



Digital Work Manual I.App Solution Introduction

**Advantech Industrial IoT / AI/
iFactory Smart Manufacturing Solution**





Outline

1. Product Introduction

Overview

Challenges & Solutions

2. Product Key Features

User Scenario

Features & Functions Introduction

3. Architecture

Services

Software



Overview

In the factory, to ensure the quality of mass production, instructions have their own standard operating procedures (SOPs). SOPs are applied to production operations to improve quality inspections and maintenance. Traditional SOPs are printed on paper, however, traditional paper is wasteful and increases operating costs.

Advantech iFactory eManual I.App, provides a digital SOP which provides accurate product information and fast updates which shortens the learning curve for operators.



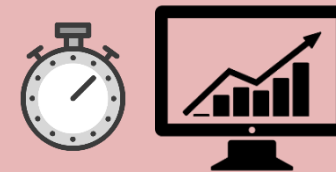
Sources Savings

With eManual, customers have no need to print mass paper instructions, which saves sources and money.



Reduce Maintenance and Management Time

With digital manual, the management and maintenance of SOP become flexible and convenient.



Accelerate Production efficiency

Operators can reduce time on finding and reading work instruction with eManual, which reduce production time and accelerate production efficiency.

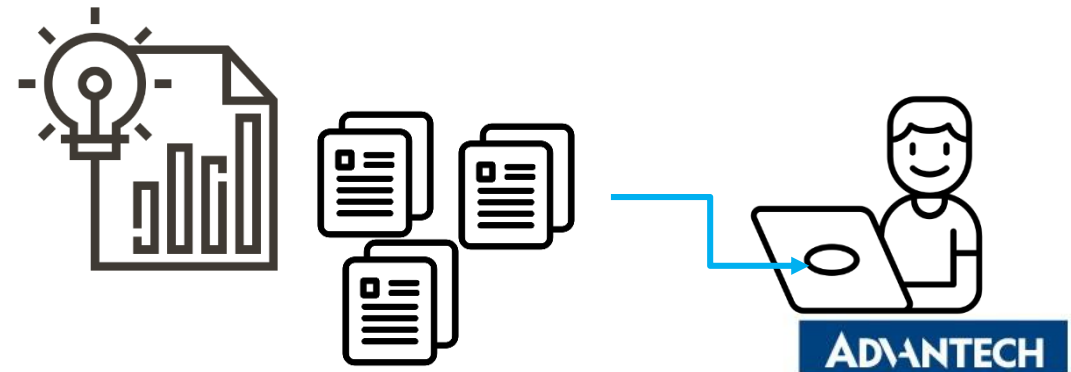
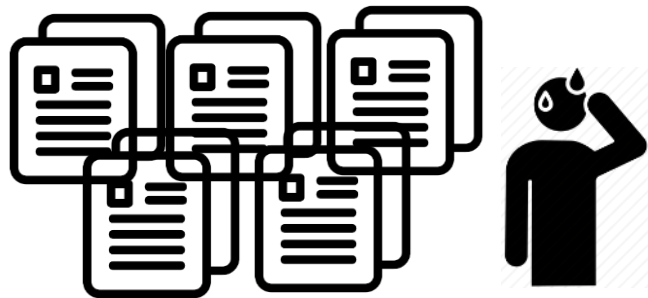
Challenges & Solutions

Challenges

1. Paper SOPs instruction are harder to update
2. Paper SOPs are easy to create and share
3. Risk of losing paper SOPs when changing shifts.
4. Paper SOPs less convenient and accurate to use.

Solutions

1. eManual provides a digital SOP, which is easy to find and trace
2. eManual effectively controls SOP usage rights to avoid outflows.
3. When shift lines end, eManual can quickly switch the SOPs on the production line, reducing the cost and time.
4. eManual allows operators to easily search for the correct SOP, increasing productivity.



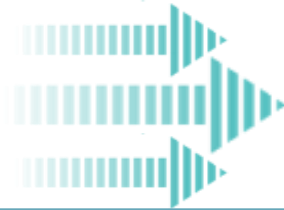
User Scenario

01

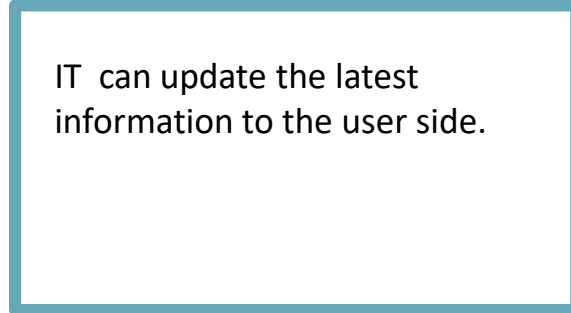
IT can easily maintain work instructions through the eManual editor.



