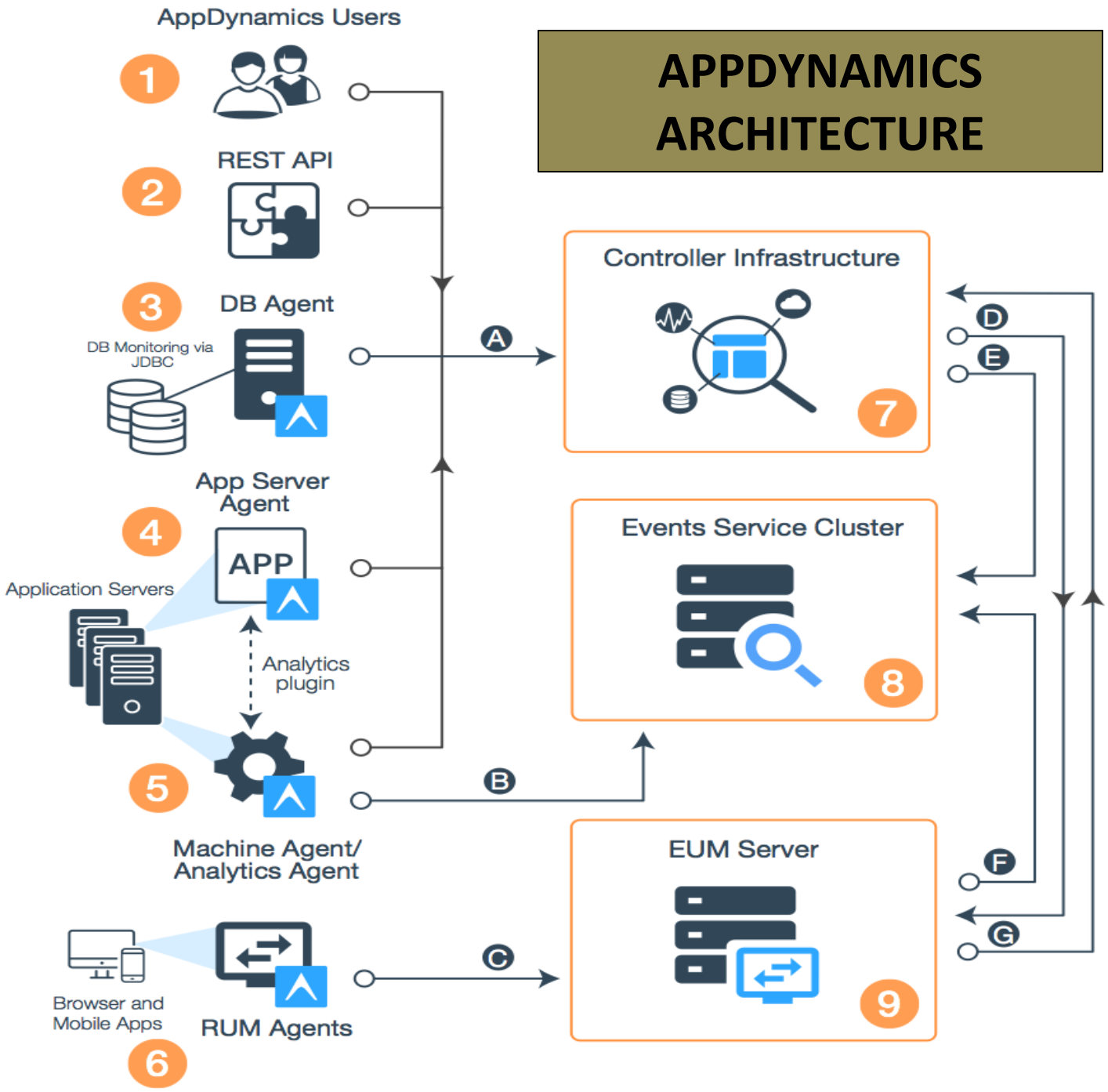
- AppDynamics APM Platform enables
  - To monitor and manage your entire application
    - Backend databases and Application servers
  - A single view across your application landscape
  - Gives you end-to-end visibility into the performance of your applications



FLOW OF APPDYNAMICS



APPDYNAMICS ARCHITECTURE



APPDYNAMICS PRE-REQUIREMENTS

- **AGENTS : App Agent & Machine Agent**
  - Agents are plug-ins or extensions that monitor the performance of your application code, runtime, and behavior.
  - The Controller receives metrics from Agents and sends them instructions.
  - Once deployed, Agents immediately monitor every line of code.
  - This allows AppDynamics to trace every transaction from start to finish

