Wavefront by VMware
Enterprise Observability Platform
Delivering true enterprise-ready and -scalable observability for modern applications on multi-cloud

What is Wavefront
Wavefront is an observability platform specifically designed for enterprises needing monitoring, observability, and analytics for their cloud-native applications and environments. DevOps, SRE and developer teams use Wavefront to proactively alert on, rapidly troubleshoot and optimize performance of their modern applications running on the enterprise multi-cloud.

Wavefront represents the evolution of traditional monitoring. It delivers full-stack observability with industry-leading analytics – using operational telemetry such as metrics, traces, histograms, span logs, events – aggregated across distributed applications, application services, container services, and the enterprise multi-cloud based on public, private and hybrid cloud infrastructures. Use Wavefront to detect unusual symptoms about your systems, ask open-ended questions about your systems, and explain them so to quickly get to the root cause of an issue.

Wavefront is a true enterprise-grade observability platform, specifically designed for the performance, reliability, and functional scale that enterprise DevOps teams require in order to deploy observability-as-a-service across the entire organization. Wavefront is production proven for customers supporting many 1000s of engineers self-servicing tens of 1000s of alerts and dashboards, from aggregate telemetry ingestion loads exceeding 250 million data points per minute. Because of this scale, Wavefront is the observability platform of choice for leading global SaaS and enterprise organizations like Workday, Reddit, Box, Okta, Centrica, Dell, DoorDash, Snowflake, Yammer and more.

AT A GLANCE
Wavefront is a platform for enterprises to deliver observability as a service across all their engineering teams. It is purpose-built for modern apps running on the enterprise multi-cloud at scale. Wavefront delivers full-stack observability with advanced analytics on metrics, traces, histograms and span logs gathered on distributed applications, application services, container services, and a multi-cloud based on public, private and hybrid cloud infrastructures.

KEY USE CASES
• Full-Stack Observability
• Application Observability
• Kubernetes Observability
• Multi-cloud Observability
• Infrastructure Visibility
• CI/CD Visibility

“At a Glance” (Image)

“Wavefront is our enterprise-wide observability platform used by hundreds of engineers across Workday’s Ops and Dev teams. With its unique analytics built on top of a common repository of full-stack operational data, Wavefront enables better team collaboration and data-driven system improvements.”

Kevin Cantoni
VP Engineering – Workday
The Wavefront Enterprise Observability Platform

KEY BUSINESS BENEFITS

- Improve DevOps team collaboration: unified visibility for Dev, SRE, Ops
- Increase developer productivity: see real-time impact of new code
- Improve customer experience: lower MTTR with automated AI/analytics
- Optimize performance and spend: right-size cloud and app resources

KEY QUANTITATIVE BENEFITS

- 10x earlier issue detection: surfacing emerging issues before they impact your customers, cut alert fatigue
- 80% MTTR reduction: with better team collaboration, incident triage
- Unified full stack view: quickly correlate app to multicloud and infra
- 30% reduction: in multi-tool complexity, eliminate tool silos
- 5x lower costs: vs. traditional monitoring tooling, fat APM agents
- 200,000 containers monitored: across a single customer estate
- 250 million telemetry points ingested per minute: easily scales to the largest global enterprise cloud-native environments
- 1000s of active users: easily supported as an enterprise-wide observability-as-a-service offering

“Wavefront observability has made a huge impact in helping us identify and reduce production performance issues. Our Ops and Dev teams start their day checking Wavefront, and use its analytics all day long to help meet our customers SLA. It’s an awesome product.”