02

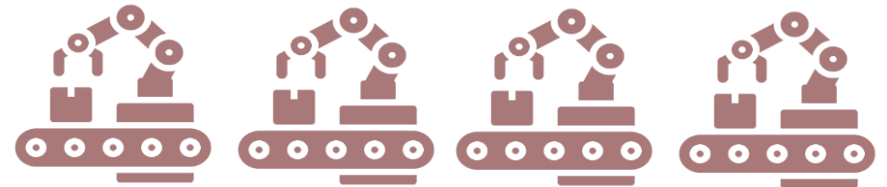
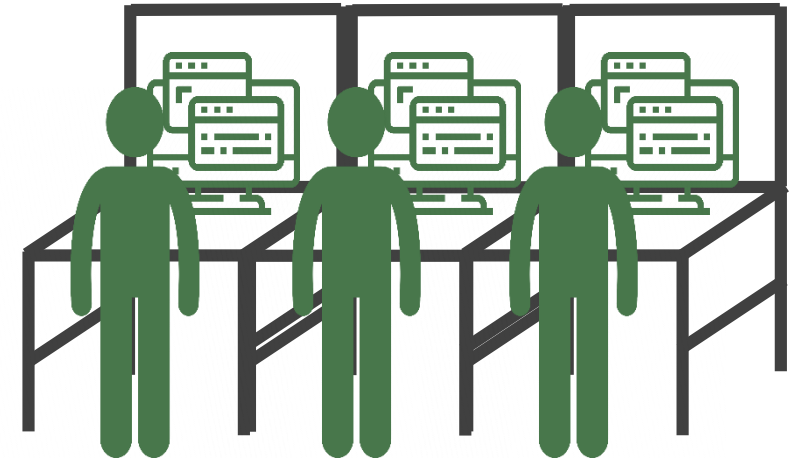


IT can update the latest information to the user side.



03

iFactory/eManual provide users (operators) with digital work instructions on a simple UI.





Key Features of eManual

01

Easy Set-Up

Simple set-up task steps and categories with built-in work instruction editor and drag-and-drop functionality - no programming needed.



03

Collect Cycle Times to Make Data-Driven Decisions

Capture meta data for every step such as speed and process cycle times for continuous improvement.

05

Web-Based Application

No additional software to install. Works on any device such as tablets, mobiles, laptops etc.

Bar-Code & QR-Code Entry

Users can scan bar-codes or QR-codes for rapid entry to any procedure or instruction.

02

Integrated Interface

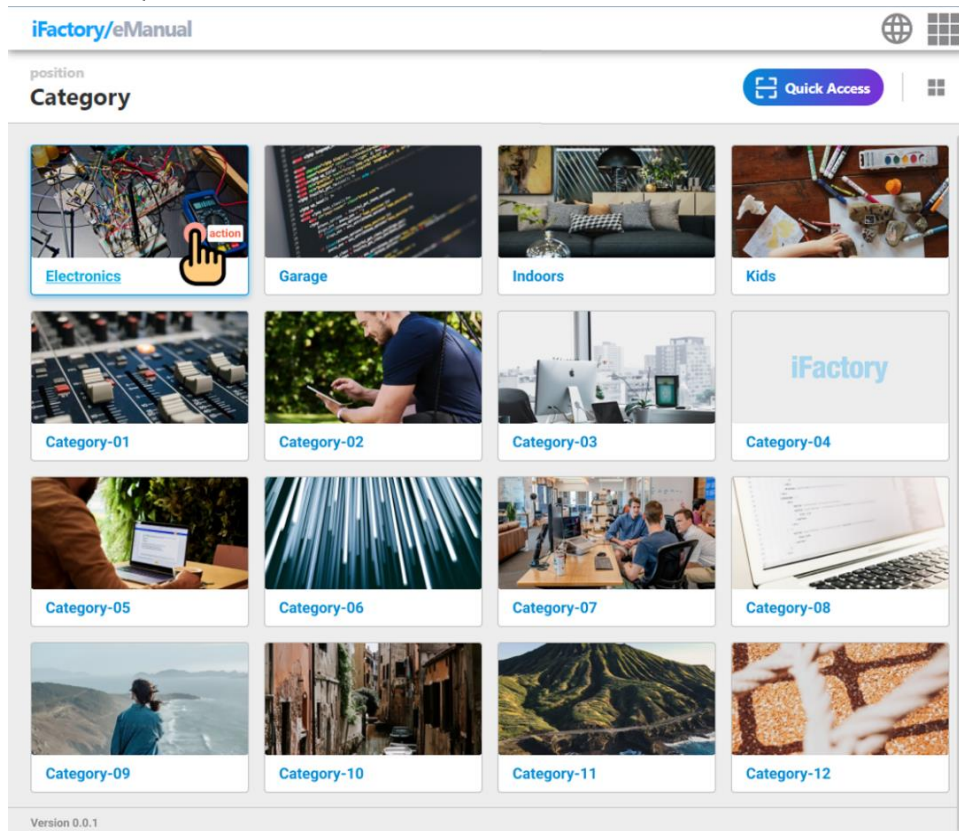
Provides APIs for other I.Apps or upper lever systems such as MES, ERP, and Shop Floor