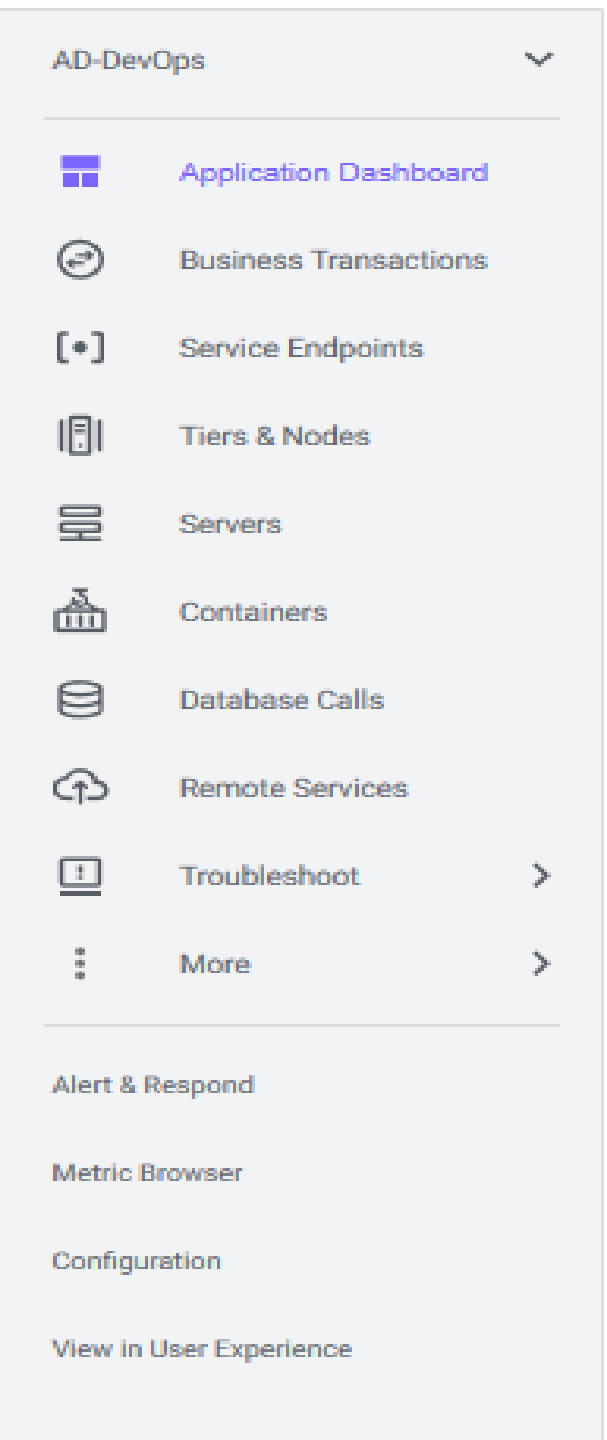
- **CONTROLLER :**
  - Agents capture performance activity across application code, servers and network nodes with minimal overhead.
  - The Controller helps monitor, troubleshoot and analyze your entire application landscape—from backend infrastructure to the end user—in one simple interface

APPDYNAMICS PRE-REQUIREMENTS

- The agent supports your application environment (Below supported Languages)
- The application host with a user account
- The application host has network connectivity to the Controller - **FIREWALL**
- The connection between the agent and Controller is a **ONE –WAY** connection initiated by the agent.
- Controller host: The hostname of the Controller to connect to.
- Controller port: The port on which the Controller listens for agent traffic.
- Account name, Account access key & SSL enabled
- On-Premises & SaaS Controller

Languages we support

SAMPLE APPLICATION



APPD NAVIGATION BAR

BUSINESS TRANSACTIONS :

A Business Transaction is made up of all the required services within your environment that are called upon to fulfill and deliver a response to a user-initiated request.

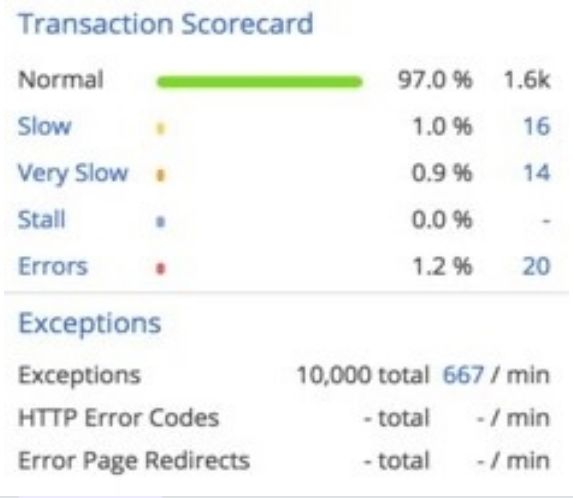
These are typically things like login, search, checkout, etc

FLOW MAPS :

Flow Maps show the tiers, nodes, message queues, and databases in the environment, and highlight the Business Transactions that flow through them.

BASELINE:

