Overview

Sierra Monitor’s tenant based IoT Cloud Platform provides a secure web connection environment for OEMs using SMC IoT Gateways to enable device monitoring, controlling, logging and notification. The cloud platform empowers OEMs with a cost-effective way to manage their deployed assets while taking service and support capabilities to the next level. OEMs and their customers can securely access and remotely monitor their entire fleet of devices from any location to ensure all assets are performing correctly.

SMC IoT Gateways interface seamlessly and securely to the SMC Cloud via wired or wireless methods. Single or multiple types of OEM devices connect to a single gateway providing a cost-effective cloud solution. There is no annual subscription\(^1\) for the OEM’s equipment to be connected to the IoT Cloud Platform.

The SMC IoT Cloud Platform provides the best, most cost-effective, and easiest to deploy solution to meet today’s demands for cloud based connectivity.

Benefits of the SMC Cloud

- Deploy in weeks not years.
- Eliminate OEM engineering development time and expense.
- Register gateways seamlessly through the OEM’s cloud portal residing on SMC’s tenant based IoT Cloud Platform.
- Monitor and control equipment connected to the cloud through the SMC Cloud’s secure portal, reducing field truck expenses.
- Retrieve data (automatically stored in the gateway for 30 days) and push it to the cloud for storage (for up to a year).
- Generate cloud-based notifications/alarms via SMS and/or emails to inform users as soon as an event occurs.
- Create multiple user accounts within the tenant portal for secure management of user credentials, security permission levels and device assignments.
- Fully scalable – SMC’s Cloud Platform is built to facilitate growing customer demands.
- Upgrade gateway firmware – Install new features and enhance configuration via the SMC Cloud using admin access.
- Push data securely to 3rd party cloud services using Webhooks or RESTful API (for additional business analytics, smart phone applications, customer support software, etc.).
- Proxy Tunnel option available – allows direct online access to any Ethernet device’s native web interface when connected to a FieldServer that is registered on the SMC Cloud Platform.

\(^1\) Cloud data storage only incurs cost to the customer if the limit of 50 data points (per FieldServer) every minute for 30 days is exceeded.
Visualize Data with the User Configurable Dashboard Tool

- SMC’s Cloud Dashboard provides enriched data visualization for one or multiple sites. Features include data metrics (averages and real time values displayed in gauges and graphs), which enables collaboration and comparison of results across multiple sites.

SMC IoT Gateways

- SMC has a family of gateways for wired or wireless environments using ProtoNode, ProtoAir and FieldCast products.
- Each device connecting to an SMC IoT Gateway must have a common protocol with the gateway. SMC supports over 140 different protocols, for example:
  - BACnet, Modbus, SNMP, EtherNet/IP, LonWorks, KNX, M-Bus and many more

Security

- SMC’s Cloud Platform is hosted on Amazon Web Services (AWS). AWS is a recognized leader in providing cloud Infrastructure-as-a-Service (IaaS) with broad security certification and accreditation.
  - SMC takes advantage of the AWS security infrastructure best practices and IT security standards which includes: SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70), SOC2, SOC3, FISMA, DIACAP, FedRAMP, DOD CSM Levels 1-5, PCI DSS Level 1, ISO 9001, ISO 27001, ITAR, FIPS 140-2 and MTCS Level 3
  - The cloud platform has no firewall dependencies through HTTPS, and instead utilizes TLS/SSL (Transport Layer Security/Secure Sockets Layer) to ensure data security - port 80 and 443
- All traffic, between the SMC Cloud and the on-premises IoT gateway, is encrypted using TLS 1.2.
- Any HTTP web traffic sent to the SMC Cloud portal using TCP port 80 is automatically redirected to HTTPS on port 443 to ensure that all data transmissions remain encrypted. The WebSocket communication is also encrypted with TLS 1.2.
- SMC’s Cloud Platform was certified secure by Provensec, an industry-recognized leader in cyber security testing and risk management services.

Contact SMC Sales for an easy proof of concept evaluation. Contact sales@sierramonitor.com.