KUKA.iiQoT Jump Start Initiative Presentation

Agenda

1

Our
KUKA iiQoT
solution

2

Our
offering
for you

Agenda

1

Our
KUKA iiQoT
solution

2

Our
offering
for you

Uptime and Efficiency of Robots is Essential in Profitable Robot-based Automation

Increase of **production uptime** and **employee efficiency**

Always **up-to-date** (security & functions)

Passive tool for alerts/ notifications of **key events**

One software tool to increase production uptime and employee efficiency

Our Experience for Robot-Automated Shopfloor

-1 Maintenance event

Up to **5h p.a.**[1,2]

Prevent downtime before or when it happens

Up to **20h p.a.**[1]

Up to **25h p.a.**[1,2] **production savings**

All robot information on one spot & up-to-date

Up to **1h p.a.**[1]

"3-click" KRCDiag transfer to KUKA

Up to **0,5h p.a.**[1]

Up to **1,5h p.a.**[1] **employee savings**

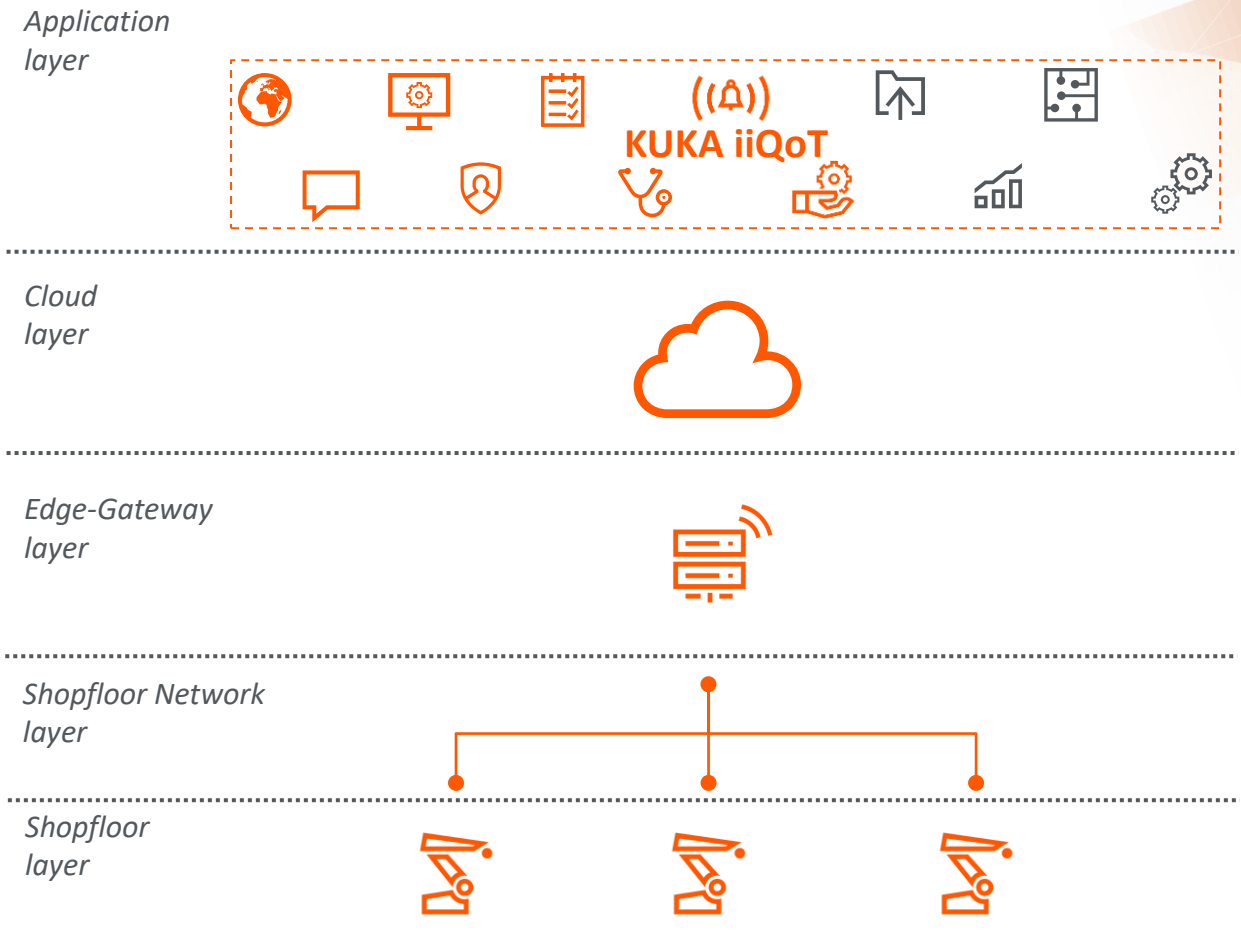
All with cost-free KUKA iiQoT.Basic

-Versus-

Average customer one-time effort of 8h [3]

[1] Based on KUKA production hall; Augsburg Germany - 6 robots; 255 days; three shifts
[2] Based on average maintenance duration of all robot maintenance events
[3] Based on assumption that prerequisites are given (checklist available)

