

Modius® OpenData® API/Client Portal Manager

A Unique Data Management Approach Designed for Colocation Partners to Meet the Challenges of Client Transparency and Contractual Obligations

One of the toughest challenges facing Colocation providers is integration with other applications to provide Customer Portals and Data Transparency.

However, this is now a standard requirement for Data Centers offering colocation options to the world's hyperscalers.

This requirement has become a core aspect of managing a data center, and a DCIM (Data Center Infrastructure Management) product must enable this capability to provide a truly complete solution. Providing DCIM accounts for colocation customers is not an acceptable solution - it introduces security and privacy risks, and you must carefully constrain the accounts to avoid unwanted disclosure of other data.

The OpenData API provides Colocation customers with visibility on the data center's shared infrastructure gear that handles power distribution and environmental management. In addition, it can provide visibility of equipment provided for (or by) the customers without exposing the DCIM solution to outside access or risking cross-client data visibility. The goal is to meet these challenges, and exceptional DCIM solutions must enable the Data Center operator to meet these contractual requirements in a manner that's also easy to maintain.

The focus starts with raw equipment status, data and trends - the specific requirement in many Colo contracts. Via the API, a CRM (or a colocation customer directly) can access and display raw data (telemetry data) from the devices in the data center power chain and environmental management. Colocation customers can drill down, pulling history/trends across a date range for any exposed data point at their convenience. Data point management is simplified via a graphical interface that provides a method to easily alter which points are published by the client - or allow the client to select these points themselves as a subset of the published points.



Beyond access to raw data, OpenData makes it easy to build a full-featured customer portal by addressing the following needs

- Enables visibility of truly shared equipment (like a generator) across all clients.
- Facilitates partitioning of other shared equipment (like a PDU-Power Distribution Unit) that may contain points for multiple clients on a single piece of equipment.
- Provides a method to generate service tickets through your customer portal to facilitate equipment deployment, service work, and change requests.
- Ticket access through the API includes status visibility on tickets as work is done – allowing the client to see progress without additional work by the DCIM team to generate updates manually.
- Provides a method for sharing select DCIM reports and charts with clients via the portal – avoiding the need to rebuild the same report in both systems.



Top Features

1. **Transparency for Hyperscalers with minimal impact** – Provides visibility of core device telemetry (raw) data through a standardized interface in a standardized format across all vendors and models.
2. **Greater Security Control** – Data is collected through existing secure infrastructure and then shared through OpenData to the customer. This prevents opening local infrastructure subnets to external traffic and security risks.
3. **Advanced Front-End Security** – The API can be deployed via high volume front ends like Microsoft Azure's API Management Service and AWS. This allows for advanced security, like short life tokens and validation of client and CRM connections, before being sent.
4. **Client Identity Mapping for Better Access Control** – Clients Identity (via an external system like a CRM) can be mapped to OpenData hardware devices and Assets for easy control of device access.
5. **Shared Device Support** – Devices and Assets can be shared to multiple clients. This allows for shared resources like a generator to easily be exposed to multiple customers for full transparency.
6. **Hierarchical Client Modeling** – Clients can be defined in a Hierarchy. This allows devices to be grouped by the customer at a Building Level via one ID, site via another ID, and region via another ID. This enables easy support and access control at multiple levels.
7. **Data Point Level Access Control** – Exposure from OpenData within a device can be controlled via an easy-to-use GUI that determines if a given point value is exposed via the API. This allows exposure of points needed for transparency agreements, without clutter from undesired points.
8. **Analytics Reports via API** – Charts are available fully rendered in HTML and ready to display in an external solution or CRM display.
9. **Deployment Support** – Modius can assist in a completely secure deployment of the API through Azure, AWS, and other services.



Technical Specifications

Windows Server - 2008 or newer, with all service packs and security patches installed

Microsoft SQL Server – 2014 R2 to 2019, Standard Edition or better. 2016 to 2019 for exceptionally large installations where data partitioning is recommended

Microsoft SQL Server Management Studio, installed with access to SQL Server



About Modius

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

OpenData[®], the Modius flagship offering, provides a comprehensive set of tools for managing the performance of mission-critical infrastructure, from integration of disparate devices, to analytics, to integrated dashboards.