

MEANINGFUL ALERTING IN REAL-TIME

About

Sunrun is the largest residential solar company in the United States with over 100,000 customers, and has deployed more than \$2 billion in solar systems. Using their seamless “solar as a service” process, Sunrun allows consumers to get a fast, personalized solar energy system designed for their home.

The Sunrun logo is displayed in blue lowercase letters within a white circular background.

Goals

Sunrun needed a monitoring solution that would support its modern infrastructure and DevOps team:

- Wanted the ability to create more meaningful alerts based on analytics and dynamic thresholds to reduce alert fatigue
- Needed to handle high resolution data and custom app metrics to catch issues before impacting users
- A cost-effective solution that would enable the team to deploy across all services

Results

SignalFx has enabled the engineering team to instrument their own metrics and more effectively catch and troubleshoot performance issues:

- Reduction in noisy alerts and improved visibility into critical issues using alerts based on dynamic thresholds and analytics, not just static values
- The team now has a single place to monitor, correlate, and alert against system, platform, and custom app metrics
- Extension of production class monitoring and alerting to the entire infrastructure

SUNRUN WAS SUFFERING FROM ALERT FATIGUE

“SignalFx gives us a sophisticated way to make an alert that is meaningful and not just generating false positives.”

Florian Berckemeyer

Manager of DevOps Team, Sunrun

Environment

Sunrun's core differentiating apps for design and pricing are built in-house and run 100% on AWS:

- AWS infrastructure spanning 200 instances, that can experience significant scale out with load on a per-app basis
- Using EC2, RDS, SQS, S3, ElastiCache (Redis), Cloudfront, and DynamoDB today, with plans to adopt Lambda in the future
- The team is shifting towards a DevOps model with a microservices approach

How

Sunrun uses SignalFx for production monitoring of their Design and Pricing apps. They correlate systems, platforms, and custom application metrics for both applications in real-time across multiple dimensions:

- System metrics like CPU, Memory, Disk Usage, Network IO
- Platform metrics like Java JVM
- Application metrics like custom metrics on key method calls, important classes, and performance of REST endpoints
- Integrations with the collectd collection agent, Java client library, and AWS

“It’s easy to see if one server is behaving badly compared to the rest - this would be impossible without SignalFx’s streaming analytics.”

Florian Berckemeyer

Manager of DevOps Team, Sunrun

Why SignalFx

After seeing how the SignalFlow analytics engine was core to SignalFx’s approach to monitoring and alerting, Sunrun was convinced with:

- Ability to create meaningful alerts with dynamic thresholds and analytics
- Analytics based on derived metrics such as growth rates instead of static values
- A single place to monitor, correlate, and alert against systems metrics, platform metrics, and custom application metrics
- Priced for only metrics sent to SignalFx, not the number of instances monitored

About SignalFx

SignalFx is the most advanced monitoring solution for modern applications. Our mission is to help cloud-ready organizations drive high levels of availability in today’s elastic, agile, distributed environments. With SignalFx, development and operations teams gain a real-time view of, interact with, and take action on the infrastructure and application metrics that matter.