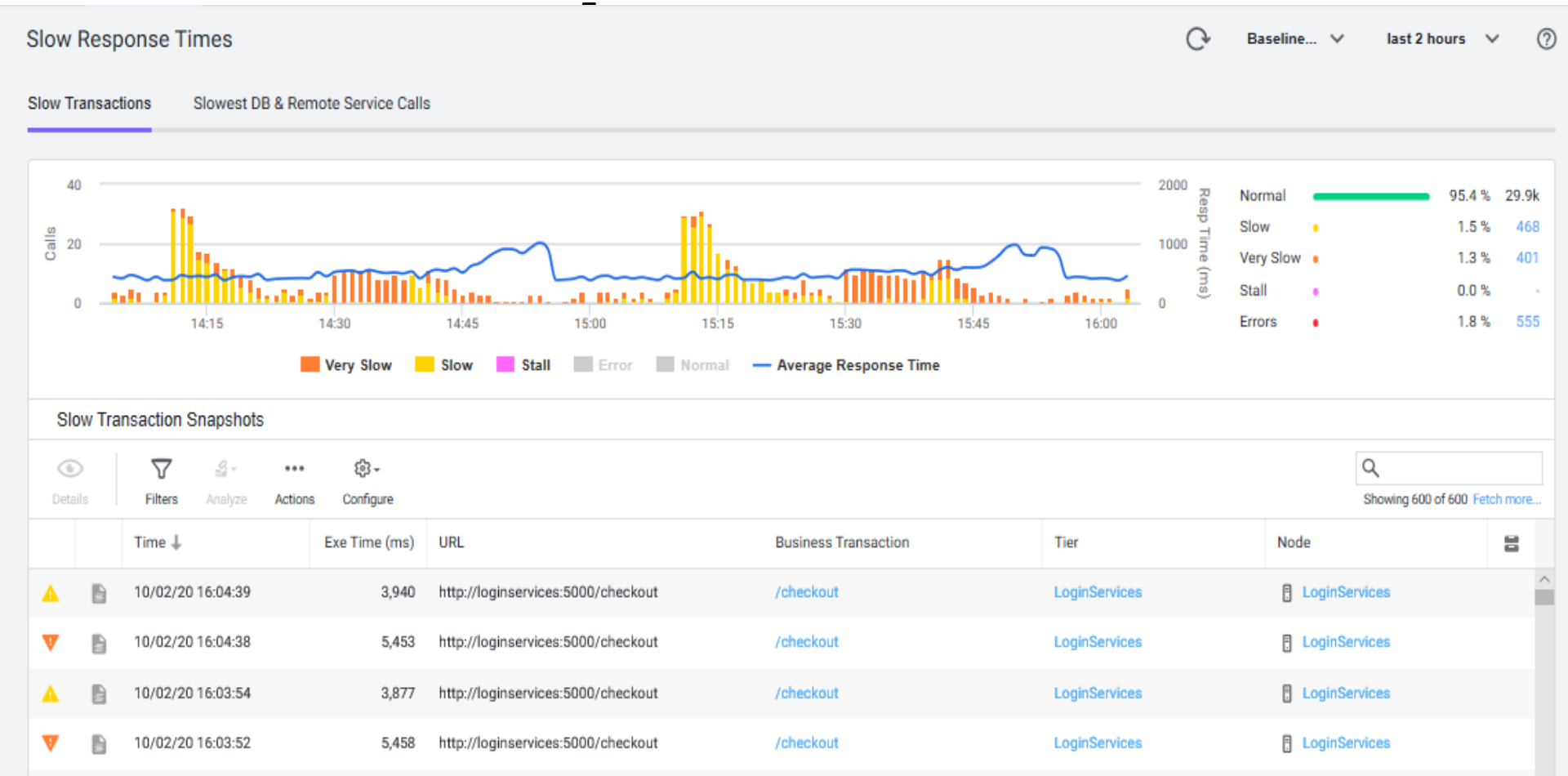
Every agent monitoring a Business Transaction sends detailed performance and business metrics back to the Controller, which, through machine learning, automatically creates a dynamic Baseline for each metric.



TRANSACTION SCORECARD :

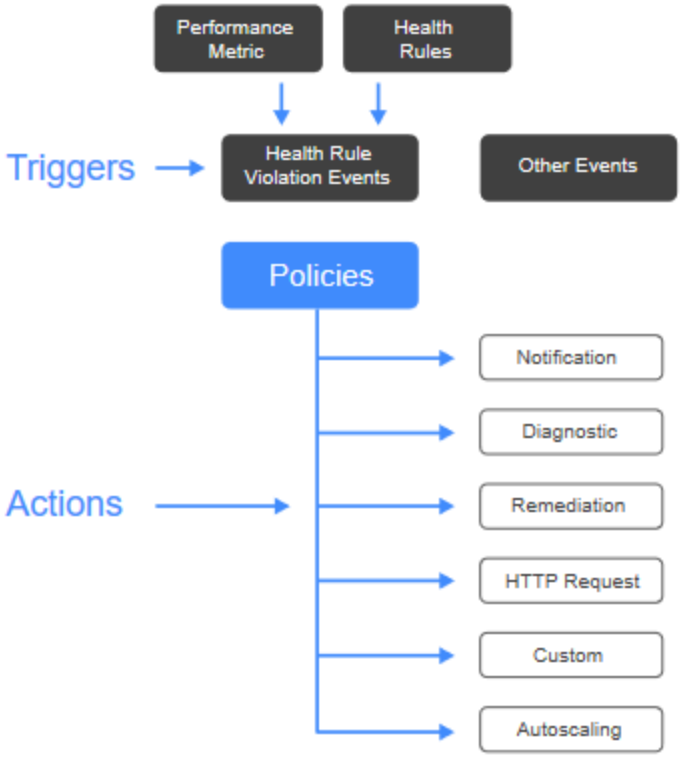
The transaction scorecard summarizes the performance of a business transaction at the application, tier, or node level within a specified time range.

