MAKING EVERYTHING DATA DRIVEN

About

Onshape is the first and only full-cloud 3D CAD system that lets everyone on a design team work together using any web browser, phone, or tablet. Built for the way today's engineers, designers and manufacturers really work, Onshape gives secure and simultaneous access to a single master version of CAD data without the hassles of software licenses or copying files.

Onshape

Goals

As a fast-growing service in a competitive market, Onshape wanted to become data driven in everything from UX and design to feature development and operations:

- Need for self-service access to metric creation, visualization, and analytics so everyone can have visibility into their own services

- Wanted a monitoring and alerting solution that has the ability to handle dynamic data so that charts, dashboards, and alerts are easily managed as the organization scales

- Real-time interactive analytics on multidimensional data so users can pivot on metadata like customer type or service

Results

Onshape has gained visibility into the performance of their app and the entire stack below it, which they did not have before SignalFx:

- Development teams now have self-service access to monitor their own service metrics

- Accurate analytics on high resolution data, including time over time comparisons, and ability to aggregate on multiple dimensions

- Real-time visibility into app-wide performance, proving invaluable as they have been able to proactively detect issues before customer report them

"SignalFx has allowed us to be able to see metrics about our service at all parts of our software development lifecycle."

John Rosseau
Operations Team Lead, Onshape

Environment

To create their disruptive CAD-as-a-Service product and make it scale with demands of a global user base on every kind of device, Onshape is built 100% on AWS:

- Hundreds of instances hosted on AWS, spread across three regions

- Infrastructure is divided between Dev/Test, Staging, and Production clusters

- Teams are organized around microservices that make up Onshape

- Operations organization is focused on broader issues own services

How

Onshape sends everything from infrastructure metrics to custom application metrics into SignalFx:

- Integrations with AWS, collected, and StatsD used to send metrics and metadata into SignalFx

- System level metrics like CPU load, Memory Utilization, and Network I/O

- Custom application metrics, like document opens instrumented directly in their code

- Dashboards are displayed on 80-inch screens for everyone to see

> *"We get a lot of credit for being able to proactively detect issues before customers report them. SignalFx is what makes that happen."*

John Rosseau
Operations Team Lead, Onshape

Why SignalFx

Onshape found that only SignalFx was able to meet their needs in a cost-effective way that would let them roll out monitoring and alerting services across the entire infrastructure:

- Multidimensional metrics instrumentation, visualization, monitoring, analytics, and alerting capabilities

- Easy to use solution that doesn't require anyone learn a new query language

- Self-service instrumentation, monitoring, and alerting empowering all teams

- Usage-based pricing model gives them the flexibility to monitor metrics from every system they care about

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.