TOP AIOPS TOOLS & HOW TO CHOOSE

AIOps tools consume different data sources, collect the application logs, and measure the heath of your systems through automated capabilities like:

- Pattern discovery
- Anomaly detection
- Root cause determination

Today's AIOps tools have moved beyond their infancy and seem to be growing rapidly. Still, each vendor tends to specialize in one area, so there are certain features to look for, given your enterprise requirements.

In this article, we'll take a look at AIOps products, including what makes it AIOps (and what doesn't). Then, we'll sum up some leading AIOps tools and vendors.

AIOps debrief

AIOps is short for Artificial Intelligence for IT Operations.

AIOps tools are multi-layered technology platforms that automate and enhance IT operations by using analytics and machine learning to analyze big data collected from various IT operations tools and devices. AIOps platforms help IT Ops departments automatically spot, react to, and report on IT Ops issues in real time.

The heart of any AIOps platform combines big data with machine learning to support and partially replace processes and tasks in IT domains like:

- Monitoring
- Service desk & technical support
- Automation

(Learn more in our AIOps explainer.)

What makes an AIOps product?

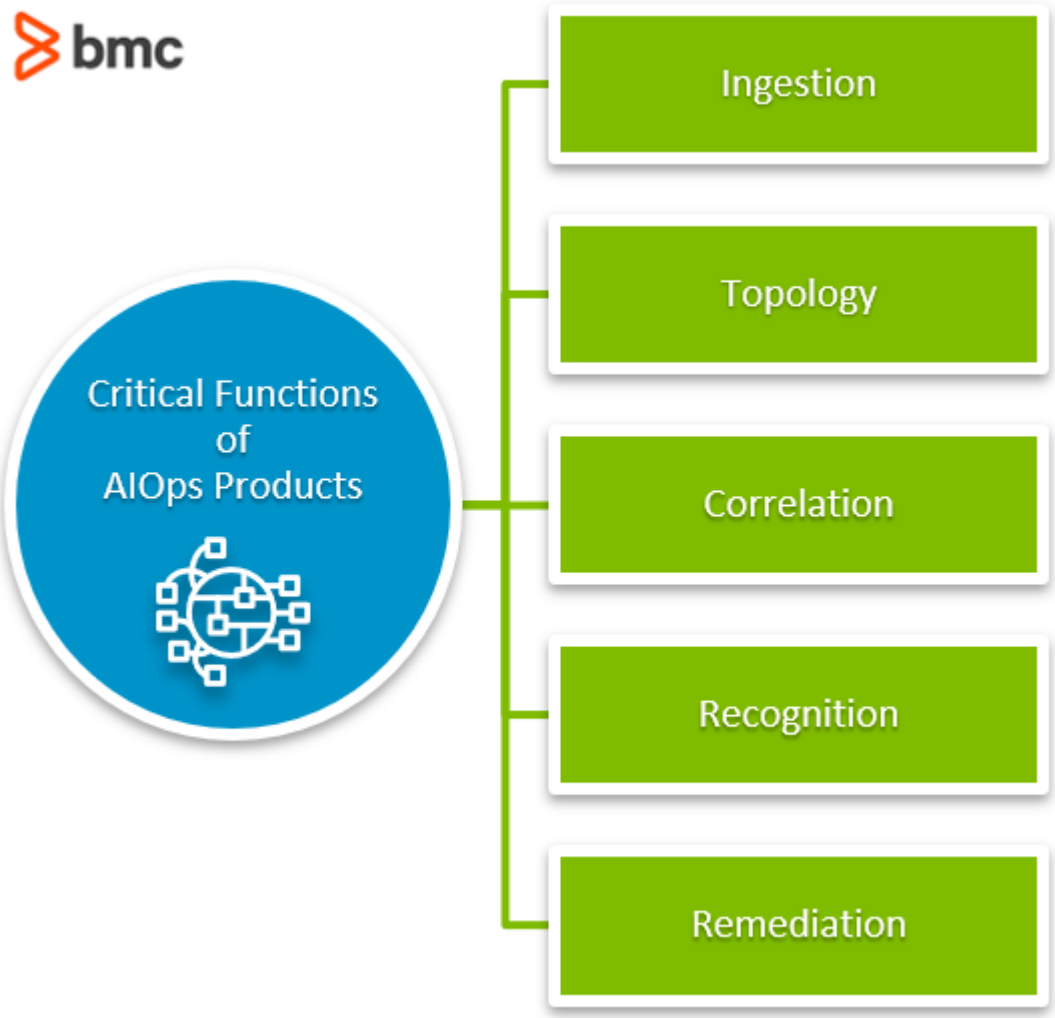
AIOps is already transforming the IT Operations methodology and overall spending, so it benefits everyone to understand what vendors, products, and services make up the AIOps marketplace.