TYPES of CALLS : Normal , Slow, Very Slow, Stall &



ALERT & RESPOND

Alert and Respond Overview



Policies >

Configure Polices to send alerts, perform diagnostics, or execute scripts when Health Rules are violated, Anomalies are detected, or events such as server crashes occur.

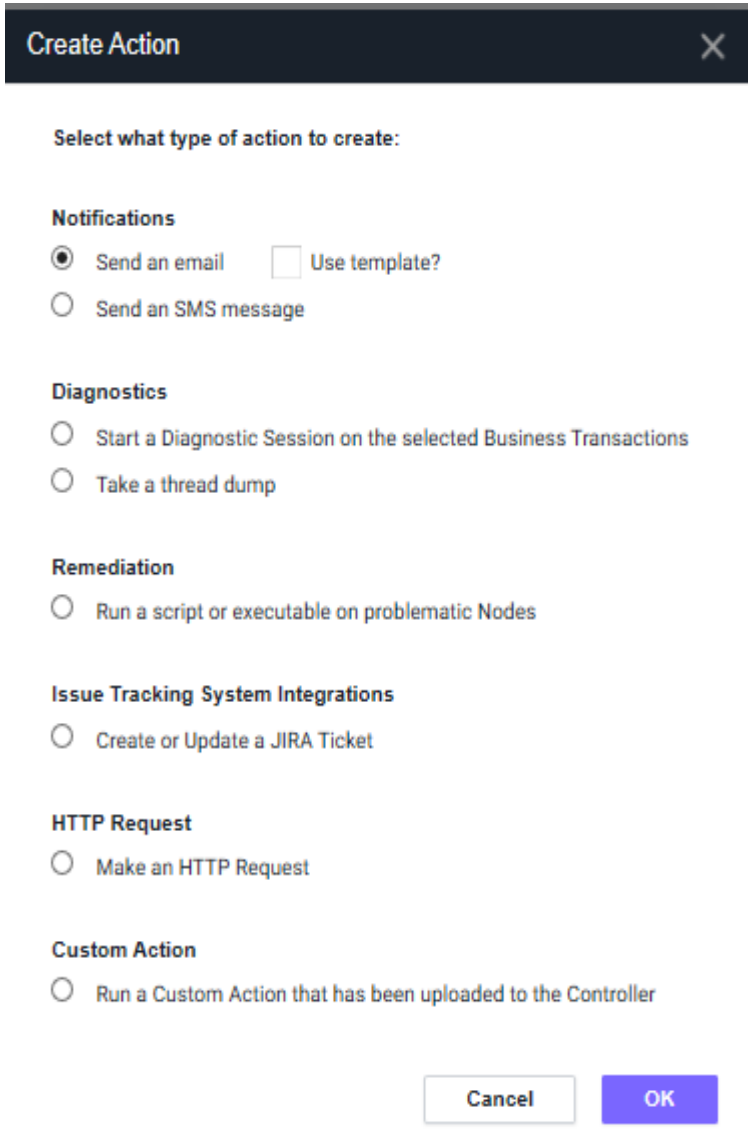
Health Rules >

Health Rules compare performance metrics against their baselines or other thresholds. When performance fails to satisfy Health Rules, Health Rule violation events are created. You can create Health Rules to alert you to problems whose logic is clear-cut, including violations of Service Level Agreements (SLAs).

