

Implementing a Mobile-based Data Center Monitoring System

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Abstract

The purpose of this paper is to build a mobile-based data center monitoring system. This monitoring system consists of four agents, including SNMP agent, MySQL agent, JSON agent, and Web agent. The SNMP agent queries the managed devices according to SNMP protocol; the MySQL agent stores the query results to MySQL database; the JSON agent transfers the results to JSON format; and the Web agent generates the web pages.

This monitoring system is implemented as seven operation steps. Management console retrieves SNMP information from managed devices. The information are shown in web pages, stored in MySQL database, and transferred into JSON format. MySQL data can be used to generate the historical graphics. JSON format is provided to the mobile devices to show information. Finally, the warning messages are used to notify administrator that a special condition in his data center occurred. Based on this system, even if the administrator goes outside, he still can know the status of his data center.

Keywords: Mobile device, SNMP, JSON