04

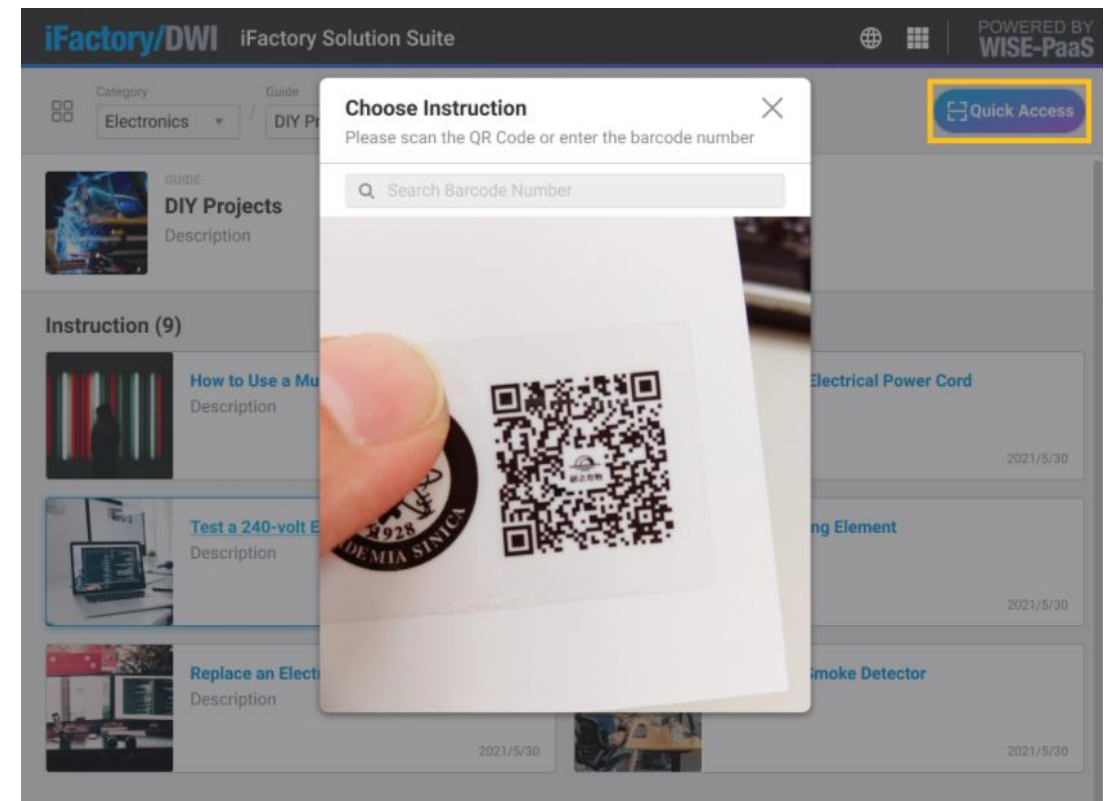


Accessing and Using eManual

- **A web-based software application.** Users can create work instructions or view reports anywhere, anytime via browser on any web-capable device, tablet, laptop, iPad etc.
- Quickly access information across all instructions using built-in **search functionality or Bar-Code and QR-Code Scan.**



