China Bank

The Bank Had Many Monitoring Tools, But Nothing That Could Explain Why End-Users Complained That Their Apps Were Slow. With SteelCentral AppResponse, the Bank Now Has Complete Visibility Into All Business-Critical Applications.

The bank has more than 200 banking outlets throughout China and relationships with more than 700 banks overseas.

Challenge: Complaints about application performance showed need for greater visibility

Although the bank's IT department had created an advanced infrastructure that constantly monitored the performance of its PCs, networks, servers, databases and other components, end-users still complained from time to time about slow application performance.

There were some traffic analysis tools in the datacenter, but the granularity of network traffic monitoring was rough, and application-based monitoring was inadequate. The capabilities fell short of true business-oriented visibility into network traffic and application performance. Also, the IT team had no way to systematically monitor end-user experience. Nor did it have any kind of early warning system that could alert IT to potential performance issues.

When a problem occurred, the teams responsible for the network, system, database and application domains would try to figure out the root cause separately. Each fought its own battle without a clear direction or coordination. No live data was available to trace an issue. In most cases, troubleshooting was based on device and transaction logs only, and it was difficult to pinpoint the source of the problem.

These shortcomings delayed problem resolution and often caused more adverse impacts. The bank decided to bring in advanced network performance management (NPM) and application performance management (APM) solutions.

The goals for the project included

- A complete platform for network traffic monitoring and analysis
- Centralized monitoring of the performance of business-critical processes

- Graphic visibility of business performance and network performance
- Early warning and alarms regarding business performance and network performance

- Monitoring and optimization of end-user experience
- Fast location and analysis of performance failures
- Retrospective analysis and diagnosis of historical data

In Brief

Challenges

- Gain visibility into the end-user experience
- Accelerate troubleshooting
- Create an early warning system for addressing network and application performance issues proactively
- No systematic way to monitor end-user experience

Solution

- SteelCentral AppResponse

Benefits

- Deeper visibility into end-user experience based on service-level monitoring
- Faster, more accurate troubleshooting
- Enhanced overall operation, maintenance and collaboration capabilities of the team
- Fewer end-user complaints

Solution: End-to-end application visibility and alerts to potential problems

The bank built a network and application performance visibility platform on Riverbed® SteelCentral™ AppResponse, a network-based APM solution that provides real-time application performance monitoring based on actual end-user experience.

The platform has two components. One is traffic aggregation using a network packet broker, which collects packet data from each network domain through port mirroring, using SPAN technologies, and distributes it to the AppResponse appliances as needed. AppResponse then takes the packet data and uses it to determine the end-user experience.
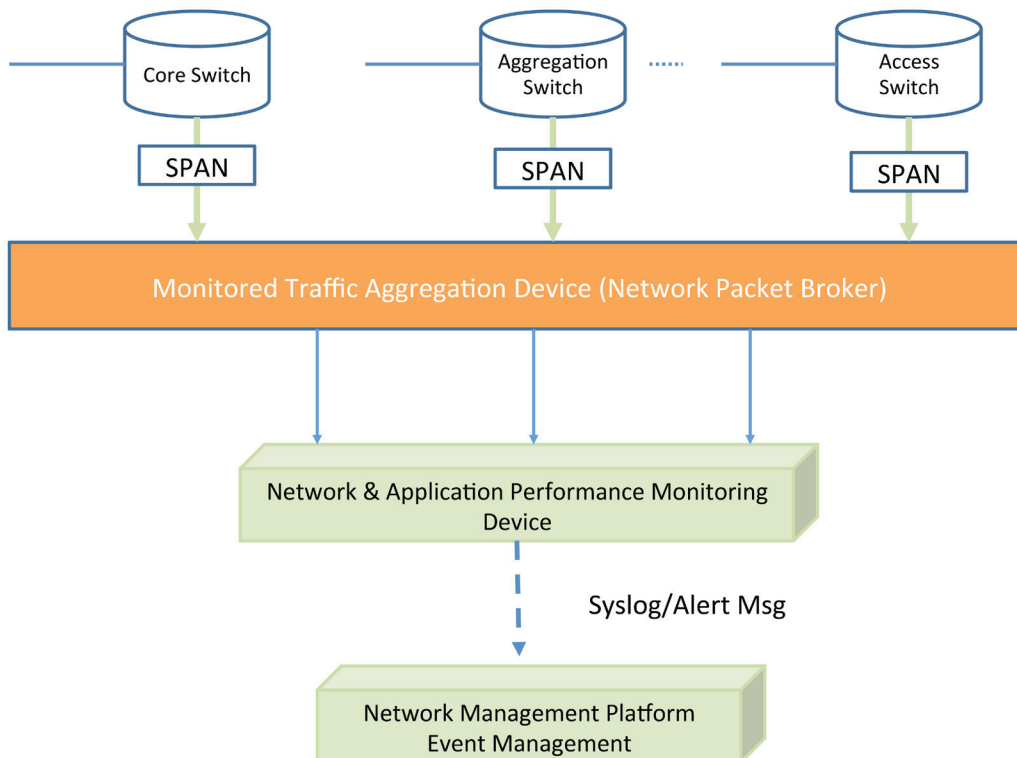
Network and application performance visibility platform: Traffic aggregations