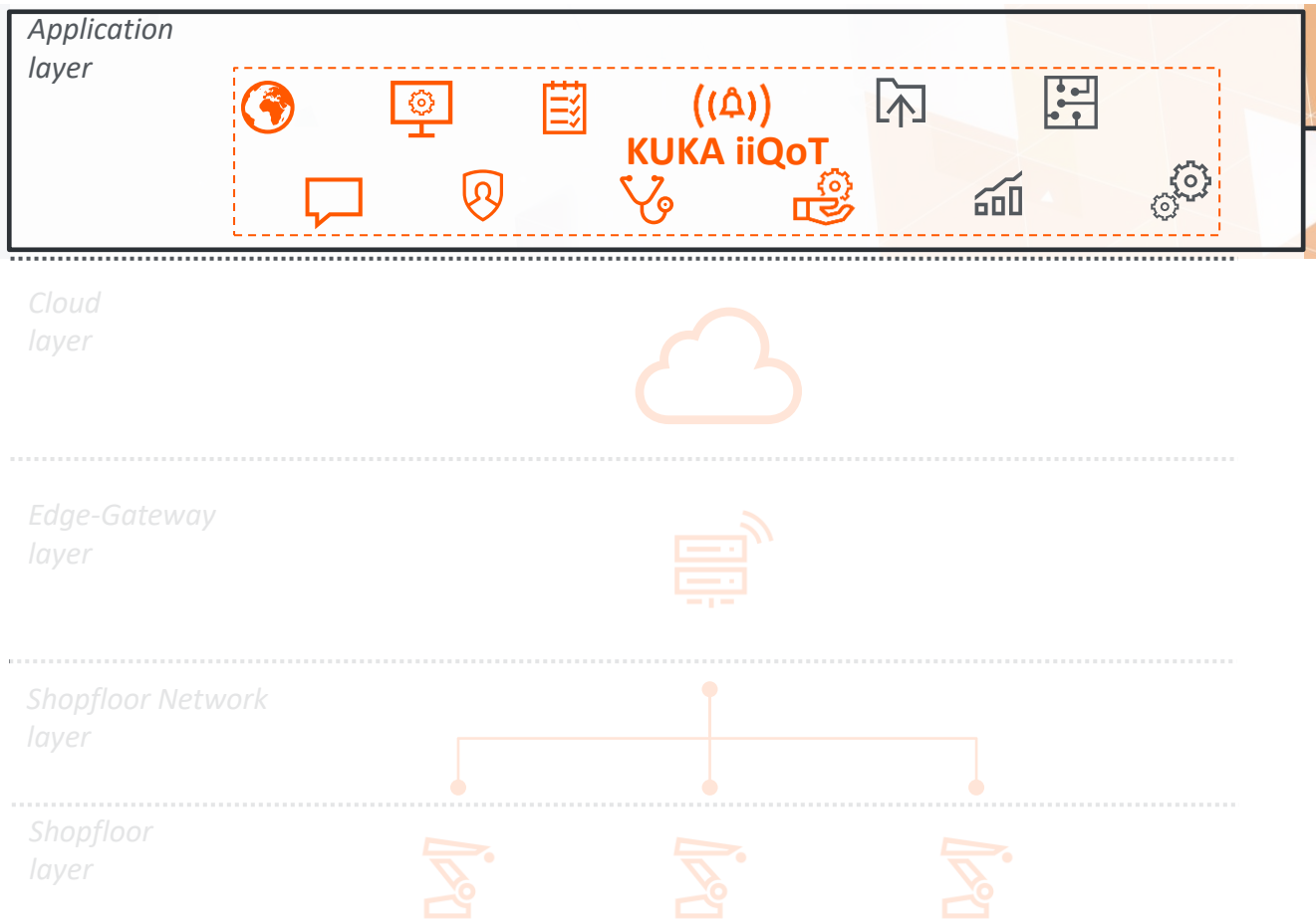
KUKA iiQoT Product Architecture



Simplified visualization of necessary layers to connect physical production assets with a cloud solution

→ ***KUKA Robots with KUKA iiQoT***

KUKA iiQoT Product Content



For Free

Freemium

Core Application

KUKA iiQoT.Basic

- Asset Manager
- Messages
- Condition Monitoring
- Security Monitor
- Changelog
- Fault Diagnosis
- Notifications
- Maintenance Manager

