

Radware Application Performance Monitoring (APM)

Real-time isolation and remediation of performance bottlenecks

With productivity, customer loyalty and the bottom line all at stake – today's IT manager must effectively address business-application delays and ensure service levels (SLAs) with customers, business partners and internal business units. However, without detailed visibility into application performance or the ability to accurately pinpoint the source of performance degradations in a complex and distributed environment, precious time and resources can be wasted on finger-pointing and irrelevant remediation attempts.

Radware Application Performance Monitoring (APM) module extends the capabilities of your application delivery and security solutions to proactively monitor and measure end-to-end performance metrics, identify the location of bottlenecks along the application delivery path, and apply network and application-level remediation techniques.

With Radware APM, real-time users' traffic can be analyzed across a broad array of relevant parameters such as response time and transaction failure rate. Baseline thresholds can be set and automatic alarms triggered to detect SLA-breaking degradations and isolate root causes. Immediate and relevant remediation can be applied using the array of load-balancing, layer 4-7 switching and traffic shaping techniques that are already built into your Radware solution, so that problems are mitigated with minimal operational impact.

With your Radware solution – getting APM is simple

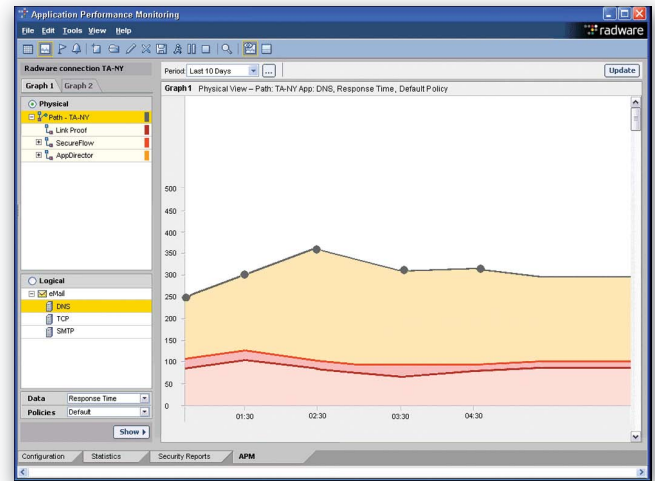
Radware APM extends the capabilities of your existing Radware AppDirector and DefensePro solutions by measuring and analyzing real-time, end-to-end traffic flowing through your application delivery production environment. The operational impact is minimal with no additional, costly probe or data-aggregation appliances that need to be purchased and no server-side or client-side software agents that need to be deployed, updated or managed. Radware APM measures actual user-traffic – not simulated transactions, so any overhead associated with simulation set-up is unnecessary, and monitoring is more accurate.

Highlights and Benefits

- Real-time visibility into application performance
- Wide set of performance metrics, aggregated from single or multiple touch-points on the application delivery path
- Proactively monitor business-critical application performance and trigger alarms when SLA thresholds are not met
- Reduce operational impact of troubleshooting Web-based and distributed business-applications
- No costly additional deployment of probe appliances or software agents necessary
- Prevent “finger-pointing” between network & application teams
- Isolate bottlenecks on the application delivery path and immediately apply built-in layer 4-7 switching and traffic shaping remedies on the fly
- Support planning and rapid application deployment and ensure performance levels in production environment

Monitor and isolate application delivery bottlenecks

Simply measuring delays at the end-user isn't sufficient to determine the root cause of performance degradations. Today's application delivery path can span multiple data-centers and include: a complex WAN, security devices like firewalls, load-balancers, and multiple server farms and databases. Radware APM utilizes measurements from multiple points along the physical transaction paths to isolate specific bottleneck points and report on them in real-time. The location and cause of a breakdown or slow-down by a specific application e.g. Oracle, Web-Portal or Email can be granularly determined, including which set of users, e.g. customers or employees, is experiencing the degradation and which servers are underperforming.



Proactively monitor granular SLA thresholds

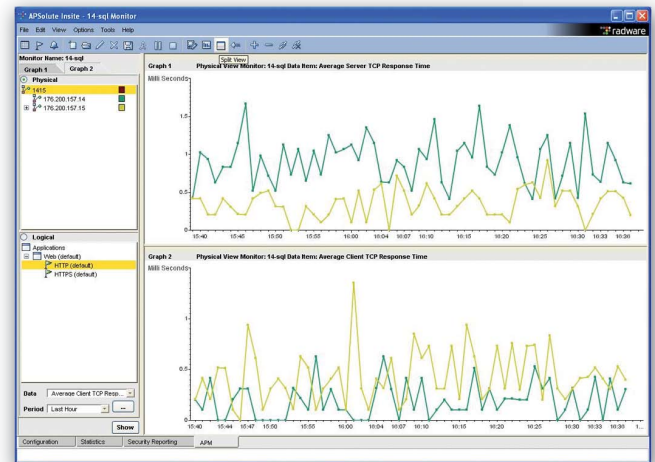
Radware APM provides administrators with a rich set of application-relevant parameters to measure traffic at various points along the delivery path. These include:

Response Time:

- Client (TCP)
- Application
- Server (TCP)
- Round Trip (TCP)
- Full SSL Handshake

Application/Transaction Stats:

- Total Bandwidth Consumption
- Average Number of Concurrent Sessions
- Total Number of New Sessions
- Total Number of New Transactions
- Total Number of Transaction Failures
- Network Efficiency
- Success Rate
- Network Utilization
- % Incomplete Full SSL Handshake
- % Incomplete Application Response



Application SLAs with external and internal users can be base-lined and proactively monitored by setting thresholds against any of the above metrics and issuing alerts when performance numbers go below desired levels.

Respond to performance and SLA problems in real-time

Coupling Radware APM's granular performance measuring and bottleneck isolation capabilities with the built-in load-balancing, layer 4-7 switching and bandwidth management features creates a complete and powerful application delivery solution that combines troubleshooting and remediation. Administrators need only access a single management console to gain deep insight into the performance of their application infrastructure, pinpoint the location and cause of degradations and apply traffic redirection or traffic shaping policies to bypass bottlenecks or reallocate network resources to meet current user needs. Solution effectiveness can again be immediately measured and any adjustments can be applied on the fly. The result is a very operationally efficient approach to managing the service levels of your business critical applications.

Supported Applications

- Oracle: integrated with Oracle application management module
- Web: HTTP and HTTPS
- Email: SMTP, POP3 and IMAP4
- Any user defined, TCP-based application

Requirements

Management versions:

Insite ManagePro v2.60 or higher

Device versions:

AppDirector v1.06 or higher

DefensePro v3.20 or higher