

OEE/A SRP

(OEE-Availability Solution-Ready Package)

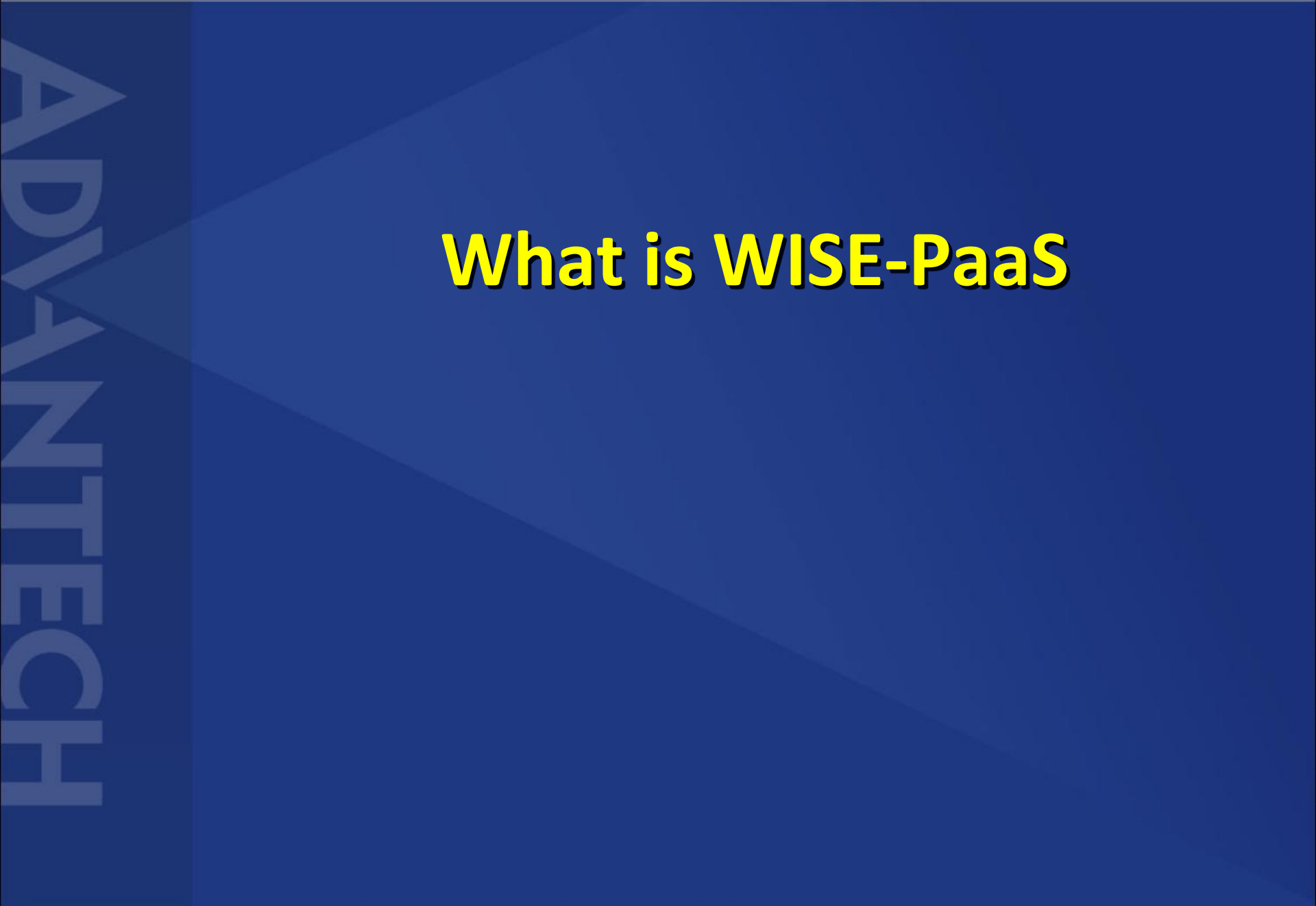
Alger Tan

IIoT SRP SAE

Jan 2019

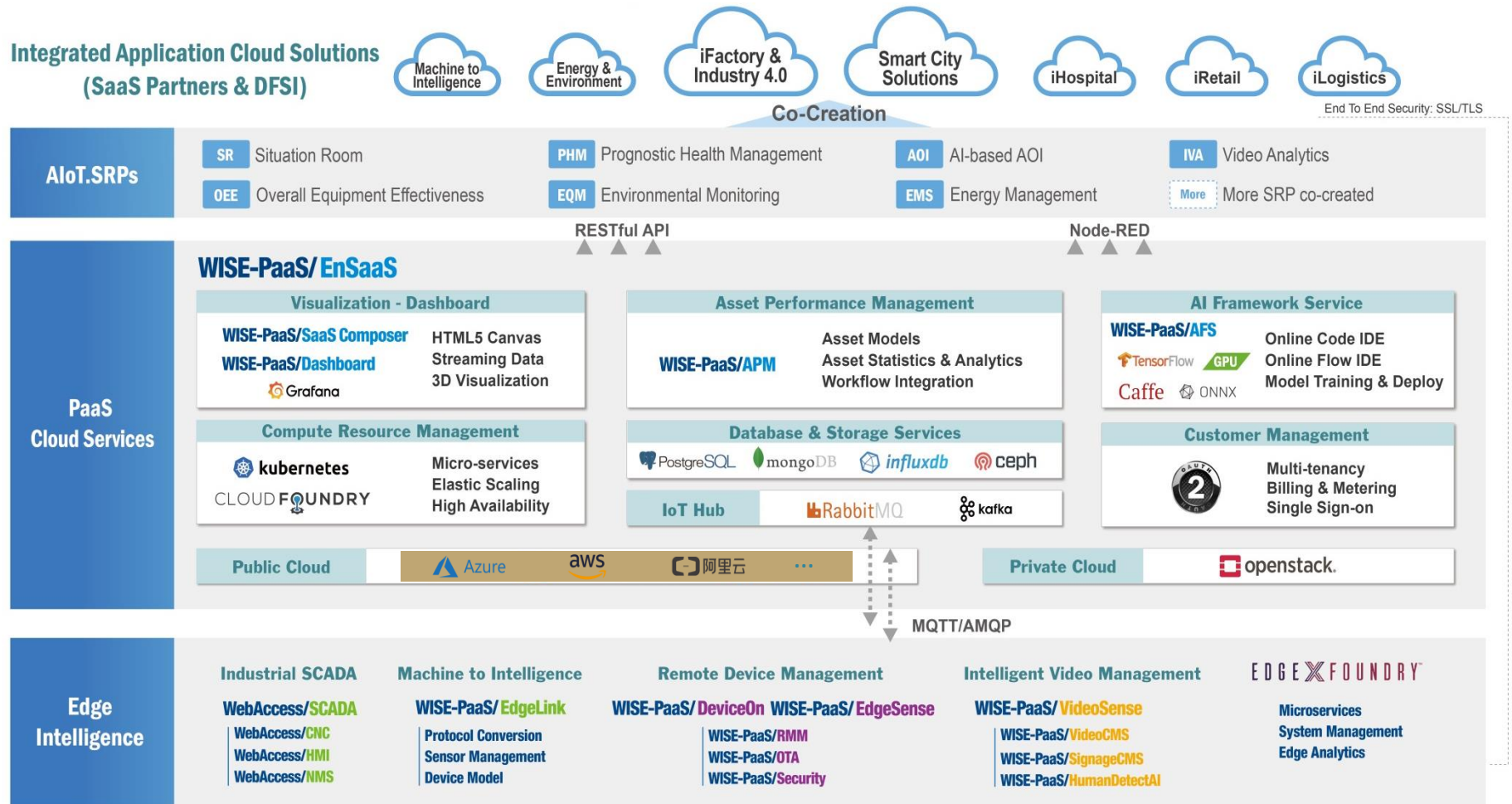
Agenda

- What is WISE-PaaS
- What is OEE/A SRP
- Build up OEE/A Simulation Environment
 - Marketplace Introduction and Hands-on
 - Device Simulator to WebAccess/SCADA Introduction and Hands-on
 - WebAccess/SCADA to WISE-PaaS/SCADA Introduction and Hands-on
 - WISE-PaaS/SCADA to OEE-Configure Introduction and Hands-on
 - OEE-Configure to WISE-PaaS/Dashboard Introduction and Hands-on



What is WISE-PaaS

WISE-PaaS 3.0 AIoT Edge-to-Cloud Architecture



V20181029.WW

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WISE-PaaS/EnSaaS – Public Cloud

Running Instances and to be deployed



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WISE-PaaS User Flow Scenario

<https://wise-paas.advantech.com/en-us/marketplace/>

Login marketplace account
and subscribe EnSaaS Package

<p>Entry service package: 3 million IoT Hub Messages per month, 2GB App Space memory, 50GB DB Storage</p> <p>7.4 WISE-Point</p> <p>9806WPENSD</p> <p>Subscribe</p>	<p>Value service package: 50 million IoT Hub Messages per Month, 2GB App Space memory, 300GB DB Storage</p> <p>28.7 WISE-Point</p> <p>9806WPENMD</p> <p>Subscribe</p>	<p>Economic service package: 200 million IoT Hub Messages per Month, 4GB App Space memory, 1,200GB DB Storage</p> <p>100 WISE-Point</p> <p>9806WPENLD</p> <p>Subscribe</p>
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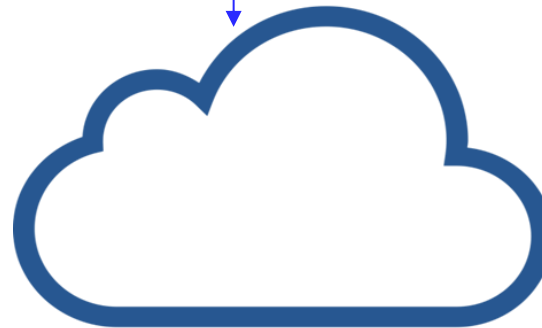
Select your Account

Customers who wish to use EnSaaS cloud service in China regions are required to sign up for EnSaaS (China) account where the data center is in Beijing. For EnSaaS services available in global regions, please sign up for EnSaaS account where the data center is in Hong Kong.

your Account Region *

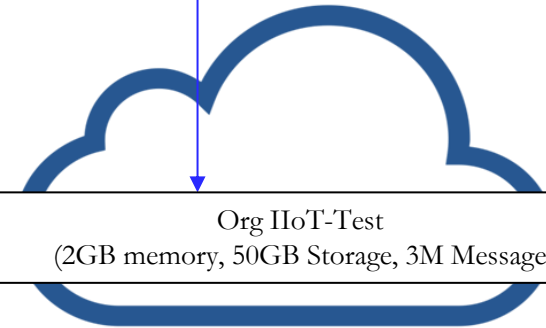
☐ EnSaaS (China) account

☐ EnSaaS account
for services available outside of China



WISE-PaaS

Beijing



WISE-PaaS

HK

Org IIoT-Test
(2GB memory, 50GB Storage, 3M Message)



* Operated by ZTE/Verizon

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WISE-PaaS User Flow Scenario – SCADA Service

<https://wise-paas.advantech.com/en-us/marketplace/>

Once you have EnSaaS account, you will be able to subscribe package into space.

For example, first time we subscribe EnSaaS entry package as below

The screenshot displays the WISE-PaaS/EnSaaS Cloud Service marketplace. On the left, three service packages are listed:

- Entry service package:** 3 million IoT Hub Messages per month, 2GB App Space memory, 50GB DB Storage. Price: 7.4 WISE-Point.
- Value service package:** 50 million IoT Hub Messages per month, 2GB App Space memory, 300GB DB Storage. Price: 28.7 WISE-Point.
- Economic service package:** 200 million IoT Hub Messages per month, 4GB App Space memory, 1,200GB DB Storage. Price: 100 WISE-Point.

Each package has a 'Subscribe' button. A red box highlights the 'Entry' package, and a red arrow points to the detailed view on the right.

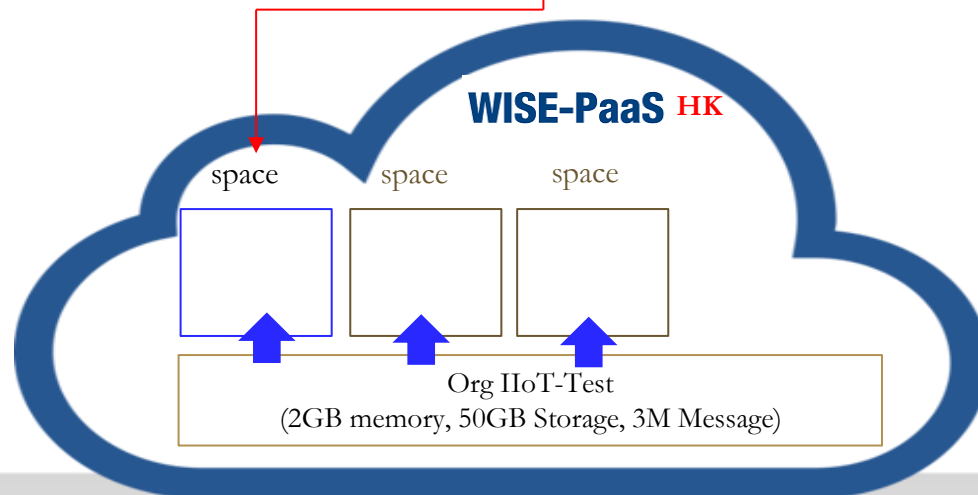
The detailed view shows the 'Choose Your Monthly Subscription Services' page. It includes a table with the following data:

Software Service	Plan / Quantity	Pricing
Entry service package: 3 million IoT Hub Messages per month, 2GB App Space memory, 50GB DB Storage	Entry	7.40
17.95GB (usage) / 20GB (total memory)		
<input type="checkbox"/> Add additional 2GB to my App Space memory		0.00
Add Bundled Service ...		
<input type="checkbox"/> EdgeSense 10 devices	1	0.00
<input checked="" type="checkbox"/> SCADA 1,000 tags	1	0.00
<input type="checkbox"/> VideoCMS 8CH	1	0.00

Annotations with dashed blue lines point to the pricing:

- Price of EnSaaS (Infra Resource):** Points to the 7.40 price for the entry package.
- FREE for SCADA Service:** Points to the 0.00 price for the SCADA 1,000 tags bundled service.

Create "default_space" and install selected APPs automatically.



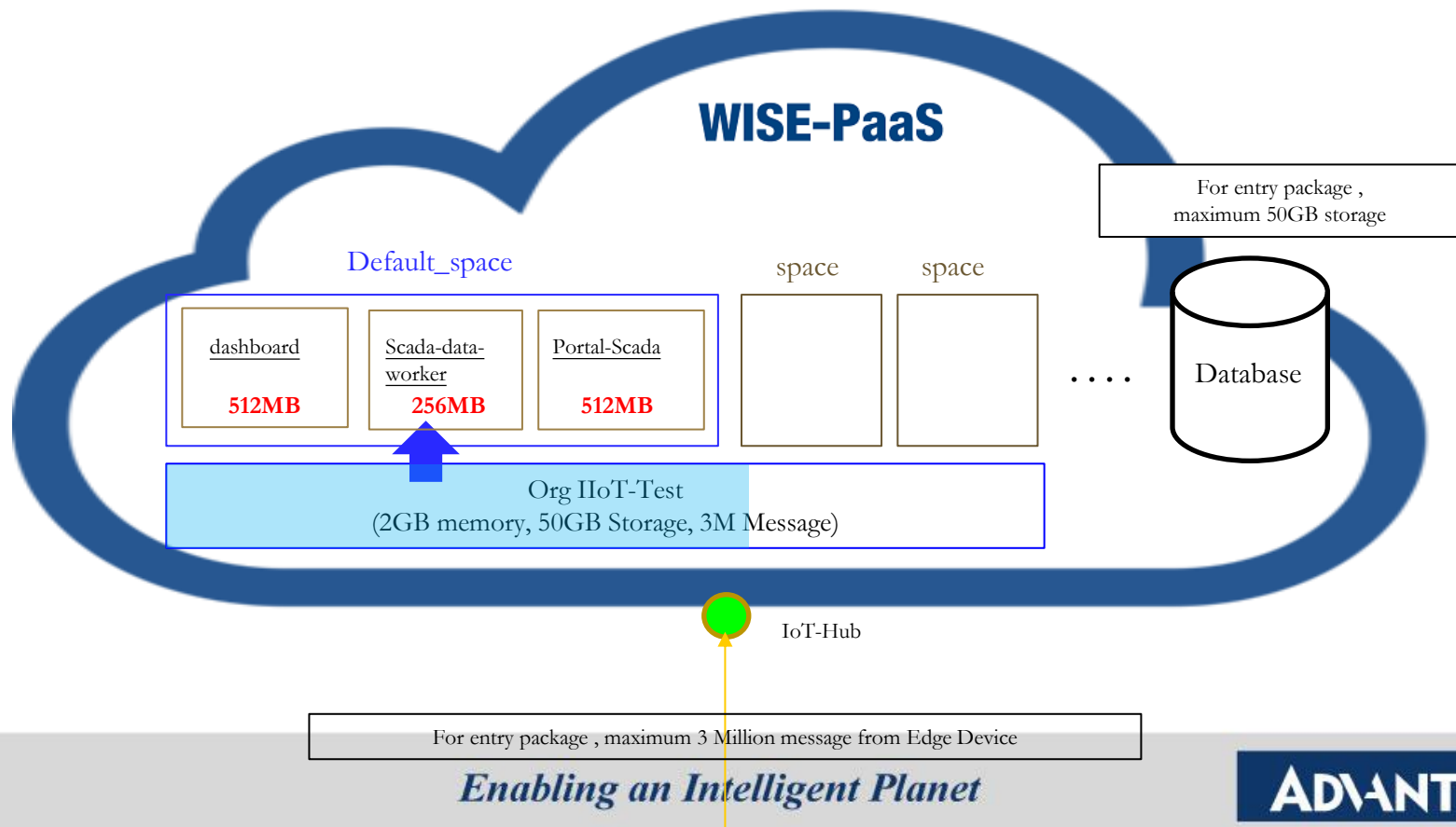
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WISE-PaaS User Flow Scenario – SCADA Service

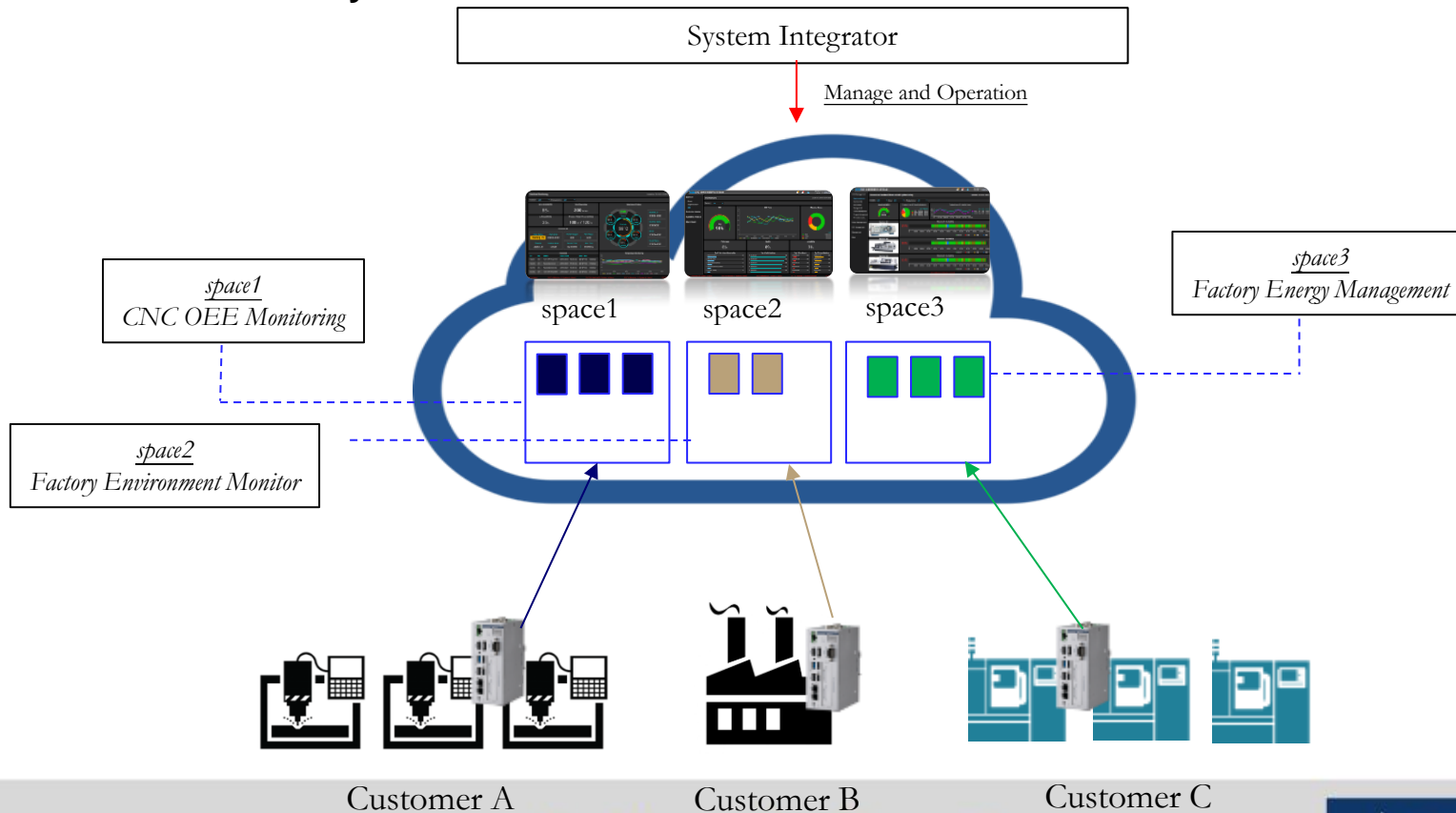
Wise-PaaS User Flow Scenario – SCADA Service