Free for use until 10/23

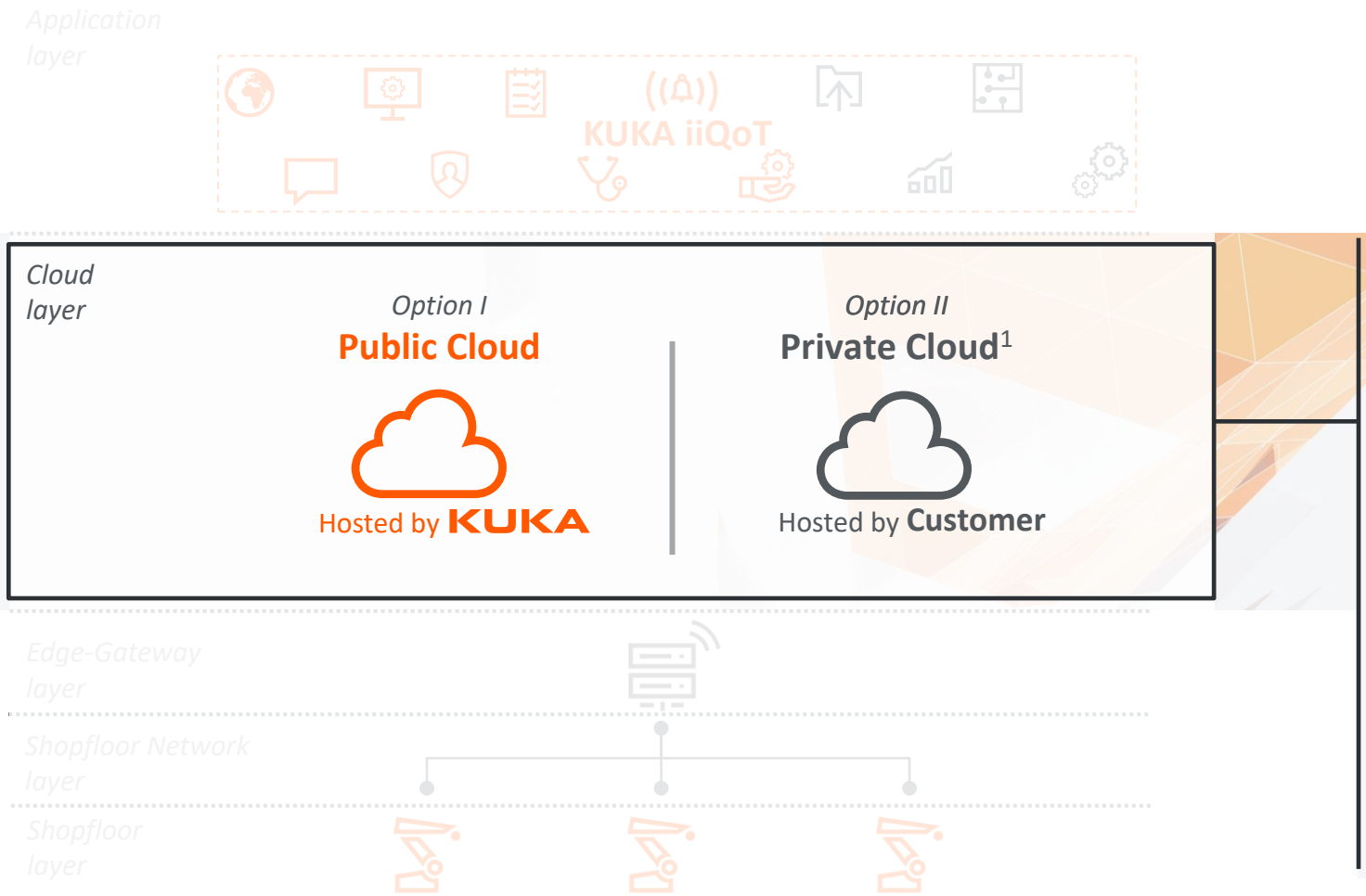
Premium

Add-On Application

KUKA iiQoT.Advanced (10/23)

- Predictive Maintenance
  - Condition-based Maintenance
- Efficiency Monitoring
  - Energy consumption analysis
  - Cycle time analysis
- Load Analysis
  - Load test (Robot Selector)
  - Current load
- Backup Management
- Process Data Aggregation

KUKA iiQoT Cloud Options



KUKA recommendation
- **Fastest usage**
- **Smallest effort**

Option I

KUKA

Public Cloud

- Managed cloud by KUKA
- Latest product developments & IT security standards
- Smallest involvement/effort by customer

Option II

Customer

Private Cloud

- Managed cloud by customer incl. hosting costs
- Cloud adjustments required to enable all functions
- Involvement/effort required by customer (project)

