A Monitoring Solution for Basic Behaviors of Objects in Distributed Systems

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Abstract

Information about communication behaviors of objects in a distributed system is critical because it will provide comprehensive data on the operations of the objects in the system. In addition, this information will support system administrators in quickly detecting special states or events, potential risks, as well as locations of errors that occur in the system. In this paper, we propose a method tomodel basic operations for monitored objects in distributed systems and a basic monitoring solution for these operations to monitor communication operations between objects in these systems. These proposals focus on a hierarchical architecture of objects in distributed systems, consisting of multiple levels such as monitored objects, networks, domains, and global systems. Based on these models, we can build a suitable monitoring solution to support system administrators in operating and diagnosing communication behaviors of objects in distributed systems.

Keywords

distributed systems; object monitoring; behavior model

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