The second is the traffic monitoring and analysis platform, which includes AppResponse. Aggregated and deduplicated packet data from the network traffic aggregation platform is analyzed in real time by AppResponse to provide visibility into network traffic, application performance, transaction analysis and end-user experience.

The IT team deployed AppResponse in all key business domains to achieve granular monitoring of business-critical network traffic. They were also deployed at the core switching uplink of every branch to the head office,

for full monitoring of the traffic where the branches, offices and sub-branches access the centralized core business system. In all, several traffic aggregation devices and 32 AppResponses were deployed across the bank.

The broad range of visibility enabled by AppResponse delivers fully visual and granular monitoring of network traffic and application performance of the business-critical systems across the bank.

Network and application performance visibility platform: Traffic monitoring and analysis

In order to achieve proactive, response monitoring, rather than continuing with the previous more reactive troubleshooting approach, the IT team leverages AppResponse:

- For early warning and alarming of all business-critical processes

- For strong data analysis and statistics of business qualityTo enable the optimization and enhancement of business performance

- To facilitate the development and testing of new services

- As the foundation for future analysis of big data mining
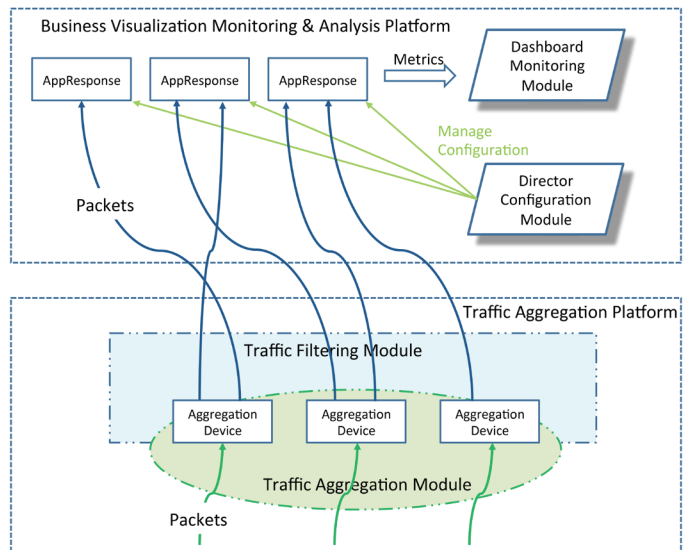
Benefits: Faster, more accurate troubleshooting and fewer complaints from end-users

With a solid network and application performance visibility solution now in place, each of the bank's domain teams now shares a common view of performance across the business, eliminating the guesswork and finger-pointing, and empowering them to get down to the facts about how the applications are actually performing. Mean time to resolution has improved, resulting in increased employee satisfaction and fewer complaints from end-users.

About Riverbed

Riverbed, at more than $1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com.

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