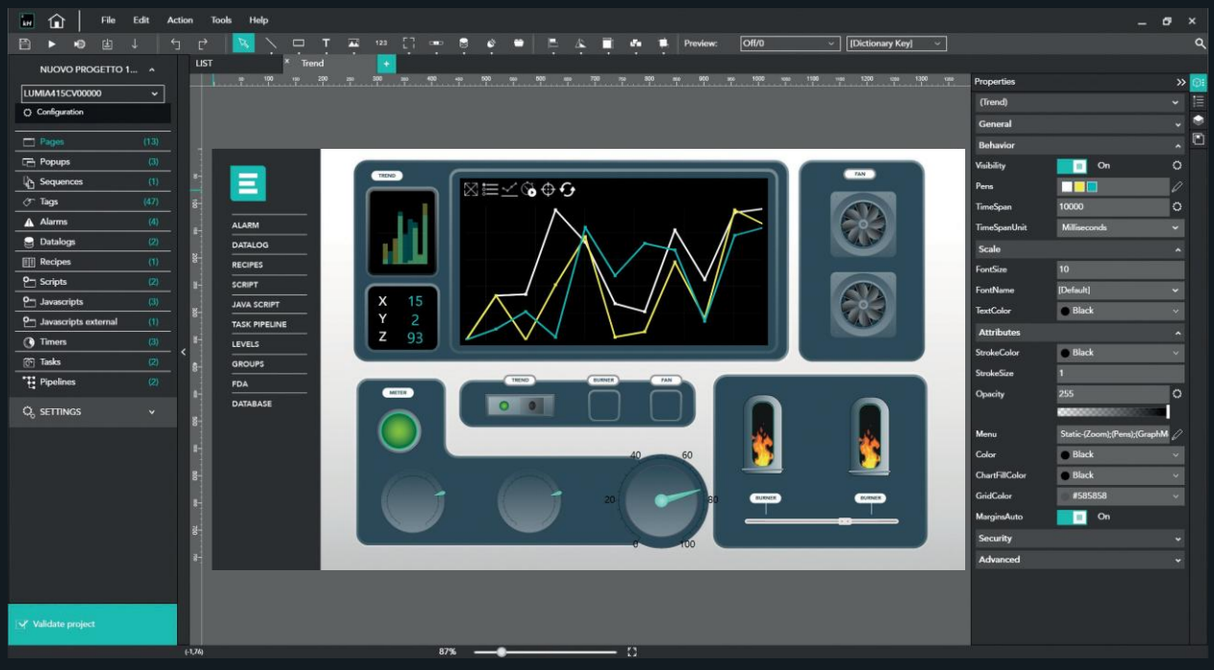
Kreo HMI

Kreo HMI

Software platform that makes the engineering and development of web based visualization and control center solutions extremely easy.

Both Linux and Windows based target devices are supported.



Integrated production report with edit and run time filtering.

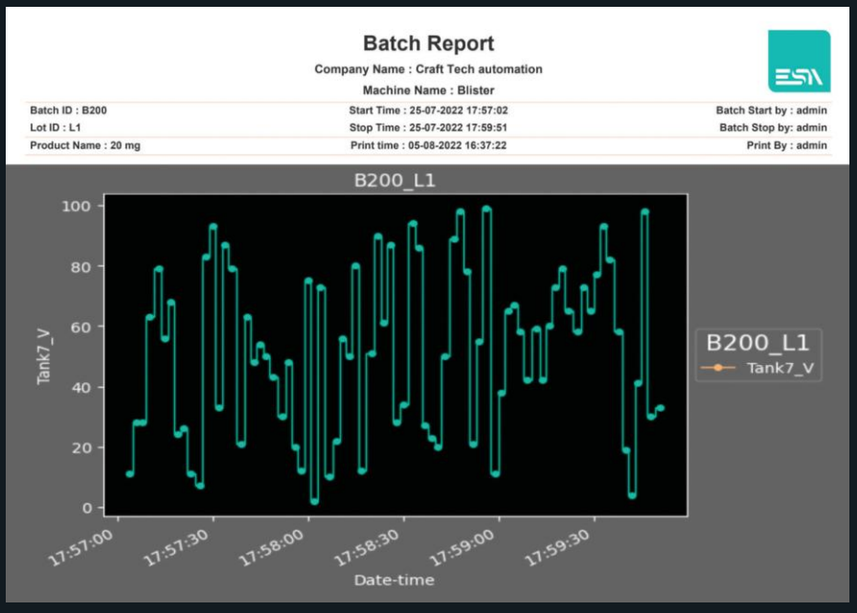
Advanced debug of the application with integrated monitoring of the edge tasks and edge to web dataexchange.

