

Technical Brief

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Introduction to SANWatch – Disk Performance Monitor

Abstract

This document introduces SANWatch's disk performance monitor module and its main features.

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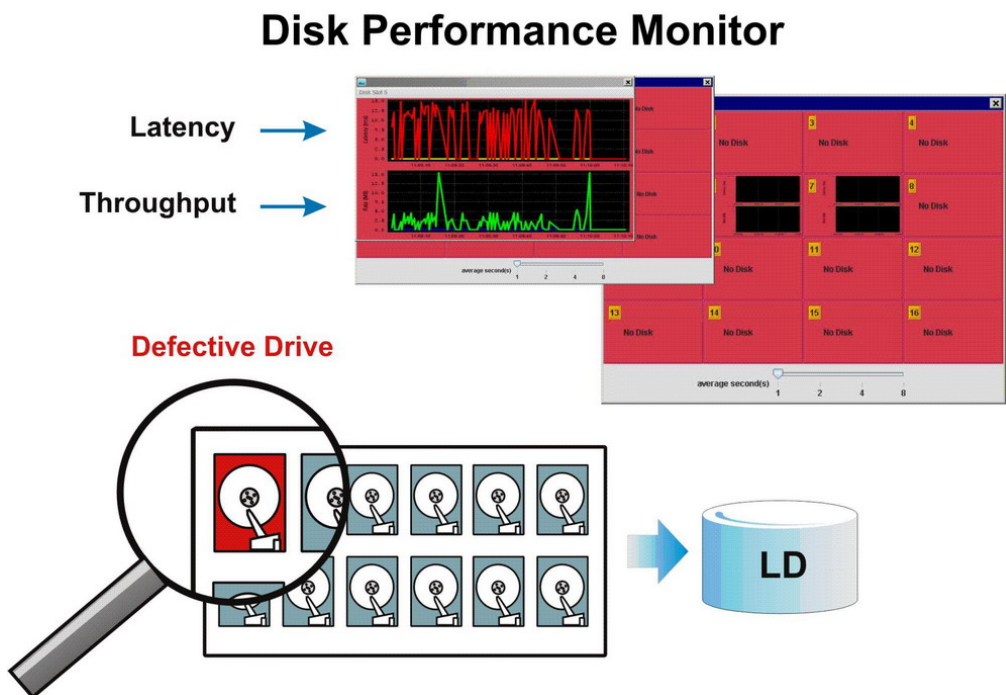
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Why Disk Performance Monitor?

Users may sometimes find that the overall system performance degrades but no notified events explain the reasons. One of the reasons unable to be identified by notifications is faulty drives. Since notification is issued only when drives completely fail, users need a way to locate the defective drives which does not fail but has impacted the system performance. SANWatch's disk performance monitor module allows users to access the performance of individual disk drives during active I/Os. When detecting drives showing an abnormal latency or low throughput, administrators can replace the faulty drives to restore and ensure optimum system performance.

Disk Performance Monitor Features

Through disk performance monitor GUI, users can get an overview of the performance graphs of all the drives in the same enclosure. There are two kinds of graphs, one representing Read/Write latency and the other representing Mbps transfer rate. Users can choose to view either or both kinds of graphs.



If users want to have detailed examination of an individual drive, they can click the graph to see its pop-up closer view. Besides the curves in graphs, the average Read/Write latency and throughput are also displayed in numbers for quick reference.

By modifying the two parameters, **Average** and **Duration**, users can configure how the disk performance is shown in the graph. **Average** means the interval within which an average disk drive latency value or transfer rate is generated. Users can choose

among 1/2/4/8 seconds as the interval. **Duration** means the duration of the latency or throughput monitoring represented in the graph. Users can choose among 30/60/90/120/150 seconds as the duration. If **Average** is set as 2 seconds and duration set as 90 seconds, then in 12:00:00, users can see the graph whose curve represents the disk performance since 11:58:30, and the curve is constituted by the average latency or throughput values generated every 2 seconds.

In the cases when IT managers fail to sit before the management console monitoring the disk performance, they can make use of the performance recording feature to get the performance log for an extended period of time. In the normal condition, all the member drives of a logical drive should deliver similar latency and transfer rate to enable the optimal performance. Therefore, when playing back the log, IT managers can compare the performance of individual disk drives to find out abnormal latency or low throughput and in turn locate the defective drive dragging the overall performance.