The goal of AIOps isn't simply to implement new tooling. A successful AIOps implementation:

- Gathers and consolidates operational information into a big data platform.
- Uses analytics and machine learning to identify, react to, and report on IT issues in real time.

The goal here, says Gartner, is to curate and enhance quality data so infrastructure and operations (I&O) leaders can tie use cases to relevant practices and business persona.

When looking for products in the AIOps marketplace, it helps to remember AIOps is a multi-layered platform with many elements. According to Gartner's 2021 report, the main functions of any AIOps platform must include these five functions:



Let's take a look at each characteristic.

Ingestion

An AIOps platform must be able to ingest, index, and normalize events and/or telemetry from a range of domains, vendors, and sources, including but certainly not limited to:

- Networks
- Infrastructure
- Apps
- Existing monitoring tools
- The cloud

The platform must also use machine learning to support both historic and real-time (streaming) data analysis.

Topology

The AIOps platform must discover and assemble a unified topology of IT assets. That means the platform must understand how proximity, logical dependencies, and other dimensions can apply to the relationships between IT assets and the services you're delivering.

Correlation

An AIOps tool must correlate and compress events in order to reduce unnecessary human intervention. Here, it is combining time and topology to group-related events.

Recognition

Any AIOps tool must be able to process event and telemetry data to detect or predict important events, incidents, or other issues. Because it uses ML, the platform should continually learn and improve the individual patterns of events that are important.

Remediation

The AIOps platform must continuously learn and improve on the associations between each important event and the operations team response to it. The platform can do this in two ways:

- Explicitly being told by the operator
- By observation

What isn't AIOps?

Here's an easy way to test if a product is actual AIOps—or not.

- Is the product simply a data storage/retrieval system? Not AIOps.
- Are the product's functionalities limited to trend analysis, forecasting, and querying vast datasets? Not AIOps.

(Answer these 10 questions when determining what AIOps solution to buy.)

Popular AIOps tools & vendors

Now that we know what makes up an AIOps tool, we can look at some platform options.