IEC 61131 script online debug with breakpoints, step increment and variable watch window.

Smart recipe management with structure and archive online update.

Libraries

+ Library management
  - Static graphic objects
  - Animated objects
  - System widget
  - Project widget
  - ST and Java script
  - Responsive container
+ SVG based libray objects
+ Sharing and reusing



Kreo HMI Runtime

EdgeHMI

+ Communication drivers
+ Field data collection
+ Data aggregation
+ Elaboration

WebHMI

+ Visualization
+ Simple and smart User Interface

+ External Javascript

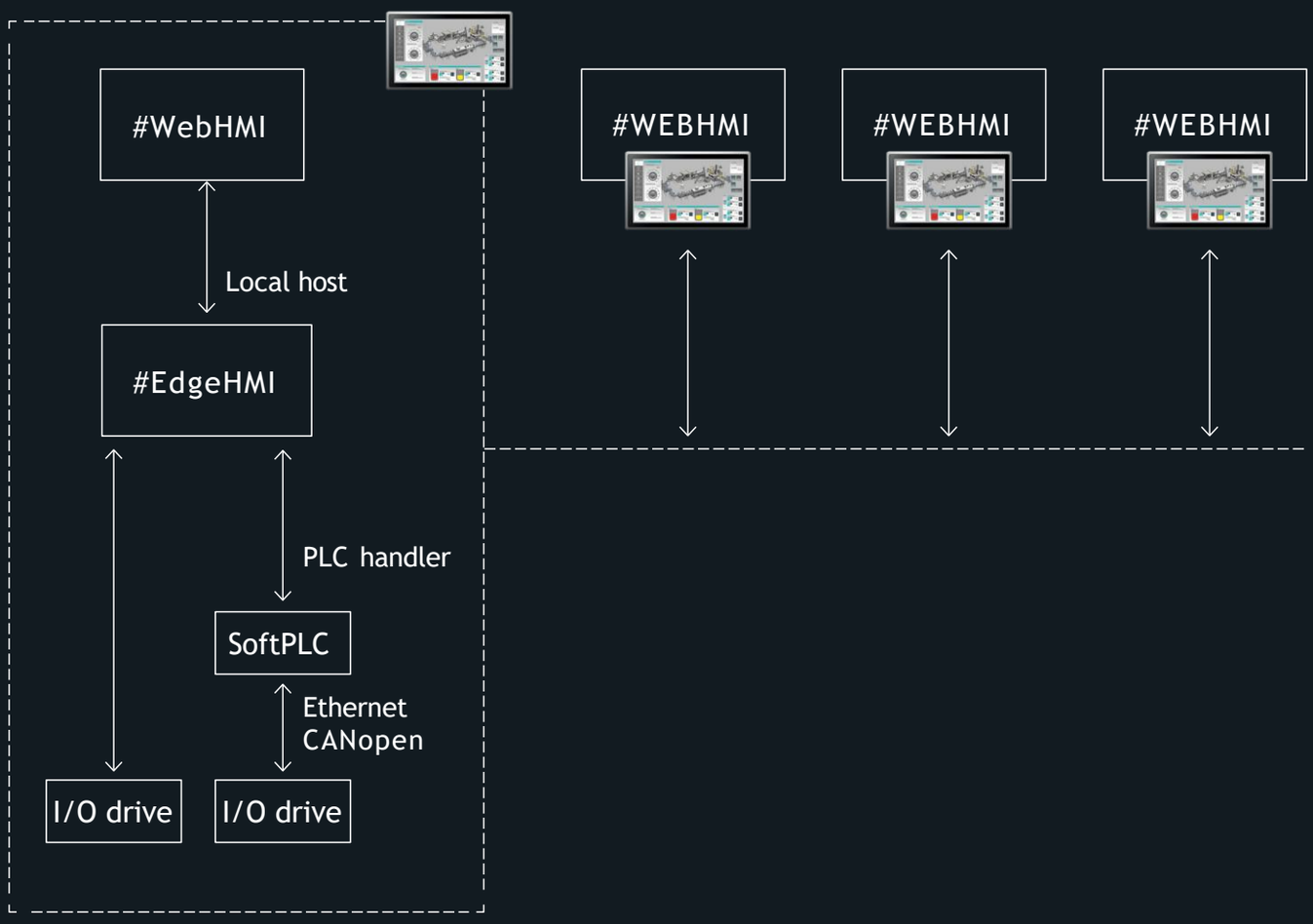
+ Multi touch and gestures

+ + WebPage technology - Full HTML 5

+ Integrated PDF reader and Video player

+ ST Script - IEC61131

+ Responsive design



Kreo HMI Reporting

Report Filter

+ Batch Wise Reporting
+ Date Wise Reporting

Advanced PDF Reporting Tool

Our advanced reporting tool is designed to meet the needs of modern industrial and compliance-focused environments. Key features include:

+ **Dynamic and Custom Report Design :**
  Create fully customizable reports using the inbuilt editor.

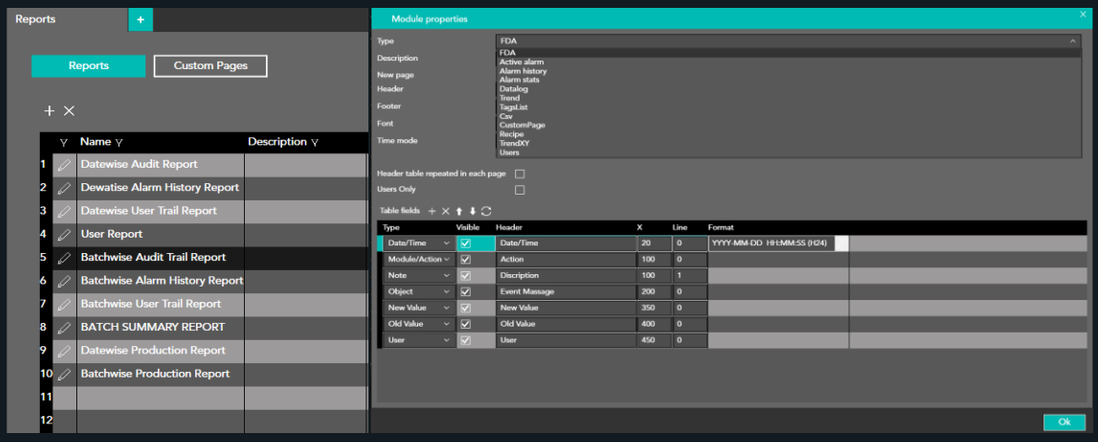
