Citrix Analysis Module for SteelCentral AppResponse

Correlate front-end user sessions to back-end transactions to understand where and why problems are occurring in Citrix Virtual App and Desktop (formerly XenApp and XenDesktop).

Citrix Virtual App and Virtual Desktop are two of the most performance sensitive applications in the enterprise. Poor performance results in screen freezes, slow logins, slow application launches, keystroke lags, session disconnects, etc. Since a Citrix farm supports hundreds of users, a slowdown often impacts them all. Thus, poor Citrix performance can have a significant business impact.

While Citrix deployments can reduce IT costs and simplify IT deployment and support, the performance troubleshooting process can be tricky due to its unique architecture. Citrix acts as a proxy for back-end applications, relaying information between the user and the back-end tiers that process the user transactions. It is difficult to relate user traffic on the front-end to proxied sessions on the back-end.

Identifying the exact cause of a Citrix performance issue is a challenge because there are many different server tiers with inter-dependencies between them. Furthermore, any of the server tiers can be hosted in cloud or virtual environments, complicating troubleshooting further.

The lack of an end-to-end view into Citrix Virtual App and Desktop transactions makes it difficult to identify and troubleshoot user experience problems. By default, problems are typically blamed on 'the network'.
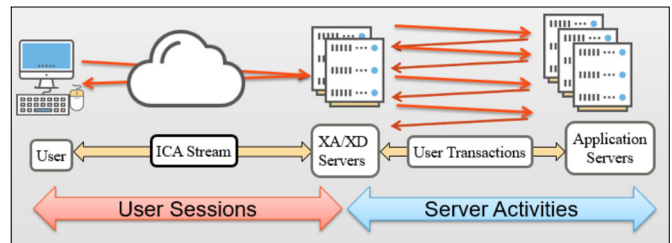

Figure 1

Citrix troubleshooting is complicated because it ties front-end user session with the back-end server activity information. SteelCentral AppResponse can correlate user and server activity to help you understand where and why Citrix problems are occurring.

SteelCentral AppResponse

Riverbed® SteelCentral™ AppResponse delivers full stack application analysis—from packets to pages – letting you observe all network and application interactions as they cross the wire. Using powerful network and application analytics and flexible workflows AppResponse speeds problem diagnosis and resolution to help you get to answers fast.

Citrix Analysis Module

The SteelCentral AppResponse Citrix Analysis module provides end-to-end visibility of user transactions traversing a Citrix Virtual App or Virtual Desktop server. Citrix Analysis leverages AppResponse's industry-leading analytics to isolate performance problems to the Citrix user or Citrix server activity. Using this information, IT operations teams can:

- Correlate front-end user sessions to back-end server activity to understand where and why problems are occurring

- Follow an individual user session through the Citrix tier to understand where and why problems are occurring

- Continuously monitor end-to-end Citrix user performance

- Monitor server-side and port latency, turns, utilization, connections, and retransmissions

- Drill into the performance of the network, database, Web applications or other Citrix application tiers

- Monitor client-side latency, application execution time, host resource allocation, and infrastructure latency
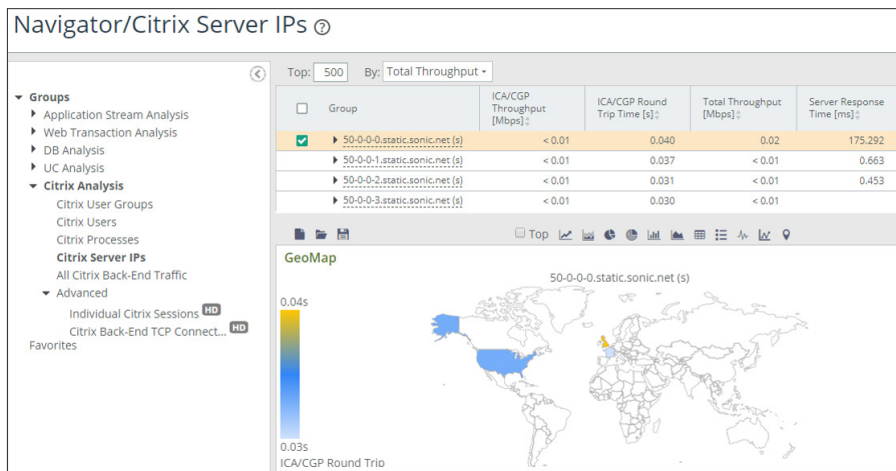

Figure 2
The Citrix Analysis module provides detailed information into the Citrix Server tier, including front-end RTT, back-end response time composition, the apps, databases, web apps currently running, throughput, server turns and retransmissions, Geomaps that show country and region, and more to enable easy diagnosis of Citrix problems.

Benefits

Use SteelCentral AppResponse Citrix Analysis to:

- Accelerate Citrix troubleshooting by rapidly pinpointing the root causes of Virtual App and Virtual Desktop problems

- Understand end user experience for Citrix-hosted applications

- Clearly prove when the Citrix infrastructure is not the problem

- In a glance, understand if the problem resides with the front-end user session or the back-end server activity
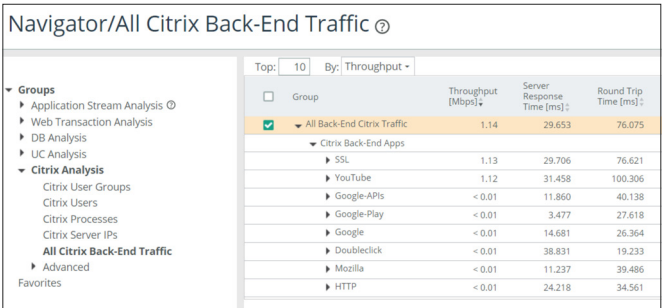
Key Features

Three Insights:

- Citrix Servers

- Citrix Users

- Citrix User Sessions

Five Navigators:

- Citrix User Groups

- Citrix Users

- Citrix Processes

- Citrix Server IPs

- Citrix Back-End Traffic

- Compare front-end round trip time to back-end response time composition for Citrix user sessions to see where delay is occurring

- Correlate front-end user sessions to back-end server activities on a single screen with front-end round trip time (RTT), back-end response time composition chart, Citrix processes, back-end apps, back-end servers and ports, front-end and back-end TCP connections

- Troubleshoot back-end server activities using Top Citrix servers, Citrix processes, Apps, Client IPs, Connected servers, Databases, Web apps, Web page families, and GeoMaps showing country and region

- Troubleshoot network issues using throughput, packet throughput, request and response retrans throughput, server turn rate, Citrix session duration, ICA/CCP compression rate, Citrix sessions started, Citrix sessions finished

- Integrates with SteelCentral Aternity, end user experience monitoring from the point of consumption—the user's device

Figure 3

With the AppResponse Citrix Analysis module, you can investigate the performance of all the Citrix back-end traffic.

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