# Cluster IOT Platform

By AClusterLLC USA

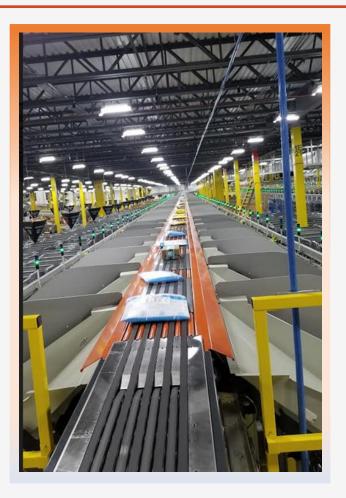
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## About Acluster LLC

We are conveniently located in the Baltimore suburb in Maryland, USA only 30 minutes away from Washington DC. Since inception in 2007, A cluster LLC has provided technical solution for the Robotics, Logistic and Material Handling industry in the USA. As an expert solution integrator and innovative designer, the company has worked with many partnerships to solve cutting edge industrial automation challenges. Partnering with Postls USA and Fluence USA it has designed many solution which is deployed globally in USPS, DHL, UPS,UK Mail, Russia Post, Canada Post, Sick AG, Amazon etc.... Our expertise includes Robotics integration, eCommerce fulfillment center design, mathematical modeling, concept simulation, business "use cases" modeling, machine vision, machine learning, postal automation, factory automation, auto-ID, camera-based motion tracking and inspection systems for the industry. We are a system integrator committed to provide a complete and proven turnkey technology solution for the project, leveraging many years of experience in the process automation and engineering innovation.

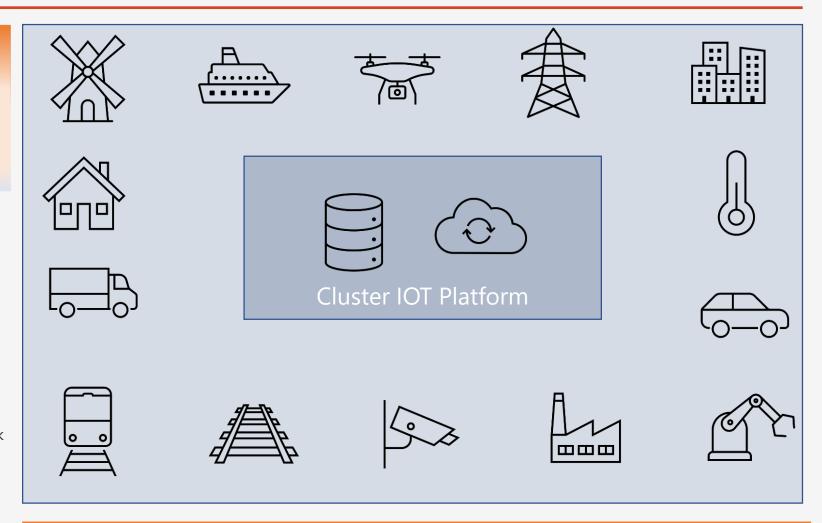


Our solution for Amazon fulfillment center in CA

## IOT Platform: Seamless connection for Home and Office automation

Our Unique IOT platform connects any device anywhere in the world and allow user to control, monitor and manage over the internet from PC, cell phone. We ensure all data is kept local with in the country. Our secure logging, device level authentication, data encryption keeps the devices private to the user and to the corporation. Our data is not routed through Chinese server.

- ☐ Cluster IOT a secure way to connect device
  - > Secure device management
    - > Access control, encryption
  - > Secure data management
    - Access control, encryption, Security certification verification
  - > Real-time monitoring and analytics
    - > Supported by our backend DB
  - > Operational analytics
    - > APPS and Application layer SW
  - > Save time on integration
    - ➤ No Software or additional network capacity needed for the business
  - > Predictive maintenance
  - > Global Public Cloud Provider
    - > We host all your device

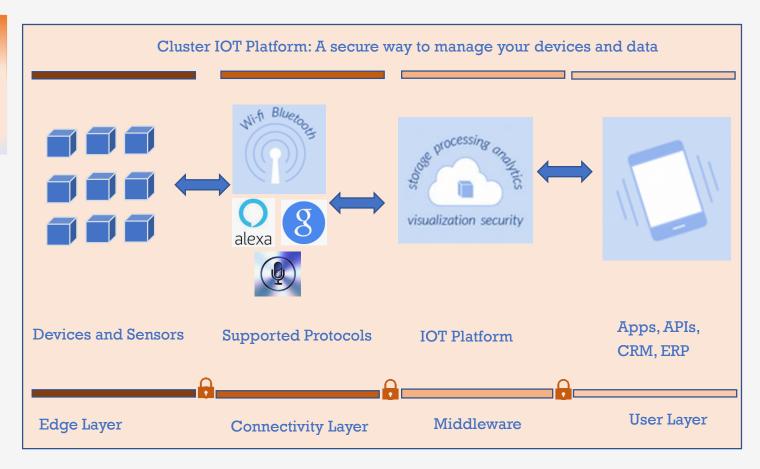


Control your Home, Office, Car, Factory, monitor data and asset from anywhere anytime across the globe!

