

IoT Gateway "DeviceGateway"



IoT Gateway DeviceGateway

47



Bridge the gap between production sites and IT systems
-Utilize to create added value from production site data-

IT Side : MES, SCADA, WEB services, Cloud services, etc.

IoT Linkage

Equipped with linkage functions for many IoT services, without any programming.

Connectivity

Supports communication with more than 320 series devices from 80 vendors.

Multiple Models

Hardware Models and Software Models (Docker Container)



Vendor-specific cloud protocol

User Definition Json/MQTT (AWS etc.)

User Definition XML/HTTP

Open Standard Agents (SNMP)

Shared Protocol (OPC, SQL, FTP)

Device Gateway

Vendor-specific protocol

Open Network Protocol

OT Side:

Factory



PLCs
Robots
Machine Tools

Plant



Measuring Equipment
Temperature Controllers
Flow Meters

Infrastructure



Water
Oil and Gas
Energy

Building



Building Controller
Lighting Equipment
HVAC System

Sensors



Position sensors
Accelerometers
Thermometers

PLC

**MITSUBISHI
MELSEC**



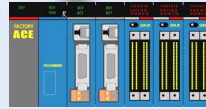
**JTEKT
TOYOPUC**



**OMRON
SYSMAC**



**YOKOGAWA
FA-M3**



**HITACHI
HIDIC**



**SHARP
Satellite**



**FUJI
MICREX**



**KEYENCE
KV**



**YASKAWA
MP**



**PANASONIC
FP**



**ROCKWELL
Allen-
Bradley**



**SIEMENS
SIMATIC**



GE



**TOSHIBA
V/nv**



Machine Tools

- MITSUBISHI
- YAMAZAKI
- FANUC
- SHIBAURA

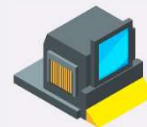


Robot

- YAMAHA
- IAI
- SANYO



Networks



- | | | |
|------------|--------------------|-------------------|
| ● ANYWIRE | ● AZBIL | ● WAGO |
| ● HIOKI | ● RKC | ● MTT |
| ● M-SYSTEM | ● CHINO | ● OMRON |
| ● HAKKO | ● Eurotherm | ● Ablic |
| ● IDEC | ● PANASONIC | ● SIRC |
| ● KOYO | ● MITSUBISHI | ● CODESYS |
| ● DELTA | ● YOKOGAWA | ● COMTROL |
| ● MOXA | ● Silex Technology | ● PHOENIX CONTACT |

