

Improve processes, detect current problems, prevent costly downtimes, and produce better products

REFERENCES MAINFLUX LABS

Open Source Internet of Things Technology & Consulting Services

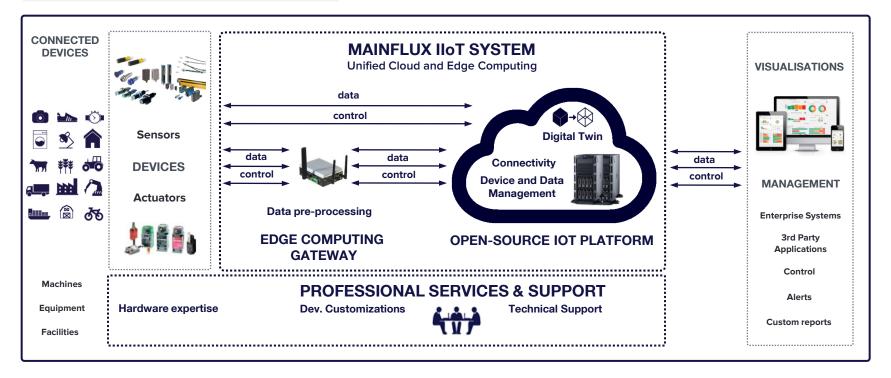
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What We Do

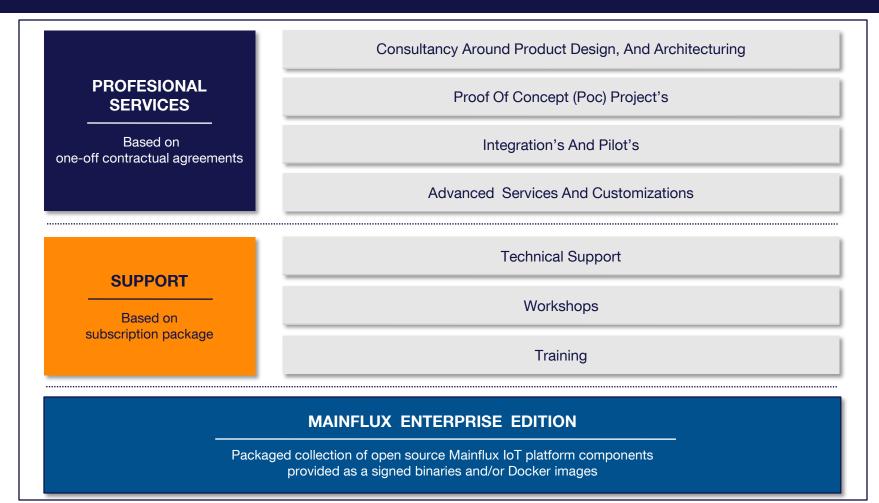
Mainflux Labs is providing

Mainflux
IIoT System

Professional
Services & Support



What We Do



Mainflux Technology Adoption



Implementation of Mainflux IoT Platform Store project. Extending LoRa support in Mainflux. Using Mainflux IoT Platform Video: Principal Engineer of Target's IoT platform Dan Cundiff: Building an IoT Platform at Target.

O'REILLY Golab

in Europe, USA and China

OPEN SOURCE SUMMIT

INT (copemotion)



Conferences **Speaking Engagements** Open Networking Summit - Santa Clara O'Reilly Software Architecture - London ITNext Summit & Codemotion - Amsterdam IoT Solutions World Congress - Barcelona

Two awards from the community of 80

companies and EdgeX Governing

1. Community Contribution Award for



Intel demonstrates Mainflux IoT Plarform or metering on the edge, with article "View Metering In Action On Edge Middleware Platforms"

EDGE X FOUNDRY

COLLABORATIVE PRO IECTS

ILFEDGE





2. Innovation Award for Extensive

Exemplary Leadership

Linux Foundation Membership & Awards

Intel USA - Non-contractual Cooperation

> **300,000 DOWNLOADS** of Mainflux SW Repositories

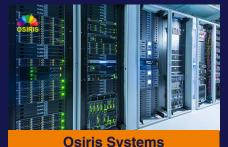
512,743 DL MQTT adapter service

300,691 DL HTTP adapter service 282,537 DL Normalizer service 370.174 DL

Things service

347,206 DL

Mainflux Technology Adoption



for India Coast Guard

development of "Smart RoBo Monitoring Application Smart Server Racks with integrated Chillling Unit, UPS, PDU, environmental and safety sensors. India Coast Guard has already deployed 26 such Smart Server Racks deployed across various locations in India, and is planning to deploy 80 plus such servers in the coming months.