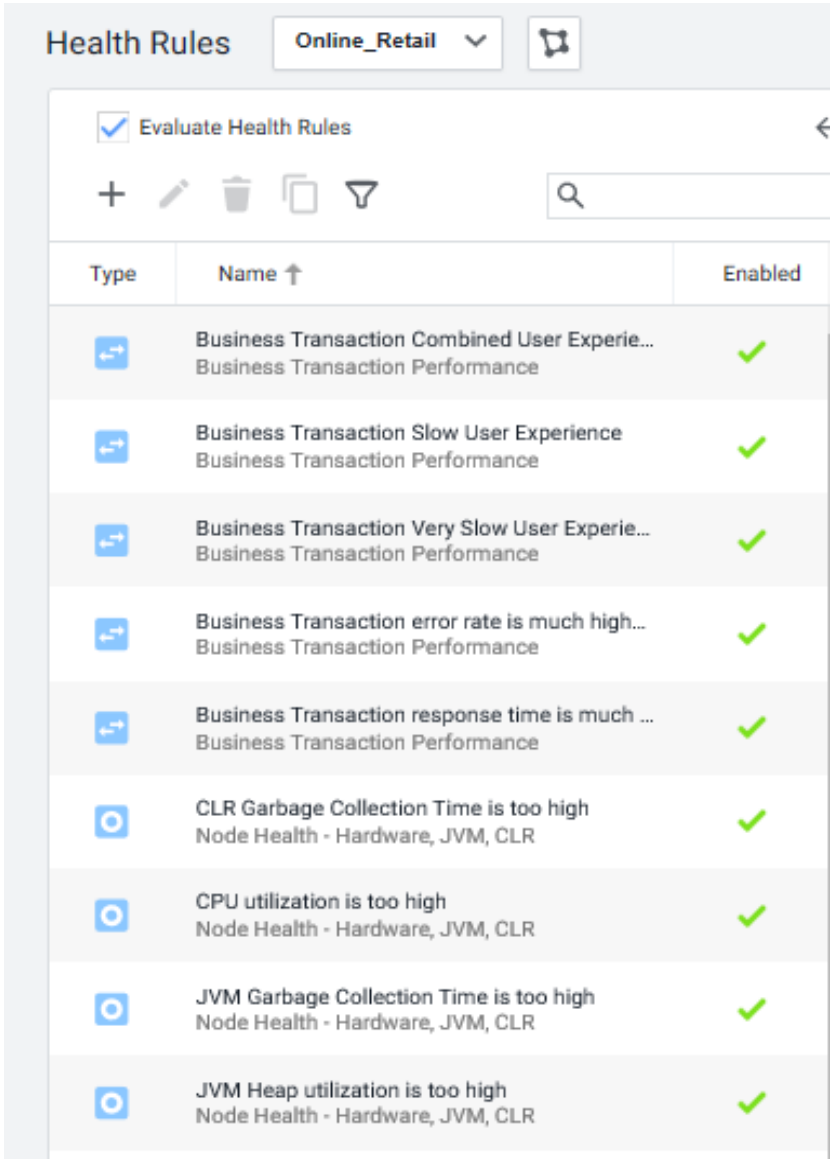
Actions >

Actions are the responses you direct AppDynamics to take when Policies are violated. They include sending notifications by email or SMS, taking snapshots, creating thread dumps, and executing scripts.