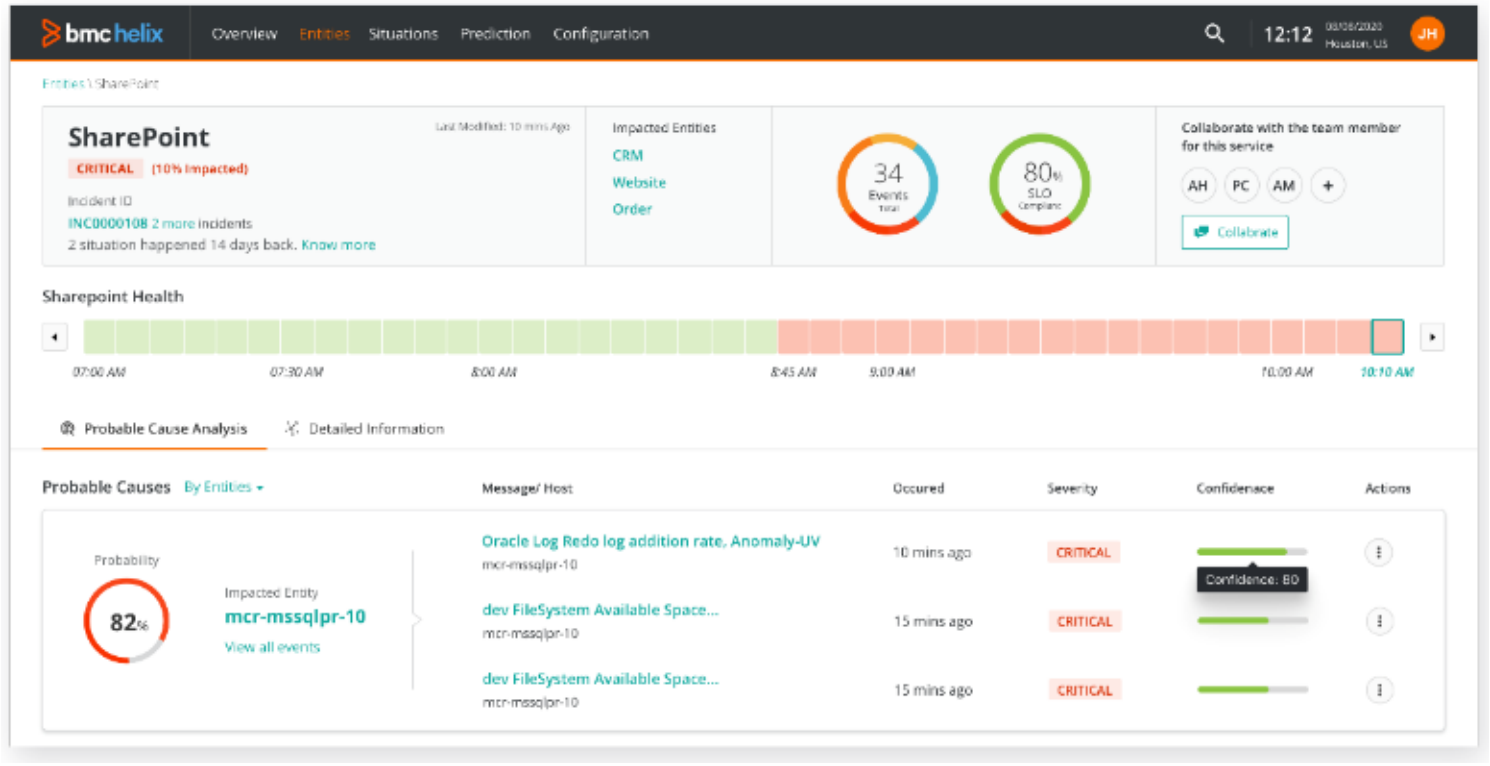
Like most software categories, not every vendor provides products in each category. It's best to look at the vendor's full range of AIOps offerings and consider future needs as you start deploying your own AIOps platform.

For starters, here's a good list of well-known AIOps tools and vendors.

BMC Helix Operations Management

BMC Helix Operations Management helps you proactively improve service performance and availability, relying on an AIOps-driven combination of:

- Service-centric monitoring
- Advanced event management
- Next-generation probable cause analysis



BMC Helix Operations Management

BMC Helix Operations Management can be used alongside the new BMC Helix Platform, an open solution that delivers open, cross-domain engagement, observability, and actionability. A global leader in software solutions, BMC delivers not only AIOps solutions, but also AI-driven service management (AISM) capabilities, which might be the full solution ITSM/ITOM teams are looking for.

(Learn more about AIOps at BMC.)

