Progress® | Flowmon

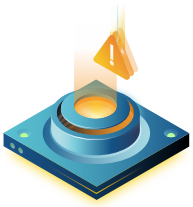
Flowmon APM

FLOWMON APM

Flowmon Application Performance Monitoring (APM) is a system for measuring user experience and the performance of business-critical applications. It speeds up trouble-shooting and provides solid data on usage, capacity, error rate and SLA, thereby helping to avoid customer churn and create conditions for employees to work productively.

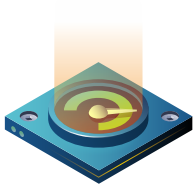
Flowmon APM

Helps with application troubleshooting, capacity planning, SLA and user experience monitoring.



Delivers decisive intelligence to pinpoint the cause of problems – network, web application, or database.

Allows administrators to be proactive and resolve incidents before employees lose productivity and customers leave.



Is agentless and unobtrusive; it measures application transactions on the network.

Key features and benefits

Agentless

Passive network sensors capturing application transactions to provide insights without any impediment to application performance or security.

Real-time insights

Prevent danger from escalating and act before users start suffering from degradations.

Universal deployment

Flowmon APM is independent of the application server, database or operating system, and is well-suited for heterogeneous environments.

Fast time-to-value

Get actionable application performance metrics in minutes. Configuration takes three easy steps.

ROI in weeks

Do not lose revenue over critical application degradation. Flowmon is time and cost-efficient, usually reaching break-even point within weeks.

Short incident response time

Incidents are detected in real time and displayed as context-rich events to provide clear guidance for appropriate remediation.

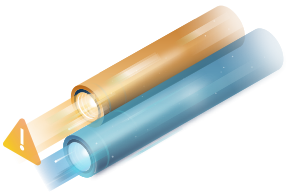
NetOps and DevOps together

The system clearly shows whether incidents originate from the network or application and helps the two teams to optimize investigation.

Use cases

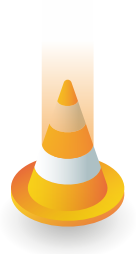
Cloud Migration

With native support of AWS, Azure and Google Cloud Platform, you get all the convenience of the cloud at zero cost of transparency.



Capacity Planning

Context-rich statistics and reporting will provide admins with a clear view of application usage and create a firm ground for purposeful resource allocation.



Ensuring Application Availability

Identify bottlenecks, monitor error codes and measure SLA compliance from a single dashboard. Flowmon is agentless and provides intelligence on the cause of problems without any impact on performance.

User Experience Monitoring

The solution monitors applications from the user's perspective, providing full transparency into the application delivery chain for easy troubleshooting and root-cause analysis.

End-to-end visibility

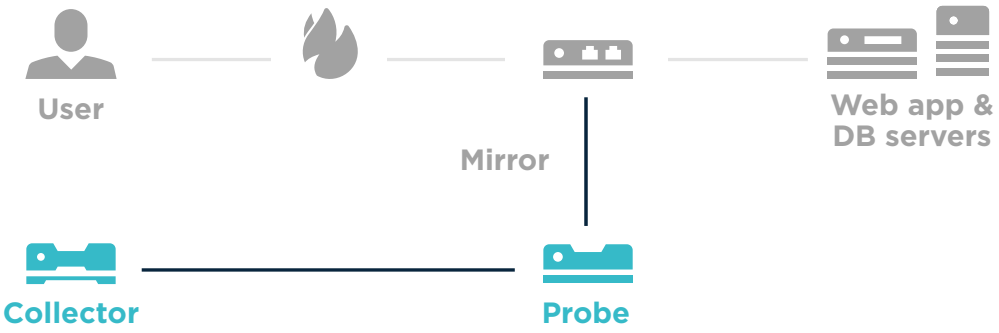
By collecting performance metrics on user, network, application and database behavior, and correlating what happens at each point, Flowmon APM is able to locate the source of issues regardless of which environment it is deployed in. It uses intelligent algorithms to identify those transactions that, when resolved, will deliver the greatest overall improvement to application performance.