+ **Integrated PDF Viewer :**
  View reports directly within the system—no external software required

+ **Secure, Non-Editable Format :**
  All reports are saved in a tamper-proof format to maintain data integrity and prevent falsification.

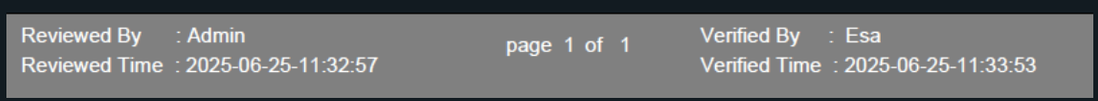
+ **Flexible Storage Options :**
  All reports are saved in a tamper-proof format to maintain data integrity and prevent falsification.

Custom Header

+ Audit Trial
+ Active / History Alarm
+ Critical Non-Critical Alarm
+ User Activity
+ Data-Log
+ Recipe Report
+ Batch Recorded History
+ Trend Report
+ Batch Summary
+ Batch Setting Parameter
+ Combine Report



Custom Footer



Kreo HMI Audit Trial

Feature

+ Electronics signature
+ Digital Recorded
+ Retype Password
+ Add Comments to pdf
+ Print/PDF by Filter

Comprehensive User Action Tracking

The audit trail logs detailed user actions to ensure complete traceability and accountability. Actions recorded include:

+ **Button/Switch/Numerical value entries: :**
  Tracks changes made to numeric parameters, Logs the value before and after the change. Records who made the change, ensuring traceability.

