APM refers to application performance management or application performance monitoring. In the fields of information technology and systems management, application performance management (APM) is the monitoring and management of performance and availability of software applications. APM strives to detect and diagnose complex application performance problems to maintain an expected level of service.

APM Tools:

- >>Dynatrace.
- >>Splunk Enterprise.
- >>Microsoft System Center.
- >>New Relic APM.
- >>Amazon CloudWatch.
- >>Database Performance Analyzer.
- >>Datadog.
- >>SolarWinds Server & Application Monitor

AppDynamics' capabilities:

Automatic Application Mapping:

While most web APM Management solutions require manual configuration and code changes to deploy, AppDynamics automatically instruments your code and maps your entire application architecture.

Business Transaction Monitoring:

AppDynamics, unlike most application performance tools, understands application performance in terms of business transactions, or user requests. By giving you business transaction context into your performance bottlenecks, AppDynamics enables you to understand application performance the way your end users experience it, and to prioritize issues based on their business impact.

Code-Level Application Performance Diagnostics:

With AppDynamics, you can drill down into a specific call stack trace to find class and method-level detail around response time latency in a matter of seconds. While many application performance monitors display response time correlation across the application, AppDynamics

offers both wide and deep visibility, allowing users to get to root cause of performance issues in a matter of seconds.

Compare Performance of Application Releases:

Have you ever wished you could compare snapshots in your application performance management tools from before and after a major code release? Now you can do that in AppDynamics with its new Compare Releases feature. Find out how a recent release affected your production environment and your end users in a single dashboard.

Proactive Alerting on Application Performance Metrics:

With AppDynamics, you can set alerts based on application-level and infrastructure-level metrics as well as Business Transaction performance. While other application performance management tools rely on static universal thresholds for alerting, AppDynamics is much more fine-grained, which allows you to avoid alert storms and, even worse, missing problems.

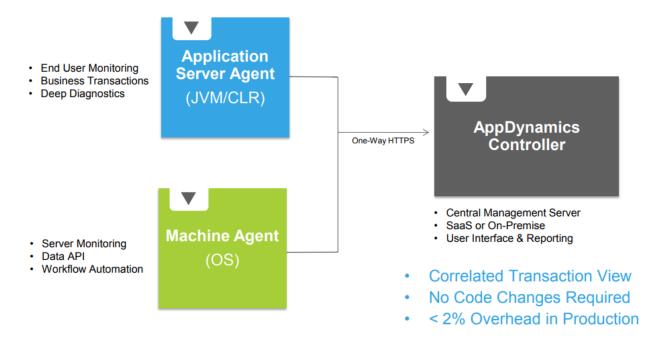
Dashboards and Reports:

Keep management in the loop with high-level application performance dashboards and PDF reports. Dashboards and reporting allow you to evaluate the cost of performance outages and slowdowns as well as demonstrate the value of your performance tuning projects.

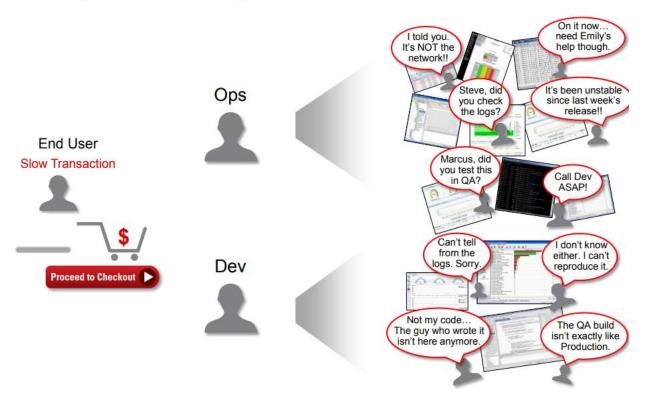
Note: There are two flavors in AppDynamics:

- ✓ Lite Viewer
- ✓ Application Server Agent.