- EnSaaS will install “Wise-PaaS Dashboard” (512MB) application in default, it’s also free.
- Each package will include several application which response to various service.
- For example of Wise-PaaS SCADA package (Free) , we have two applications installed in space. 1. Scada-data-worker (256MB) 2. Portal-Scada (512MB)
- lot hub message is counted with entire organization (all spaces)
- DB storage is counted with entire organization (all spaces)



WISE-PaaS User Flow Scenario – SI Service

- **Wise-PaaS User Flow Scenario – Example for SI Service**
 - Immediate service deploy and provide service to different customer.
 - No IT maintenance effort.
 - Compatible with most of Advantech edge product.
 - Free dashboard application to visualize manufacturing process and realize industry 4.0

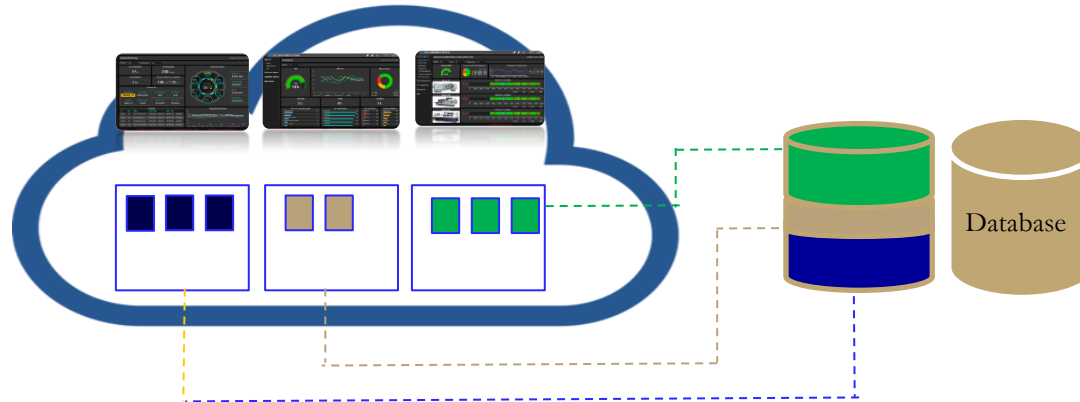


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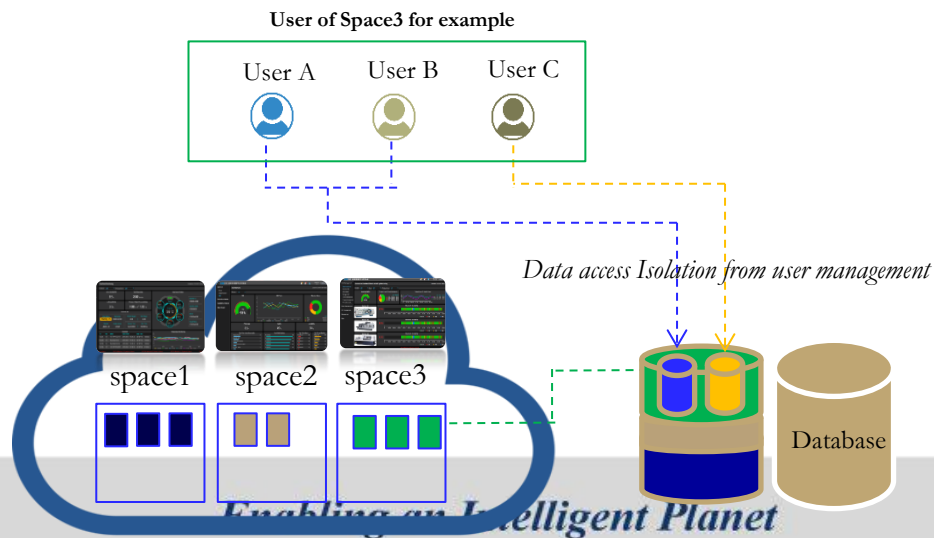
WISE-PaaS User Flow Scenario – SI Service

- Wise-PaaS User Flow Scenario – **Example for SI Service**
 - Data isolation by each space.

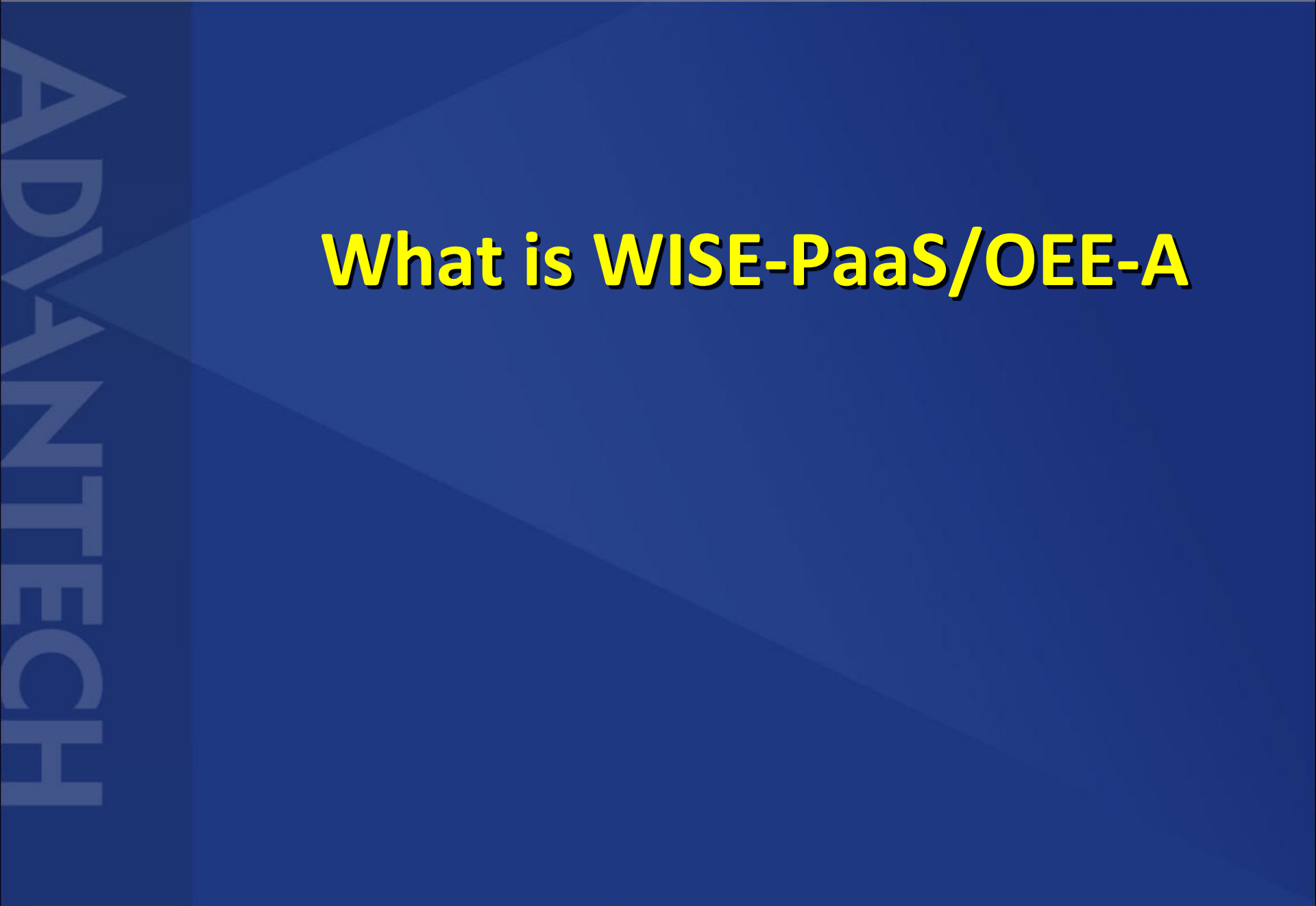


Data Isolation from each application

- Data view isolation user management.** In the application of space, user can be managed to access different project.



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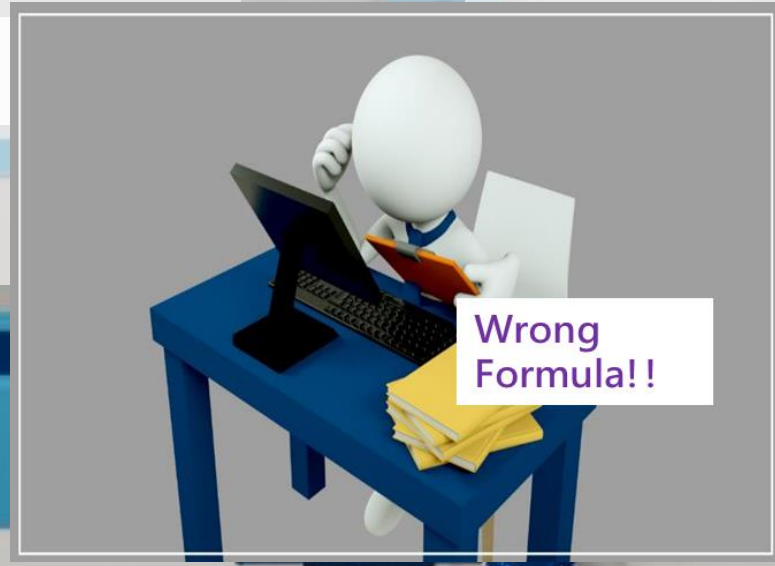
What is WISE-PaaS/OEE-A

Paint Point of Factory Owner

Status of equipment ?

Production lead time ?

Where is bottle neck ?



Un-smooth manufacturing ➡ Stuck Capacity ➡ Lower Output

What is OEE Availability

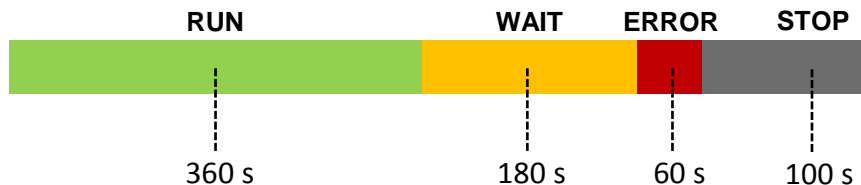
OEE (Overall Equipment Effectiveness)

$$\text{OEE \%} = \text{Availability (\%)} \times \text{Performance (\%)} \times \text{Quality (\%)}$$

Availability

$$\text{Availability (\%)} = \frac{\text{Total Machine RUN time (sec)}}{\text{Total Machine Power-on time (sec)}}$$

Ex:



$$\text{Availability (\%)} = \frac{360 \text{ s}}{360 + 180 + 60 \text{ s}} = 60 \%$$

Structure

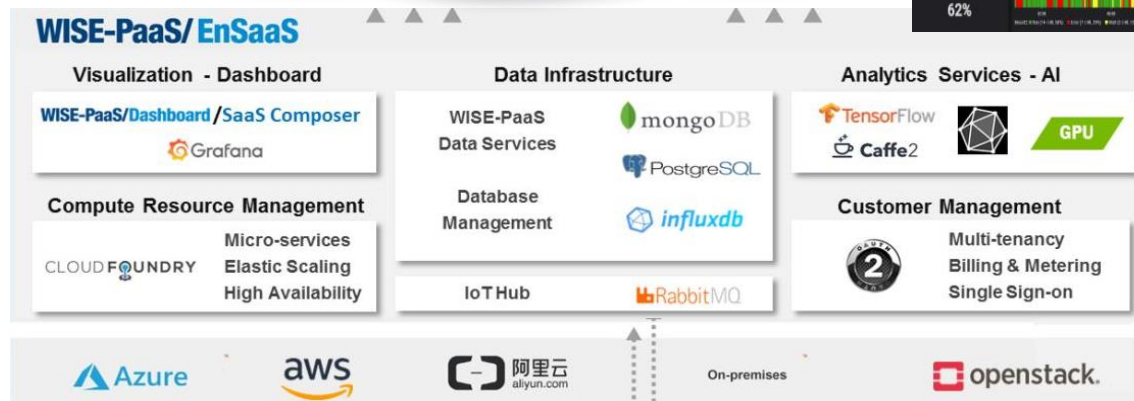


PaaS

IaaS

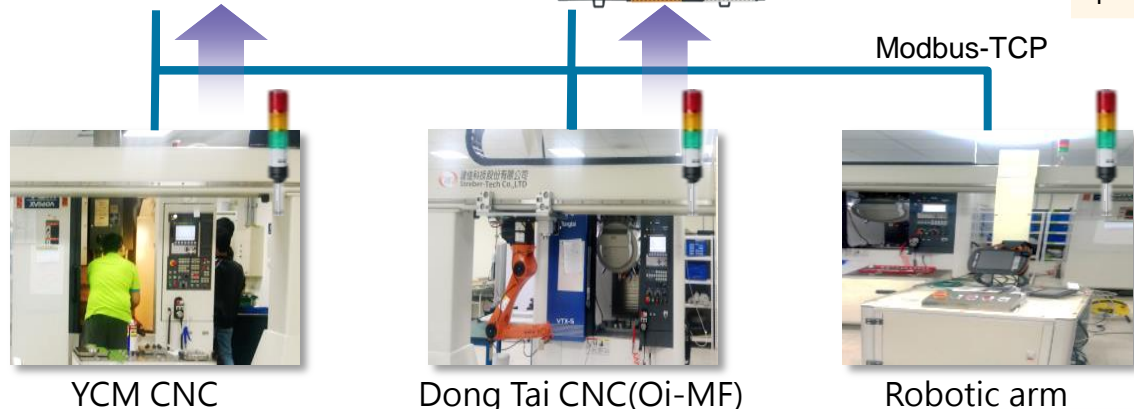
Edge Intelligent Server (EIS)

Edge Device



Integrate to a Calculation Tag

Value	Explanation
0	Stop
1	Alert
2	Idle
4	Run

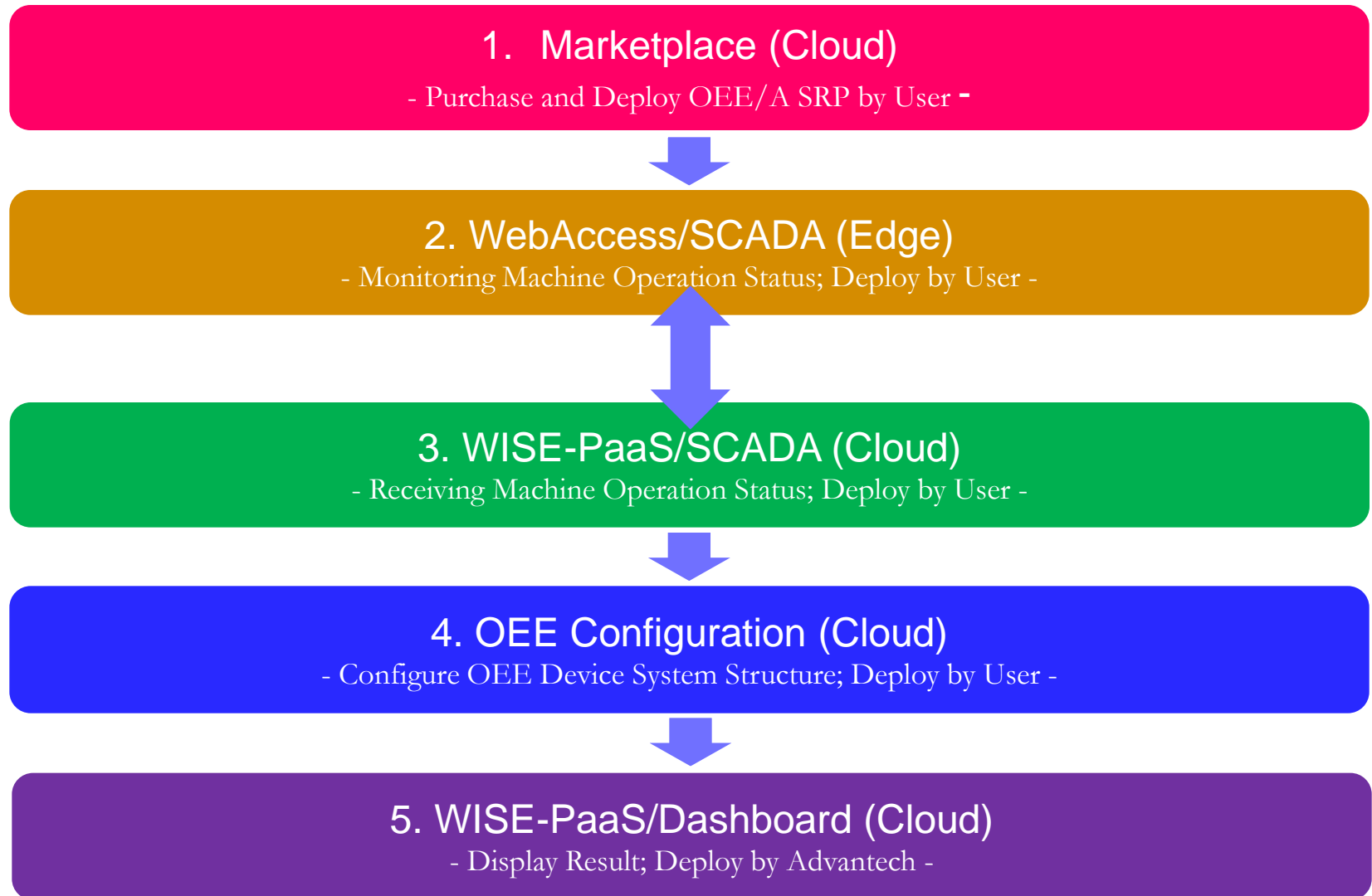


Get the device running status (many tags)

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OEE Availability Configuration Steps





