

TOWARDS THE ENHANCEMENT OF BIG DATA VISUALIZATION USING ANALYTICAL DASHBOARDS

Makieiev Maksym, Kopp Andrii
National Technical University
«Kharkiv Polytechnic Institute», Kharkiv

Software development in the last decade has drastically evolved to face new business requirements. Modern software solutions take into account huge amounts of data generated and consumed by an application. Collecting information during software lifespan greatly benefits management teams, creating a solid background for business solutions. To generate and extract benefits from such information, huge teams are involved in the research and maintenance of big data solutions. As a modern trend, dashboards are used as a way of grouping and visualization of data being used by different teams and departments. Nevertheless, with the constant enrichment of business requirements, information and metrics for visualization cannot be presented in the same time efficiently. Therefore, the problem of the most space-efficient metric set definition is faced by technology companies in all fields [1]. As the result, we propose to analyze a set of metrics available for visualization to select the appropriate visualization method for each one. Using it, a set of the most valuable metrics can be presented using any modern visualization tool. In Fig. 1, a set of metrics is visualized using Kibana [2] data visualization tool.

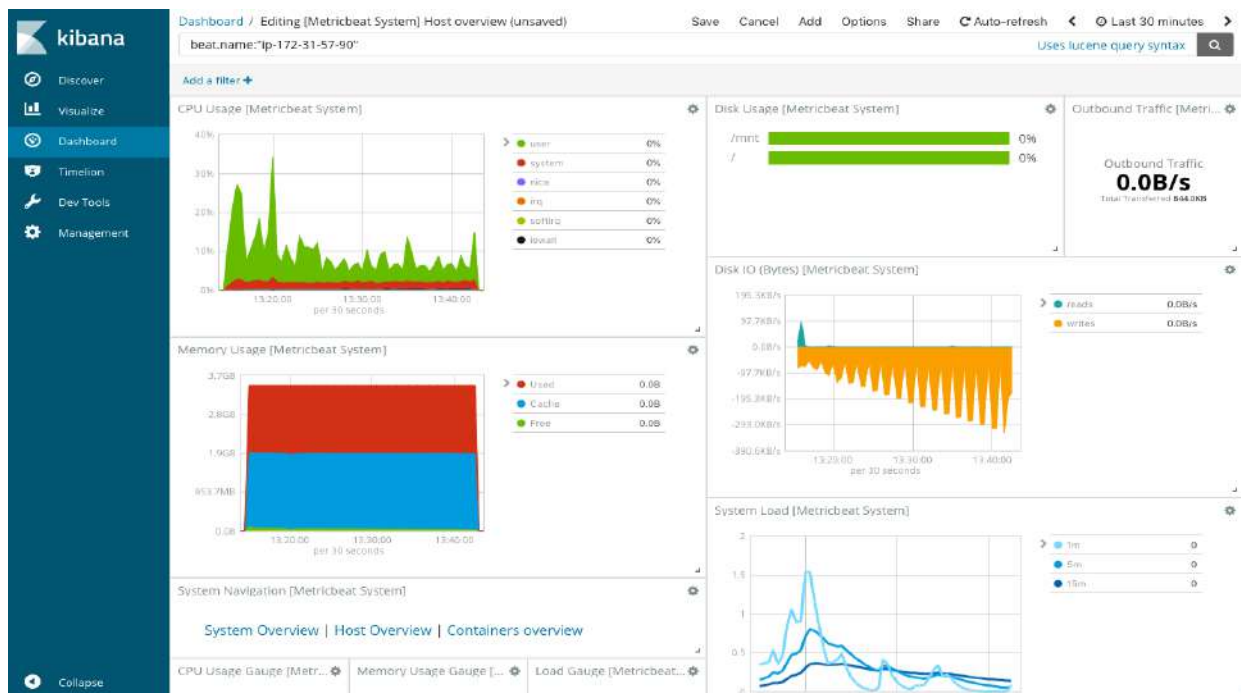


Fig. 1. – Example of metrics visualization using Kibana [2]

References:

1. C. N. Knaflic. *Storytelling with Data: A Data Visualization Guide for Business Professionals*. Wiley, 2019. 288 p.
2. Kibana documentation // URL: www.elastic.co/guide/en/kibana