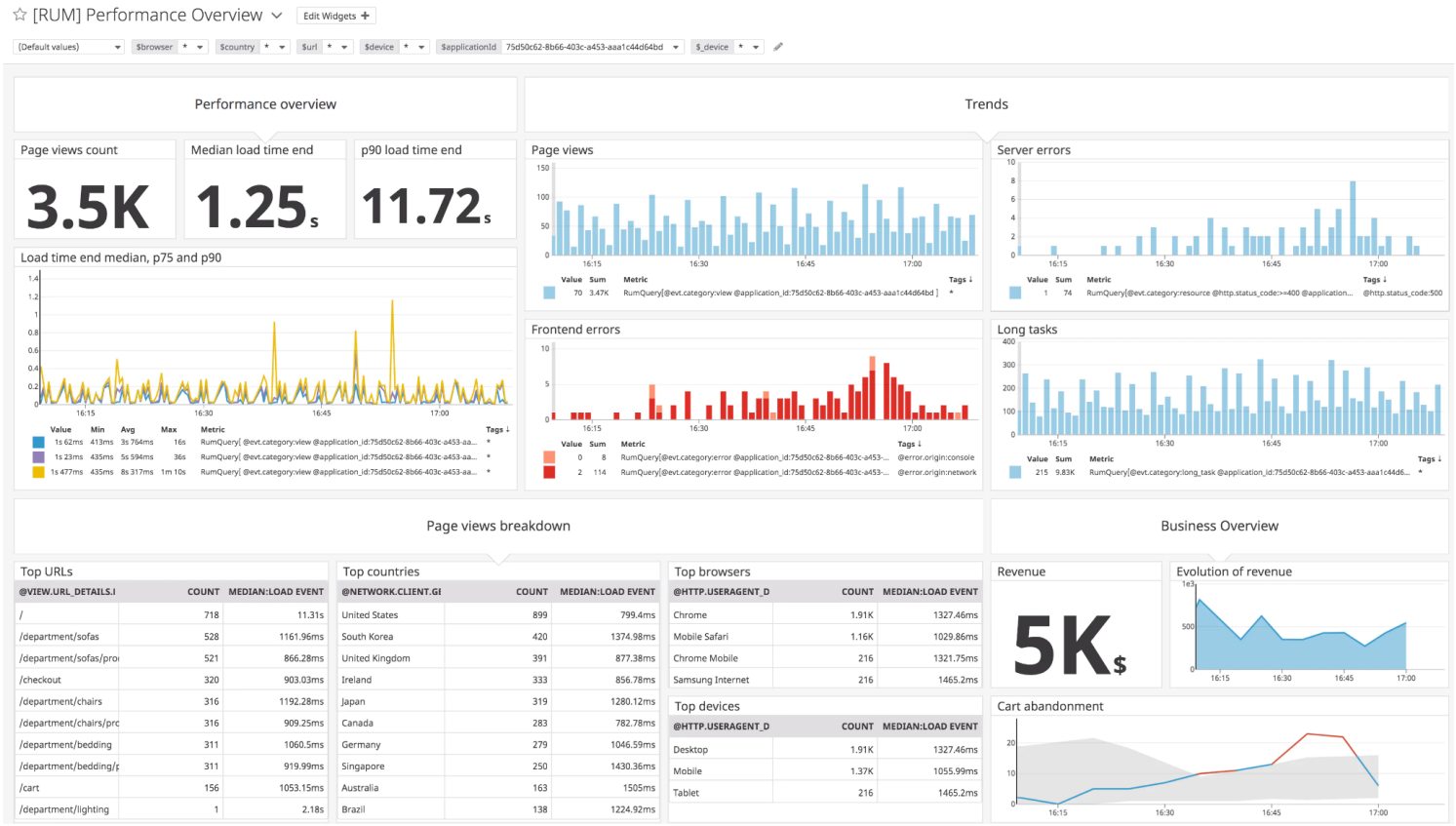
Datadog APM

Specialties: Application performance monitoring (APM)

Pricing: Free tier; Pro tier $15/host/month; Enterprise tier $23/host/month

Datadog is an excellent AIOps tool. It offers full visibility, monitoring, troubleshooting, on applications, and comes with log collection, and error-reporting, and everything else. Custom-build your own dashboards.

While it has many large customers—Samsung, DreamWorks, Sotheby's, Deloitte—Datadog services many mid-size companies as well. It looks to be better suited for more general use APM than Splunk, with more of an open source culture around its use.