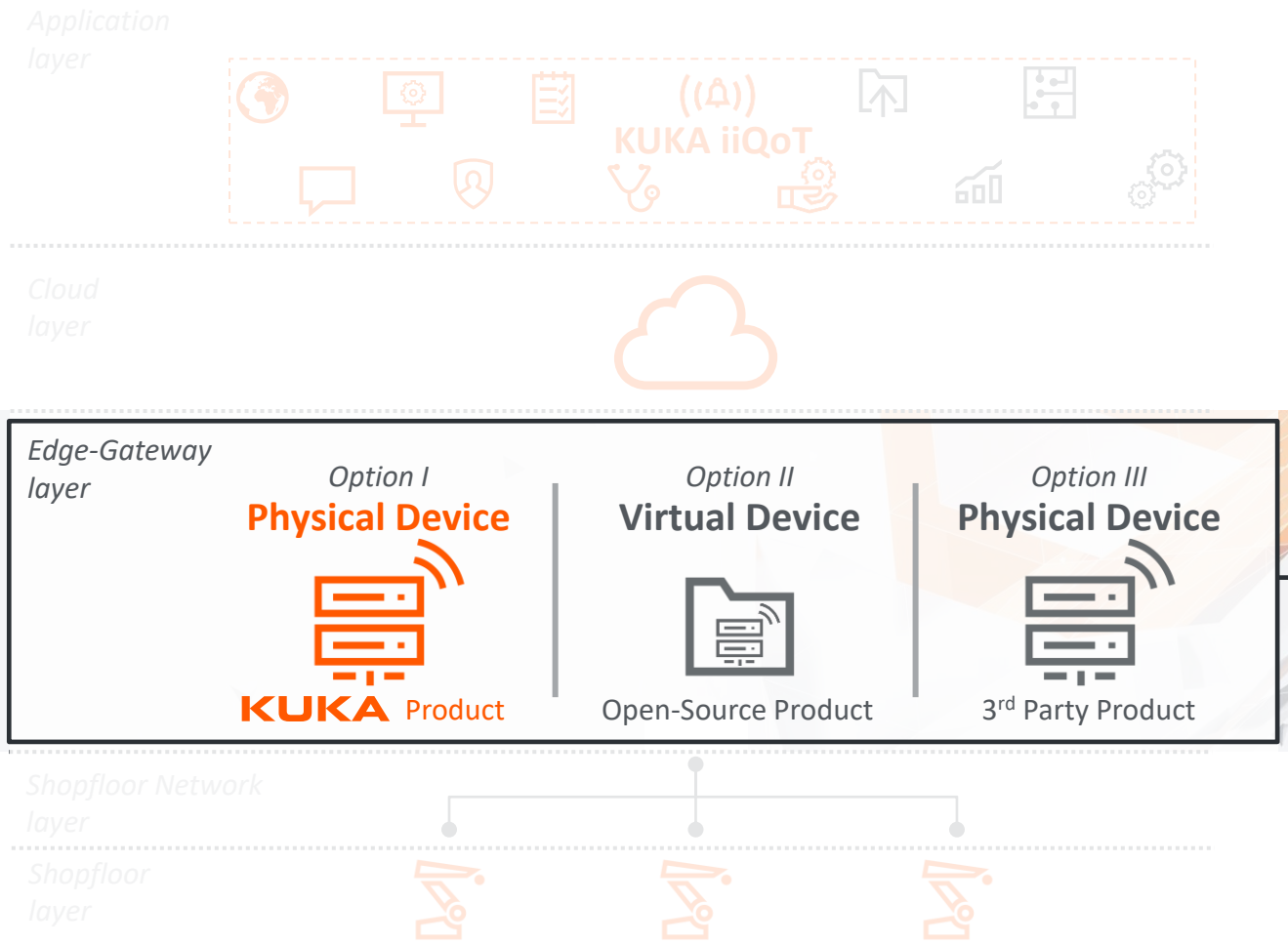
General

Cloud Server Notes

- All options come with KUKA iiQoT Broker Software
- All options come with commissioning manuals
- Customers task to set up required IT infrastructure

1) Private Cloud adjustments require project approach with customer and will be invoiced by Time & Material

KUKA iiQoT Edge Gateway Options



KUKA recommendation
- **Full KUKA support**
- **2 Services in one**

Option I

KUKA CRSM Type A

- Licensed KUKA Product
- Performs KUKA iiQoT **and** KUKA Remote Service
- Meets IT security standards with integrated Firewall

Option II

Virtual Cloud Connector

- Cost-free Product
- Performs KUKA iiQoT vitually
- Customer provides server with integrated Firewall