How it works

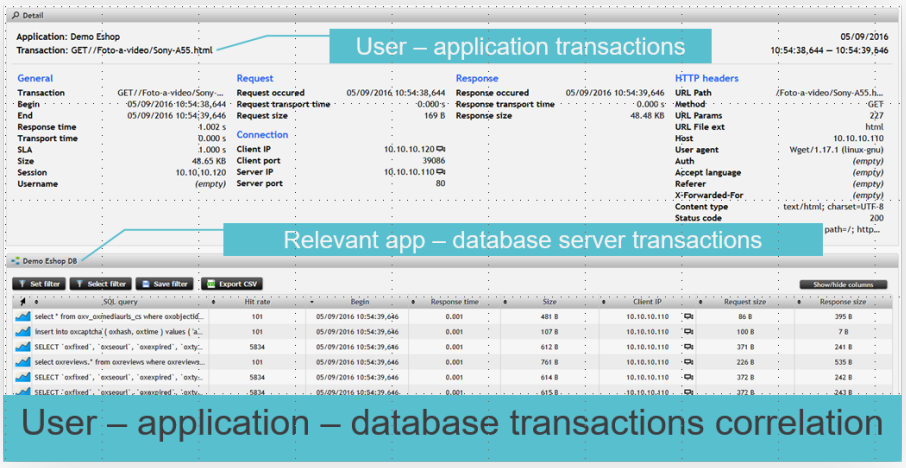
Network-based application monitoring requires no agents or any changes made to the infrastructure. It can give an authentic picture of application performance the way the end user experiences it.

Measurement

Flowmon APM collects information for all users and user transactions at any given moment. It tracks interactions between users and application servers as well as application and database servers.



The collected metrics are then correlated and provide information about which element along the application delivery chain is causing delays and where bottlenecks may lie.



The main performance metrics are Application Response Time measuring the delay caused by the application and Transport Time which represents a delay introduced on the network level.

Network and Application Delay Metrics

Application Response Time (ART)

Time difference between the last packet of the request (from client to server) and the first packet of the response (from server to client). Request and response refer to transaction on the application layer.

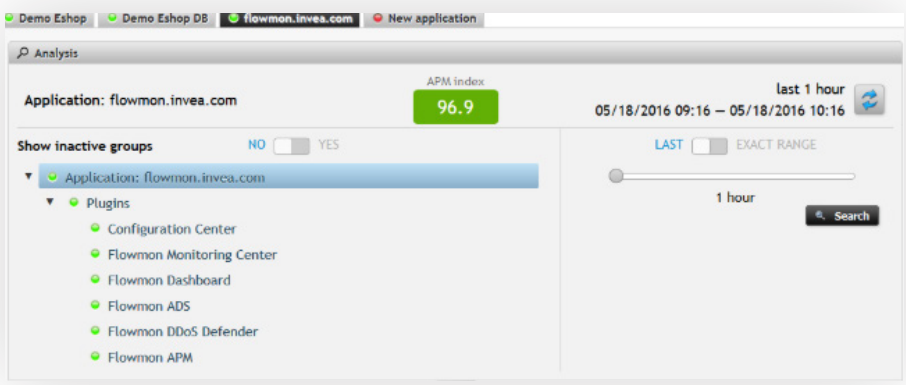
Transport Time (TT)

Time difference between the first and last packet of the request (in case of client-to-server communication) or the first and last packet of the response (in case of server-to-client communication). Request and response refer to transactions on the application layer.

The data is expanded by additional transaction details such as the full SQL statement and full URLs, as well as size, IP address, session ID, username, browser information and server status code. This provides plenty of information for troubleshooting and optimization.

Analysis

The system computes one main metric, which is the APM index. It is derived from the Application Response Time for all transactions and expresses the fulfilment of the user-defined SLA as a percentage score. It's a quick and easy way to get a global view of the application's performance and to know when the SLA is not being met. Additional metrics are available, including response time of 99% and 95% from the transactions, median as well as multitudes of SLAs.