Instruction Category



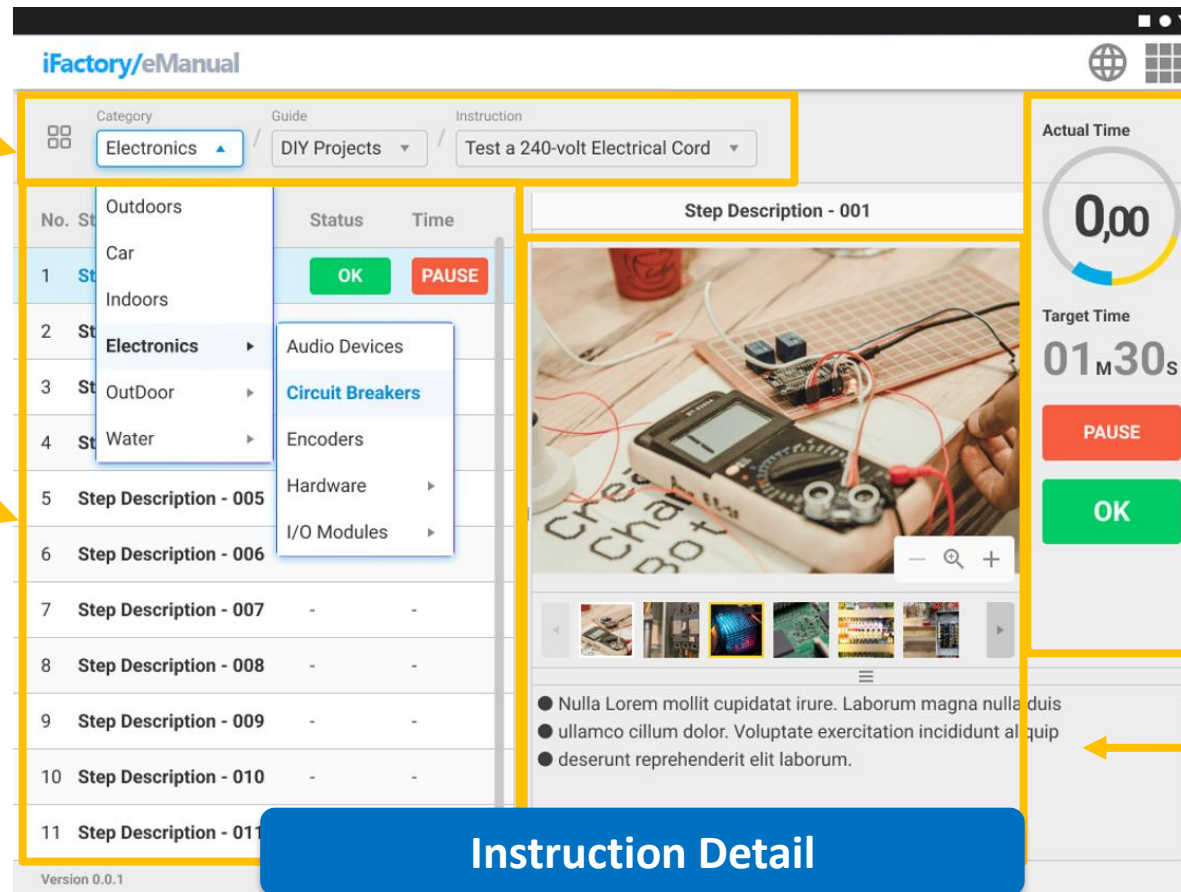
Quickly Access Instructions

Digital SOPs by Step

- Work instructions and steps are displayed in real-time.
- Capture times for each process task start / stop.
- Cycle time indicator shows targeted time for each station as well as actual time per station. Through eManual, Station data can be connected with iFactory/MOM and iFactory/KPI to give management the tools they need to make data-driven operational decisions.

Quickly instruction switch

Steps switch and time capture



iFactory/eManual

Category: Electronics / Guide: DIY Projects / Instruction: Test a 240-volt Electrical Cord

No.	Step	Status	Time
1	Outdoors	OK	
2	Car	PAUSE	
3	Indoors		
4	Electronics		
5	OutDoor		
6	Water		
7	Step Description - 005		
8	Step Description - 006		
9	Step Description - 007		
10	Step Description - 008		
11	Step Description - 009		
12	Step Description - 010		
13	Step Description - 011		

Step Description - 001

Actual Time: 0,00

Target Time: 01 M 30 S

PAUSE

OK

Instruction Detail

Version 0.0.1

Each Process task start & stop, shows targeted time

Images and written Instructions



eManual Video Work Instruction


- Include videos of how-to complete any procedure to turn complex concepts into simple visual instructions.
- Capture video on the floor or in the field and include it in your work instruction service. Remove the potential for confusion or misinterpretation.

iFactory/eManual

Category: Atest01 Guide: Guide01 Instruction: ins

No	Step Description	Status	Time
1	A01	-	
2	A02	-	
3	Step3	Pause	<button>Start</button>

Step3



Actual Time: 0,27

Target Time: 0 M 50 s

Start

Video Tool includes: Full screen display, Minelayer, Volume adjustment, Speed adjustment...etc.

Video Instruction

ADVANTECH



Digital Instruction Editor Tool

- Easily create work instructions in a simple, easy-to-use system with eManual built-in work instruction editor tool. Use images, written instructions, video or connect to current PDF files, supports files up to 5 GB in size.
- Quickly set-up task sequences by setting instruction management categories, uploading photos and videos, adding markups, and writing instructions with no programming needed.

