connect SENSOR, METER, EQUIPMENT to INTERNET for DATA ANALYTIC & VISUALIZATION



Industrial Internet of Things Platform















Introduction



Globiots is an Global Industrial Internet of Things Platform, developed by Daviteq since 2012, gained from 10-year experiences in Measurement & Controls.

Globiots platform allows customers easily connect their machine, process & people for Remote Management and Business Intelligent.

Globiots can be deployed and installed everywhere in the World. All Globiots clusters can be connected worldwide to form a distributed world-wide IoT system.

Features



READY TO USE

Pre-built platform for Data connectivity, Data storage and Analytics, with ready to use Visual Software for Quick deployment IoT projects.



USER INTERFACE FLEXIBLE

User interface can be configured to suit your application.



NO RISK

Risk Reduction with well-organized Innovation Process, allows customer can start from free Trial to Production & Launching.



HIGHEST SECURITY

Multi layers protection technology allow highest security to prevent Data leakage and lost.



QUICK DEPLOYMENT

With 03 simple steps you can bring your device Data to internet for Analytic & Visualization.



Configure

Use



SCALABILITY

System architecture allows customer easily expand their connected devices, adding more parameters, more users and account easily.



SIMPLE OPERATION & MAINTE-NANCE

With Device Management and SIM Management, everything will be done easily with just few clicks.



ENTERPRISE CONNECTIVITY

Allows data connecting to Enterprise system like SAP, ORACLE, SALESFORCE or other application software.



OPEN CONNECTIVITY

Out-of-box gateway can be connected to most of Industrial Machine, Equipment via RS485/Modbus RTU.



CUSTOMERS STRONGLY FOCUS ON THEIR APPLICATION DEVELOPMENT

Worry-free about device connectivity, communication, server, Data Storage, Data management, Data Analytic, Reliability & Security. Customers/Partners will maximize their focusing on Application development of their Business.

Globiots Architecture

iConfig

- Device management: activation, configuration, health monitoring...
- SIM management (for cellular Gateway).
- Data management: search/query data, data export (data view in Table, Trending & Widgets).
- Data analytic Rules Configuration.
- Alarm & Event configuration & management.
- · SMS Configuration.
- · Administration: account, role, group, user.

Vizuo

- Web-based application;
- Mobile application runs on Android, iOS...
- Main functions of Vizuo:
- Dashboard: displays realtime data, raw data, analyzed data, remote control widgets...
- Report & Export: to view the data in a form of report. The reports can be exported to excel file, csv file, pdf file.
 Historical trending: allow customers manipulate their data in graphic trends. The trends can be exported as csv file.
- · Alarm Management: allow customers to config and view the alarms. Alarms can be exported to excel file.
- Event Management: allow customers to config and view the events. Events can be exported to excel file.
- Administration: allow customers to administ their user, role & group

3rd-party Application Software

- These applications will be developed by partners or customers. They will connect to globiots system via 02 ways: Restful API and Pushed data web-socket stream.
- The application will be developed based on the specific requirement of each vertical market. Therefor it will be more powerful than the Vizuo software.
- We are highly welcoming the partners and application developers to co-operate with us in developing the powerful applications for many vertical markets.

Security

Handling all the security of system

SMS Gateway

- Handling all the incoming and outgoing sms messages of the system
- SMS is used to notify alerts to users or communication to devices;

RestAPI

- Restful API for connection to Application software.
- Data is raw data or analyzed data.

Data Analytic

- Basic Data analytics.
- Complexed Data analytics.

Data Storage

- Time-seri data storage
- System Data Storage

Pushed Data Websocket Streams

These streams allow system to push Realtime data, or alerts notification (includes alarms, events) to application software

Monitoring System

To monitor all the activities of system: server, services, communication...

Data Engine

- Device Authentication & Secutiry
- Data encoding & decoding
- Data compression and decompression
- Data Processing (virtual parameters...)
- Soft-processing Alarm & Event
- Time synchronization for Device
- · Accept multi protocols
- Load balancingRealtime data forwarding

Cellular



Ethernet WiFi

Satellite



Protocols

- DRM a fast & secured procotol over IP developed by Daviteq for very low bandwith network like 2G/GPRS
- Open protocols will be added into system in near future: MQTT, CoAP, AMQP, Restful...