Bob Muglia
CEO – Snowflake

Wavefront’s Key Observability Capabilities

<table>
<thead>
<tr>
<th>Key Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry’s Most Advanced AI/Analytics and Query Language</td>
<td>Wavefront AI/analytics and query language make it easy to ask open-ended questions about your data. Turn any query immediately into an alert or a dashboard chart. Automate so much more with Wavefront analytics.</td>
</tr>
<tr>
<td>Analytics Insights on Full-Stack Metrics, Histograms, and Events</td>
<td>Wavefront gathers metrics from any corner of your environment including microservices, legacy applications, containers, serverless, multi-clouds, and data center infrastructure. Use histograms to see outliers within high velocity metrics. Correlate it all against system events.</td>
</tr>
<tr>
<td>Analytics Insights on Distributed Application Tracing and Span Logs</td>
<td>Wavefront records full distributed traces of your cloud native applications, correlating it all to metrics and span logs within application service maps. Troubleshoot and optimize application performance faster with unified views.</td>
</tr>
<tr>
<td>Smart Alert Creation and Real-Time Streaming, Centralized or Self-Serviced</td>
<td>Wavefront provides the industry’s most advanced and accurate alerting platform powered by analytics and the Wavefront query language. DevOps engineers can define smart, adaptive, multi-threshold alert conditions, for alerts that matter, eliminating morale-depleting alert fatigue.</td>
</tr>
<tr>
<td>Superior User Visualizations and Real-Time Experience</td>
<td>Wavefront delivers instantaneous chart rendering and real-time updating, enabling fast iterative incident triage. Create and customize dashboard from a simple but powerful widget-enabled tool bench. Scale self-service dashboards to 1000s of active users across your organization.</td>
</tr>
<tr>
<td>Full Data Fidelity Across Entire Telemetry Store, No Down-Sampling</td>
<td>Wavefront retains full granularity of all your telemetry (1-sec bucket default, sub 1-sec with histograms) as data is archived. No down-sampling preserves 100% data fidelity. Accurately baseline to seasonality and historical trends.</td>
</tr>
<tr>
<td>Massively Integrated, with 200+ Prebuilt Integrations</td>
<td>Wavefront is source-agnostic for all types of telemetry, using open standards and APIs. Wavefront also comes with 200+ prebuilt integrations (plus dashboards, alerts) for applications, services, tools and infra, full-stack. Get started faster using these integrations, easily customize as needed.</td>
</tr>
</tbody>
</table>

Easily Collect and Aggregate Telemetry from Everywhere

Wavefront is very open and flexible for ingesting data using open standards and APIs:

- Ingest telemetry using any variety of open collector agents – Telegraf, cAdvisor, Micrometer, OpenCensus, Jaeger, etc. – managed by the Wavefront proxy
- Instrument your application code to send metrics, traces, and logs directly to the Wavefront proxy eliminating need for a heavy, expensive APM agent
- Instruct Wavefront via API to pull telemetry directly from any variety of cloud services including services from AWS, Azure, GCP, and 3rd party tools
Observability That's Enterprise-Ready, Enterprise-Scalable

Enterprise DevOps teams can confidently deliver observability-as-a-service across their organizations with Wavefront. Here are some of the critical reasons why Wavefront has become the industry’s leading, enterprise-grade observability platform:

**Real-Time Performance at Scale:**
Wavefront has a patent-pending architecture that’s proven to scale to millions of metrics per second. Many customers with thousands of active users use Wavefront to set alerts, run queries and view dashboards. The platform is also optimized to handle high cardinality metrics at scale, delivering real-time visibility no matter the telemetry volume.

**Detailed Platform Self-Reporting:**
Wavefront provides a real-time portal on its service status and usage. Track how Wavefront is consumed by team, project, domain. Set usage quotas with per team reports to maintain cost budgets.

**User Customization at Scale:**
Wavefront enables user teams to self-service their telemetry and create their own alerts and dashboards at scale. Intuitive query builders and creation tools for alerts and dashboards make it easy for all teams to deliver on service level objectives (SLOs) for their services.

**High Availability Architecture:**
Wavefront has a high availability architecture with a 99.95% SLA using multiple availability zones across multiple regions. It keeps 4 copies of your data at all times, and queues your data even if your WAN link goes down. The Wavefront Cloud auto-indexes and shards, adapting to your data shape.

**Granular Policy Control:**
Wavefront enables DevOps teams to support 100s of teams based on policy. Define access to assets with granular user groups. Protect sensitive metrics with permission controls. Encrypt data at multiple levels. Support multi-tenant SSO.

**Full Programmable Automation:**
Wavefront provides a complete API and CLI for all its UX capabilities, with version control, facilitating automation and monitoring as code. Wavefront integrates with run-book automation and continuous delivery platforms to automate remediation and roll-backs.

“Before Wavefront observability, we would have no clue what is going on. Now we can fix software and validate that the changes had exactly the effects we intended.”

John Beatty
Cofounder & CEO – Clover by Fiserv