

Performance counter monitoring mechanism for measuring QoS attributes in SOA.

ABSTRACT

Nowadays, many similar web services with same functionalities have been developed around the world. When multiple web services provide same functionalities, Quality of Service (QoS) turns to an important issue. In this paper, monitoring is used in order to measure QoS attributes of web services in Service-Oriented Architecture (SOA). Windows Performance Counters (WPC) is a windows component which supports application monitoring. The main focus of this paper is applying performance counters for monitoring of web services in order to measure their QoS attributes such as response time and throughput at provider-side. We introduce CWPC monitoring approach in detail and we describe employing performance counter facilitate QoS measurement process. Additionally, the results of monitoring via performance counter for measuring QoS attributes such as response time and throughput are presented which can be considered for taking management decisions like adjusting proper monitoring interval.

Keyword: Monitoring; Performance counter; Web services; Quality of service; SOA.