Gateways

- Data logging;Alarm processing
- Event processing
- Remote configuration & health diagnostic
- Internet connection via: WAN like Cellular or LAN like Ethernet, WiFi



Out-of-Box Gateway



Embedded Module Gateway

Soft-Gateway



Real worlds



Sensor



Meter



Machine



Heavy Equipment



Vehicle



Home Appliance



Globiots Deployment

Globiots Deployment in 03 Packages



Cloud Globiots

This cloud service is best suitable for customers who have few devices to hundreds of devices. They don't have the IT department to operate and maintain the system. They need a pre-built ready-to-use Visualization software. However, they are able to access data through APIs at anytime they need.



Private Cloud Globiots

This deployment is best suitable for customers who want to have a separated IoT Platform for their own, not related to other customers. However, they still do not want to have IT department for operating and maintain the system. In this case we will host a separated globiots platform for customers on our Tier 4 Data Centers. The deployment, configuration and maintenance will be under our responsibility.



On-Premise Globiots

This package is best suitable for large enterprises who want their own platform to be installed at their premise.

Globiots Deployment Process

Turning your good ideas into a successful product or solution is not an easy process. The process will go through at least following 04 stages

Ideas **Filtering**

Project planning **Prototyping & Testing**

Production & Launching

With globiots and our experienced professional team, everything could be easier. We will work together with you in entire project cycle from Ideas to Launching. There are few steps to make it successfully:

Gathering requirements from customers

Requirement analysis

Hardware design & production

Software design, configuration or production

Planning for mass production & launching

Modification & testing again

Prototype running & testing with limited quantity

Typical Applications

Energy & Utility Monitoring Solution



Energy consumption management is very important in most of Industrial Plant and Large Commercial Building. It affects their operation cost, environment regulation, corporate image...

BTS Station Monitoring Solution



The Uptime and Readvness of BTS Stations are the key success factors in Telecommunication Industry. increase those factors, a smart connected remote monitoring system is needed. This system is to remotely monitoring all the status of BTS station like Energy, Power, Fuel, Temperature, Humidity, Security....An alert will be triggered and notify back to central or services team to act immediately.

Fuel **Monitoring Solution**



Fuel price is increasing day to day and is one of the biggest OPEX in transporindustry. Therefore, consumption management is one of the must-do activity for every transportation company. Moreover, it can help customer to detect immediately the event of fuel theft. The fuel monitoring for genset or heavy equipment to make sure their readiness of operation and prevent the Fuel theft.

Genset/Heavy Equipment Monitoring Solution



Unlike other machine, the readiness of back-up Generator is the most important thing. Therefore, a remote system will continuously monitor the status of Genset like Battery voltage, Fuel level, Oil Pressure, Cooling temperature...to make sure your Genset is always ready and working properly. Moreovers, it can allows customer start/stop the Genset remotely. Maintenance trip will also be reduces.

Pipeline Monitoring Solution



Monitoring the corrosion of gas pipeline from upstream platforms to downstream production plants is the most important work for a Gas company. However, the monthly services trip to the pipeline at off-shore will makes the OPEX increase. A remote monitoring for corrosion is installed to help customers collect the corrosion data remotely everyday. They will get the right reports timely at lowest cost. The system can work with satellite and cellular network.

Production Monitoring Solution



Nowaday. modern manufacturing plants will have hundreds or thousands of CNC machine or robot to produce thousands pieces of parts or products a day. Therefore, the productivity of machine/robot, machine/robot health status and operating behavior of workers are the most key factors must be monitored and control within limits. Those activities will help customer increase the productivity, lowering the production cost, expand machine/robot life, increasing the skill of workers.

Featured Case Studies



CNC Machines Production Monitoring



Fuel & Generator Monitoring for BTS Stations



Energy Monitoring for Dairy Factory



Pipeline Corrossion Monitoring