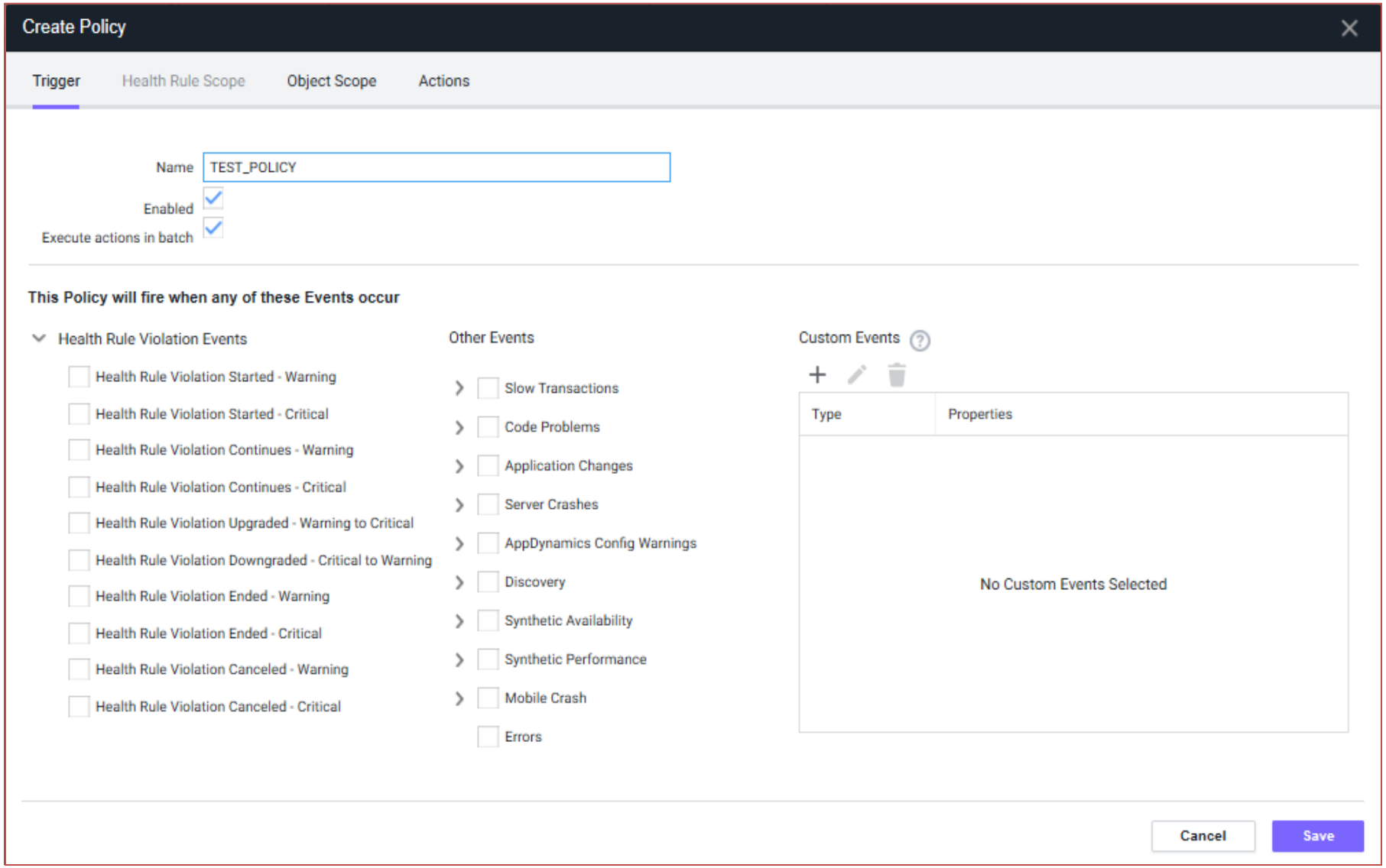
ACTIONS



HEALTH RULES



POLICIES

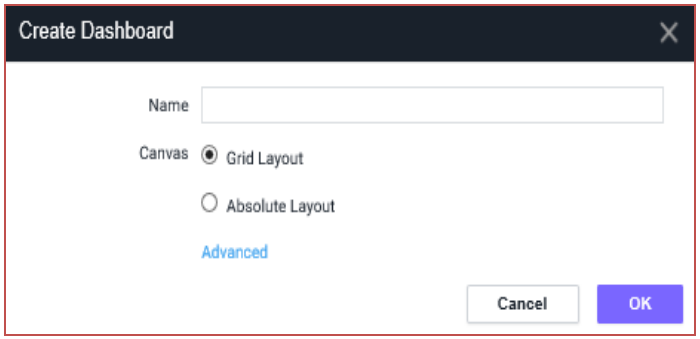

Create Policy
Trigger
Health Rule Scope
Object Scope
Actions
Name
TEST_POLICY
Enabled
Execute actions in batch
This Policy will fire when any of these Events occur
Health Rule Violation Events
Health Rule Violation Started - Warning
Health Rule Violation Started - Critical
Health Rule Violation Continues - Warning
Health Rule Violation Continues - Critical
Health Rule Violation Upgraded - Warning to Critical
Health Rule Violation Downgraded - Critical to Warning
Health Rule Violation Ended - Warning
Health Rule Violation Ended - Critical
Health Rule Violation Canceled - Warning
Health Rule Violation Canceled - Critical
Other Events
Slow Transactions
Code Problems
Application Changes
Server Crashes
AppDynamics Config Warnings
Discovery
Synthetic Availability
Synthetic Performance
Mobile Crash
Errors
Custom Events
Type
Properties
No Custom Events Selected
Cancel
Save

DASHBOARDS

Dashboards provide a graphical overview of the selected data made available for quick access. Custom dashboards helps to create and arrange widgets to give users a visual overview of the data of interest.

TYPES OF LAYOUT :

a. GRID layout
b. ABSOLUTE layout

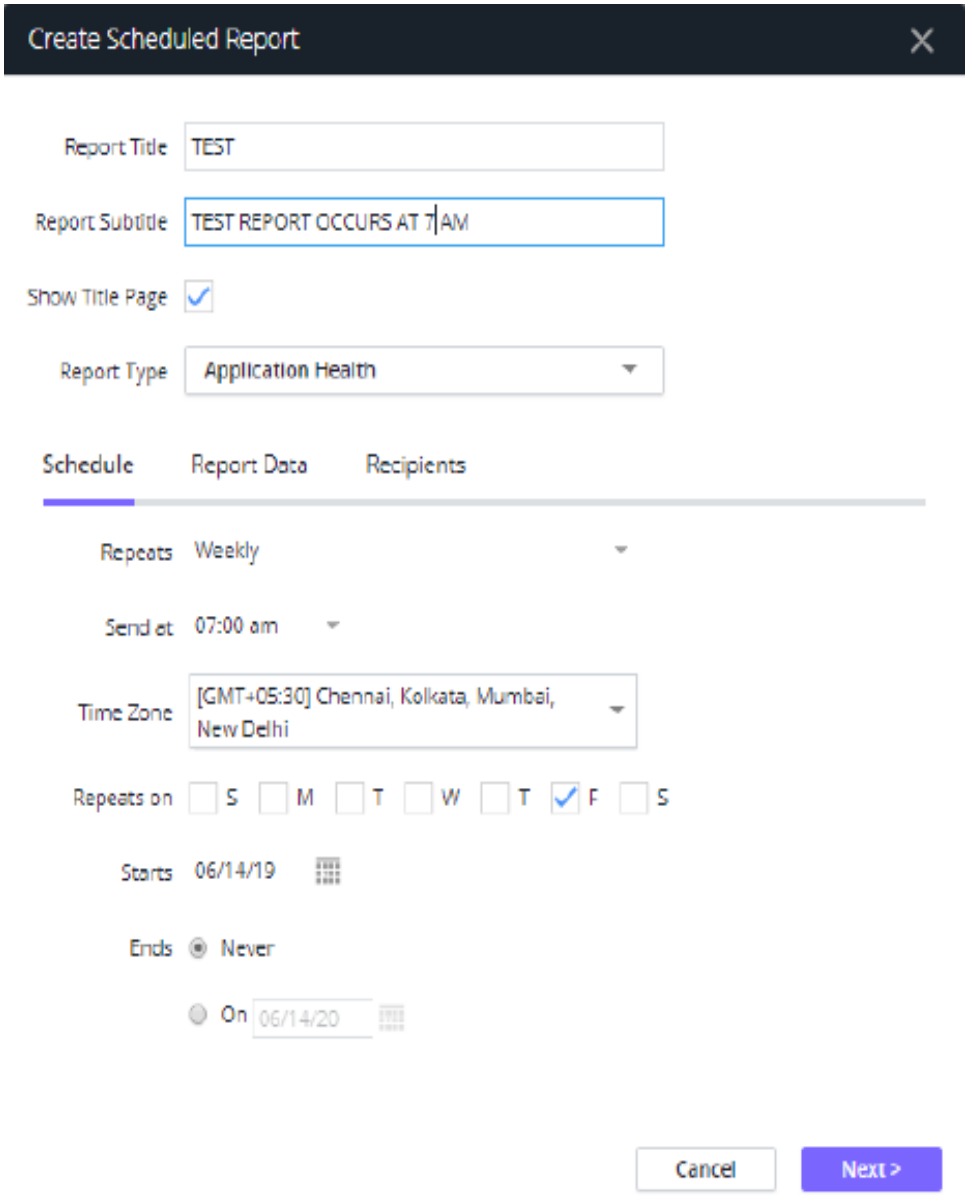


REPORTS

AppDynamics can extract data from dashboards and create scheduled reports.