Option III

Welotec EG 500

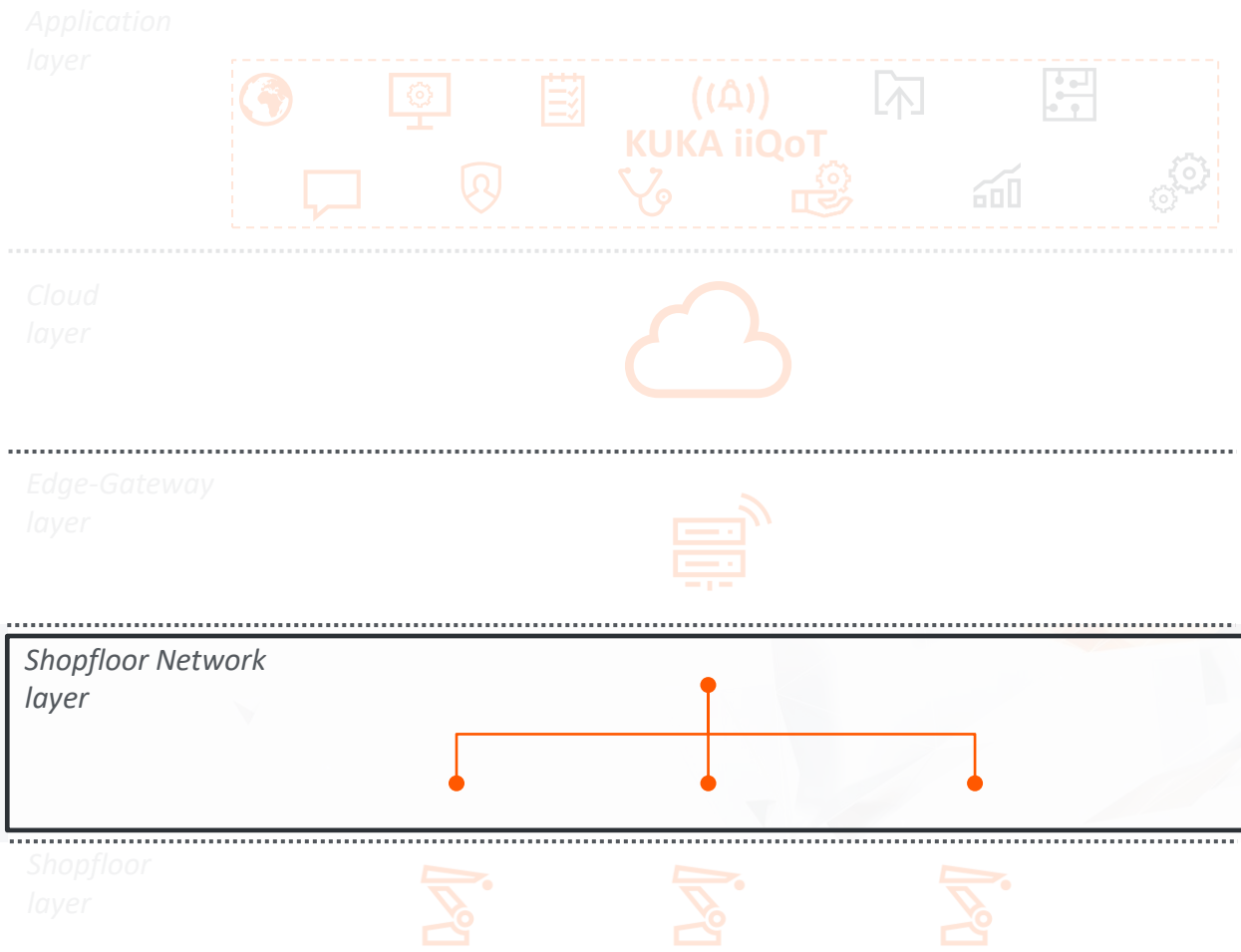
- KUKA recommended Edge-Gateway (not sold by KUKA)
- Performs KUKA iiQoT (Remote Support requires add. Hardware)
- Customers task to procure Welotec EG 500

General

Customer Notes

- All options come with KUKA iiQoT Broker Software
- All options come with commissioning manuals
- Customers task to set up required IT infrastructure