Mainflux IoT Platform is used for



Strictit
School Management System

Strictit ERP and Quality Management and industrial automation company, working mostly in German SME as well in industrial facilities on 4 continents of the world, developed and commercialized school management solution for Switzerland high schools, using Mainflux IoT platform.



Asset Monitoring for Mauritus Telecom BST Towers powered up with ECB, Diesel Generator, Battery Bank. The feed from the existing sensors, do the required calibration at the hardware level, aggregate and transmit the data to the cloud for further analysis using predictive maintenance which provides energy savings.



Taloslogy – Sri Lanka Home Automation Application catering to the home automation segment, with four components in application:

- Device Management (Mainflux)
- Application Backend
- Consumer Mobile Application (Flutter)
- Device Design, Manufacturing, Firmware
 - Smart AirCondtion Automation
 - Smart Gate(Roller gate) Automation
- Refrigerator Monitoring

Mainflux Technology Adoption



Member of the consortium funded by EU H2020 Research and Innovation program for development of assistants for Safe, and Productive Virtual Construction Design, Operation & Maintenance using a Digital Twin. Mainflux was invited by TU Berlin, other members include Erasmus Universiteit Rotterdam, German and Scandinavian construction structural engineering companies.



Member of the consortium funded by EU H2020 Research and Innovation program for development developing resilient accountable metrics, privacy-preserving methods, verification tools and system framework that will serve as critical building blocks to achieve trustworthy Al in security solutions. Member of consortium Includes Fraunhofer, Delft University of Technoogy, Telefonica, NEC, among the others.

Clients and Reference Business Cases



Worldwide Provider of Oilfield & Gas Equipment - USA

Start: 06/2018 / End: Ongoing

First phase: Consulting services for edge computing gateways.

Second phase: Implementation of
Mainflux IoT Platform for management of
IoT gateways deployed in the field.
Implementation of Mainflux IoT Platform
as the Core IoT Platform for gathering
operational data from connected Oil &
Gas equipment.



Independent Software Vendor Locomotive Digital Twins

PoC - Start: 11/2019 / End: 02/2020

Enhancing ISV Client Platform product with an automatic gathering of telemetry data from the equipment, remote and/or autonomous rule-based equipment controlling.

Monitoring of operational indicators of underlying IoT specific IT-infrastructure, remote control of the lifecycle of remote devices.



Start: 09/2018 / End: 10/2020

Development of blockchain powered (Hyperledger) data marketplace for the comprehensive, secure and automated monetization and exchange of IoT sensors and digital assets data with technical and policy-based data verification and the access to a global network of sensors provided by Nokia Sensing as Service.

Clients and Reference Business Cases



PoC - Start: -10/2019 / End: 02/2020.

IoT Platform connected with provisioning, monitoring & analysis with mongoDB with full UI.

First phase: Oil & Gas use case demo kit.



System Integrator - Germany / Japan Manufacturer

PoC - Start: 12/2019 / End: 03/2020

Connecting pharma manufacturing machines via enterprise network to Mainflux. Using OPC-UA industrial protocol. Updating machine and process Digital Twin representation and record it to a semantic database. Integration of MES/ERP systems for process automation, replacing costly historians.



PoC - Start: 09/2018 / End: Ongoing

PoC - Customization of IoT platform for NB-IoT devices for smart metering aimed for Telecom from Eastern Europe.

Mainflux Globally

Countries in which Mainflux is deployed

USA, Russian Federation, Germany France, Switzerland, Georgia, Sri Lanka, India, Mauritius, Australia

Mainflux Labs is in a position to provide credible recommendations for solution deployment with regards to hosting, data storage, communication security, in all mentioned markets except China, considering that its clients and companies that are using Mainflux technology are based in USA, Russia, EU, Switzerland, India and Australia.

Regarding Russia, Mainflux Labs has close relations with two companies/clients (from Moscow and St Petersburg) which are operating within domain of Internet of Things, and have firsthand experience with all relevant regulations.





THANK YOU!

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