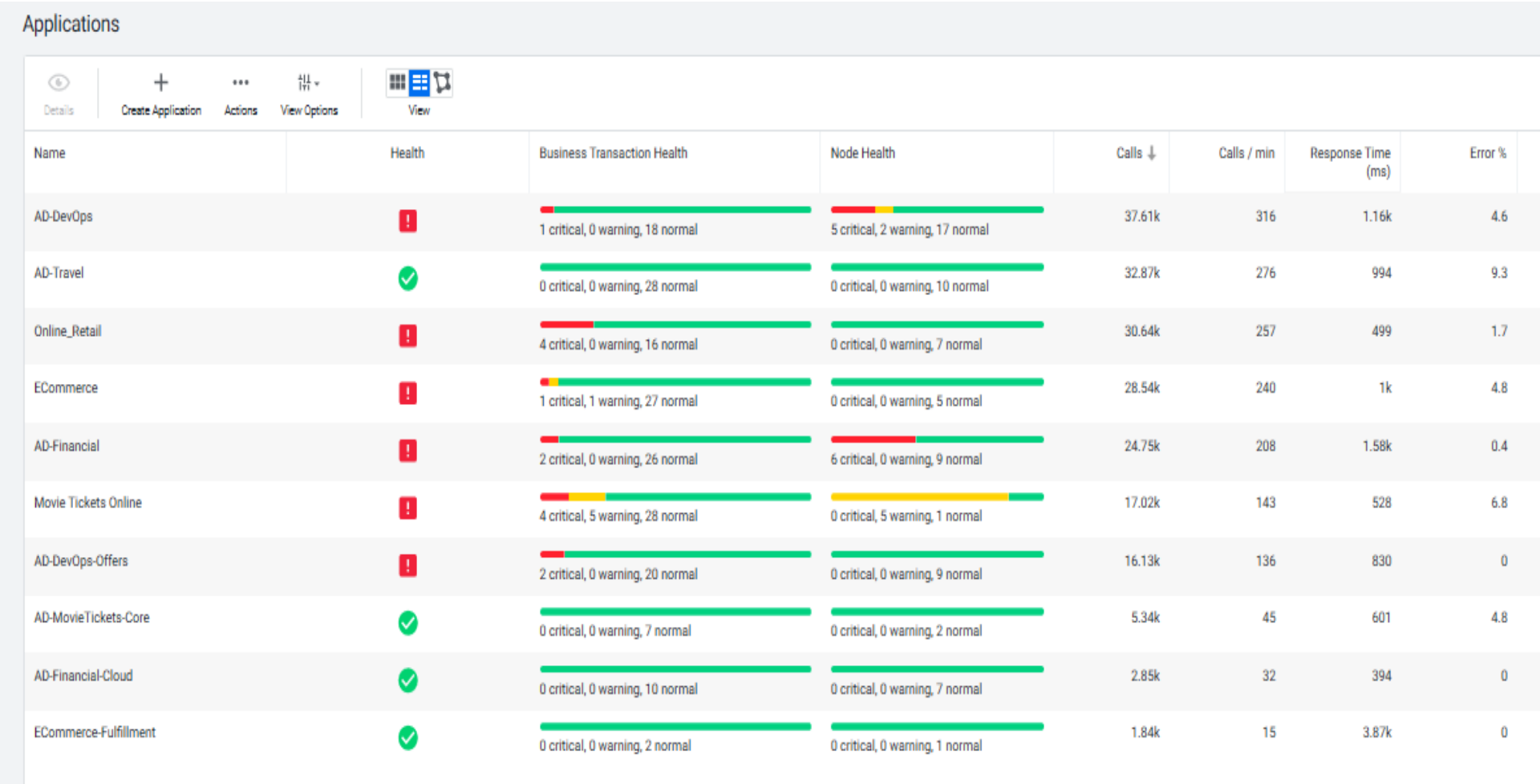
Scheduled **reports are created automatically** on a regular interval. AppDynamics helps create reports with the data pulled out from **Dashboards** and sends it to the configured list of **email recipients**, as scheduled

Sample report where it is scheduled on weekly basis i.e on **Friday** at **07:00 AM IST** starting from 06th June 2019 and end date for the report is not mentioned. Recipients to be added for whom the report is to be sent.