KUKA iiQoT Shopfloor Network

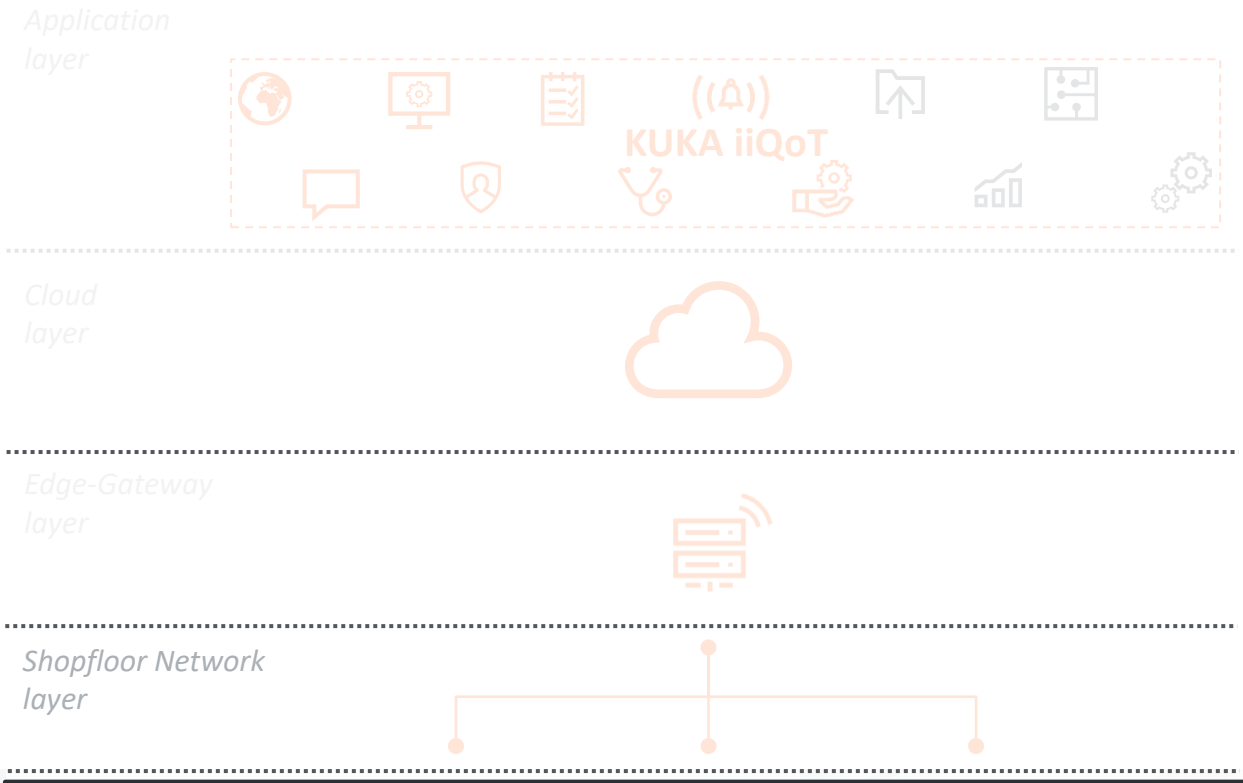


General

Customer Notes

- Network connection between robots and edge-gateway
- KUKA offers a Shopfloor Network checklist
- Customers task to set up required IT infrastructure

KUKA iiQoT Shopfloor Requirements



General

Customer Notes

- Each robot needs **KUKA.DeviceConnector pre-installed**
- Free KUKA software (Download on KUKA Marketplace)
- KUKA iiQoT works with OS KSS 8.3 or higher

KUKA iiQoT Data Security

powered by KUKA Microsoft Azure

KUKA Cloud Security

- ISO 27001 certified data center located in the European Union
- Latest MS Azure cloud security and compliance standards
- Newest encrypted data traffic
- Edge authentication via TPM[1] (industry-wide ISO standard)

Data Storage Rules

- Only KUKA robot variables
- Strict GDPR compliance

Objective of Data Collection

- Solely purpose of robot system
- Improvement of KUKA products & services

KUKA Data Assurance

- No back trace of user or production quality
- No sharing to 3rd parties
- No value for external parties

[1] (Trusted Platform Module)

Agenda

1

Our
KUKA iiQoT
solution

2

Our
offering
for you

The Jump Start Initiative Covers all Customer Challenges to use KUKA.iiQoT

Content

Provide all necessary items for efficient implementation

Close technical support to solve all obstacles to use KUKA.iiQoT

Official KUKA solution with continuous development

Offer

The Jump Start Initiative covers all upcoming tasks for the customer and allows an economical IIoT project

Jump Start Initiative in a Nutshell

KUKA offers an <u>all-inclusive</u> approach to enable the digital transformation of KUKA Robots with iiQoT

What is in for you?

- Immediate tenant
- Easy access to required hardware[1]
- Direct access to iiQoT experts

Until End of 2022

Timely-limited offer[2]

How to qualify?

- Start of IIoT project in 2022
- Provide employee for iiQoT commissioning
- Agree to feedback interviews (product & commissioning)

[1] Limited number of rental devices – first come first serve
[2] Offer is active if customer agrees to contract iiQoT Jump Start and starts implementation in 2022

Who is our target group for KUKA.iiQoT – Jump Start?