File Format Types	Supported File Formats
Graphic file formats	JPG, JPEG, GIF (Recommended pixel size: 1920px wide, 1024px high)
Video import formats	MP4

File Format

Step Duration Configuration

Text Instruction Editor

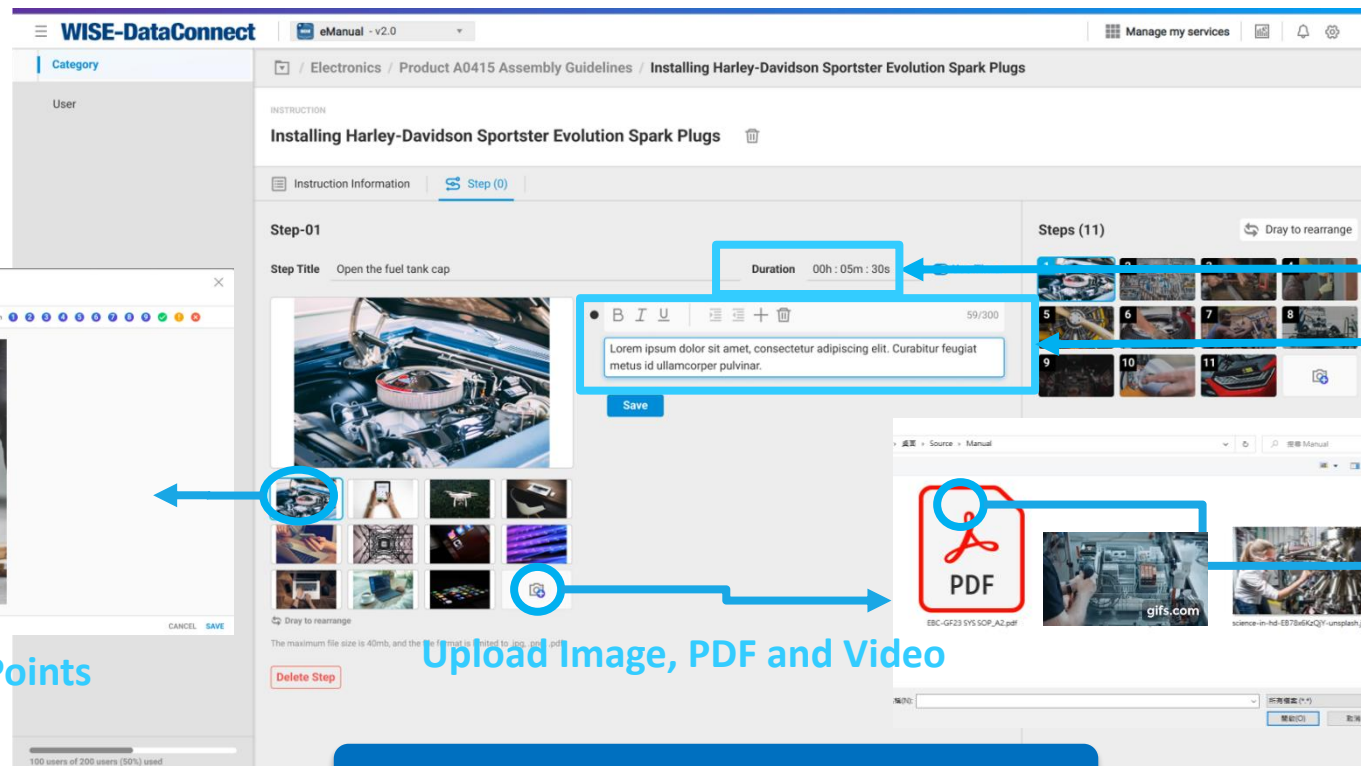
Markup Key Points

Upload Image, PDF and Video

Create Work Instruction

Select multiple pages
PDF to upload

ADVANTECH





Structured Instruction Management - Back Stage

Build a centralized library of standard work procedures. Consolidate Instructions with guide and arrange categories to fulfill various user demands for knowledge management.

Bar-Code & QR-Code generator helps the user to scan and rapid enter any instruction.

WISE-DataConnect | eManual - v2.0 | Manage my services

Category: Electronics / Product A0415 Assembly Guidelines / Instruction

GUIDE: Product A0415 Assembly Guidelines

Move to | Export | Duplicate | Delete

Instruction Name	Step	Date Modified	Date Created	Action
Instruction - 003	14	2021/01/06 00:00:00	2021/01/06 00:00:00	
Instruction - 005	11	2021/01/06 00:00:00	2021/01/06 00:00:00	
Instruction - 006	8	2021/01/06 00:00:00	2021/01/06 00:00:00	
Instruction - 008	9	2021/01/06 00:00:00	2021/01/06 00:00:00	
Instruction - 002	20	2021/01/06 00:00:00	2021/01/06 00:00:00	
Instruction - 009	6	2021/01/06 00:00:00	2021/01/06 00:00:00	

100 users of 200 users (50%) used

1-6 of 6 | 50 / page

Move or Copy Instruction to Other Category

Select Instruction(s)

Please select the instruction to copy

Instruction(s)

- KEIM
- FunderMax
- Tarkett Sports
- Ceramiche Refin
- Aparici
- Gustafs
- Skyfold
- Focus
- EQUITONE
- Neolith
- Kvadrat Soft Cells
- Linvisible
- Island Exterior Fabricators

Selected Instructions (6)

- panoramahl - FunderMax/Tarkett Sports/
- ULMA Architectural Solutions - FunderMax/Tarkett Sports/
- SilentiLab - FunderMax/Tarkett Sports/
- Libart - FunderMax/Tarkett Sports/
- Sancal - FunderMax/Tarkett Sports/
- Cupa Pizzarras - FunderMax/Tarkett Sports/

CANCEL SUBMIT

Instruction Structure

Export Instructions Bar-Code & QR-Code

Export QR-Code or Barcode File(s)

Please select the format of the downloaded image file.