AppDynamics Production Monitoring Architecture



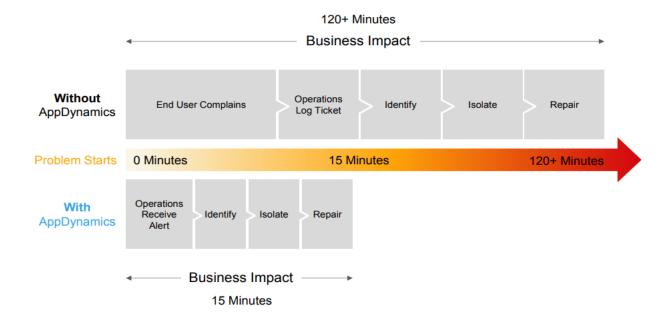
Example: A User Complains of a Slow Transaction



Manage Your Business Transactions with AppDynamics



Reducing Business Impact and MTTR with AppDynamics



Languages Supported:

- Java
- ➤ .NET
- ▶ PHP
- ➤ Node.js
- C++
- > Python
- **≻** Go
- Extensions

Databases Supported:

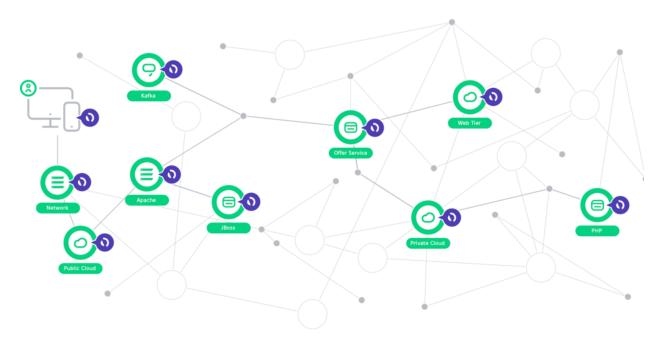
- Mysql
- Oracle

Servers Supported:

- > Weblogic
- > Tomcat,
- ➤ JBoss
- Websphere
- Glassfish
- > Jetty
- OSGi Containers
- > Tanuki service wrapper

Agents and Controller:

- Agents are plug-ins or extensions that monitor the performance of your application code, runtime, and behavior.
- ➤ They are deployed to every corner, from devices to containers and hosts to application. The Controller receives metrics from Agents and sends them instructions.
- All of this performance activity is displayed via the Controller UI.



Agents

Once deployed, Agents immediately monitor every line of code. Unique tags are assigned to every method call and every request header. This allows AppDynamics to trace every transaction from start to finish—even in modern, distributed applications.

Supported platforms: AWS, Microsoft Azure, Google Cloud and multi-cloud.

Controller:

Agents capture performance activity across application code, servers and network nodes with minimal overhead. The Controller is updated in real-time, even in hyper-complex applications with thousands of agents. The Controller helps monitor, troubleshoot and analyze your entire application landscape—from backend infrastructure to the end user—in one simple interface.

Note: Controllers are configured by a **controller-info.xml** file.

AWS APPDynamics:

AppDynamics provides a powerful, easy-to-use, unified Application Performance Management (APM) and business performance monitoring solution designed for complex, distributed architectures. With AppDynamics, you can:

- Monitor AWS-based applications including microservices and Docker. End-to-end support is provided for all native AWS technologies such as EC2, RDS, SQS, S3, DynamoDB and Lambda through integration with AWS CloudWatch.
- Migrate your applications into AWS faster with automatically generated application topology maps, discovery of important interactions and user journeys, resource utilization tracking, and

AppDynamics

the ability to compare pre and post move benefits.

- Instantly scale up AWS instances. Cloud Auto-Scaling allows you to increase application capacity when you need it in order to avoid over-provisioning and provide uninterrupted performance during busy business periods.
- Improve your applications in AWS with business performance monitoring. Make clear, understandable correlations between the quality of your customers' experiences with your applications and the business outcomes that improve with every release.

Highlights:

- End-to-end monitoring of cloud native applications on AWS.
- Accelerate your migration to AWS and prove the benefits.
- Seamless, real-time performance monitoring across on-premises and AWS environments.

Pricing Information

Below are the total costs for these different subscription durations. Additional taxes may apply.

AppDynamics Application And Business Performance Monitoring		
Units	12 MONTHS	36 MONTHS
Java APM	\$3960	\$9100
.Net APM	\$3960	\$9100
Python APM	\$3960	\$9100
РНР АРМ	\$3960	\$9100
NodeJS APM	\$3960	\$9100
C/C++	\$3960	\$9100
Apache Web Server	\$3960	\$9100
Database Visibility	\$3960	\$9100