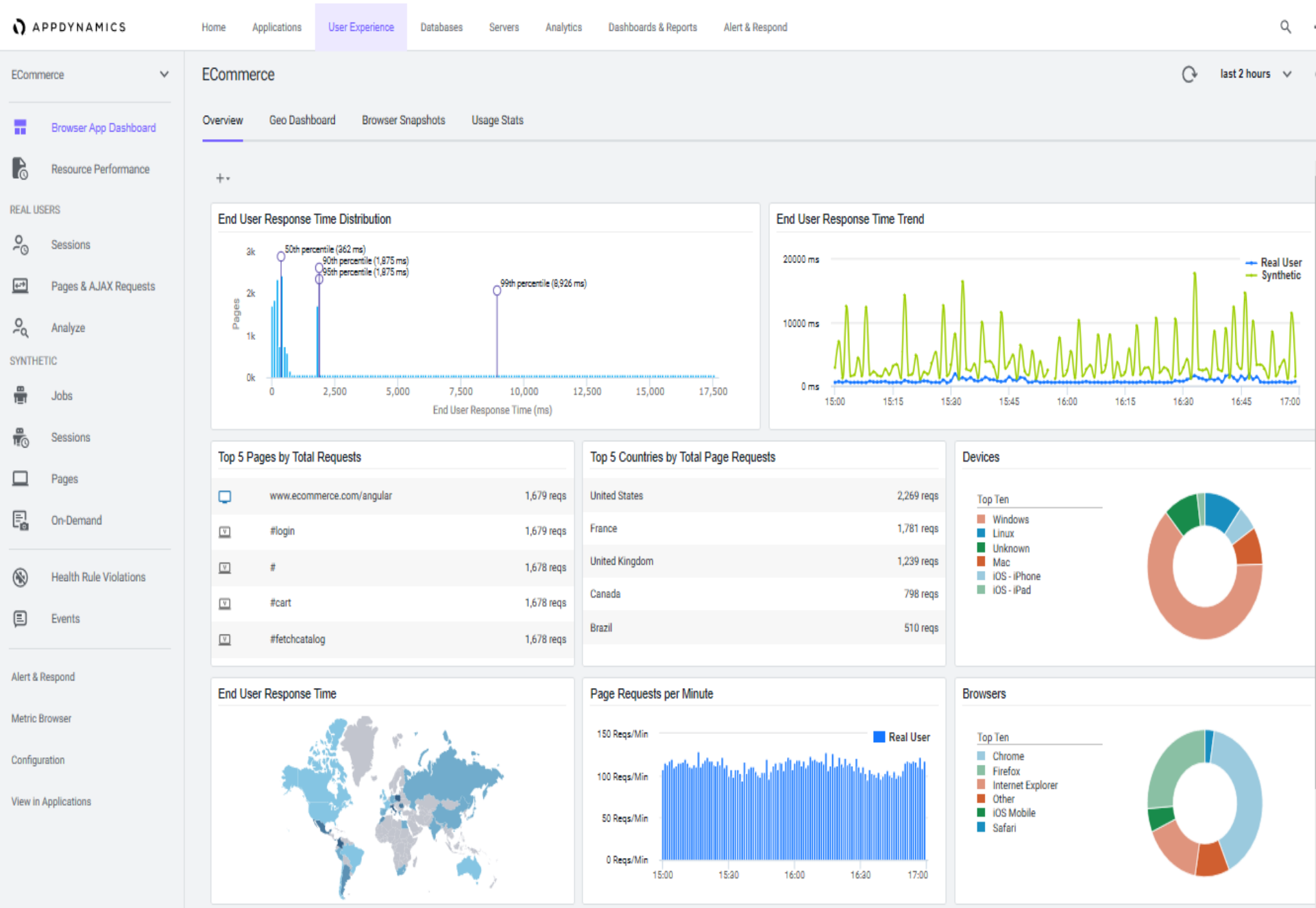
HEALTH STATUS

Health status : Normal, Warning & Critical



Name	Health	Business Transaction Health	Node Health	Calls	Calls / min	Response Time (ms)	Error %
AD-DevOps		1 critical, 0 warning, 18 normal	5 critical, 2 warning, 17 normal	37.61k	316	1.16k	4.6
AD-Travel		0 critical, 0 warning, 28 normal	0 critical, 0 warning, 10 normal	32.87k	276	994	9.3
Online_Retail		4 critical, 0 warning, 16 normal	0 critical, 0 warning, 7 normal	30.64k	257	499	1.7
ECommerce		1 critical, 1 warning, 27 normal	0 critical, 0 warning, 5 normal	28.54k	240	1k	4.8
AD-Financial		2 critical, 0 warning, 26 normal	6 critical, 0 warning, 9 normal	24.75k	208	1.58k	0.4
Movie Tickets Online		4 critical, 5 warning, 28 normal	0 critical, 5 warning, 1 normal	17.02k	143	528	6.8
AD-DevOps-Offers		2 critical, 0 warning, 20 normal	0 critical, 0 warning, 9 normal	16.13k	136	830	0
AD-MovieTickets-Core		0 critical, 0 warning, 7 normal	0 critical, 0 warning, 2 normal	5.34k	45	601	4.8
AD-Financial-Cloud		0 critical, 0 warning, 10 normal	0 critical, 0 warning, 7 normal	2.85k	32	394	0
ECommerce-Fulfillment		0 critical, 0 warning, 2 normal	0 critical, 0 warning, 1 normal	1.84k	15	3.87k	0

END USER MONITORING




SUCCESS