Ideal Customer Profile

- High intention of executing/starting IIoT project in 2022
- Dedicated contact person for IIoT implementation
- Interest in free iiQoT connection consulting
- KUKA Operating System (V)KSS 8.3 or higher
- Agree to product & commissioning feedback loop
- Customer executes robot maintenance and/or optimization

Note:

- KUKA.iiQoT is for all industries
- Only participants of Jump Start initiative are entitled for free iiQoT connection consulting (deadline 31st of December 2022)

All Components necessary for KUKA.iiQoT and Jump Start Offering

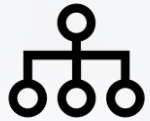
Product components

1

KUKA.iiQoT Tenant

2

Cloud Gateway

3 

Customer IT-Infrastructure

Jump Start Initiative covers all components

Customer Tenant

- Immediate Tenant access
- Cloud costs hosted by KUKA

\+

Included Cloud Gateway

Physical Cloud Gateway[1] Virtual Cloud Gateway[2]

- Rental - **- Free -**

\+

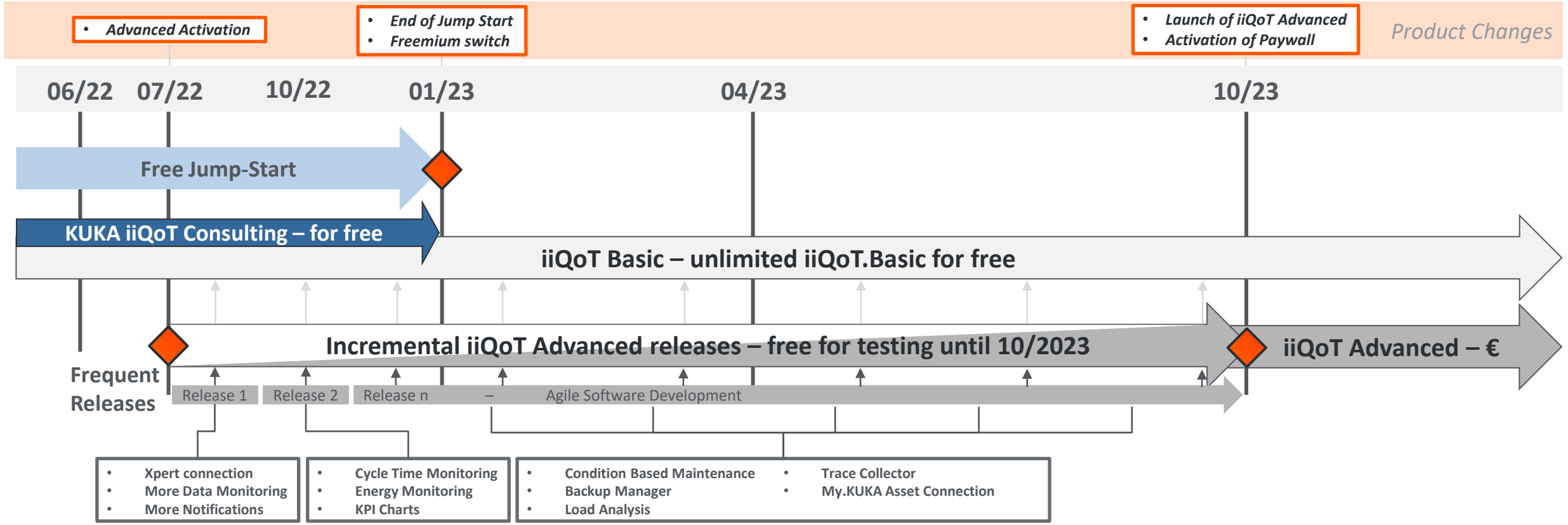
iiQoT Connection Support

KUKA Consulting Service to ensure connection of KUKA.iiQoT with customer IT-Infrastructure

The Jump Start Initiative covers all components

[1] KUKA offers cloud gateway recommendation with corresponding gateway configuration and additional commissioning manual
[2] Customer must provide server/PC for virtual cloud gateway

KUKA.iiQoT Product Roadmap – External



Questions?

If you have any questions, or you would like to discuss this product in depth for your company?
Please do not hesitate to contact us.

Team-Contact:

Digital Services
IIoT Products & Projects

DigitalServices.Robotics.De@kuka.com

KUKA Deutschland GmbH
Zugspitzstraße 140, 86165 Augsburg / Germany
www.kuka.com

Direct Contact:

Andre Zivny
Head of Software Portfolio Management

Portfolio Management Software

Mobil: +49 151 7218 6120

Andre.Zivny@kuka.com

Julian Krebs
IIoT Business Development Manager

Digital Services

Mobil: +49 172 3702 350

Julian.Krebs@kuka.com