

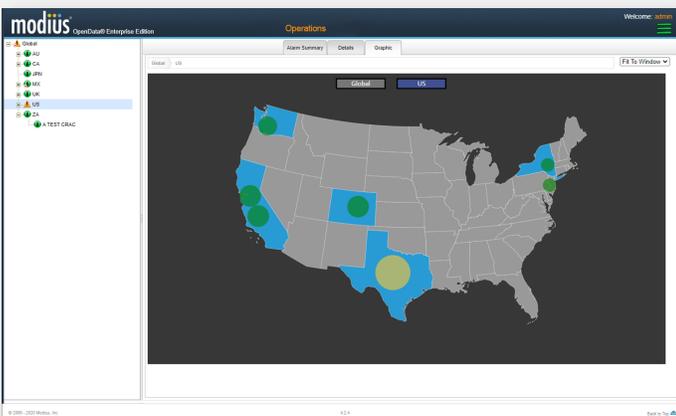
Modius® OpenData® for Remote Monitoring

Modius OpenData

The OpenData system from Modius is the industry's only fully distributed data collection solution for gathering real-time performance metrics from across a network of mission critical facilities. It offers core alarming and data collection capabilities across all power, cooling, networking and environmental sensor equipment.

As facilities become more efficient, they also become more difficult to manage. The margin for error in today's critical facility is dangerously thin, requiring Fault Detection and Diagnostics (FDD) throughout the physical infrastructure, including systems that distribute power, cooling, lighting, and water. As operations are run near maximum capacity with an expectation that everything "keeps working", one device failure can leave the operator with very little time to react to prevent catastrophe. This is true in all facilities, including telecom sites, data centers, manufacturing operations and even remote sites in less than desirable locations.

The OpenData solution for monitoring infrastructure availability can help. It gives you the early warning you need by providing an end-to-end system that actively polls every device at each facility (both IP-networked & serial). The advantages of the Modius approach include intelligent alarms based on configurable computations. Rather than generate an overflow of low-level alerts, OpenData sends you only the alarms you need when they matter most.



Infrastructure Availability Monitoring

How it Works

- Automated monitoring of all infrastructure equipment through direct real-time polling of equipment (both IP-networked and serial)
- Centralized alarm management to a single console across multiple mission critical facilities (telecom sites, remote sites, manufacturing operations, data centers, etc.)
- Simplified data management via Intelligent alarms capability

Features

1. Full monitoring and measurement of all infrastructure equipment (power, cooling, environment sensors and IT devices)
2. Robust intelligent alarming using virtual (or computed) points
3. Complete alarm management, including notification and escalation with history tracking, alarm audit and integrated help desk for opening and closing response tickets.

Key Reports

Alarms by device
Notification by device
Notification by user

Non-reporting devices
Disabled alarms

Advantages

- Covers all major power, cooling and IT devices, including IP-based and serial networks
- Easy to deploy and maintain by customer personnel, no on-site coding or programming for low TCO
- Supports all major Business Intelligence tools with open database access

Benefits

- Centralized alerts and alarms for all devices
- Improve MTTR & lower MTBF
- Achieve true N+1 redundancy

1 Collect

Collecting unstructured measurements across your facilities creates a unique set of issues:

- How do I collect data from all the different devices and applications in my facilities?
- How do I account for all the inconsistencies and ambiguities in this unstructured data?

OpenData collects data from any and all devices. It supports multiple protocols and is agnostic to all makes and models, for both networked and non-networked devices. OpenData automatically translates and normalizes that data from across your facilities into structured metrics that are easily formatted for presentation in reports, charts, graphs and dashboards.

2 Analyze

All fault conditions have user defined descriptions and severities making them clear to understand. The source of a problem may still require some investigation. When there's a critical situation, you need information readily available to support appropriate and timely action. Operator screens are intuitive, robust, and accurate. Graphical displays can be used to present point values and status in ways that are meaningful to your organization and staff. A landing page might be a quick way to check on a room, site, or subsystem. But effective remote monitoring requires features such as rule based algorithms that enable you to combine and transform data into meaningful metrics, KPI's, and alarms. This ability to contextualize data (i.e. give it meaning) ultimately leads to better results because you're able to interpret what's going on without having to sift through nuisance information. Any measurement, virtual or native, and/or fault can be exposed to a graphical presentation, analytic report, or dashboard. Time-stamped logs and graphs provide additional insights to identify dangerous trends or when things went wrong. In response to a warning alarm, you have, at your finger-tips, min/max/avg trended readings to distinguish between sudden vs gradual changes. OpenData is continuously



collecting time series values (TSVs), and this data is available to you for detailed analysis. Many metrics and KPI's can be defined from the source data. Analytics is used to data mine for deeper analysis of system performance and for root cause investigation.

3 Act

OpenData provides the tools required for operators to take effective action, including alarm notification and escalation paths, alarm audit trails and an integrated Help Desk for opening and closing response tickets. It also provides fault detection and diagnostic tools to give operators the visibility they need to resolve problems before a crisis arises. OpenData features an easy to use interface which accurately represents the organization of facility infrastructure with live status, making operators extremely efficient. OpenData alarm management can lead to preventative maintenance, resulting in significant cost savings, and even avoid downtime.

About Modius

Modius Inc. is a world leading end-to-end solution provider for managing the availability, capacity and efficiency in the critical facilities of data centers, smart buildings, telecommunications and other IoT environments.

OpenData, the Modius flagship offering, provides all the tools needed to manage the performance of mission critical infrastructure, from integration of disparate devices, to analytics, to integrated dashboards, all in a "single pane of glass."