1. Marketplace

OEE Availability Configuration Steps

1. Marketplace (Cloud)

- Purchase and Deploy OEE/A SRP by User -



2. WebAccess/SCADA (Edge)

- Monitoring Machine Operation Status; Deploy by User -



3. WISE-PaaS/SCADA (Cloud)

- Receiving Machine Operation Status; Deploy by User -



4. OEE Configuration (Cloud)

- Configure OEE Device System Structure; Deploy by User -

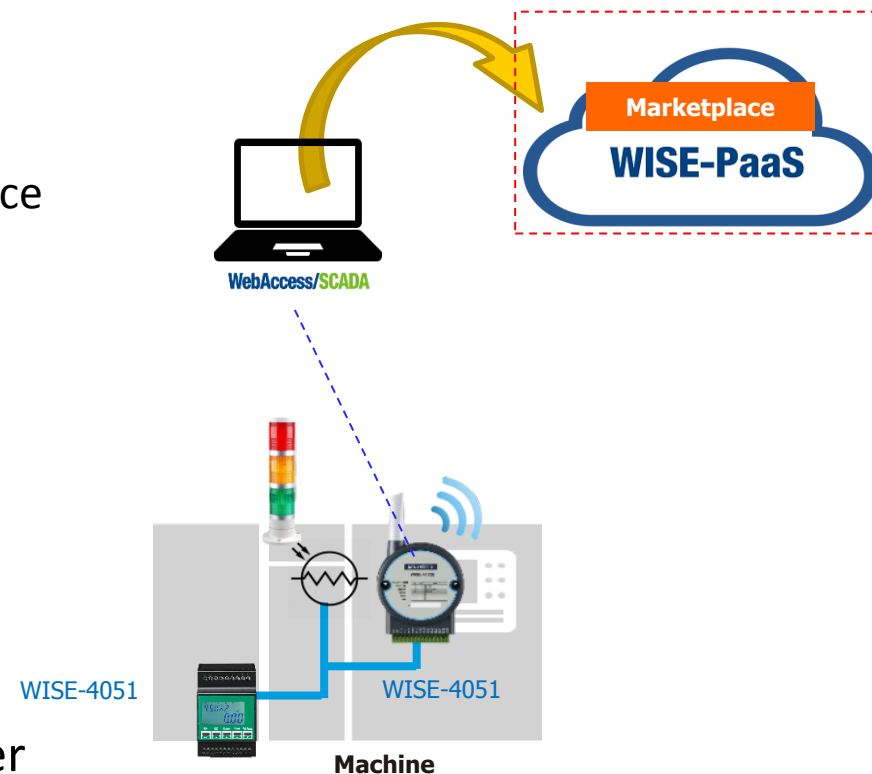


5. WISE-PaaS/Dashboard (Cloud)

- Display Result; Deploy by Advantech -

Marketplace Pre-request & Purpose

- Pre-request
 - User must have two accounts
 - **Marketplace account** – for purchase OEE/A SRP
 - **WISE-PaaS/EnSaaS account** – arrange an organization and a space to deploy OEE/A SRP
- Purpose
 - Deploy OEE/A SRP Applications
 - URL: <https://wise-paas.advantech.com/en-us/marketplace>
 - Get all key **instances** and **URLs** after OEE/A deployment is completed



Instance List

	Name	Version	Purpose
1	portal-scada	1.3.14 or later	WISE-PaaS/SCADA
2	portal-OEE-Config	2.0.2 or later	Setup product line machine
3	Dashboard	1.1.19 or later	WISE-PaaS/Dashboard
4	api-ifactory-srp-postgres	1.1.3 or later	Internal use
5	api-scada-simplejson	1.0.14 or later	Internal use
6	OEEUtilizCal-dataworker	1.3.2 or later	Calculate OEE/A hourly, daily and monthly data
7	OEEUtilizSig-dataworker	2.4.3 or later	Get device running status from database
8	scada-dataworker	1.3.7 or later	Internal use

URLs

- All key URLs can be found at Management Portal
 - Organization -> Space -> Application -> Routes

Organization: NipponRAD Space: default2_space

Application List Service Instance List Route List Usage

Name ▲	Package State	Instances:	State
portal-scada-1-3-7-nipponrad-default2_space.wise-paas.com			
portal-scada-nipponrad-default2_space.wise-paas.com			

Routes Environment Variables

application_env_json

Both URLs are ok.
The only difference is to show application version number or not

URLs

- Customer company name and Space name will be included in URL

	Application	URL Rule
1	portal-scada (WISE-PaaS/SCADA)	https://portal-scada- CompanyName-SpaceName _space.wise-paas.com/#/CloudManager/DeviceManagement
2	portal-OEE-Config (OEE Configuration)	https://portal-oeconfig- CompanyName-SpaceName _space.wise-paas.com/
3	Dashboard	https://dashboard-1-1-18- CompanyName-SpaceName _space.wise-paas.com/?orgId=1

Easy Steps

1. Deploy OEE/A SRP in Marketplace

OEE/A - Overall Equipment Effectiveness Solution
An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing
iFactory/OEE

2. Pay by WISE-Point

iFactory OEE/A Generic Industrial Cloud Service

100 machine connections

16.68
WISE-Point

9803WPOE01

Subscribe

Deploy the Subscribed Services

Your service will be deployed to the Space below. You can edit Space name on the Management Portal.

Space Name: OEE-713162

3. Space will be deployed

4. Result in Management Portal

My Customers - >> Advantech >> X

Management Portal

X

+

https://portal-management.wise-paas.com/space

WISE-PaaS/EnSaaSManagement Portal

Organizations / AdvIoT-SAE / OEE-713162

Organization AdvIoT-SAE Space OEE-713162

Application List Service Instance List Route List Usage

	Name	Package State	State	Instances	State	CPU	Memory	Disk
<input type="checkbox"/>	api-factory-erp-postgres-1.1.3	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	128M	1G
<input type="checkbox"/>	api-escape-emperson-1.0.14	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G
<input type="checkbox"/>	dashboard-1.1.19	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G
<input type="checkbox"/>	OEEUtiltyCal-dataworker-1.3.2	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G
<input type="checkbox"/>	OEEUtiltySig-dataworker-2.4.3	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G
<input type="checkbox"/>	portal-OEE-Config-2.0.2	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	64M	512M
<input type="checkbox"/>	portal-escape-1.3.14	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G
<input type="checkbox"/>	escape-dataworker-1.3.7	STAGED	<div></div>	1 (Total) • Usage	<div></div>	N/A	256M	1G

WISE-4051

Machine

WISE-4051

Practice – Marketplace

- Open a browser (e.g. Chrome) and enter Marketplace URL
<https://wise-paas.advantech.com/en-us/marketplace>
- Click “Industrial Cloud Solutions”

The screenshot shows the WISE-PaaS Marketplace website. The top navigation bar includes links for Marketplace, Knowledge Portal, IoT News, Technical Portal, WISE-PaaS Alliance, and Integrated Solutions. The main header area features the text "Embedded IoT & Industrial IoT & Service IoT" on the left and "WISE-PaaS Marketplace Discovering and Shopping for Your Own IoT Deployments" in the center. Below this, there is a section with icons for "Pre-Configured Packages", "Business Expansion", "ADVANTECH WISE-PaaS IoT Edge Intelligence", "Ecosystem Co-Prosperity", and "Simple Deployment". A "View Solution" button is present. To the right, there is a video player showing a preview of the marketplace interface. Below the main header, there is a sidebar on the left with a menu: Home, IoT Cloud Services, IoT Security Services, IoT PaaS Software Services, Solution Packages, and Industrial Cloud Solutions (which is highlighted with a red rectangle). The main content area under "IoT Cloud Services" shows three service cards: "WISE-PaaS/EnSaaS - edge to cloud services" (with a "WISE-PaaS/EnSaaS" link), "Microsoft Azure Pay-As-You-Go" (with an "Azure" logo), and "Azure Cloud Infrastructure" (with an "Azure" logo). A "See More" link is visible to the right of the "IoT Cloud Services" section.

Practice – Marketplace

- Select “OEE/A Overall Equipment Effectiveness Solution”

The screenshot displays the WISE-PaaS Marketplace website. The top navigation bar includes links for Marketplace, Knowledge Portal, IoT News, Technical Portal, WISE-PaaS Alliance, and Integrated Solutions. A left sidebar lists categories: Embedded IoT & Industrial IoT & Service IoT, IoT Cloud Services, IoT Security Services, IoT PaaS Software Services, Solution Packages, and Industrial Cloud Solutions. The main content area features a hero section with the title "WISE-PaaS Marketplace" and the subtitle "Discovering and Shopping for Your Own IoT Deployments". Below this is a diagram illustrating the WISE-PaaS IoT Edge Intelligence ecosystem, which includes components like Pre-Configured Packages, Business Expansion, Ecosystem Co-Prosperity, and Simple Deployment. A "View Solution" button is present. To the right, a video player shows a preview of the marketplace interface. Below the hero section, the "Industrial Cloud Solutions" category is expanded, showing three solution cards: "E2I/Vibration Monitoring", "M2I/CNC", and "OEE/A - Overall Equipment Effectiveness Solution". The "OEE/A" card is highlighted with a red border and contains the text: "OEE/A - Overall Equipment Effectiveness Solution", "An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing", and "iFactory/OEE". Logos for Microsoft, ARM, MBED, McAfee, and Acronis are displayed at the bottom of the hero section.

Marketplace Knowledge Portal IoT News Technical Portal WISE-PaaS Alliance Integrated Solutions

Embedded IoT & Industrial IoT & Service IoT

WISE-PaaS Marketplace

Discovering and Shopping for Your Own IoT Deployments

Pre-Configured Packages Business Expansion Ecosystem Co-Prosperity Simple Deployment

ADANTECH **WISE-PaaS** IoT Edge Intelligence

[View Solution](#)

Microsoft ARM MBED McAfee Acronis

WISE-PaaS Marketplace

Home > **Industrial Cloud Solutions**

- IoT Cloud Services >
- IoT Security Services >
- IoT PaaS Software Services >
- Solution Packages >
- Industrial Cloud Solutions >

Equipment Vibration Monitoring Solution

Facilities Equipment Status Monitoring and Maintenance

E2I/Vibration Monitoring

M2I/CNC Machine Management Service v1.1.0

Industrial Cloud Solution for Machine Management

M2I/CNC

OEE/A - Overall Equipment Effectiveness Solution

An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing

iFactory/OEE

Practice – Marketplace

- Click “Start Trial”

The screenshot displays the WISE-PaaS Marketplace website. The top navigation bar includes links for Marketplace, Knowledge Portal, IoT News, Technical Portal, WISE-PaaS Alliance, and Integrated Solutions. A left sidebar lists categories: Embedded IoT & Industrial IoT & Service IoT, Home, IoT Cloud Services, IoT Security Services, IoT PaaS Software Services, Solution Packages, and Industrial Cloud. The main header reads 'WISE-PaaS Marketplace' with the tagline 'Discovering and Shopping for Your Own IoT Deployments'. Below this is a promotional banner for Advantech WISE-PaaS IoT Edge Intelligence, featuring icons for Pre-Configured Packages, Business Expansion, Ecosystem Co-Prosperity, and Simple Deployment, along with logos for Microsoft, ARM, MBED, McAfee, and Acronis. A video player shows a preview of the marketplace interface. The featured product is 'iFactory/OEE' by Advantech, described as an 'OEE/A - Overall Equipment Effectiveness Solution'. It lists the service provider as Advantech, category as Industrial Cloud Solutions, and last update as 10/24/2018 12:00:00 AM. A description states it is 'An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing Operational Excellence'. To the right, a pricing box shows '16.68 up WISE-Point' for a 'Monthly Subscription (Trial Available)', with a 'Start Trial' button highlighted by a red rectangle.

Marketplace Knowledge Portal IoT News Technical Portal WISE-PaaS Alliance Integrated Solutions

Embedded IoT & Industrial IoT & Service IoT

WISE-PaaS Marketplace

Discovering and Shopping for Your Own IoT Deployments

Pre-Configured Packages Business Expansion Ecosystem Co-Prosperity Simple Deployment

ADVANTECH **WISE-PaaS** IoT Edge Intelligence

View Solution

Microsoft ARM MBED McAfee Acronis

Home IoT Cloud Services IoT Security Services IoT PaaS Software Services Solution Packages Industrial Cloud

iFactory/OEE

OEE/A - Overall Equipment Effectiveness Solution

Service Provider : Advantech
Category : Industrial Cloud Solutions
Last Update : 10/24/2018 12:00:00 AM

An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing Operational Excellence


16.68 up
WISE-Point
Monthly Subscription
(Trial Available)


Start Trial


Practice – Marketplace


- Click “Subscribe”

Resource

 Frequently Asked Questions

 Join WISE-PaaS Alliance Member

 Become WISE-PaaS Solution Provider

 Explore WISE-PaaS Knowledge Portal

iFactory OEE/A Generic Industrial Cloud Service

100 machine connections

16.68
WISE-Point

9803WPOE01

Subscribe

Practice – Enter Marketplace Account

- Login Marketplace
 - Enter Marketplace email address and password, and then click “Sign In”

Sign In

I have an Advantech account

English ▼

Email address

Please enter your email

Password

Please enter your password

Sign In

[Forgot your password?](#)

New to Advantech ?

Sign Up Today

Create your Advantech Account and enjoy these benefits:

- Download member-exclusive

Practice – Change Role

- Click “Change role to this customer”

ADVANTECH *Enabling an Intelligent Planet* Points : 0.00 Nick Liu

Home

My Customers

Customer List

Company	Customer Admins	Points	Types	Change Role
WISE-PaaS_Internal (AdvIIoT-SAE)	1-100RWXR	0	WISELead	Change role to this customer

- Click “Confirm”

Confirm Change Role

Do you want to change the role to :

Company: WISE-PaaS_Internal (AdvIIoT-SAE)
Customer Admin: 1-100RWXR
Point: 0
Type: WISELead

Cancel **Confirm**

Practice – Select Connection Number

- Select Number of Device/Machine connections, then click “Next”

Estimate Your Price

Estimate your monthly fee by machine connections

Please Select the Number of Device/Machine Connections

OOE/A - Overall Equipment Effectiveness Solution - An Industrial Cloud Solution for Real-time Machine Availability Management for Maximizing Operational Excellence

100 machine connections ▼

Estimated Total: 9.28 WISE-Point/mo

Associated PaaS Service Minimum System Requirements

This solution requires at least the following WISE-PaaS/EnSaaS resources to operate its functions.

IoT Hub messages: 3M; DB Storage: 50GB; App Space memory: 2GB

***After checking your EnSaaS environment, you currently have 7.5GB App Space memory which is sufficient for this subscription.**

**Pay As You Go consumption fees automate apply for IoT Hub messages and DB Storage usage exceeding the subscribed plan in a monthly billing cycle.*

Discount:

0.00 WISE-Point/month

Estimated Total after discount:

9.28 WISE-Point/month

**Your WISE-PaaS/EnSaaS Trial Subscription ends on Jan 21, 2019*

NEXT

Practice – Authorize Confirm

- Enter WISE-PaaS/EnSaaS Account and then click “Authorize & Confirm”

Subscribe to this Industrial Cloud Solutions


powered by WISE-PaaS

OEE/A - Overall Equipment Effectiveness Solution
Service Provider : Advantech Category : Industrial Cloud Solutions
Last Update : 10/24/2018 12:00:00 AM
An Industrial Cloud Solution for Real-time Machine Availability Management
for Maximizing Operational Excellence

ESTIMATE PRICE



AUTHORIZE & CONFIRM



DEPLOY



Authorize

Login with your WISE-PaaS/EnSaaS account to authorize and confirm the subscription

[Forgot your password?](#)

Confirm your Subscriptions

- OEE/A - Overall Equipment Effectiveness Solution - 100 machine connections

**Pay As You Go consumption fees apply for IoT Hub Messages and DB Storage usage exceeding the subscribed plan in a monthly billing cycle.*

Total after discount :

9.28 WISE-Point/Month

PREV

AUTHORIZE & CONFIRM

Practice – Start Deploy

- Marketplace will inform the Space of the OEE/A SRP deployment
- Click “Start Deploy”

Deploy the Subscribed Services

Your service will be deployed to the Space below. You can edit Space name on the Management Portal.

Space Name: OEE-713162

Ready to deploy your services. This may take a while to process.

Deploy

- OEE/A - Overall Equipment Effectiveness Solution – 100 machine connections

START DEPLOY

Deploy

- OEE/A - Overall Equipment Effectiveness Solution – 100 machine connections

deploying



Practice – Deploy

- Space Name: OEE-713162
 - Means OEE/A are being deployed
- View your service on Management Portal
 - Means go to WISE-PaaS/EnSaaS Management Portal to check OEE/A
- Click “Done” to finish subscribed

ESTIMATE PRICE AUTHORIZE & CONFIRM DEPLOY

✓ ✓ ✓

Successfully Subscribed

The services you've subscribed are being deployed to

Space Name: OEE-713162

EnSaaS Data Center: Hong Kong [view your service on Management Portal >](#)

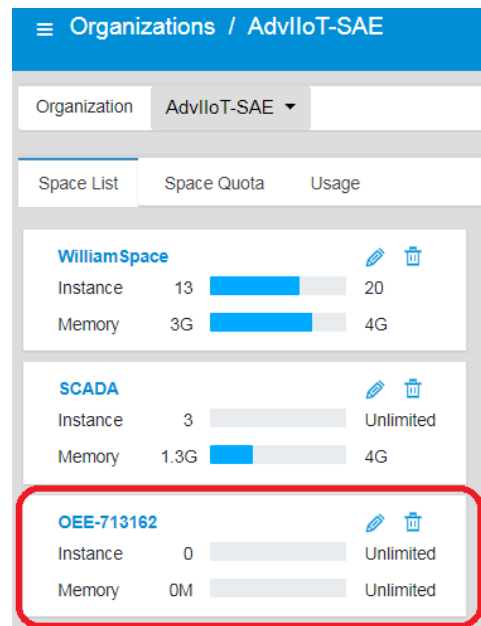
Get Started

• WISE-PaaS/EnSaaS [view Tech Documents >](#)

[VIEW SUBSCRIPTIONS](#) [DONE](#)

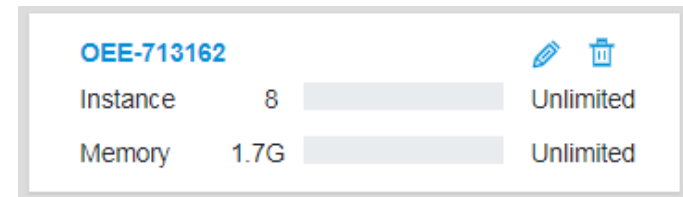
Practice – Result in Management Portal

- Space (e.g. OEE-713162) will be created in WISE-PaaS/EnSaaS Management Portal.
 - <https://wise-paas.advantech.com/en-us/marketplace>
- Once complete, 8 instances will be deployed in Space
- Click Space(e.g. OEE-713162) to check all instances



Beginning of deploying

- Instance deploys: 0
- Memory Usage: 0 M



Deployment Completed:

- 8 Instances are deployed successfully
- Memory Usage: 1.7GB

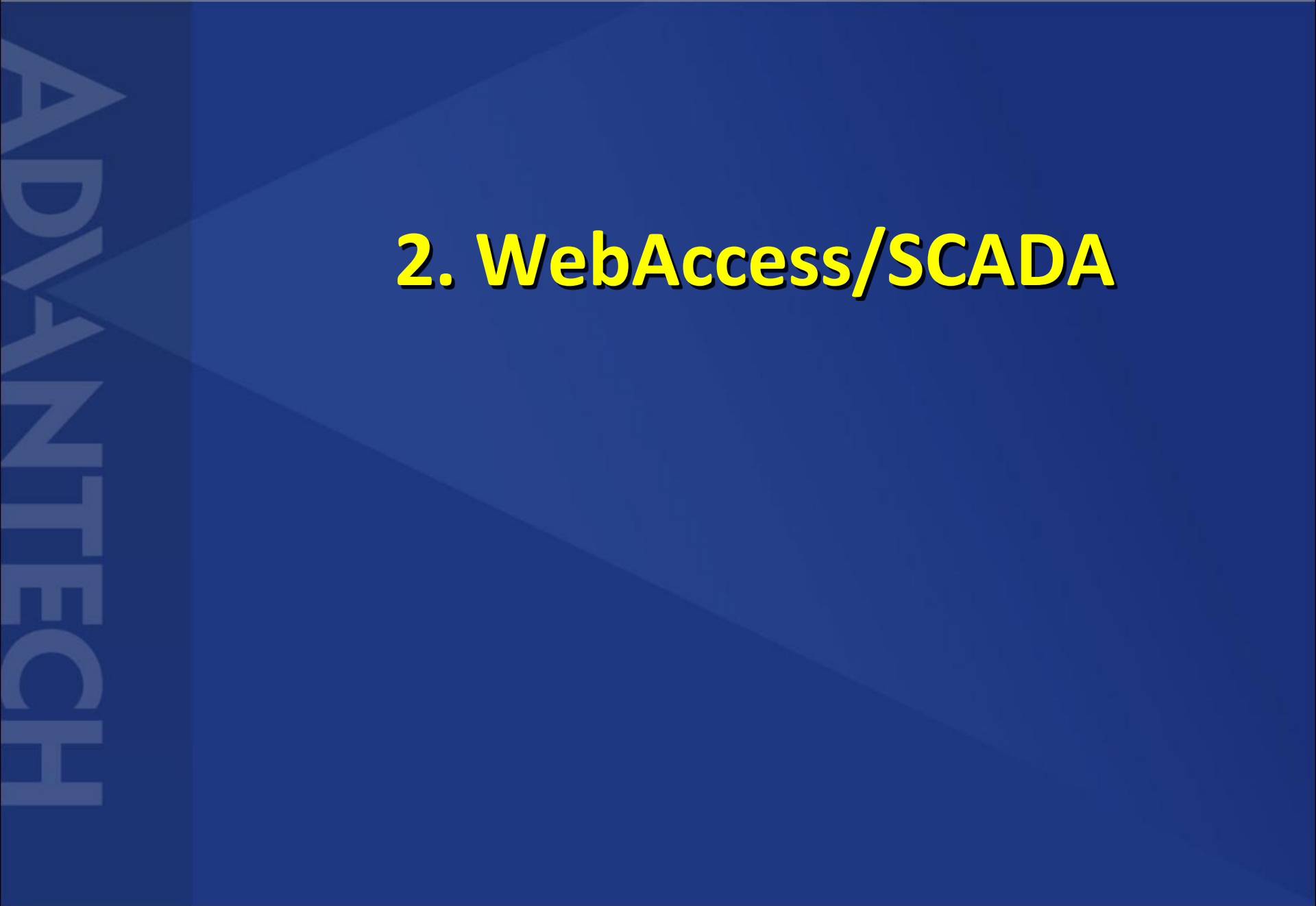
Practice – Result in Management Portal

- Result of successfully deploying OEE-Availability

The screenshot displays the WISE-PaaS/EnSaaS Management Portal interface. The browser address bar shows the URL <https://portal-management.wise-paas.com/space>. The page header includes the logo "WISE-PaaS/EnSaaS Management Portal" and the breadcrumb "Organizations / AdvIoT-SAE / OEE-713162". The left sidebar contains navigation links for Organizations, Organization, Space, Users, and SRPs. The main content area shows the "Application List" tab selected, displaying a table of applications.