## IOT Platform: Seamless connection for Home and Office automation

Our security layer keep the user devices and information secured due to the use of our own firmware on the device level by on Chip programming. We use and maintain our own IOT platform thus keeping any foreign government and entity away from the user data or asset. We create user specific IOT VPN, user is in total control of their asset.

- ☐ Cluster IOT System Architecture
  - Devices and APPS are secured by our layer of security certification implementation, access authentication and data encryption
  - > IOT Platform enhanced Security
    - ➤ Traffic pattern recognition by adaptive machine learning software
    - > User authentication
    - Dynamic certification award and Certificate validation
    - > End to end data encryption



We keep your devices and data private to yourself!

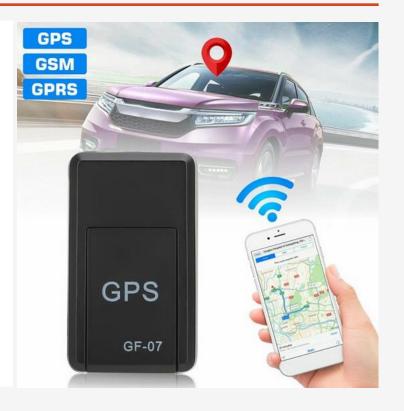
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Control and monitor home, Office, business and portable asset!

## IOT Platform: Weather data collection and Plant control

A platform to manage large scale instruments

- ☐ Cluster IOT System
  - Connect remote sensors and provide data
  - Open close valves, manage flowrate, monitor sensors







Collect weather sensors to our platform!

IOT based Plant monitoring and control system!

## IOT Platform: Enhance software solution for portable asset

Analytics and actionable intelligence for the portable assets

- ☐ Cluster IOT System
  - ➤ Geofencing for portable asset
  - ➤ Maintenance history
  - > Location data
  - > Fuel status
  - > Remote control
  - ➤ Behavioral analysis
  - ➤ Routing history





Connect any sensors to our platform!

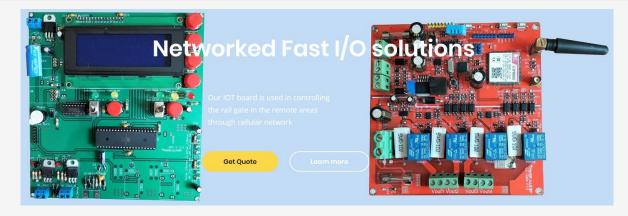
Location tracking and geofencing!

### IOT Platform: We control distributed industrial system over cellular network and internet

Control and monitor your industrial or home equipment's and sensors from anywhere in the world. We manage the secure connection through our proprietary data encryption methodology.

#### □ IOT Controller

- > Can be accessed over the web
- ➤ Can be accessed over the cellular network from any remote place
- Use mesh network to communicate to central server with Radio frequency without needing a tower or cellular connection
- Can be powered by battery, solar or wind
- > Remote control of the Motor, Lights, AC
- ➤ Remote control of Gates, V/Vs, Pumps
- Monitor Water level, moister content, fluid flow, fluid pressure from remote location across the globe
- Hardware level authentication and data encryption for enhanced security





### Project execution: A Farm with outstanding expertise

It is understood that to execute a complex engineering project client need a qualified design firm capable of integrating a complete solutions. The individual engineers in the firm have previous experience in designing large system for the US Government, Amazon and eCommerce industries in USA.

### ☐ Things we do

- Case studies
- > Infrastructure layout recommendation
- > Project management
- > Selection of appropriate technologies
- Produce SOW
- ➤ Mechanical System calculation
- > Mechanical interface design
- > Electrical interface design
- > Control interface design
- > Software interface design
- > Software protocol development
- > Quality implementation
- Acceptance test
- > Implementation of ECR
- > Web interface design
- > Produce Training documents
- > Train employees







Our team in USA, We think outside the box!

## More questions about this presentation?

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http://aclusterllc.com

## Thank you for your attention

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