EtherNet/IP

Modbus

SLMP

MTConnect

BACnet/IP



Other

DIO/AI



**Serial
Interface**



**Bluetooth
Beacon**

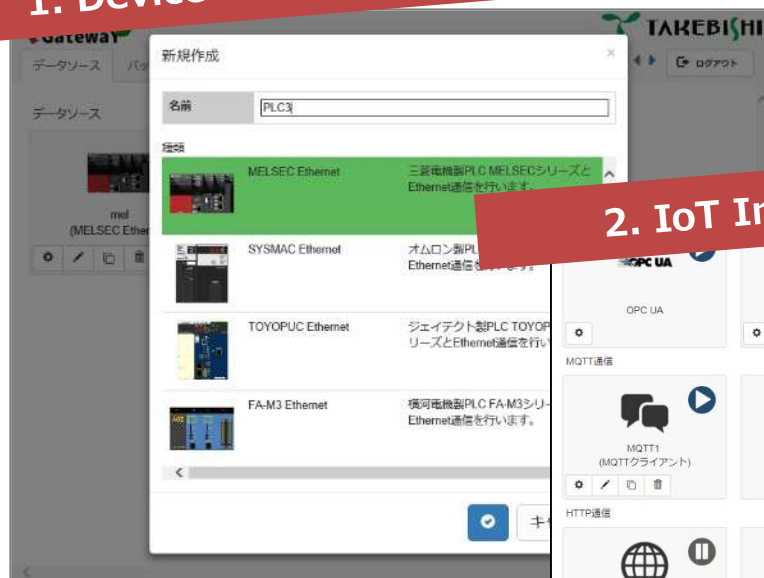


DeviceGateway Simple Operation

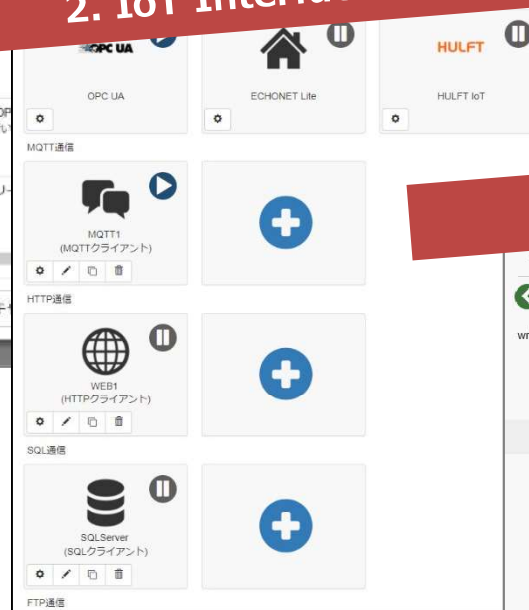
49

Transmit the production data from devices to host systems
without programming

1. Device Communication Setting



2. IoT Interface Setting



3. Custom Logic Setting



Only 3 Steps

Easy to embedded custom logic

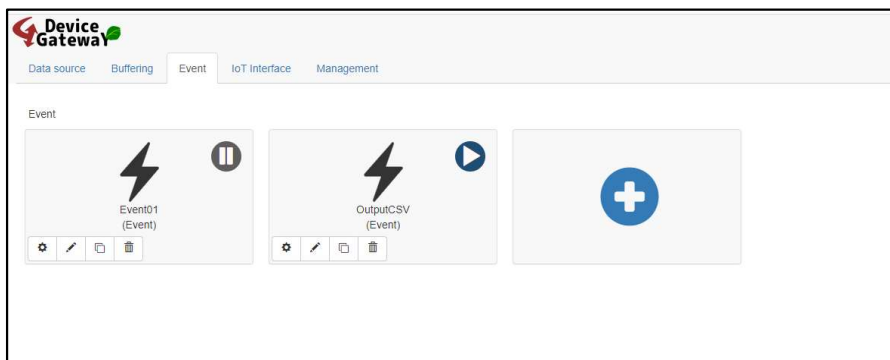
- Custom logic with no-code.
- Just select a trigger and actions.
- Various triggers and actions are provided.

Trigger

- Cycle
- Time
- Value Change
- Alarm Change
- MQTT Receive
etc.

Action

- Read from PLC
- Write to PLC
- File Operation
- SQL Query
- HTTP Request
- MQTT Publish
- Calculation
- Edit text
- Send UDP message
- Extract buffer records
- Output log message
etc.