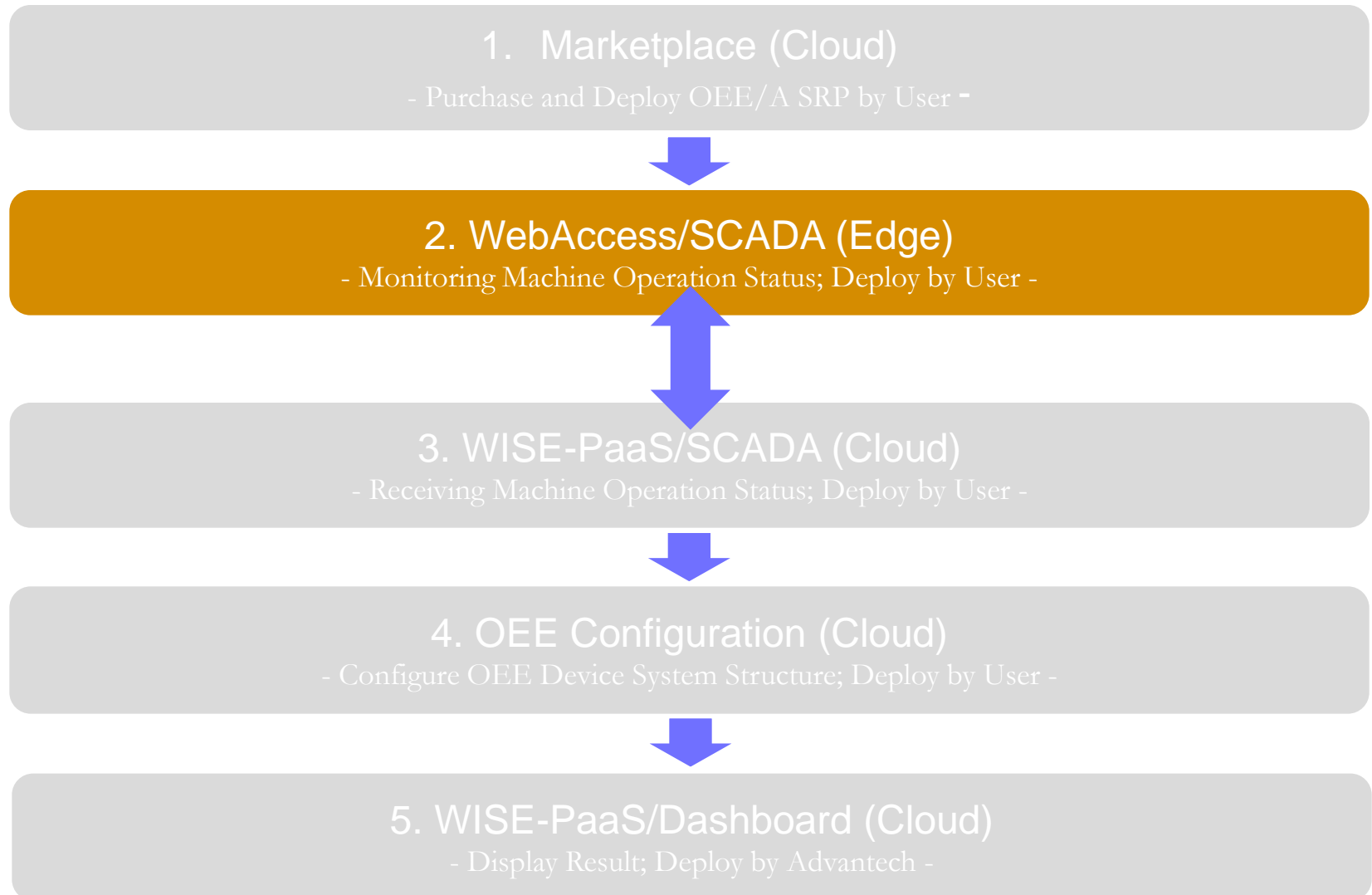
	Name ▲	Package State	State	Instances:	State	CPU	Memory	Disk
<input type="checkbox"/>	api-ifactory-srp-postgres-1.1.3	STAGED	●	1 (Total) ▼ Usage	●	N/A	128M	1G
<input type="checkbox"/>	api-scada-simplejson-1.0.14	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G
<input type="checkbox"/>	dashboard-1.1.19	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G
<input type="checkbox"/>	OEEUtilizCal-dataworker-1.3.2	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G
<input type="checkbox"/>	OEEUtilizSig-dataworker-2.4.3	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G
<input type="checkbox"/>	portal-OEE-Config-2.0.2	STAGED	●	1 (Total) ▼ Usage	●	N/A	64M	512M
<input type="checkbox"/>	portal-scada-1.3.14	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G
<input type="checkbox"/>	scada-dataworker-1.3.7	STAGED	●	1 (Total) ▼ Usage	●	N/A	256M	1G

v3.0.8



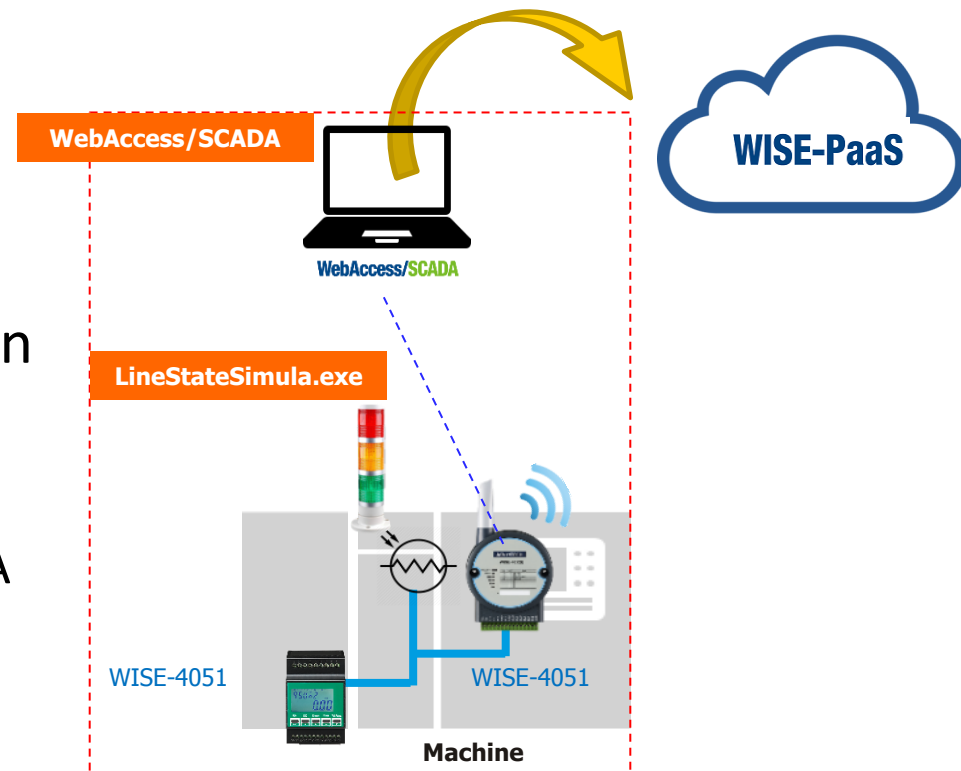
2. WebAccess/SCADA

OEE Availability Configuration Steps



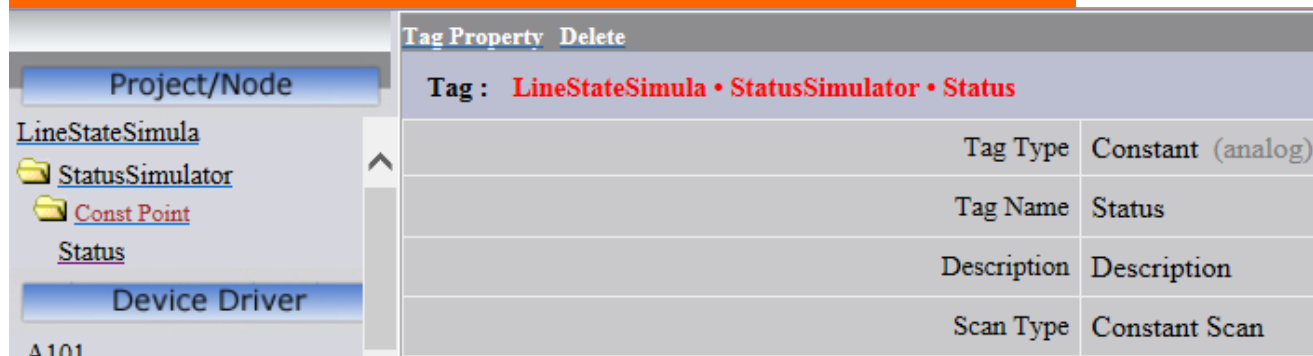
Purpose

- WebAccess/SCADA connects to machine(s) and get the **operating status (RUN / WAIT / ERROR / STOP)**
- Here we use a **simulator** (LineStateSimula.exe) to simulate a machine operation status
 - Note: Make sure you have **started** the WebAccess/SCADA **kernel** of your project before running simulator.



Easy Steps

1. Create a project with an analog constant tag in WebAccess/SCADA



The screenshot shows the WebAccess/SCADA interface. On the left, the 'Project/Node' tree is expanded to 'LineStateSimula', showing 'StatusSimulator' and 'Const Point'. The 'Status' tag is selected under 'StatusSimulator'. On the right, the 'Tag Property' window is open, showing the tag 'LineStateSimula • StatusSimulator • Status' with the following properties:

Tag Type	Constant (analog)
Tag Name	Status
Description	Description
Scan Type	Constant Scan



The screenshot shows the 'Config.ini' file in a text editor. The content is as follows:

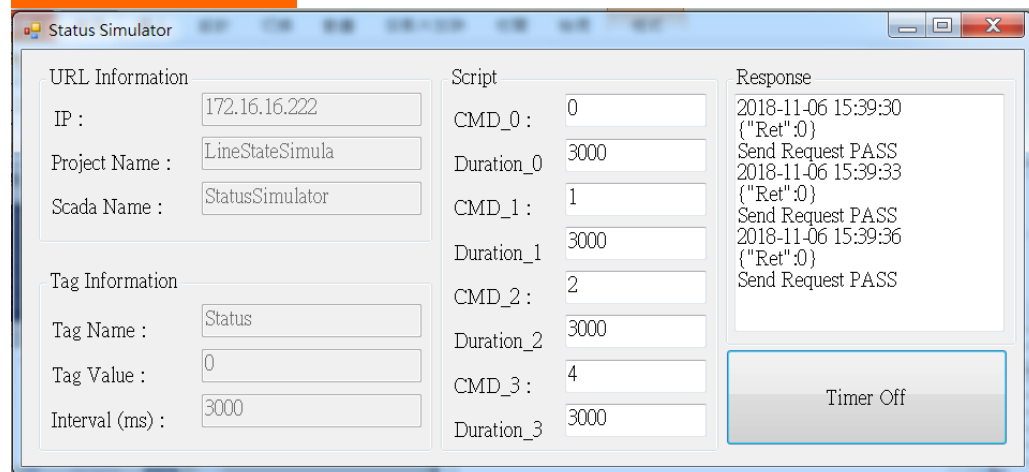
```
[config]
ServerID = 172.16.16.222
ProjectName = LineStateSimula
ScadaName = StatusSimulator

[Tag]
TagName = Status
```

2. Modify config.ini in simulator



3. Run Simulator



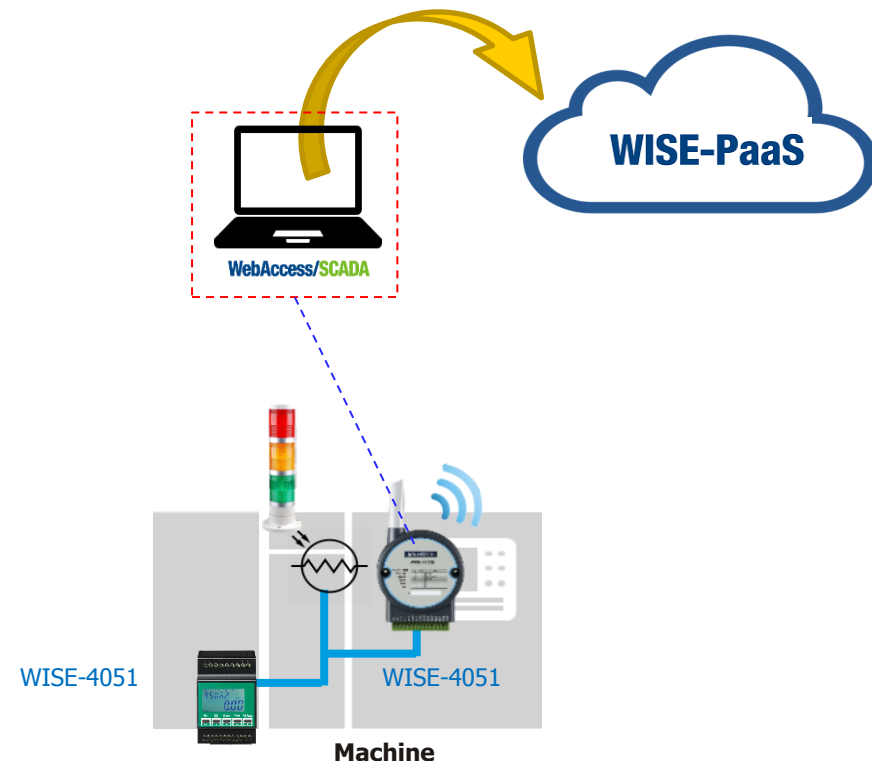
The screenshot shows the 'Status Simulator' window. It has three main sections: 'URL Information', 'Script', and 'Response'. The 'URL Information' section contains fields for IP (172.16.16.222), Project Name (LineStateSimula), and Scada Name (StatusSimulator). The 'Script' section contains fields for Tag Name (Status), Tag Value (0), and Interval (ms) (3000). The 'Response' section shows a log of requests and responses, including 'Send Request PASS' and 'Timer Off'.

Practice - WebAccess/SCADA Configuration

- Project Node name: LineStateSimula
- SCADA Node name: StatusSimulator
- Constant Tag name: Status

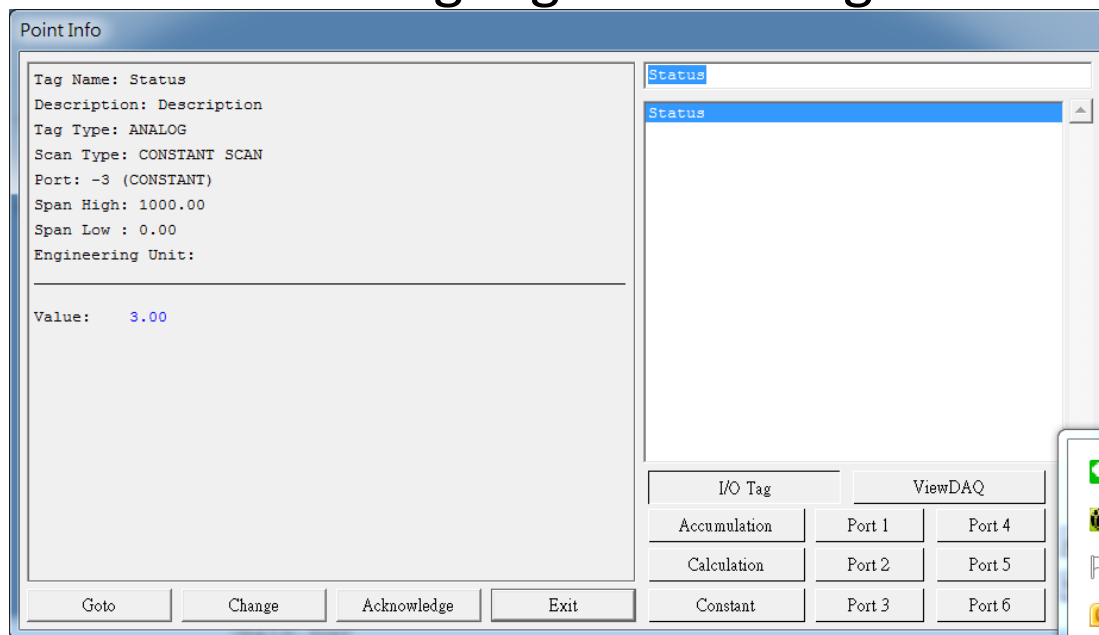
Advantech WebAccess Project Manager

Project/Node	Update Tag
LineStateSimula	Tag Type Constant (analog)
StatusSimulator (Running)	Alarm No Alarm
Const Point	Tag Name Status
Status	Description get machine running status
Device Driver	Scan Type Constant Scan
A101	Log Data <input type="radio"/> Yes <input checked="" type="radio"/> No
ABMLGX	Data Log Dead Band 3 %
ABPLC5	Write Action Log <input checked="" type="radio"/> Yes <input type="radio"/> No
ABPLCEIP	Read Only <input type="radio"/> Yes <input checked="" type="radio"/> No
ABSLC5	Keep Previous Value <input type="radio"/> Yes <input checked="" type="radio"/> No
AceFAM3	Initial Value 0
ADAM2K	Security area 0
ADAM4K	Security level 0
ADAM5560	Span high 3
ADAM5KASC	Span low 0
ADAM5KE	Output High Limit 3
ADAM6K	Output Low Limit 0
ADMIO	Eng Unit
AdvDAinfo	Display digits(integer) 1
AdvPAC	Display digits(fraction) 0
AE6000	
Agi34972A	
AlienRFID	
APAX	



Practice - WebAccess/SCADA ViewDAQ

- Result of showing tag value in tag “status”



- To send the tag “Status” value to WISE-PaaS/SCADA, user has to setup WISE-PaaS/SCADA and copy SCADA ID, Credential Key and DCCS API Url information back to WebAccess/SCADA.