QR-Code Format

Barcode Format

Download QR-Code

Download Barcode

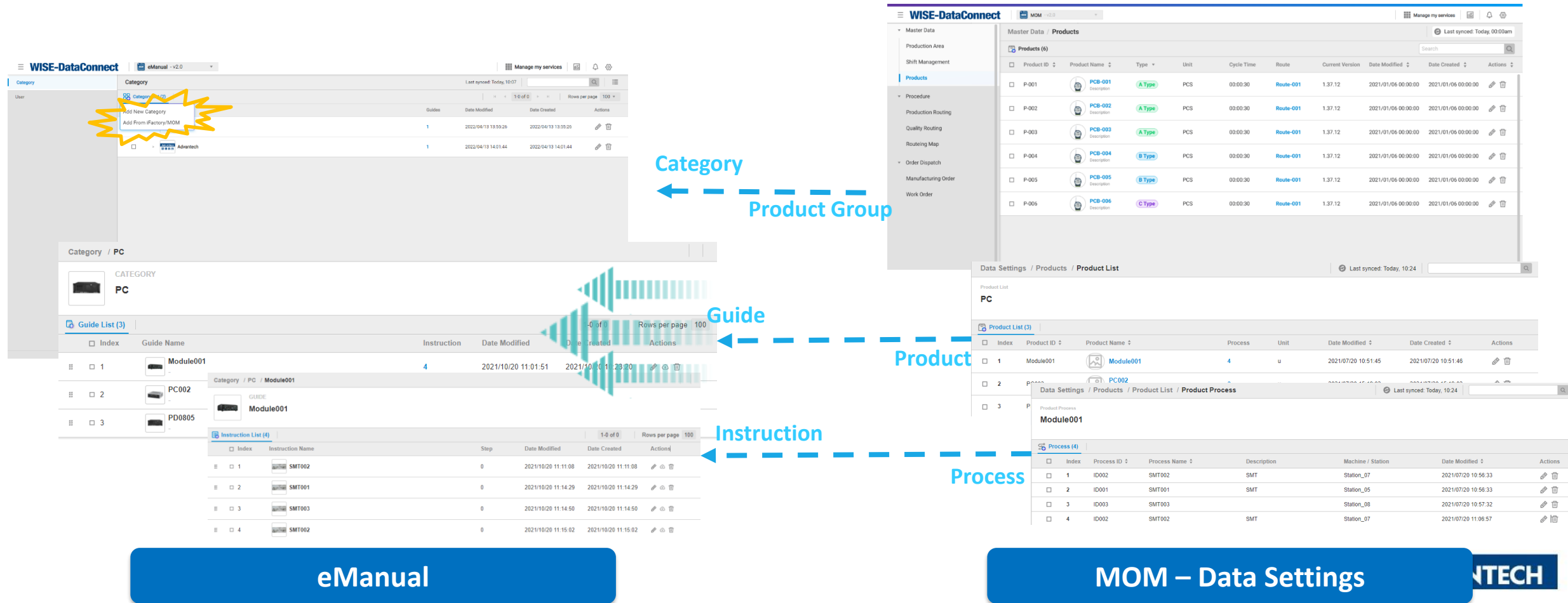
Guide List

ADVANTECH



Clone MOM Product Settings by “ONE-CLICK” - Back Stage

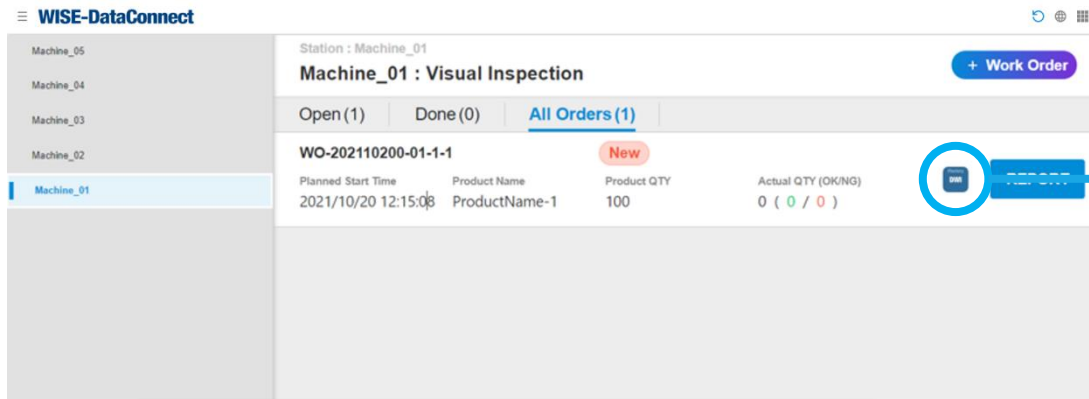
Build-in MOM Data Import feature, saves time by re-establishing all product information data in eManual, with no programming required by one click.