Datadog APM

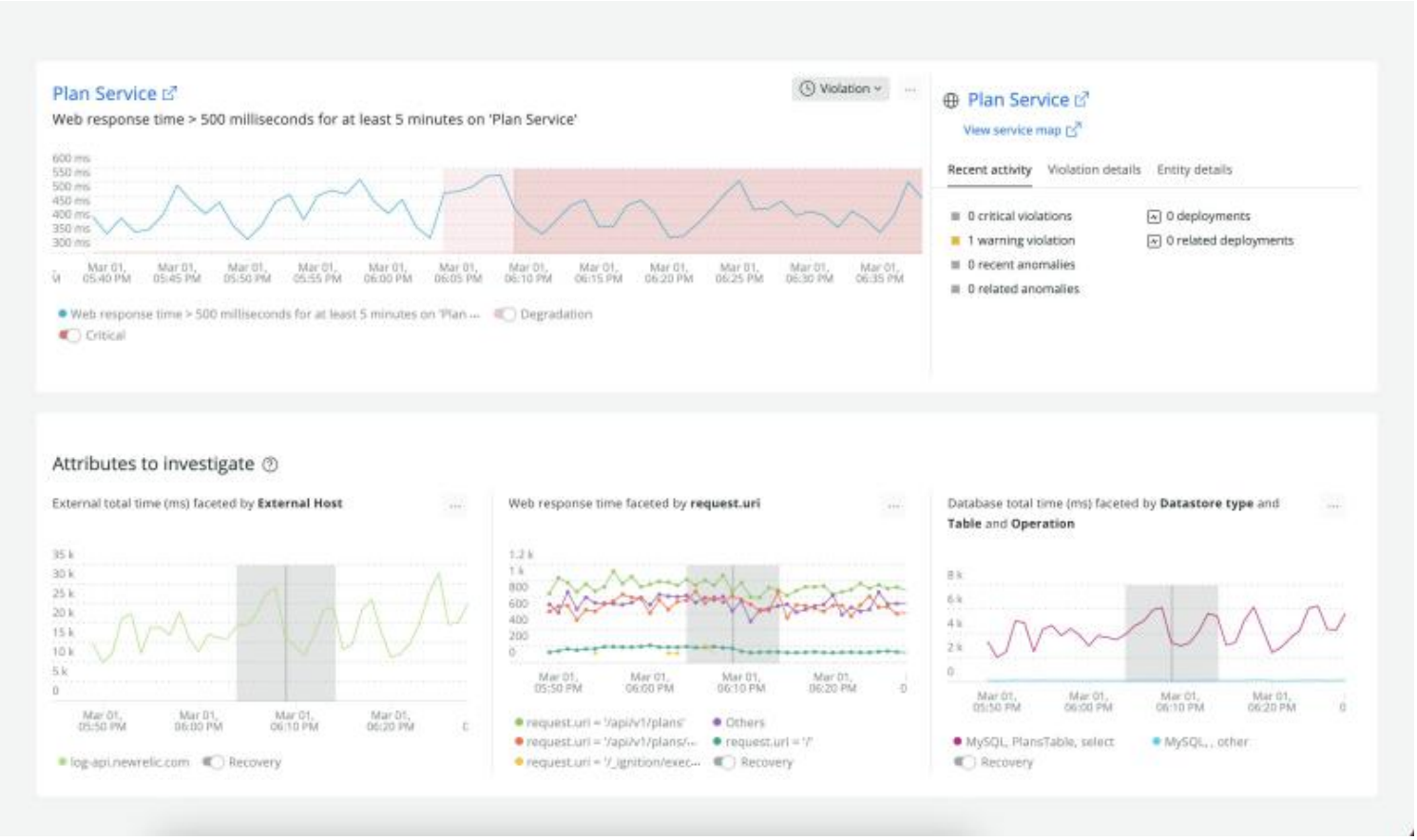
New Relic One

Specialties: APM, Infrastructure monitoring

Pricing: Starting at free, with 3 pay-to-use levels

New Relic has a focus on applied intelligence as well as APM. Its New Relic One platform has AIOps built-in to its analytics and detects anomalies fast with simple, elegant charts to monitor the system's performance.

Along with Datadog, New Relic has a good, forward-looking open approach to how they build their AIOps tooling.