Practice - Download LineStateSimula.exe Simulator

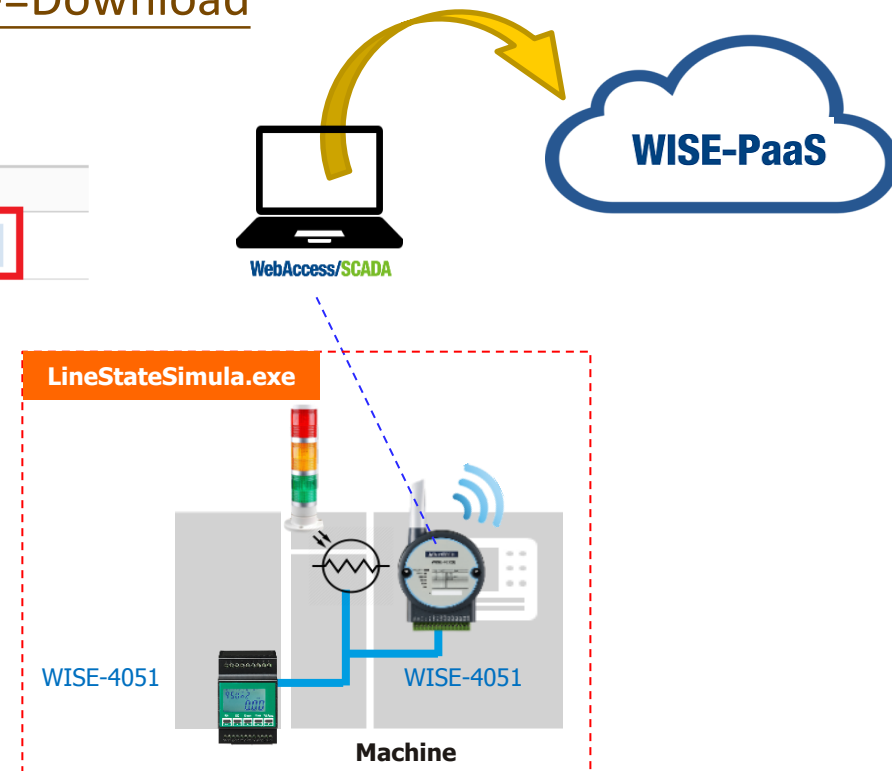
- Simulator (LineStateSimula.exe) is available at Advantech Support Portal
 - https://support.advantech.com/support/DownloadSRDetail_New.aspx?SR_ID=1-1KRCCHH&Doc_Source=Download

OEE-Availability SRP

Solution : OEE-Availability SRP

Download File	Released Date	Download Site
LineStateSimula.7z (Line State Simulator)	2019-01-16	<div>Primary</div> <div>Secondary</div>

Advantech Support Portal



Practice - Setup Simulator

- Run Notepad.exe to modify LineStateSimula simulator
Config.ini

The screenshot illustrates the setup process for the LineStateSimula simulator. It consists of three main parts:

- File Explorer:** Shows the directory structure of the simulator. The file **Config.ini** is highlighted with a red box and a red arrow pointing to the Notepad window.
- Notepad Window:** Displays the contents of **Config.ini**. The text is as follows:

```
[config]
ServerID = 172.16.16.222
ProjectName = LineStateSimula
ScadaName = StatusSimulator

[Tag]
TagName = Status

[Script]
CMD_0 = 0
Duration_0 = 3000
CMD_1 = 1
Duration_1 = 3000
CMD_2 = 2
Duration_2 = 3000
CMD_3 = 4
Duration_3 = 3000

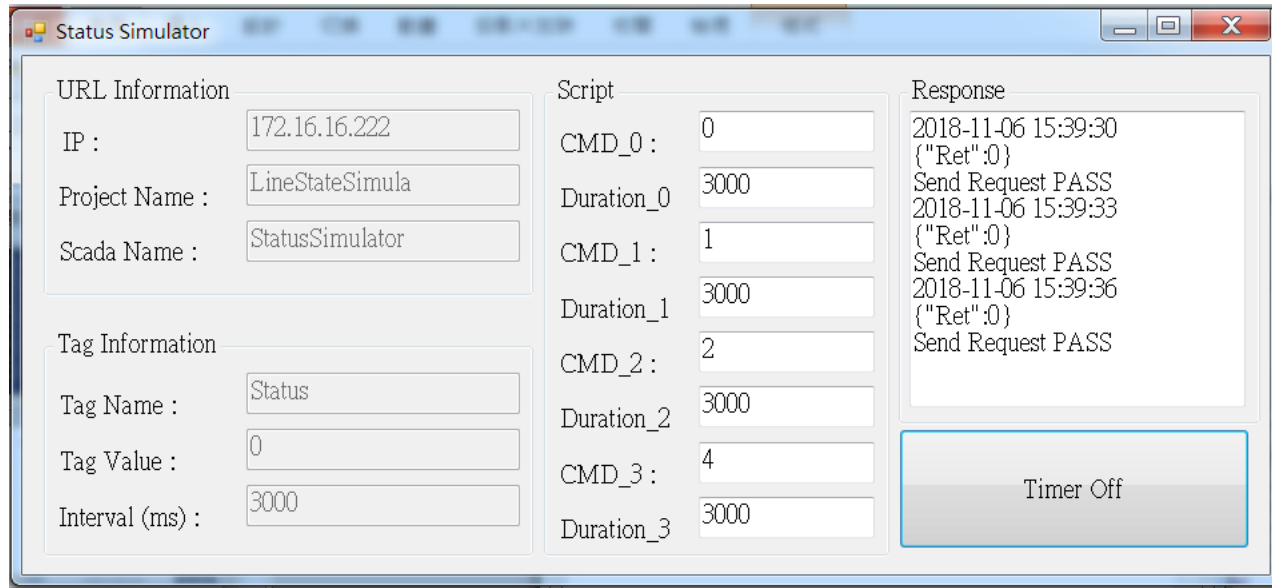
// explanation
// CMD_X: Product Line status //0 = stop, 1 = alert, 2 = idle, 4 = running
// Duration_X: hold current status for number of ms
// CMD_0 ~ CMD_3 run CMD_0 through CMD_3 repeatedly
```

Annotations in the Notepad window:

 - ServerID:** Webaccess/SCADA Server IP Address
 - ProjectName:** WebAccess/SCADA Project Node name
 - ScadaName:** WebAccess/SCADA SCADA Node name
 - TagName = Status:** WebAccess/SCADA const analog tag
- Project/Node Tree:** A diagram showing the hierarchy of the simulator. The root is **Project/Node**, which branches into **LineStateSimula**, **StatusSimulator**, **Const Point**, and **Status**. The **Status** node is highlighted in orange, and the **WebAccess/SCADA** label is at the bottom.

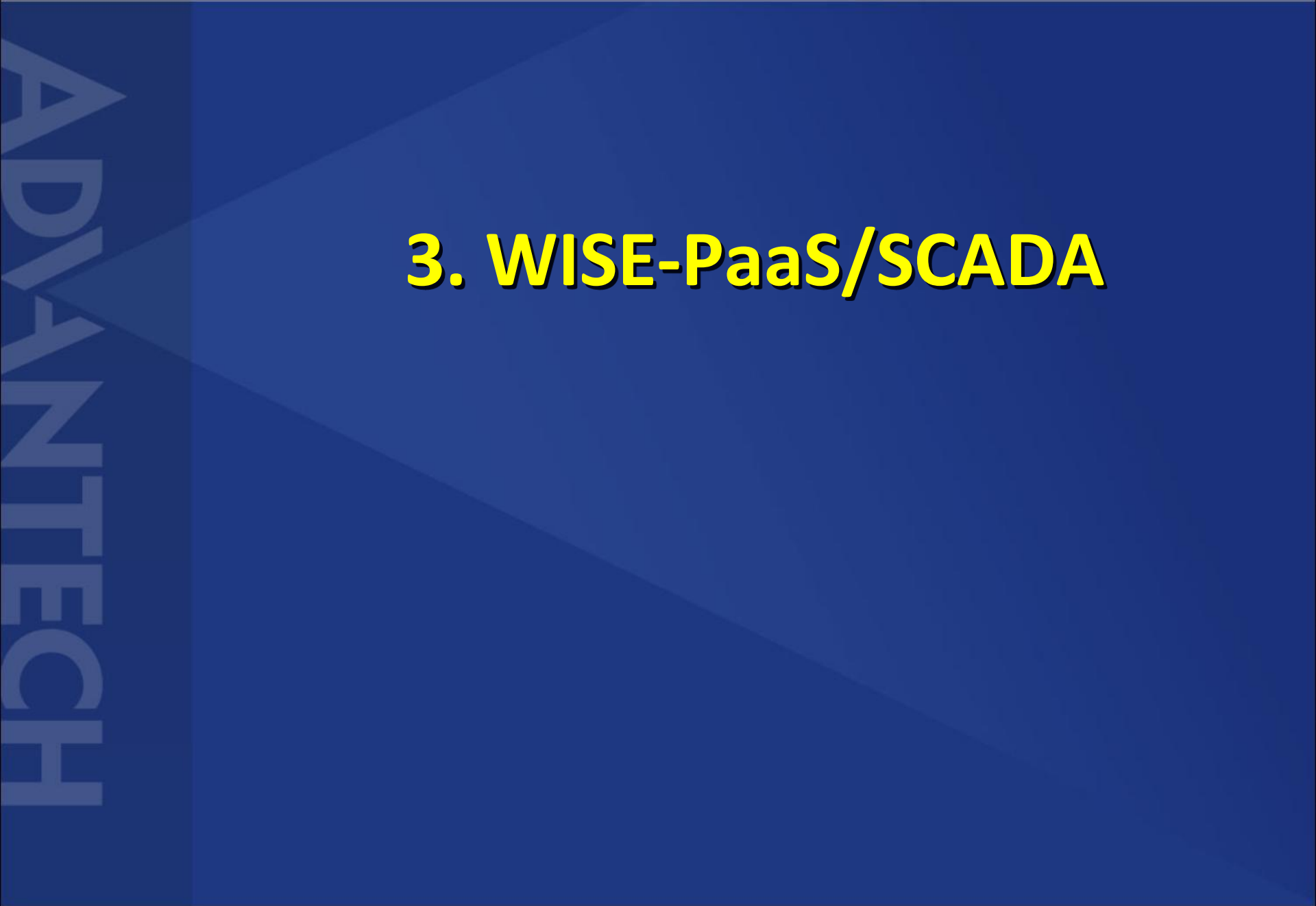
Practice - Run Simulator

- Run LineStateSimula.exe and click “Timer Off”



The screenshot shows the 'Status Simulator' application window. It is divided into three main sections: URL Information, Tag Information, and Script. The URL Information section contains fields for IP (172.16.16.222), Project Name (LineStateSimula), and Scada Name (StatusSimulator). The Tag Information section contains fields for Tag Name (Status), Tag Value (0), and Interval (ms) (3000). The Script section contains four rows of fields for CMD and Duration, with values 0, 3000, 1, 3000, 2, 3000, and 4, 3000. The Response section displays a log of requests and responses, showing 'Send Request PASS' and 'Ret:0' for each command. A 'Timer Off' button is located at the bottom right of the window.

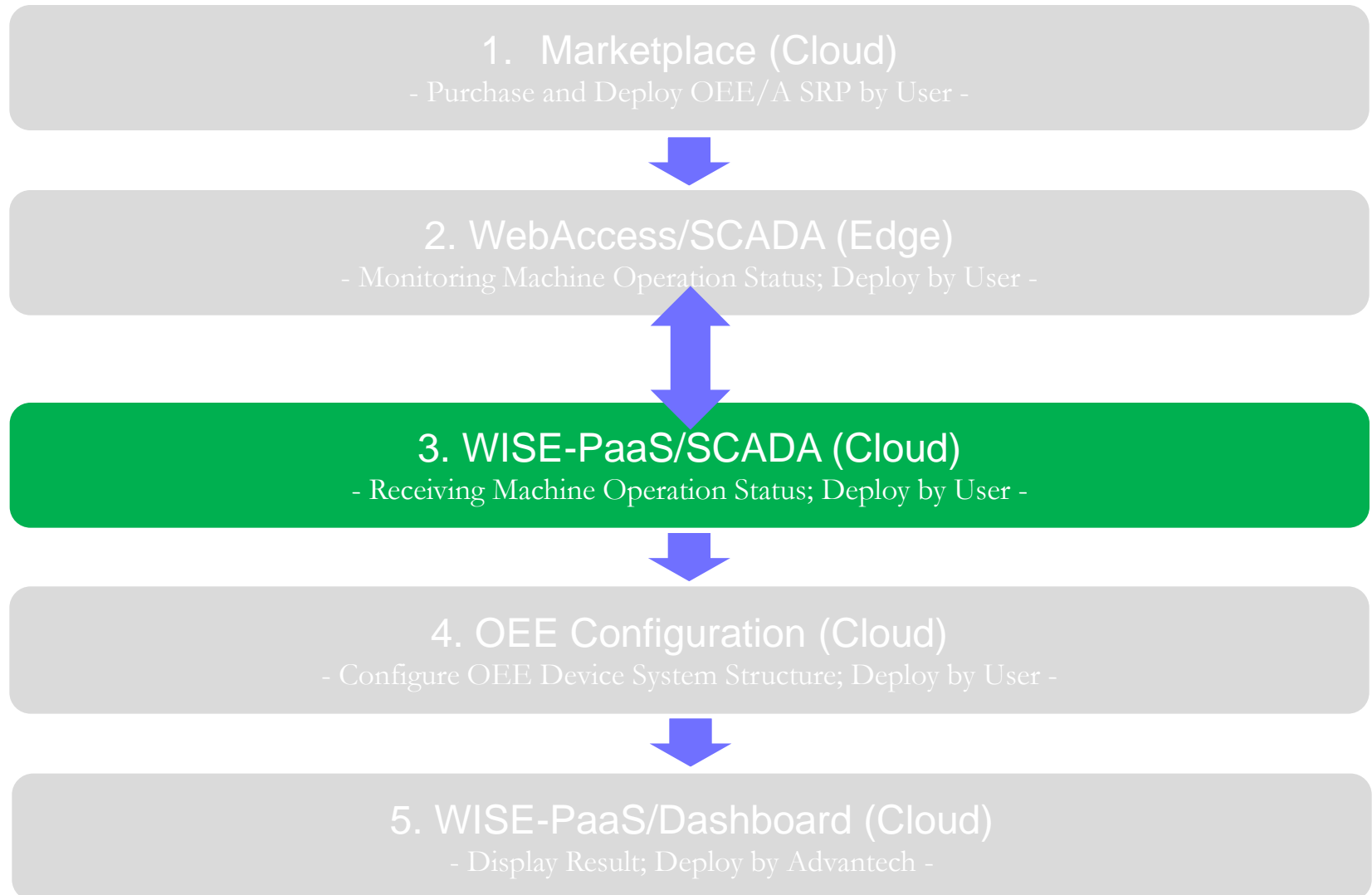
Section	Field	Value
URL Information	IP :	172.16.16.222
	Project Name :	LineStateSimula
	Scada Name :	StatusSimulator
Tag Information	Tag Name :	Status
	Tag Value :	0
	Interval (ms) :	3000
Script	CMD_0 :	0
	Duration_0	3000
	CMD_1 :	1
	Duration_1	3000
	CMD_2 :	2
	Duration_2	3000
	CMD_3 :	4
	Duration_3	3000
Response	2018-11-06 15:39:30 {"Ret":0} Send Request PASS 2018-11-06 15:39:33 {"Ret":0} Send Request PASS 2018-11-06 15:39:36 {"Ret":0} Send Request PASS	
Timer Off		



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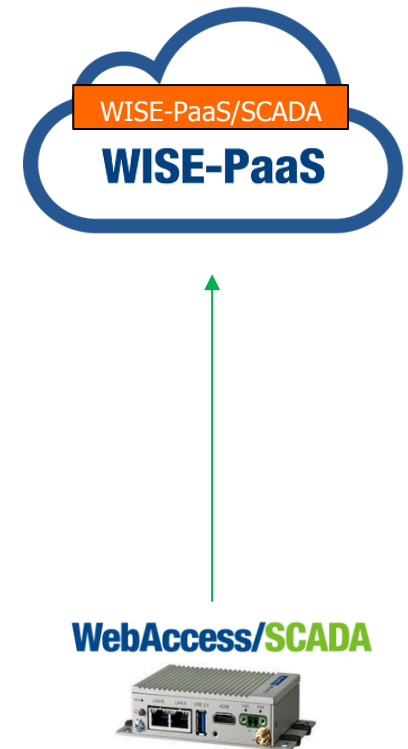
3. WISE-PaaS/SCADA

OEE Availability Configuration Steps



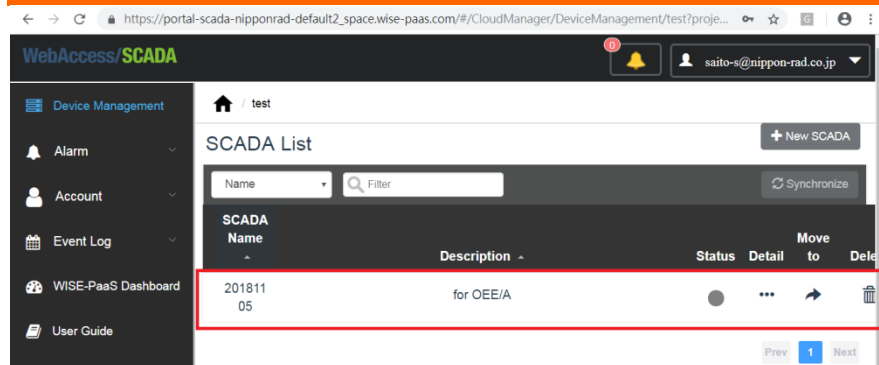
Purpose

- WISE-PaaS/SCADA receives machine operation status from WebAccess/SCADA project.
- Edge device could be WebAccess/SCADA, ADAM-3600 or ECU

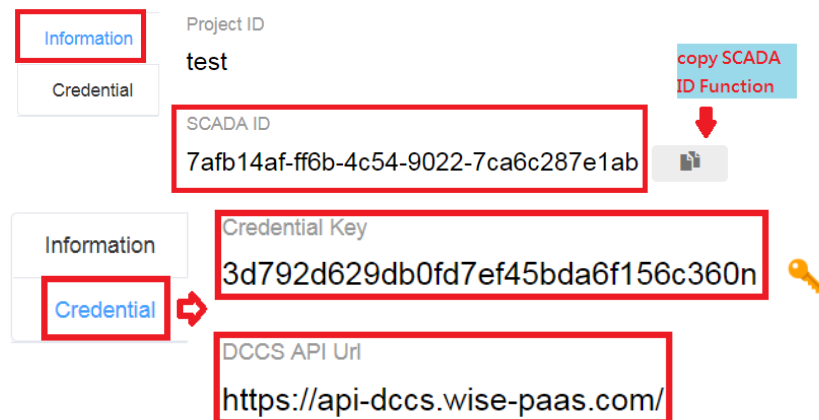


Easy Steps

1. Create a Project and a SCADA in WISE-PaaS/SCADA



2. Get SCADA ID and Credential Keys



3. Setup WebAccess/SCADA WISE-PaaS Connection Settings

WISE-PaaS Connection Settings			
Enable	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Scada ID	7afb14af-ff6b-4c54-9022-7ca6c287e1ab		
Keep-Alive Interval	60	Seconds	
Data Publish Interval	1	Seconds	
Credential Key	3d792d629db0fd7ef45bda6f156c360n		
DCCS API URL	https://api-dccs.wise-paas.com/		
Publish Data by Value Change	<input checked="" type="radio"/> Yes <input type="radio"/> No		

WISE-PaaS Whitelist			
Node Type	Const Point	<input type="checkbox"/> Saved Tags List	
<input type="checkbox"/>	Tag Name	Deadband	Log
<input checked="" type="checkbox"/>	Status	0 %	<input type="checkbox"/>


Practice - WISE-PaaS/SCADA - Create a Project Node

- Click “New Project” to create a Project Node (e.g. test)

+ New Project

- Result of creating a Project Node named “test”

WebAccess/SCADA

0  saito-s@nippon-rad.co.jp ▼

Device Management

Alarm

Account

Event Log

WISE-PaaS Dashboard



User Guide

API Document

Project List

+ New Project

Project ID ▼

Project ID	Description	Detail	Delete
Nippon RAD	NipponRAD	...	 >
test	test by Advantech PAE	...	 >

Prev 1 Next

Practice - WISE-PaaS/SCADA - Create a SCADA Node

- Click “New Project” to create a SCADA Node (e.g. 20181105)

+ New SCADA

- Result of creating a SCADA Node named “20181105”

WebAccess/SCADA

https://portal-scada-nipponrad-default2_space.wise-paas.com/#/CloudManager/DeviceManagement/test?proje...