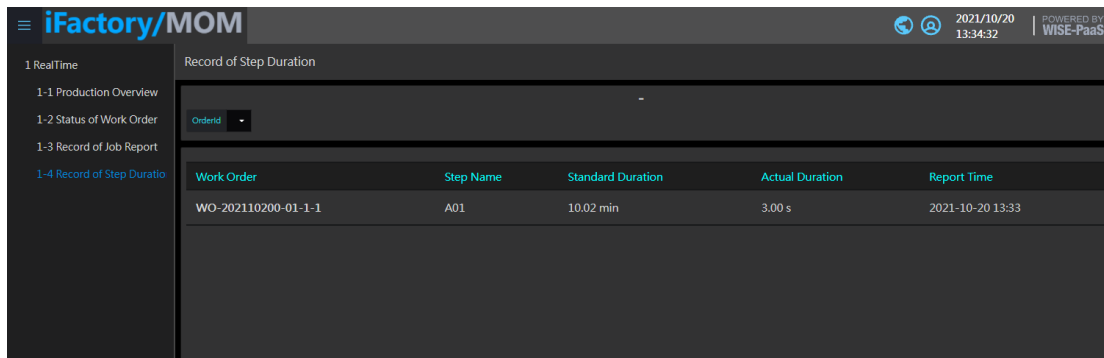
Integrated Data & Process Traceability Interface

Gathers essential information from process operators directly within your work instruction.
Easily export collected data via API to other I.Apps or your external systems.



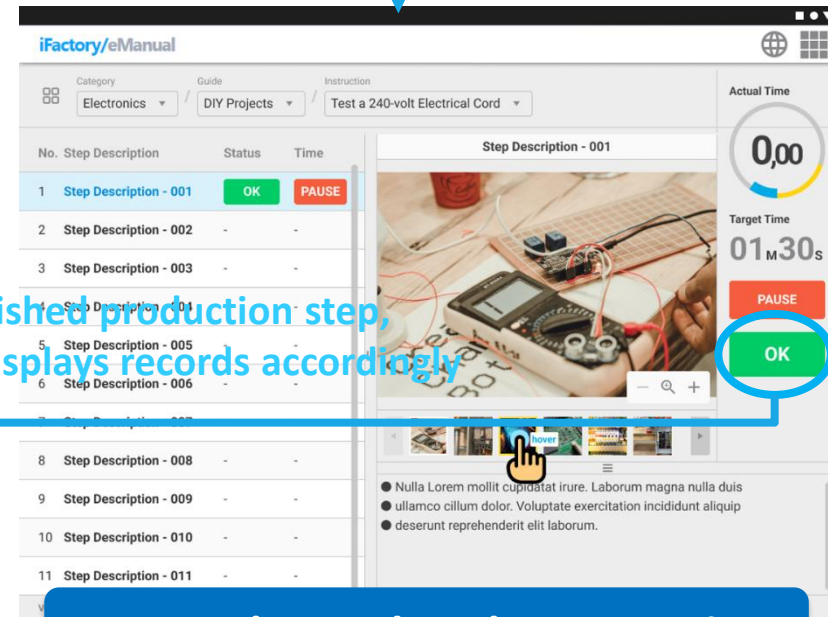
Check it and enter eManual within MOM

MOM – Job Report



MOM – Step Record Dashboard

Accomplished production step,
dashboard displays records accordingly



eManual – Work Order Instruction



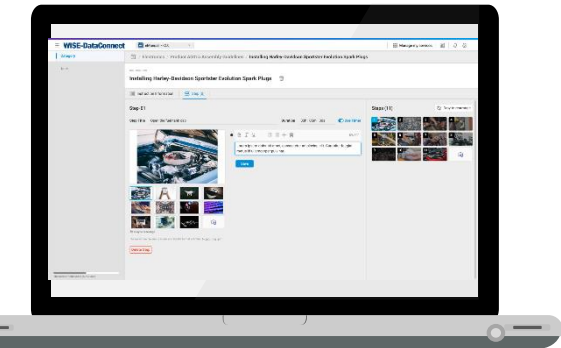
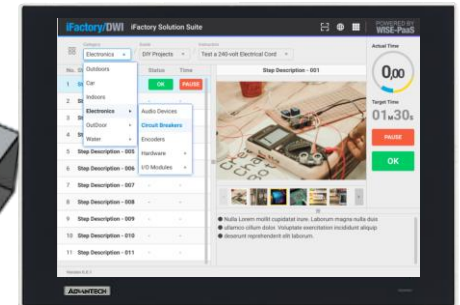
eManual Services Architecture



IFS-IMS-PPC115WA1A



IFS-IMS-PPC115WA1A



iFactory Desk- Instruction editor

Simple instruction creation and timely updates so operators will always have the most up-to-date instruction.



