Riverbed Optimizes IBM WebSphere MQ

IBM WebSphere MQ

WebSphere MQ is a reliable, ubiquitous messaging backbone for Service Oriented Architecture (SOA). It provides assured once and once-only reliable delivery of information between applications, Web services, data sources and Web 2.0, even in the event of unplanned network and resource outages. It enables applications to use appropriate qualities of service to match business need, reducing the risk of service problems caused by loss of data. WebSphere MQ provides end-to-end transactional integrity of information, using queuing to preserve the integrity of messages across the network. Built-in clustering capabilities provide dynamic workload balancing, high availability, resilience, robustness and helps manage service level agreements (SLAs).

WebSphere MQ simplifies the integration of services by abstracting infrastructure complexities and reducing integration logic in business applications. WebSphere MQ enables customers to leverage their existing skill through a wide choice of simple APIs (Message Queue Interface (MQI) and JMS, XMS) and programming languages that are consistent across more than 80 different platform configurations, provided by IBM, business partners and third parties.

Steelhead Appliances Improve WebSphere MQ Message Throughput

Steelhead appliances significantly increase the number of messages that can be sent over a wide area network (WAN) link. For global SOA implementations, this optimized WebSphere MQ capability offers the unique benefit of tying the SOA fabric together more tightly. This enables organizations to scale their transactional and Web services architecture across distributed locations, while simultaneously maintaining message reliability and improving throughput.

The Riverbed Optimization System (RiOS) utilizes industry-leading data streamlining and transport streamlining to provide data reduction, compression and transport protocol optimization. RiOS performs its byte-level data reduction through a combination of data deduplication and compression to eliminate the transmission of data across the WAN if the Steelhead appliance has already seen it before. Moreover, RiOS applies its data reduction technique in an application independent fashion so that data utilized across different applications is also never resent. The net effect is a 70% reduction in WebSphere MQ traffic on the WAN allowing organizations to save on bandwidth costs and increase capacity.

Performance Improvements

Test results show that Riverbed Steelhead appliances significantly increase the number of WebSphere MQ messages that can be sent over a WAN link. The capability to send unique one-way XML messages increased more than 2.9 times from 73.2 messages per second (mps) to 213.75 mps. Similarly, an increased capacity of more than 2.2 times was seen for unique two-way XML message throughput from 83.8 mps to 191.83 mps. Steelhead appliances also reduced bandwidth utilization more than 70% during messaging operations.
**DEPLOYMENT BENEFITS**

Deploying Riverbed with IBM WebSphere MQ produces significant benefits:

- **Enhanced business results.** As the volume of business data continues to grow unabated, the resulting increased message throughput enables companies to easily scale and handle increased business demands and transaction loads. Greater transaction capacity improves performance while minimizing lost or abandoned orders to enhance customer satisfaction.

- **Increased message throughput.** Data deduplication and latency reduction enable greater throughput for messages across a distributed Web services environment. Even SSL secured message throughput can be increased significantly.

- **Bandwidth cost savings.** Reducing bandwidth utilization for WebSphere MQ allows organizations to leverage network links more efficiently or defer upgrades for years to come.

---

**About Riverbed**

Riverbed Technology is the IT infrastructure performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers. Thousands of companies with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com