0

saito-s@nippon-rad.co.jp

Device Management

Alarm

Account

Event Log

WISE-PaaS Dashboard

User Guide

test

SCADA List

+ New SCADA

Name Filter Synchronize

SCADA Name	Description	Status	Detail	Move to	Delete
20181105	for OEE/A				

Prev 1 Next

Practice - WISE-PaaS/SCADA – SCADA ID, Credential Key and DCCS API Url

- To create a link between WebAccess/SCADA and WISE-PaaS/SCADA, user has to get following three information and copy them to WebAccess/SCADA.
 - SCADA ID
 - Credential Key
 - DCCS API Url
- Click “...” in Detail to get SCADA ID, Credential Key and DCCS API Url

	Description ▾	Status	Detail	to
20181105	for OEE/A	●	...	➔

- SCADA ID

Information

Credential

Project ID
test

SCADA ID
7afb14af-ff6b-4c54-9022-7ca6c287e1ab

copy SCADA ID Function

📄

- Credential Key & DCCS API Url

Information

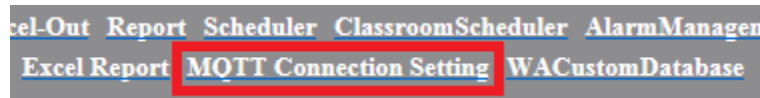
Credential

Credential Key
3d792d629db0fd7ef45bda6f156c360n

DCCS API Url
https://api-dccs.wise-paas.com/

Practice - Back to WebAccess/SCADA Node

- After constructing Project and SCADA in WISE-PaaS/SCADA, the next step is to setup WISE-PaaS Connection in WebAccess/SCADA SCADA Node property
- Click “MQTT Connection Setting” to setup WISE-PaaS connection setting and whitelist



Practice - Back to WebAccess/SCADA Node

- Click “WISE-PaaS Connection Setting” and fill-in followings
 - Click “Yes” in Enable
 - SCADA ID** – get SCADA ID from WISE-PaaS/SCADA
 - Credential Key** – get SCADA ID from WISE-PaaS/SCADA
 - DCCS API URL** – get SCADA ID from WISE-PaaS/SCADA

WebAccess MQTT Connection Settings **WISE-PaaS Connection Setting**

Node: demo • scada • WISE-PaaS Connection Settings

WISE-PaaS Connection Settings

Save

WISE-PaaS Connection Settings	
Enable	<input checked="" type="radio"/> Yes <input type="radio"/> No
Scada ID	<input type="text" value="e055aed6-fa94-400d-aa0a-b649c4f8f1c9"/>
Keep-Alive Interval	<input type="text" value="60"/> Seconds
Data Publish Interval	<input type="text" value="1"/> Seconds
Credential Key	<input type="text" value="9f9570ef0b15f7b4acafc80f28dedbp6"/>
DCCS API URL	<input type="text" value="https://api-dccs.wise-paas.com/"/>
Publish Data by Value Change	<input checked="" type="radio"/> Yes <input type="radio"/> No

Practice - Back to WebAccess/SCADA Node

- Going down to “WISE-PssS Whitelist” and select “Status” tag in “ConstPoint” Node Type

WISE-PaaS Whitelist				
Node Type Const Point <input type="checkbox"/> Saved Tags List				
<input type="checkbox"/>	Tag Name	Deadband	Log	
<input checked="" type="checkbox"/>	Status	0 %	<input type="checkbox"/>	

- then click “Save”

First Prev 1 Next End Total Pages:1, Go to page: 1

Save

- Click “Download” in SCADA Node to complete configuration

[Start View](#) [Start Draw](#) [Download](#) [Graph Only](#)

Practice - WISE-PaaS/SCADA – Viewing Result

- Device will be created automatically

Device List

Name

Filter

Device Name	Device Type	Description	Status	Detail
Const Point	Const Point	ConstPoint	<div></div>	<div></div>


- Tag will be created automatically and its value will be shown

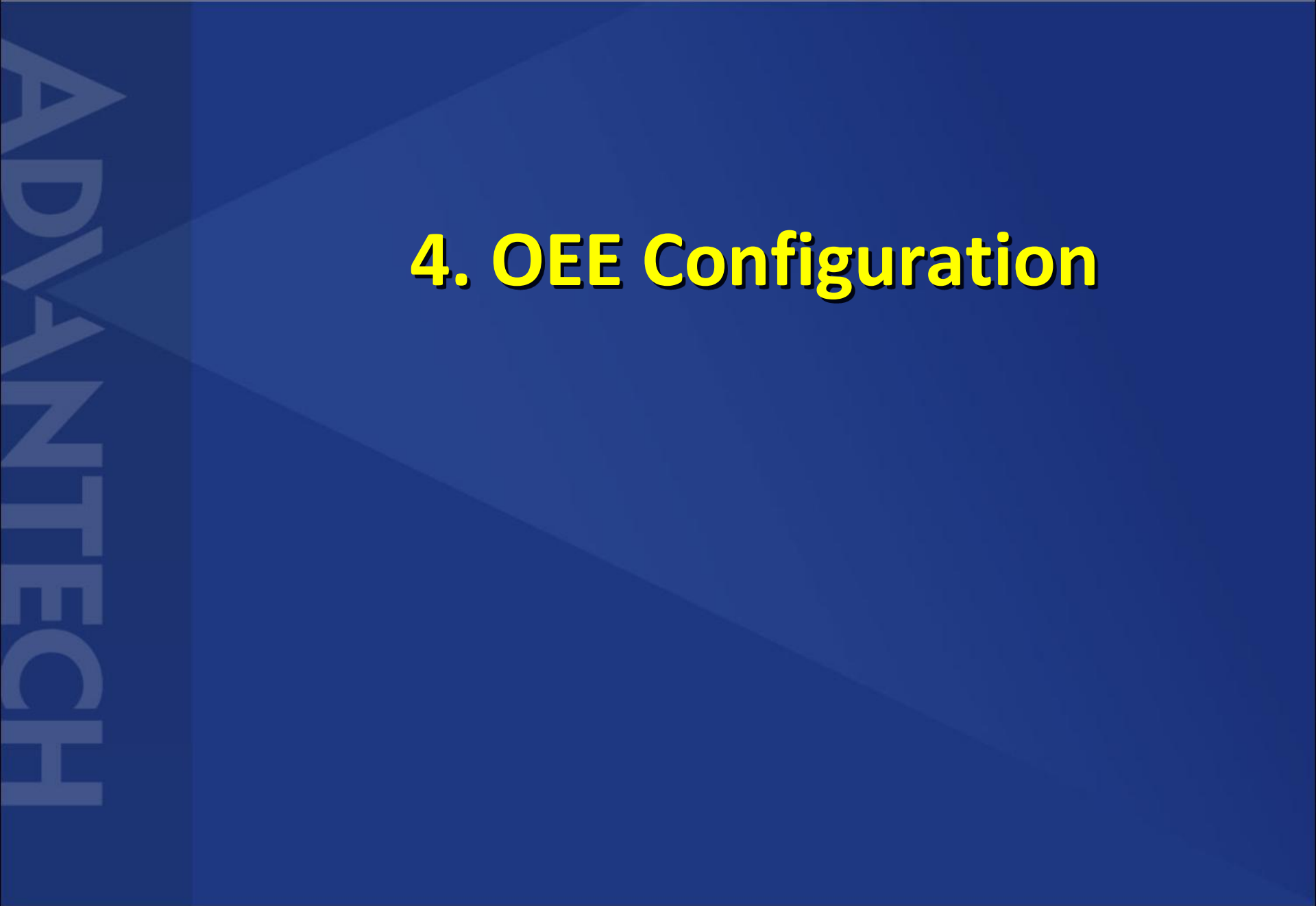
 / [test](#) / [20181105](#) / ConstPoint

Tag List

Name

Filter

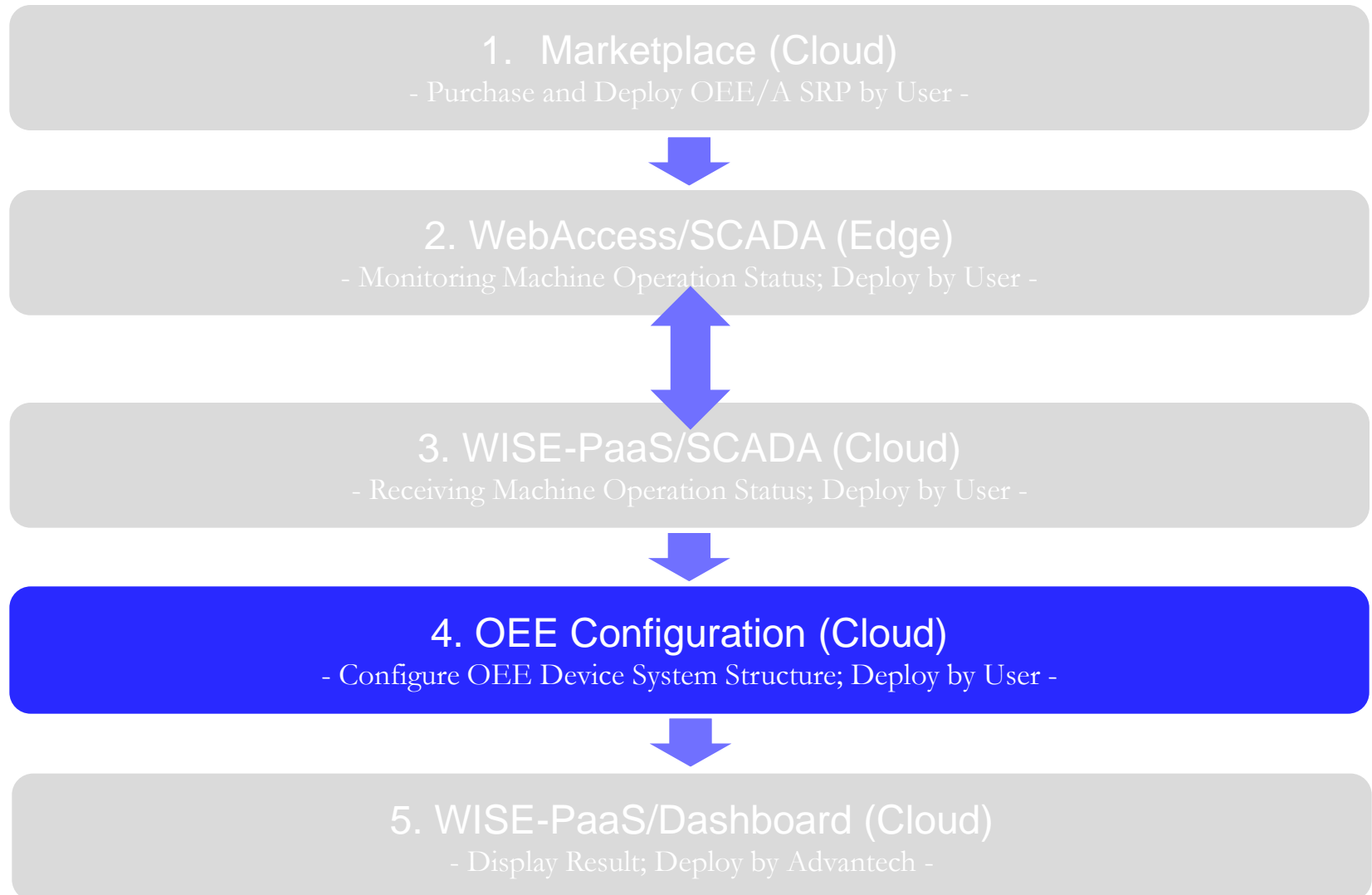
Tag Name	Tag Type	Description	Value	Update Time	Detail	Delete
Status	Analog	Description	4.00	2018-11-08 16:32:07	...	



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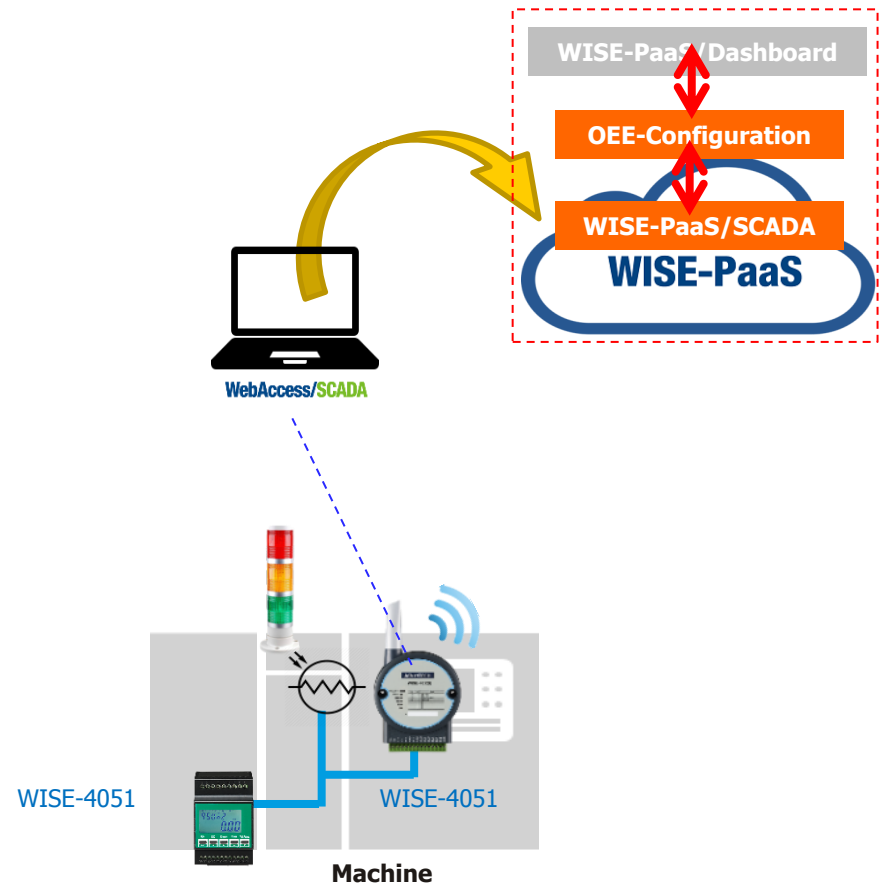
4. OEE Configuration

OEE Availability Configuration Steps

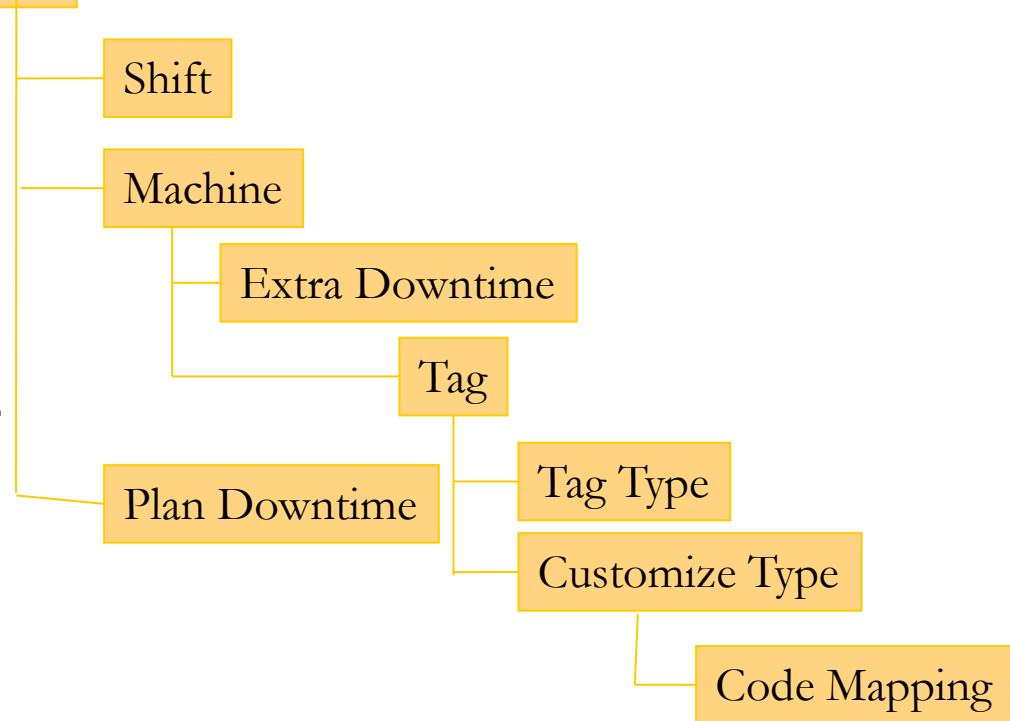


Purpose

- Two purposes:
 - Bind WISE-PaaS/SCADA tags
 - Configure and display device structure in WISE-PaaS/Dashboard

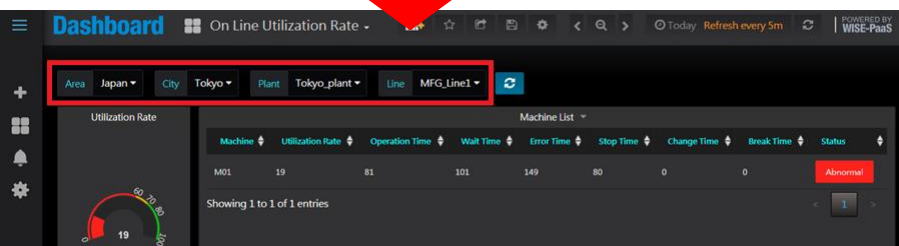


Data Hierarchy



OEE Configuration main page

區域_Area	區域設定(Area Setting)
城市_City	城市設定(City Setting)
廠區_Plant	廠區設定(Plant Setting)
部門_Dept	部門設定(Dept Setting)
線別_Line	線別設定(Line Setting)
班別_Shift	班別設定(Shift Setting)
機台_Machine	機台設定(machine Setting)
標籤類別設定_TagType	標籤類別設定(TagType)
標籤類別資訊_TagType	標籤類別資訊(TagType)
標籤資訊_TagInfo	標籤資訊設定(TagInfo Setting)
固定排休_Plan Downtime	固定排休設定(Plan Downtime Setting)
非固定排休_Extra Downtime	非固定排休設定(Plan Downtime Setting)
OEE代碼對照_CodeMapping	OEE代碼對照(CodeMapping)



WISE-PaaS/Dashboard

Login OEE Configuration

- Run Chrome and enter the URL to configure device layer
 - default: https://portal-oeconfig-companyName-spaceName_space.wise-paas.com/
 - e.g. https://portal-oeconfig-nipponrad-default2_space.wise-paas.com/
- Total 13 items, must fill “Area”, “City”, “Plant”, “Dept”, “Line”, “Shift”, “Machine” and “TagInfo” total 9 items

區域_Area	區域設定(Area Setting)	
城市_City	城市設定(City Setting)	
廠區_Plant	廠區設定(Plant Setting)	
部門_Dept	部門設定(Dept Setting)	
線別_Line	線別設定(Line Setting)	
班別_Shift	班別設定(Shift Setting)	
機台_Machine	機台設定(machine Setting)	
標籤類別設定_TagType	標籤類別設定(TagType)	optional
標籤類別資訊_TagType	標籤類別資訊(TagType)	
標籤資訊_TagInfo	標籤資訊設定(TagInfo Setting)	
固定排休_Plan Downtime	固定排休設定(Plan Downtime Setting)	optional
非固定排休_Extra Downtime	非固定排休設定(Plan Downtime Setting)	
OEE代碼對照_CodeMapping	OEE代碼對照(CodeMapping)	

Practice - Area Setting

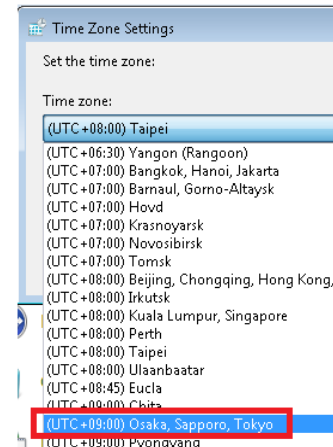
- Support 3 languages (**must fill in all of them even not using**)
 - English, Traditional Chinese and Simplified Chinese
- Area_time_zone is based on UTC + Local Time
 - E.g. Japan is UTC + 9 hours