IFS-IMS-PPC115WA1A

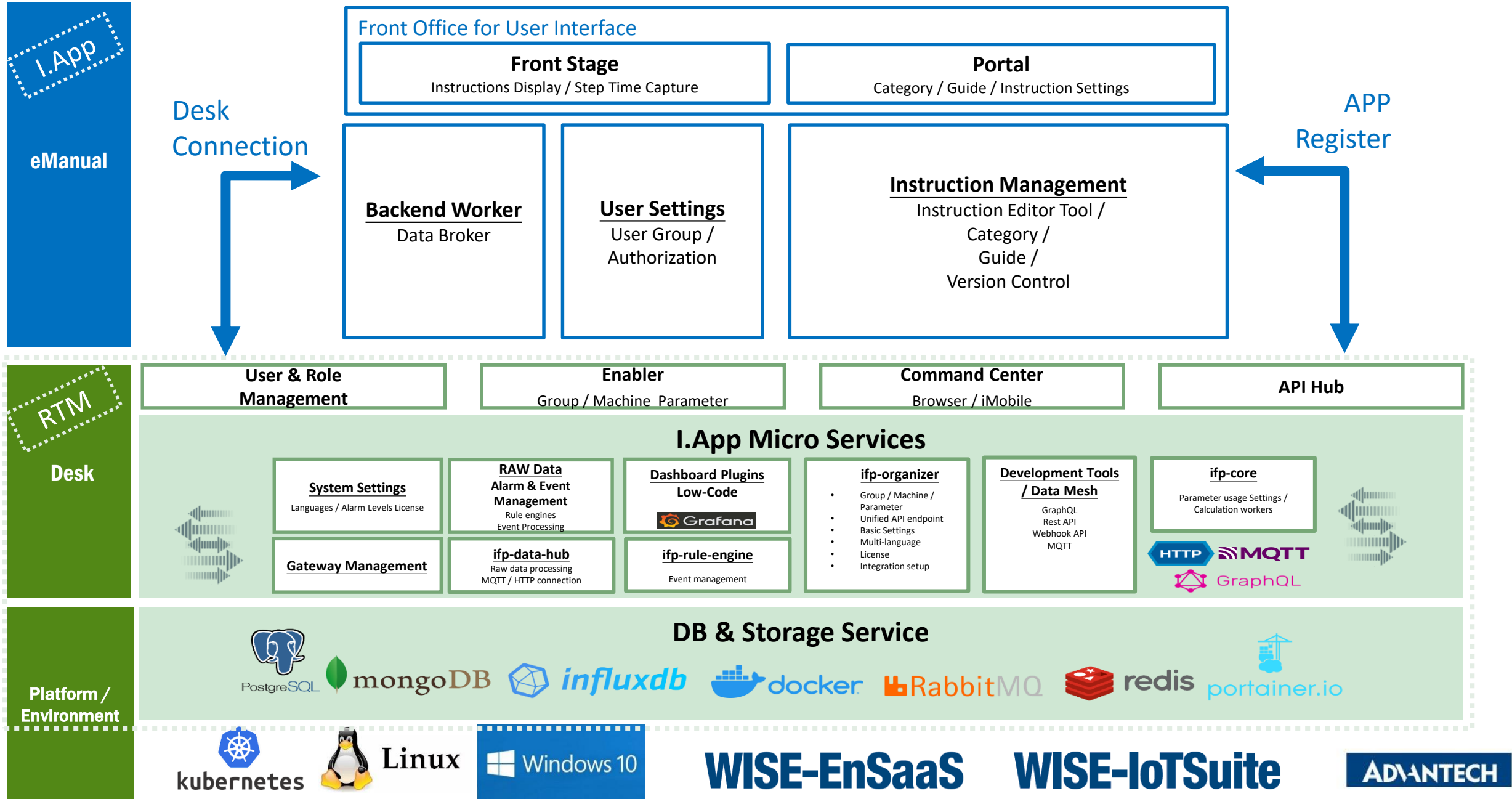
On-Site Device Work Instruction

Clear and concise procedures for on-site operators of any skill level can follow.

Handheld Tablet Work Instruction

Handheld device instruction for repair and maintenance to enforce standard procedures everywhere.

iFactory eManual Architecture



Co-Creating the Future of the IoT World