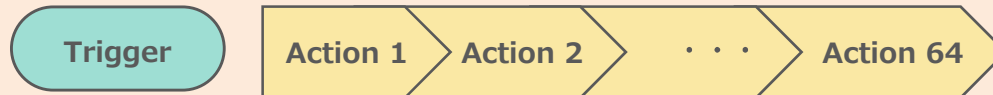


DeviceGateway Event function

51

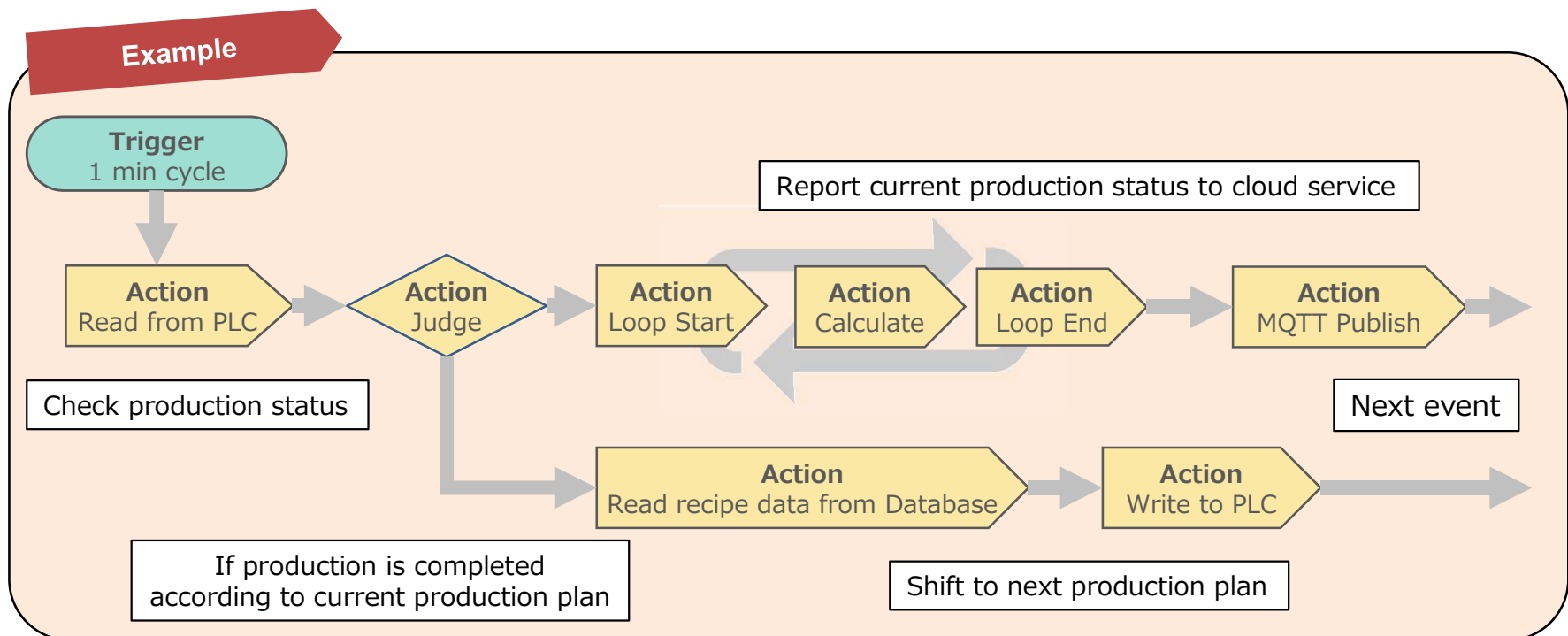
Event 1

1 event has 1 trigger and up to 64 actions



Up to 64 events in total

Example



Item	Description
Product Type	<ul style="list-style-type: none"> - Hardware Type (IoT Gateway Unit) - Software Type (Docker Container)
Supported Interfaces	<ul style="list-style-type: none"> - OPC UA Server (Data Access) - MQTT Publisher/Subscriber - HTTP Client - FTP Server / Client - SQL Client - AWS Kinesis - HULFT IoT Agent - SIEMENS MindSphere Agent - SNMP Agent - iQ Monozukuri etc.
Maximum devices counts Maximum tag counts	<p>(Hardware Type)</p> <ul style="list-style-type: none"> - 8 devices / 8,192 tags <p>(Software Type)</p> <ul style="list-style-type: none"> - 1 devices / 1,024 tags (Basic model) - 16 devices / 16,384 tags (Normal model) - 64 devices / 65,535 tags (High specification model)
Features	<ul style="list-style-type: none"> - Web configuration - Event function (custom logic with no code) - Data buffering etc.

DeviceGateway Lineup

53

Compact Model DGW-C10



- Standard compliant (CE / CSA)
- Serial 1 port (RS232C)
- Power Supply Input: AC 100-240V (The AC power cord must be procured in local country.)

Standard Model DGW-W710



- China Compulsory Certification (CCC) exemption application completed.
- Safety Standard (CE/FCC/UL)
- Equipped with DIO terminal (Input 4ch/Output 4ch)
- DIN rail mounting
- 3 serial ports (RS232C x 1, RS485 x 2)
- Power Supply Input: DC 24V

Software Model DeviceGateway on Docker



- Software model provided by "Docker" container which is based on virtualization
- Embedded in edge computer(Linux and Windows)
- Other application linkage
- Max 64 devices connection (8 devices in other lineups)
- Max 65,535 tags (8,192 tags in other lineups)

MELSEC-Q Model Q24DHCCPU-LS-B040



- space-saving
- Resistance to environment

DeviceGateway Software Model

54

Embedded DeviceGateway on the edge and work with your app.