Area Data Information

area_id	area_name_en	area_name_tw	area_name_cn	area_time_zone	modify action
1	Japan	日本	日本	9	<input type="checkbox"/>
Add_Data					
Action		Add	Modify		

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Click “Add” button after entering “area_name_en”, “area_name_tw”, “area_name_cn” and “area_time_zone”



Practice - City Setting

- For configuring City
- Example:
 - **City_name_en**: Tokyo
 - **City_name_tw**: 東京
 - **City_name_cn**: 东京
- Click “Add” button

← → ↻ https://portal-oeconfig-nipponrad-default2_space.wise-paas.com/cityapp ☆ G

City Data Information

區域	Japan ▼			
city_id	city_name_en	city_name_tw	city_name_cn	modify action
1	Tokyo	東京	东京	<input type="checkbox"/>
2	TW	TW	TW	<input type="checkbox"/>
Add Data				
Action	Query	Add	Modify	

[返回首页](#)

Practice - Plant Setting (must)

- Select City (e.g. Tokyo) first then enter 3 different languages of Plant names (e.g. Tokyo_plant).
- Click “Add” button

https://portal-oeconfig-nipponrad-default2_space.wise-paas.com/plantapp

Plant Data Information

城市	Tokyo			
plant_id	plant_name_en	plant_name_tw	plant_name_cn	modify action
Add Data	Tokyo_plant	Tokyo_plant	Tokyo_plant	
Action	Query	Add	Modify	

Practice - Dept Setting

- For configuring department
- Select Plant (e.g. Tokyo_plant) then add data
 - **Dept_no**: 1 (could be any number)
 - **Dept_name**: MFG (for all languages)
- Click “Add” button

Dept Data Information

廠區	Tokyo_plant ▼				
dept_id	dept_no	dept_name_en	dept_name_tw	dept_name_cn	modify action
Add Data	1	MFG	MFG	MFG	
Action	Query	Add	Modify		

[返回首页](#)

Practice - Line Setting

- Select Plant_Dept (e.g. Tokyo_plant,1) then add data
 - **Line_name**: MFG_Line1
 - **Line_offset**: 1 (based on your product line)
- Click “Add” button

Line Data Information

廠區_部門	Tokyo_plant,1				
line_id	line_name_en	line_name_tw	line_name_cn	line_offset	modify action
Add_Data	MFG_Line1	MFG_Line1	MFG_Line1	1	
Action	<input type="button" value="Query"/>	<input type="button" value="Add"/>	<input type="button" value="Modify"/>		

Practice - Shift Setting

- For setup working shift, for example, 3 shifts a day (00:00 ~ 08:00; 08:00 ~ 16:00; 16:00 ~ 00:00)
- Select Plant_Line (e.g. Tokyo_plant,MFG_Line1) then add data
 - **Shift_no**: S01 (for setup Shift number)
 - **Shift_name**: Day_Shift (depends on user)
 - **Shift_name_start**: 08:30:00+09:00 (must add local time zone)
 - **Shift_name_end**: 17:29:59+09:00 (must add local time zone)

Shift Data Information

廠區_線別	Tokyo_plant,MFG_Line1						
shift_id	shift_no	shift_name_en	shift_name_tw	shift_name_cn	shift_name_start	shift_name_end	modify action
Add_Data	S01	Day Shift	Day Shift	Day Shift	08:30:00+09:00	17:29:59+09:00	
Action	Query	Add	Modify	Delete			

Practice - Machine Setting

- Select Plant_Line (e.g. Tokyo_plant,MFG_Line1) then add data
 - **machine_name**: M01 ~ M04 (**depends on number of machines**)
 - **machine_offset**: 1 ~ 4 (able to enter numeric and text; this will match to the offset selection in Dashboard panel)

Machine Data Information

廠區_線別	Tokyo_plant,MFG_Line1				
machine_id	machine_name_en	machine_name_tw	machine_name_cn	machine_offset	modify action
1	M01	M01	M01	1	<input type="checkbox"/>
2	M02	M02	M02	2	<input type="checkbox"/>
3	M03	M03	M03	3	<input type="checkbox"/>
4	M04	M04	M04	4	<input type="checkbox"/>
Add_Data					
Action	<input type="button" value="Query"/>	<input type="button" value="Add"/>	<input type="button" value="Modify"/>		

Practice - Tag Type

- Display pre-defined tag names with their default ID.

← → ↻ https://portal-oeconfig-nipponrad-default2_space.wise-paas.com/tagtypeapp ☆ G | ☰

Machine Data Information

type_id	type_name_en	type_name_tw	type_name_cn
1	Utilization Rate	稼働	稼动
2	Work Order	工單	工单
3	KW	用電功率	用电功率
4	KWh	耗電量	耗电量
5	Machine Temp	機台溫度	机台温度
6	Flow Meter	流量	流量
7	Machine oxygen	氧氣	氧气
8	Pressure	壓力	压力

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Practice - Tag Info (**Important**)

- Purpose:
 - For creating connection between **WISE-PaaS/SCADA** tag and **WISE-PaaS/Dashboard**
- Rule of tag_name: **SCADA ID:Device ID:tagName**
 - Note: **one machine (e.g. M01) can only bond one tag**
- Where can user find SCADA ID, Device ID and tagName?
 - These information can be found at **WISE-PaaS/SCADA**
 - Refer to next three slides for details

Practice - Tag Info (Important)

- SCADA ID:Device ID:tagName

WebAccess/SCADA

Device Management

Alarm

Account

Event Log

W

Us

AP

Home / test

SCADA List

Name

Filter

SCADA Name

20181105

Detail

Information

Project ID

test

Credential

SCADA ID

7afb14af-ff6b-4c54-9022-7ca6c287e1ab

Tag Info Data Information

廠區_線別_機台	Tokyo_plant,MFG_Line1,M01		
tag_id	tag_name	type_name	modify action
1	7afb14af-ff6b-4c54-9022-7ca6c287e1ab:ConstPoint:Status	Utilization Rate	<input type="checkbox"/>
Add_Data			
Action	Query	Add	Delete

Practice - Tag Info (Important)

- SCADA ID:Device ID:tagName

WebAccess/SCADA

Alarm Account Event Log WISE-PaaS Dashboard

test / 20181105

Device List

Device Name	Device Type	Description	Status	Detail	Delete
ConstPoint	ConstPoint	ConstPoint		...	

Tag Info Data Information

廠區_線別_機台	Tokyo_plant,MFG_Line1,M01		
tag_id	tag_name	type_name	modify action
1	7afb14af-ffb-4c54-9022-7ca6c287e1ab:ConstPoint:Status	Utilization Rate	
Add_Data			
Action	Query	Add	Delete

Practice - Tag Info (Important)

- SCADA ID:Device ID:tagName

WebAccess/SCADA

test / 20181105 / ConstPoint

Tag List

Tag Name	Tag Type	Description	Value	Update Time	Detail	Delete
Status	Analog	Description	1000.00	2018-11-13 11:00:13	...	

Tag Info Data Information

廠區_線別_機台	Tokyo_plant,MFG_Line1,M01		
tag_id	tag_name	type_name	modify action
1	7afb14af-ff6b-4c54-9022-7ca6c287e1ab:ConstPoint:Status	Utilization Rate	<input type="checkbox"/>
Add_Data			
Action	Query	Add	Delete

Practice - Plan Downtime Configuration (optional)

- For configuring **machine downtime time**
- Select Plant_Line (e.g. Tokyo_plant,MFG_Line1) then add data
 - **Type_id**: (serial number created automatically)
 - **Day_id**: (0=Sunday, 1=Monday...)
 - **Day_name**: (based on Day_id will display Sunday / Monday so on automatically)
 - **Start_time**: 08:30:59+09:00 (must add local time zone)
 - **End_time**: 17:29:59+09:00 (must add local time zone)
- Only affect current week (start from Sunday)

Plan Downtime Data Information

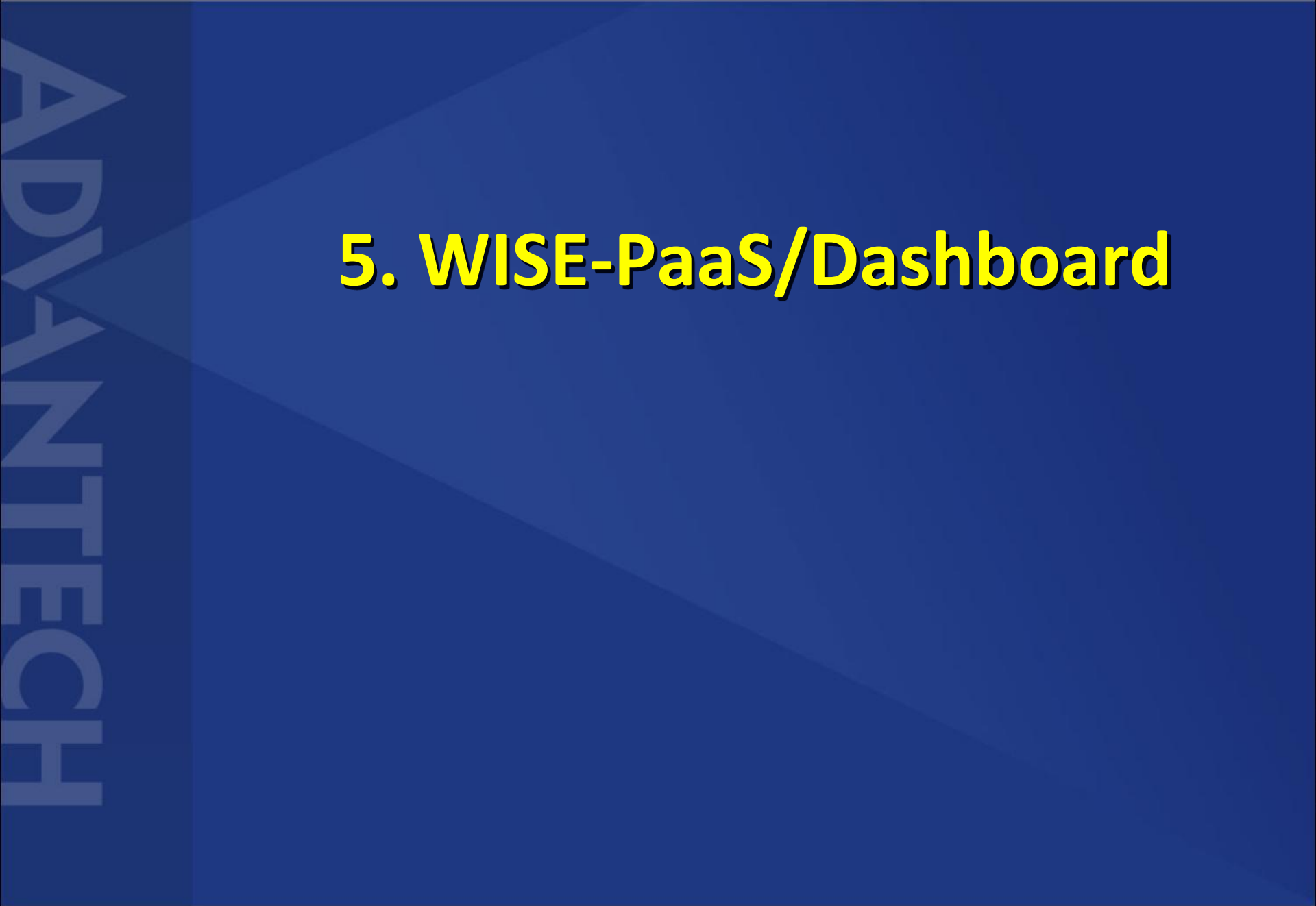
廠區 線別	Tokyo_plant,MFG_Line1 ▼					
ser_id	type_id	day_id	day_name	start_time	end_time	modify action
Add_Data		2 ▼		08:30:00+09:00	17:29:59+09:00	
Action	Query	Add	Modify	Delete		

Practice - Extra Downtime Configuration

- For adding extra or temporary machine downtime
- Select Plant_Line_machine (e.g. Tokyo_plant,MFG_Line1,M01) then add data
 - **Is DownTime**: True/False (enable Extra Downtime or not)
 - **Start_time**: 08:30:59+09:00 (must add local time zone)
 - **End_time**: 17:29:59+09:00 (must add local time zone)

Extra DownTime Data Information

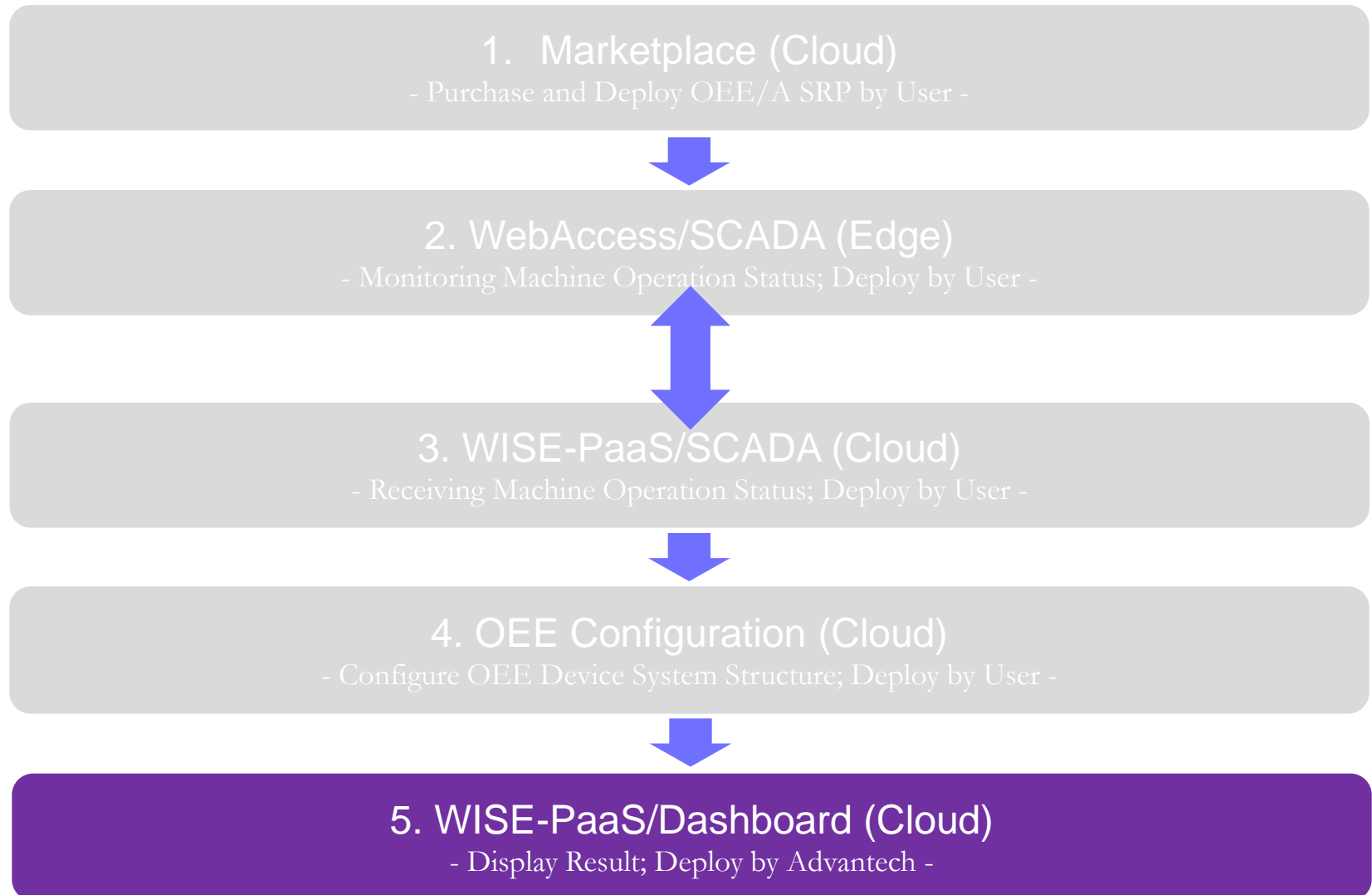
廠區_線別_機台	Tokyo_plant,MFG_Line1,M01			
id	is DownTime	start time	end time	modify action
Add_Data	True	08:30:59+09:00	17:29:59+09:00	
Action	Query	Add	Modify	Delete



ADVANTECH

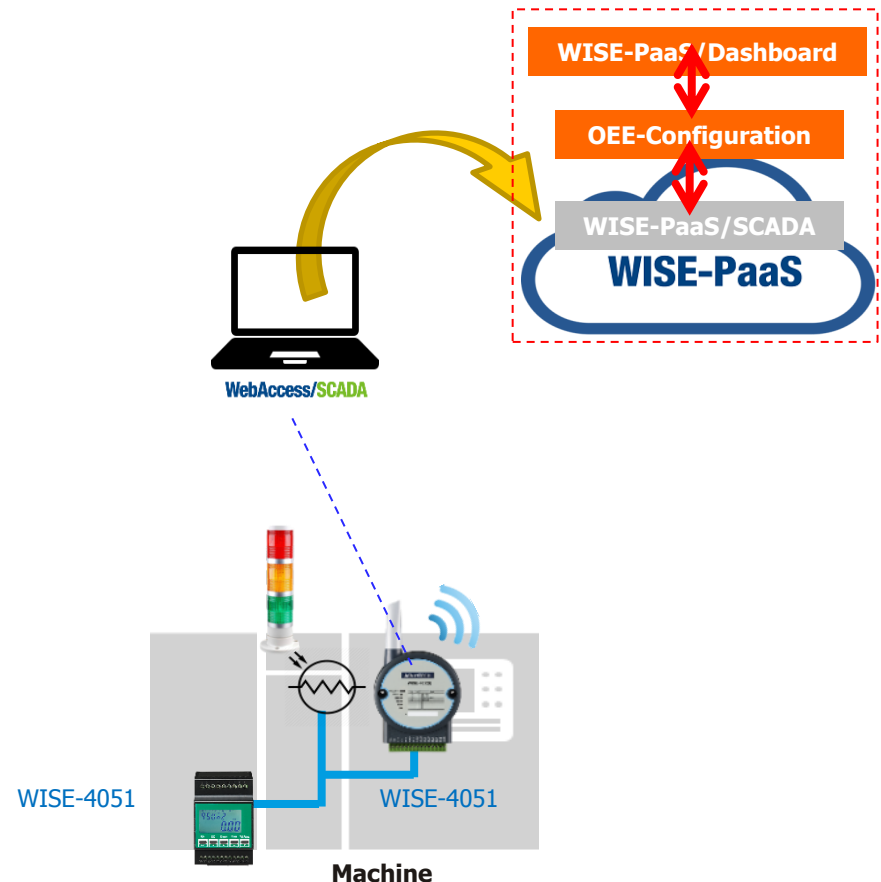
5. WISE-PaaS/Dashboard

OEE Availability Configuration Steps



Purpose

- Visualize of OEE Availability
- Modify Dashboard
 1. Able to modify default company name and its logo
 2. Able to modify default OEE-Availability Dashboard pages



WISE-PaaS/Dashboard Page List

- Total 11 key pages

	Page	Purpose
1	OEE_AREA_List	Use coordinates to show city location
2	OEE_Plant_List	Display factory (including pictures)
3	On Line Utilization Rate	Display machine status
4	Utilization_Rate_By_Analysis	Display the daily historic of the Line
5	Utilization_Rate_By_Analysis_Class	Display the daily historic of the Line and Machine
6	Utilization_Rate_by_Analysis_Machine	Display the historical data of Machine

