# EVA ICS

UNIFIED IOT AUTOMATION SYSTEM FOR BOTH SOHO AND ENTERPRISE

FOR DEVELOPERS AND SYSTEM INTEGRATORS

www.eva-ics.com



## **DATA COLLECTION AND UNIT CONTROL**

**EVA ICS offers 2 powerful ways for controlling and monitoring your equipment:** 



#### **EXTERNAL SCRIPTS**

written in any language – reliable and simple solution to quickly integrate everything you wish

## PHI MODULES

- work as fast as your system can do



**EVA ICS** destroys borders between physical and virtual equipment – monitor and control the local hardware or collect data from external cloud services

**EVA Universal Controller** can act as a controller for directly attached equipment as well as a gateway for any 3rd party controller connected with **ModBus, SNMP, I2C** or any other protocol.

## **DATA AND CONTROL UNIFICATION**



Unlike modern IoT systems which produce gigabytes of noise in data exchange points, **EVA ICS** offers strict data unification, which significantly simplifies analytics and decision making

#### All system objects are divided into 3 types:

UNITS	SENSORS	LOGICAL
can be controlled	can be monitored only	VARIABLES

Each type has 2 primary state fields: <u>STATUS</u> and <u>VALUE</u> which's enough for 100% of tasks

With **EVA UNIVERSAL CONTROLLER** you can easily transform any control protocol or data flow to the unified data format.

#### **REAL-TIME DATA EXCHANGE BETWEEN NODES**

Don't care about the protocols, just connect new node to EVA ICS cluster and it starts exchanging data with others



- Write your own applications to collect data from MQTT and interact with nodes via HTTP/GET, HTTP/POST, HTTP/JSON or MQTT API
- API for everything anything you can do in local console or interface, your software can perform via API
- Use EVA ICS built-in history engine to obtain and process historical data

## **VISUALIZATION IN MODERN INTERFACES**

• SFA FRAMEWORK allows you to build modern interfaces for any setup

• Data for visualization is obtained in real-time via web-sockets and duplicated via AJAX to increase interface reliability

• Create interface for your configuration in a few steps:



- Design the interface
- Create HTML for it
- Put JavaScript framework calls for dynamic elements
- Your interface is ready to work





## DATA ANALYTICS AND DECISION MAKING

- EVA SFA allows collecting all data and controlling every single object from one place
- Connect your own data analytics and decision-making software via **API**
- Use **EVA LM PLC** software controller to perform basic decision-making operations
- Write macros for LM PLC in Python with tons of pre-made functions allowing you to obtain any data and send control command to any object

#### FLEXIBLE SYSTEM STRUCTURE

 Leave mission-critical decision making tasks to hardware logic controllers and program only logic they can't realize

• Replace or duplicate any system parts with your own applications via powerful API

• EVA ICS works with physical objects, you work with logical only, but

• You can define logical level for your setup as deep as you wish

Move any parts of your systems to cloud and back to local

• Use EVA IoT Cloud or build your own



#### The "S" in EVA ICS stands for security

Define access level for any node to any group or single object

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All API calls can be encrypted, including MQTT API



Depending on your needs, use user accounts or API keys



**SECURITY** 

Put mission-critical nodes in local secure network



Calmly move the rest to the cloud and don't be scared to be hacked



## **INTEGRATION AND SUPPORT**

For any questions about integration, support and partnership contact the developer – AlterTech Group:

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