Active SLA testing

Flowmon APM Transaction Generator is a free-of-charge module that simulates user behavior and reports on SLA. Its main purpose is to assist with automated application testing to check the availability, proper functionality and response of their business-critical HTTP and HTTPS applications.

The module executes a set of test scenarios (Selenium) over defined time plans. The outcome is an SLA report (availability), scenario result (success/failure), response time reading and screen capture if an error occurs.

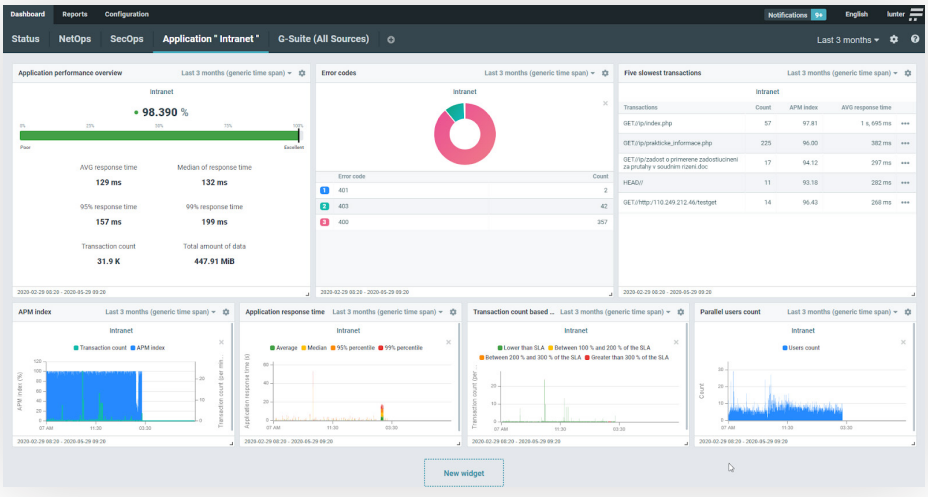
This is an excellent early warning detection system, as it works even in off-peak times, where there are no users interacting with applications. In such cases, APM cannot measure their experience, but synthetic monitoring can. Together they create a holistic system that covers all the bases of application availability monitoring.

For more details, see this blog post:
flowmon.com/en/blog/gift-flowmon-apm-transaction-generator

Visualization

All this information is displayed on the dashboard - a highly customizable information space with detailed widgets and drill-down options all in a single view. Different dashboards can be created for each application or user, complete with adjustable user permissions.

The dashboard also features alerting capabilities and the option to set up regular reports to always stay informed on application status and degradations.



APM Approach Comparison

Capability	Network-based APM	Agent-based APM
Monitor all real transactions	✓	✓
Distinguish delay introduced by network, application server and database	✓	✓
Analytics and transaction drill down	✓	✓
Track a transaction through the application chain	✗	✓
Drill down into the code level	✗	✓
Transaction correlation	✓	✓
OS/Application server independence	✓	✗

The main differentiator of measuring application transactions on the network is that it is unintrusive, and therefore does not hinder performance or present a security threat. Because it is neither OS- nor application version- dependent, it can be deployed anywhere in 3 quick steps. And while it may not provide the same level of detail as agents, it still reflects real user experience, which is what is needed in a majority of cases. Network-based APM represents the best value for money on the market.

Configuration in 3 simple steps = deployment to data on dashboard in 30 minutes

Flowmon APM works in conjunction with Flowmon Probe. Once you have your Probe in place (as you would for normal traffic monitoring), setting up APM to deliver all the statistics takes only three simple steps.

1. Configure your Flowmon Probe to perform packet sniffing to see the packets between the users and application server.
2. Enter the application server protocol, IP address and port
3. Identify the application by a specific hostname, database name or other indicators

Done! In less than half an hour, you have all the application performance analytics, APM Index and drill-down options right on your dashboard.

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