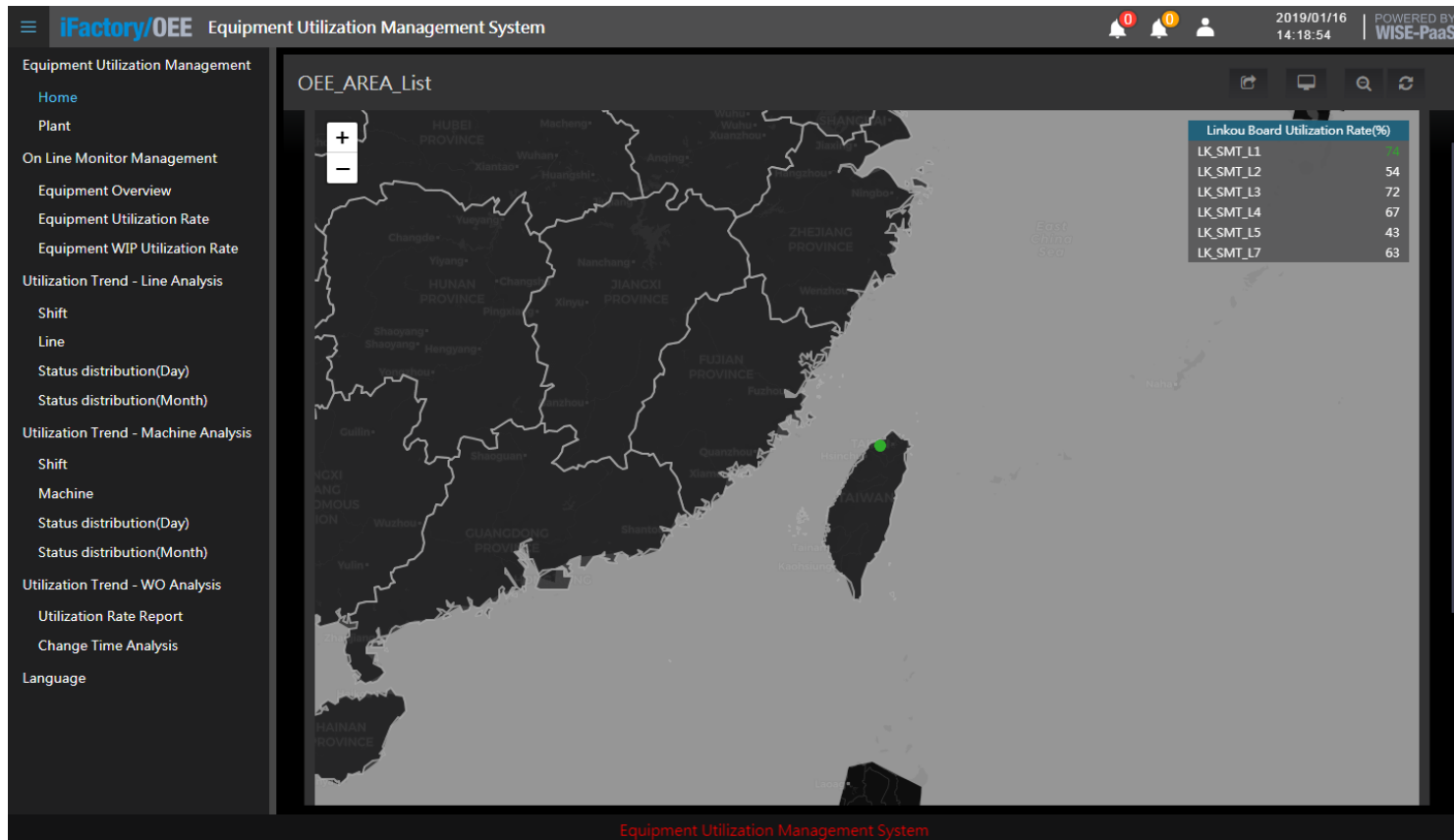
WISE-PaaS/Dashboard Page List

- Total 11 key pages

	Page	Purpose
7	Utilization_Rate_by_Analysis_Machine_Class	Display the historical data of Machine / shift
8	Utilization_rate_line_status__day_analysis_machine	Display historical data of machine status distribution
9	Utilization_rate_line_status_analysis	Display the month history of the Line
10	Utilization_rate_line_status_analysis_machine	Display the daily history of the line/machine
11	Utilization_rate_line_status_day_analysis	Display the daily history of the line

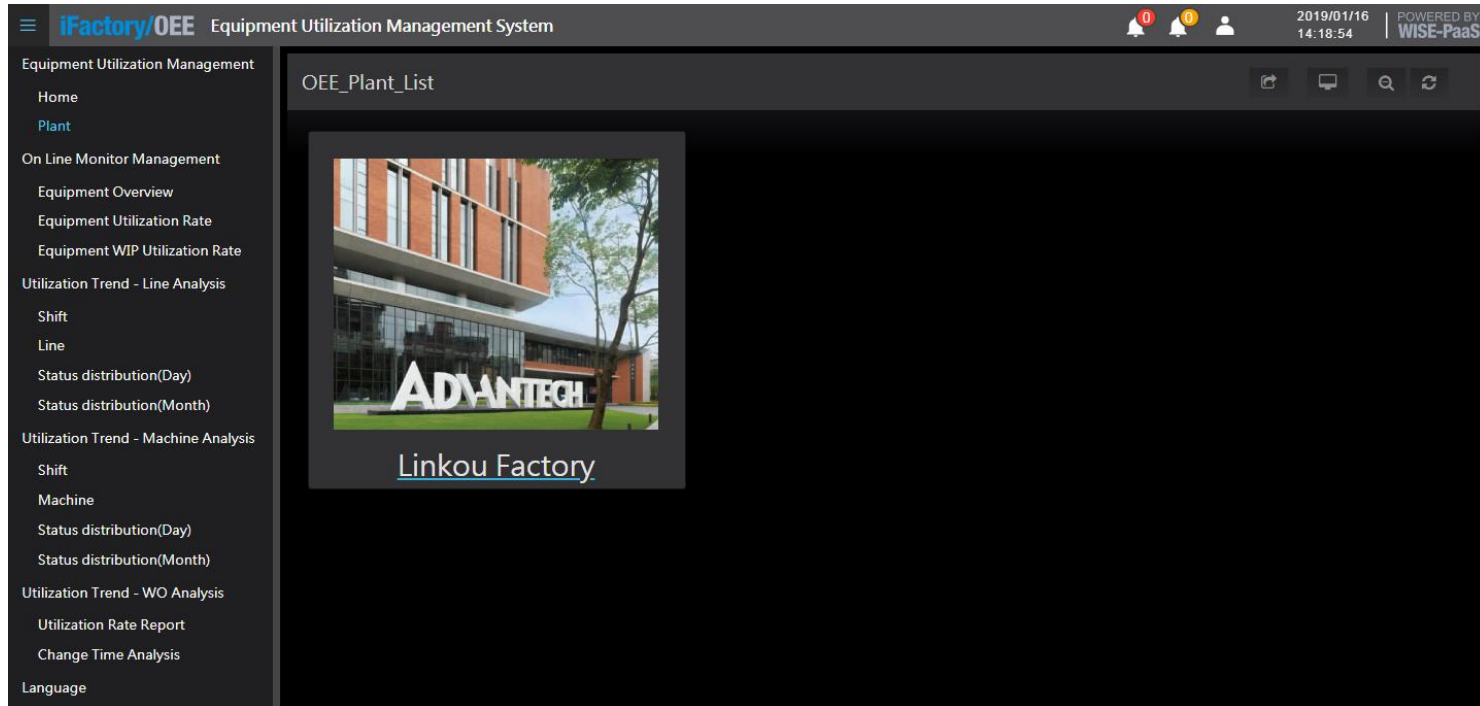
1. OEE AREA List

- Able to display factory and machine statuses on the map



2. OEE Plant List

- Customized photo display of each area of the factory, convenient management unit to control the immediate situation of the factory



3. On Line Utilization Rate

- can visually real-time utilization rate of the whole line, as well as the information of the rate of each machine, the real-time status, the time accumulation of each state, and the intuitive operation of the equipment operation/abnormal/waiting/shutdown status through the waterfall diagram



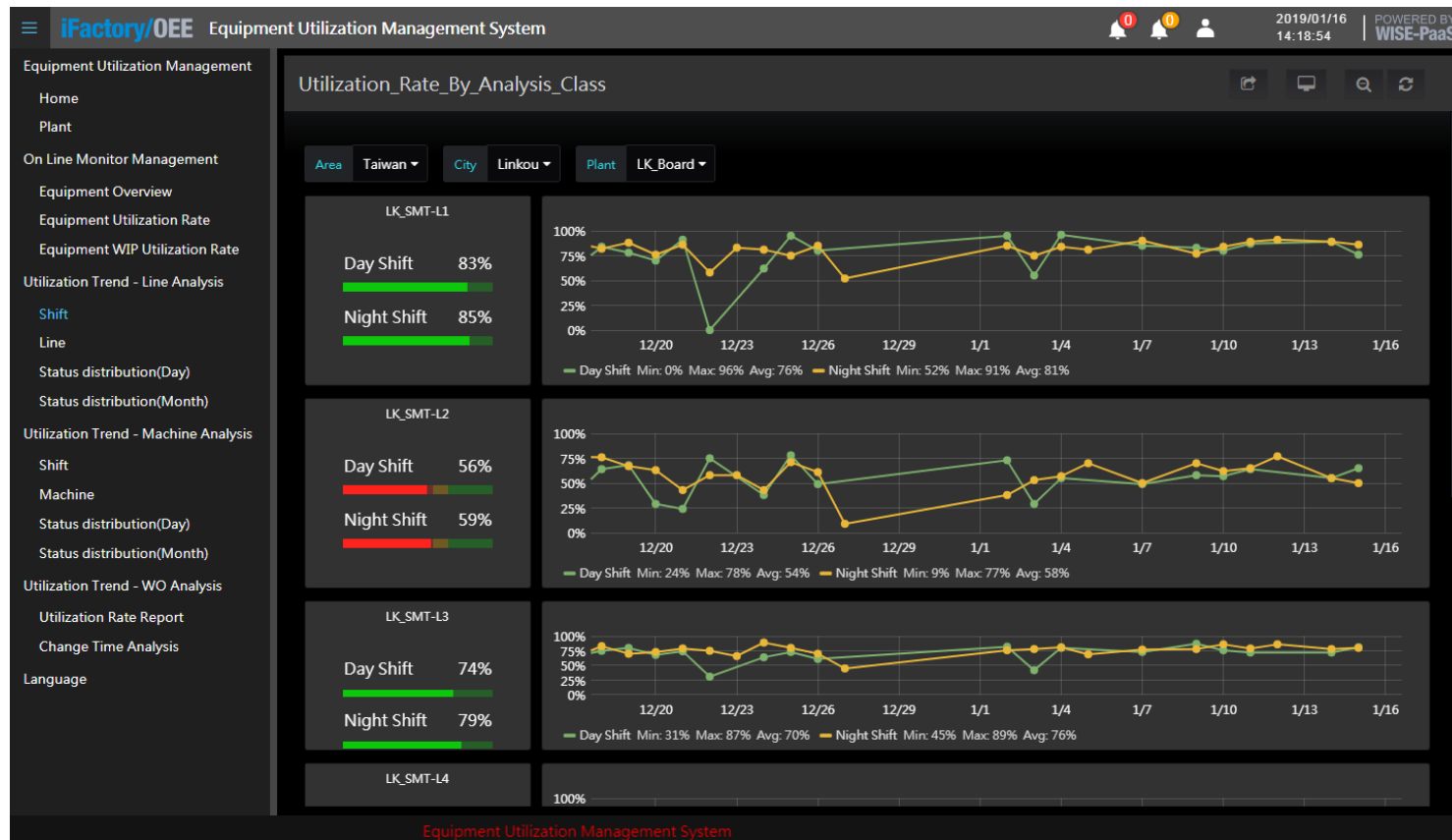
4. Utilization Rate By Analysis

- The display is a summary report, which summarizes the real-time status of all the machines and shows the difference between the trend and the target of the machine's real-time utilization rate.
- The red line is the target utilization rate, and warning mode is used to warn the rate of non-compliance.
- Let equipment personnel and process personnel analyze and improve in time.



5. Utilization Rate By Analysis Class

- Day and night shifts
- According to the way of production line, let the managers know the production indicators of each production line and the production indicators of the morning and evening **classes**



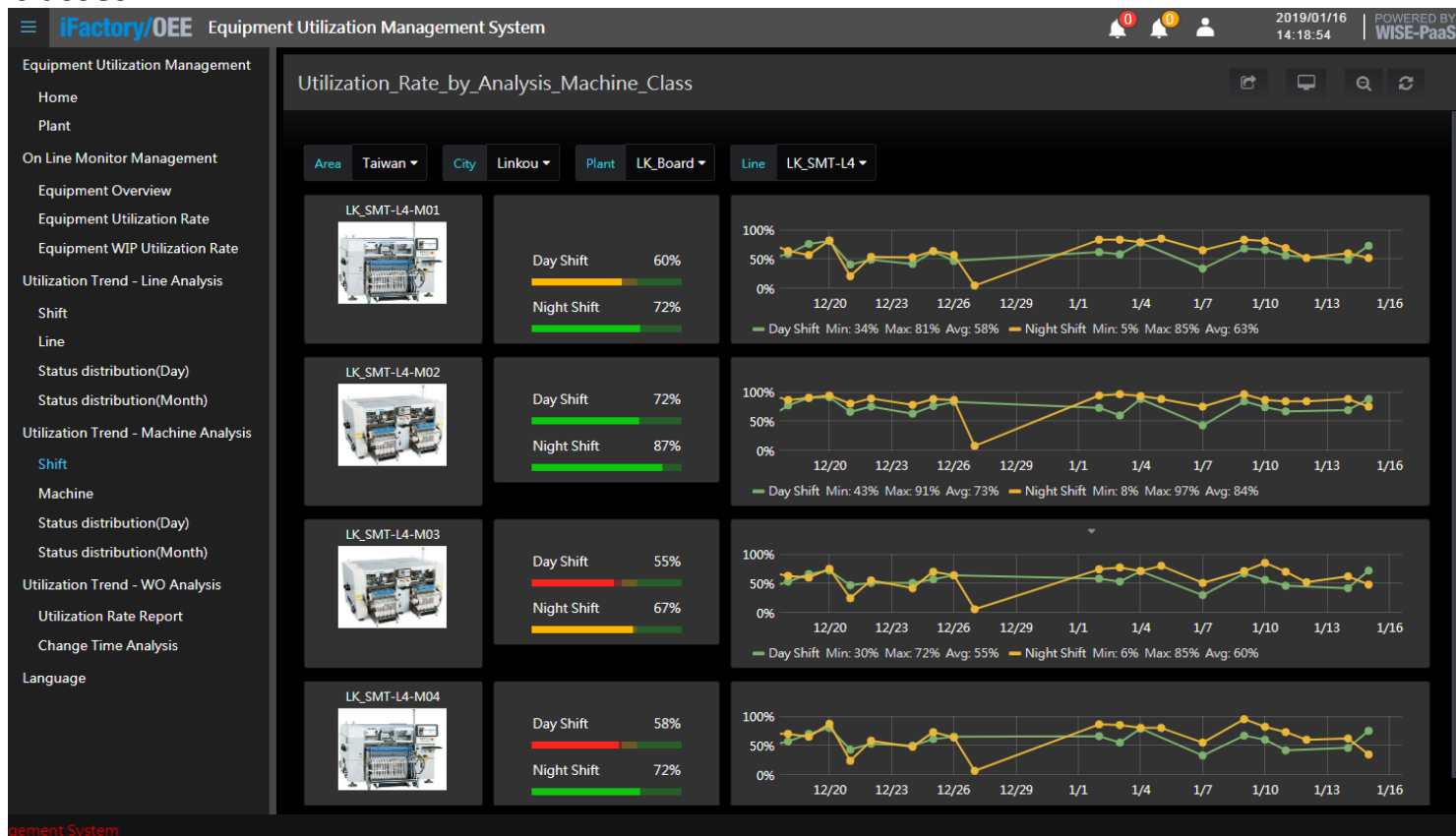
6. Utilization Rate by Analysis Machine

- The real-time status report of all the machines shows the difference between the trend and the target of the machine's real-time utilization rate. The red line part is the target utilization rate, and the early warning mode is used to warn the rate of non-compliance.



7. Utilization Rate by Analysis Machine Class

- Day and night shifts
- According to the way of each individual machine, let the manager know the production indicators of each production line and the production indicators of the morning and evening classes.



8. Utilization Rate Line Status Day Analysis Machine

- The **daily** historical trend shows the time of each machine running average/standby/abnormal/stop/retreating, so that the manager can understand the actual production status of the production line.



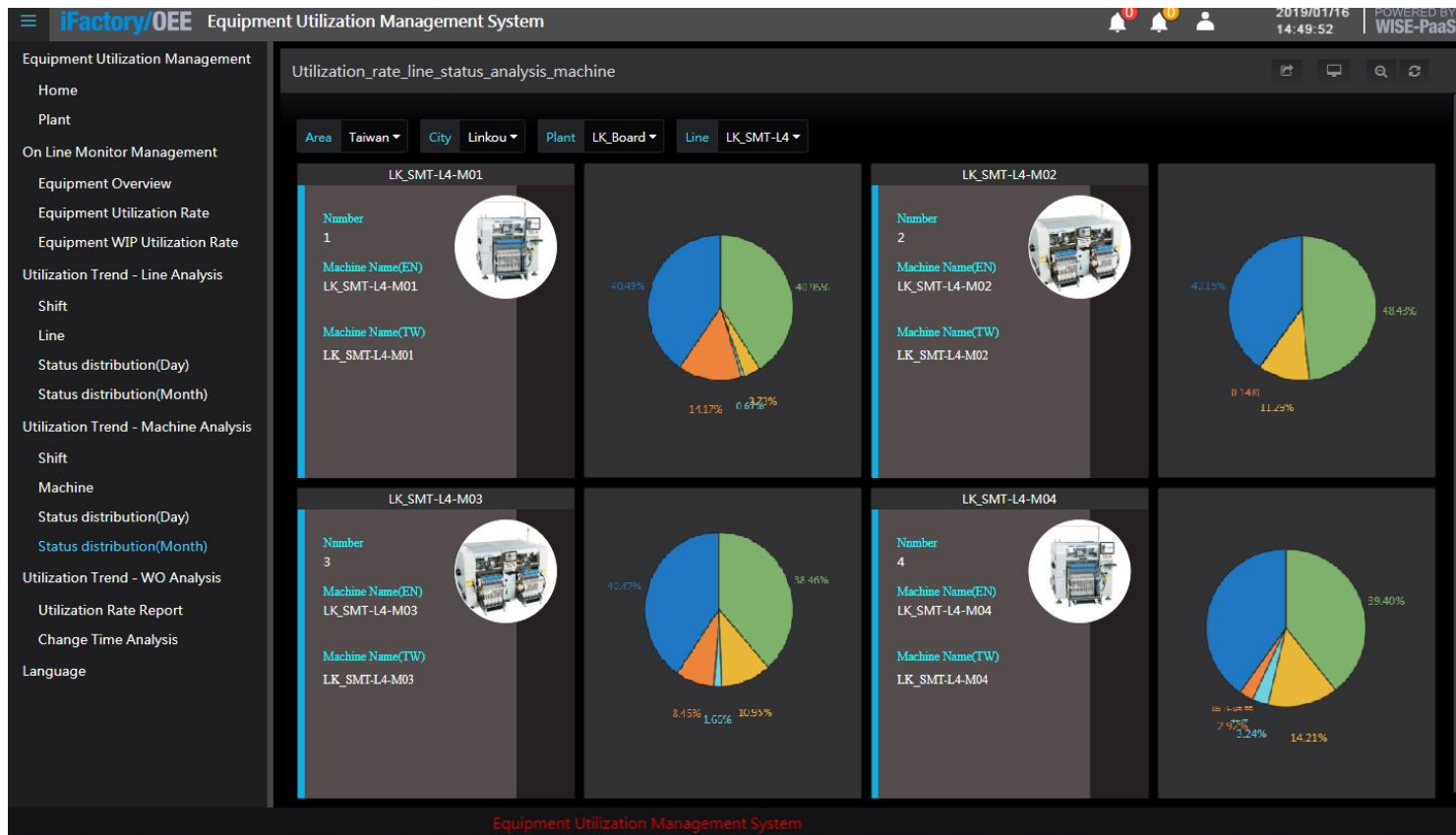
9. Utilization Rate Line Status Analysis

- The **monthly trend** of the pie chart shows the time of the production line running average/standby/abnormal/stop/retreating, so that the manager can understand the actual production status of the production line.



10. Utilization Rate Line Status Analysis Machine

- The **monthly** pie chart trend shows the time of each machine running average/standby/abnormal/stop/retreating, so that the manager can understand the actual production status of the production line.



11. Utilization Rate Line Status Day Analysis

- The columnar trend of the day shows the time of the production line running average/standby/abnormal/stop/retreating in real time, so that the manager can understand the actual production status of the production line.





Enabling an Intelligent Planet

Thank You !