New Relic One

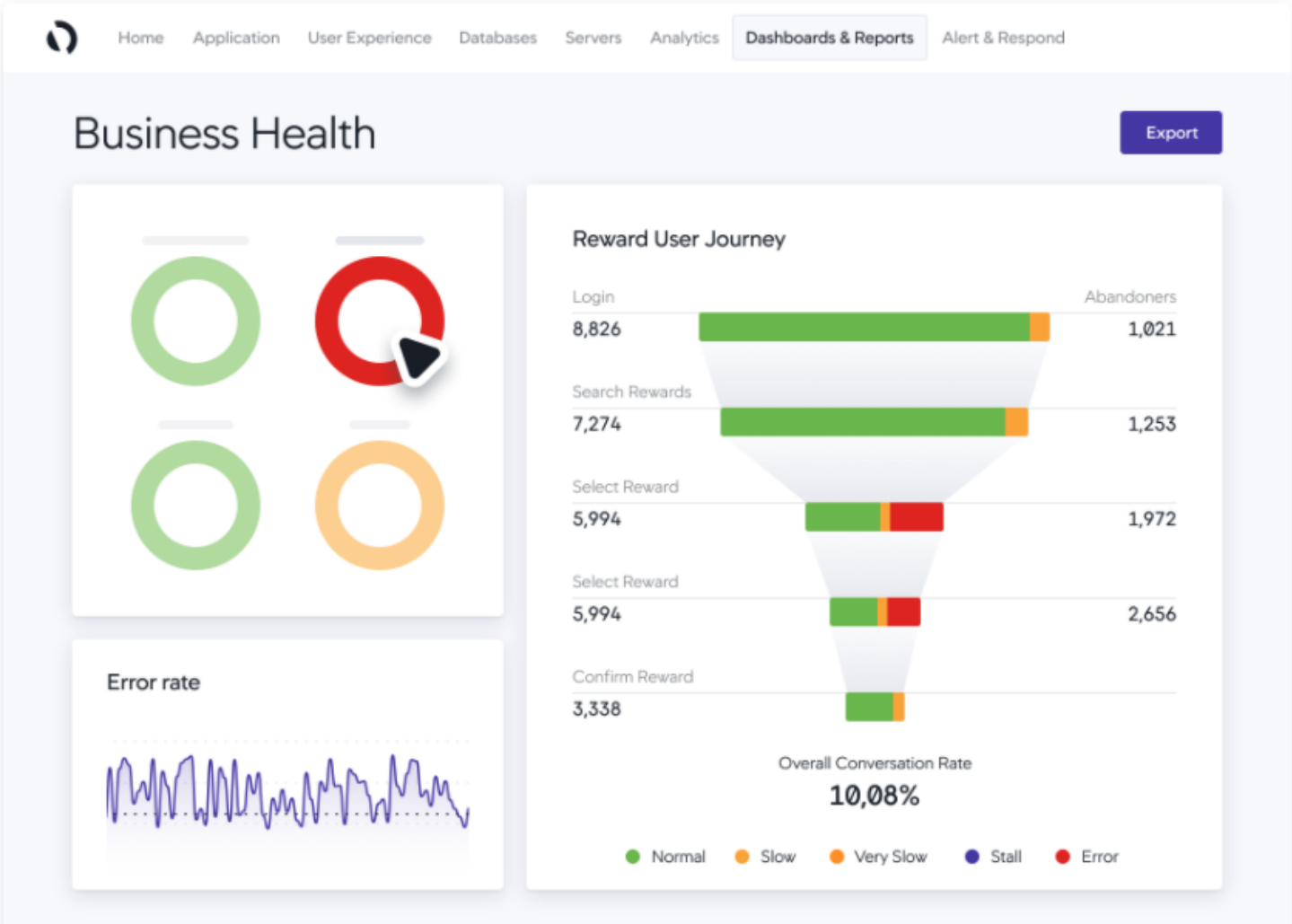
AppDynamics from Cisco

Specializes: APM

Pricing: Free trial; enterprise package starts at $90/month per CPU core

A leader in the Magic Quadrant for APM for the 9th time, AppDynamics specializes in APM. It uses its own data collectors, and works with on-prem or AWS, Azure, OpenShift and PCF environments (supports hybrid cloud environments). It is used to:

- Spot user-experience issues
- Perform root cause analysis

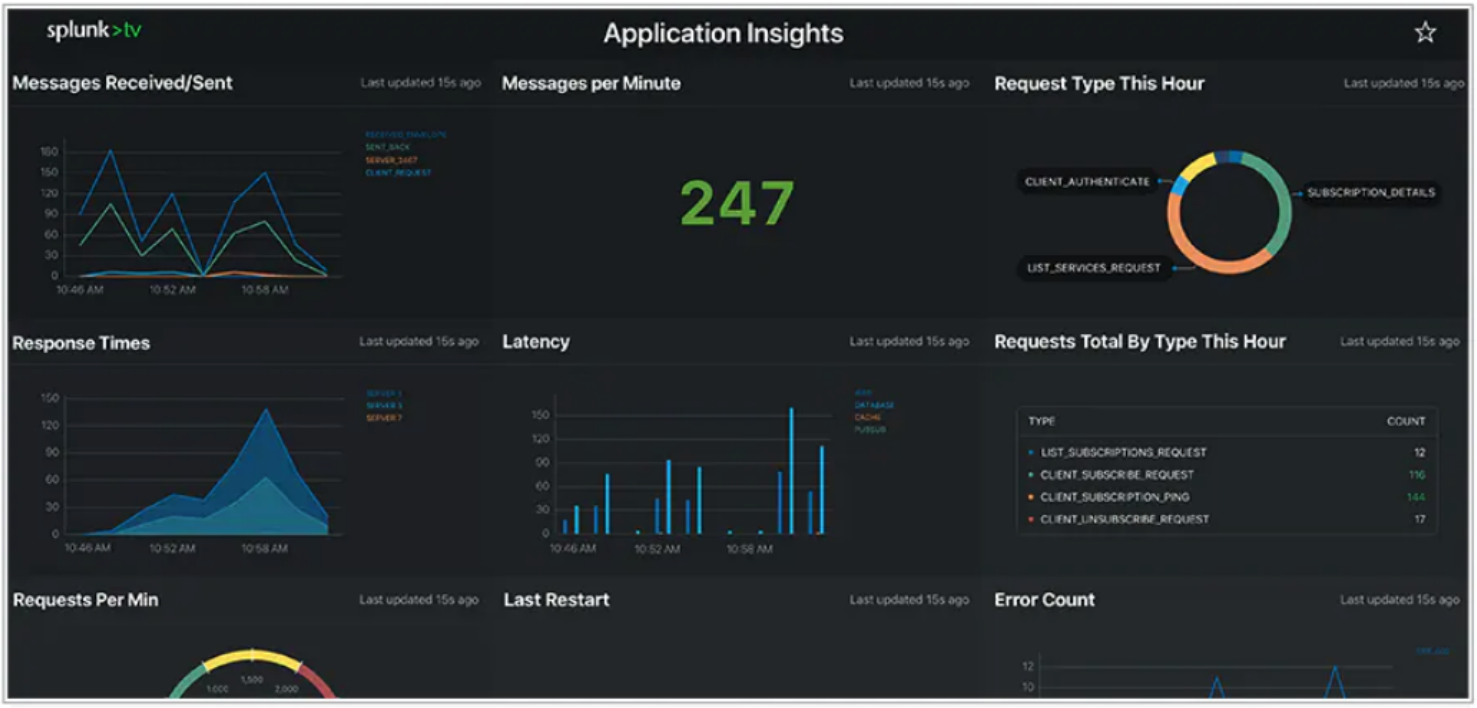


AppDynamics

Splunk Enterprise

Splunk enterprises services 91 of the Fortune 100 businesses. It is one of the most comprehensive AIOps platforms available, working with most types of cloud providers and on-prem environments. That's probably because Splunk checks the box on all the layers that make up an AI platform.

Servicing some of the largest businesses, their equipment is high-end and comprehensive. Splunk is certainly good for mid-large sized companies, and possibly too much for smaller-sized companies.



Splunk Enterprise

BigPanda

The Big Panda interface ingests data from different sources, as required for an AIOps tool. In its reporting, they've made their root cause determination explainable so a user understands the path to the decision the AI model made.

AIOps is the best in IT Operations

AIOps is a rising and important platform in the IT Operations world. If you're in a medium to large IT organization, chances are good you'll be looking at AIOps deployment in the next few years.

AIOps adoptees report saved time and saved money from adopting a good tool.

Related reading

- BMC AIOps Blog
- BMC IT Operations Blog
- AIOps Powers IT Service Management & The Service Desk
- How AIOps Is Leading Digital Transformation
- Top IT Operations Trends Today
- Artificial Intelligence (AI) vs Machine Learning (ML): What's The Difference?