

Developing a Dashboard to Monitor Business-DNA's TopEase Server Product

Degree programme : BSc in Computer Science | Specialisation : Distributed Systems and IoT
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Business-DNA is the developer and distributor of their software platform TopEase, which is an all-in-one solution for governance, risk management and compliance. Customers use TopEase to manage key aspects of their company. The goal of this project is to develop an application which monitors TopEase servers. This allows the industry partner to provide better support to customers.

Initial situation

The industry partner's TopEase platform consists of multiple web-based solutions. Prior to this project, there was no quick and reliable way for the industry partner to get information about the server that runs TopEase. This can make it difficult to support customers in case of performance issues or bugs. Offering better support capabilities and creating additional selling points were the main motivations behind developing this dashboard project.

Goals & Requirements

The main goal of this project is developing a dashboard which displays a history of changing system data (like processor usage) and general system information such as operating system and Java version. This information also has to be stored in a database and can be offered as a download. The software has to be designed in an extensible way such that in the future, additional aspects may be monitored.

Implementation

The technologies used in this project are mandated by the existing TopEase platform: Java on the server and JavaScript for the client. The server records data points into a database, and offers them through a web

API. The client can start and stop the recording process of data at will. When a client starts the recording process, the latest data gets displayed in charts. The user has multiple options for the charts, such as setting the displayed time interval. Users can also download server logs and other files, which makes customer support more effective.

Achievement

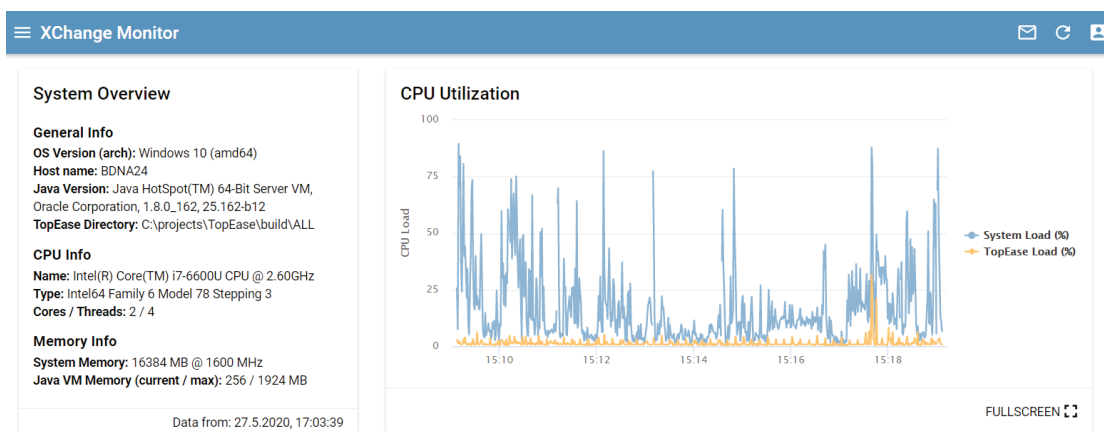
I have successfully implemented the project according to the goals defined at the outset. The dashboard displays general system information and a history of server resource usage, which can be used for analysis of performance issues. The benefit is better customer support capabilities for the industry partner, as well as offering a brand new feature on the TopEase platform.

Outlook

A first version of the software is being evaluated on test servers and will be distributed to customers with the next TopEase release. Based on feedback from internal tests and pilot customers, additional features for the dashboard such as displaying more server information will be developed in the future.



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Screenshot showing two dashboard elements. One displays general system information, the other shows a history of CPU usage.