+ **User /Login / Logout / Change information:**
  User logs actions like Login, Logout, adding, removing, blocking, or unblocking user accounts.

+ **Recipe Operations :**
  Tracks actions such as saving, update, upload, or download, delete

+ **Alarm Actions:**
  Tracks actions like enabling, disabling, or acknowledging alarms

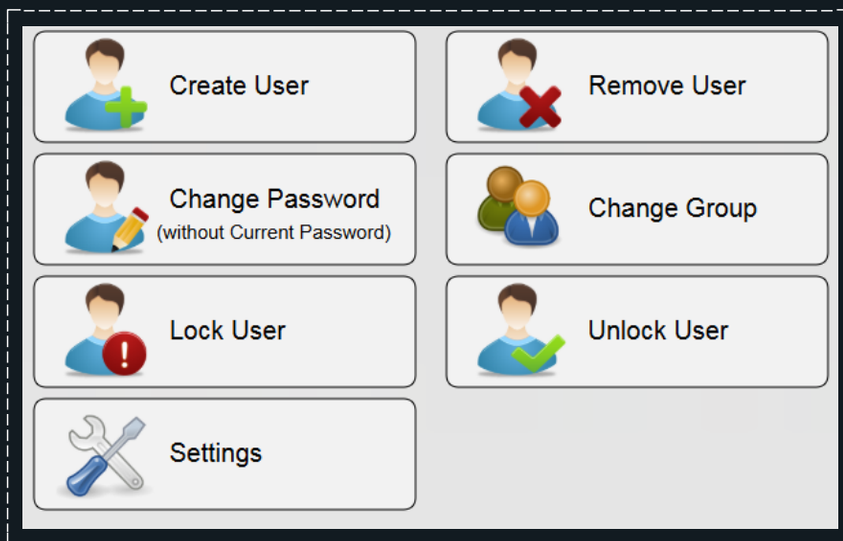
+ **System Actions:**
  Tracks system-level events, including start, exit, or shutdown operations As well As backup, Restore

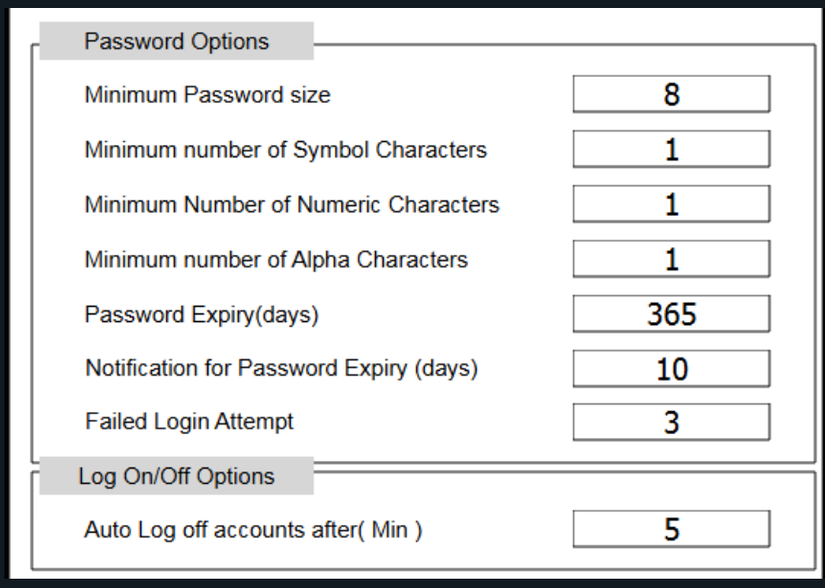
Date Time	Event Massage	Old	New	Active User
06/24/2025 13:32:28	Users/Logout			System
06/24/2025 13:32:28	Users/Login			Admin
06/24/2025 13:32:38	Users/Password changed: Admin			Admin
06/24/2025 13:33:37	Users/Added: Ketan New User Created			Admin
06/24/2025 13:34:07	Users/Password changed: Mn1			Admin
06/24/2025 13:34:19	Users/Group changed: Ketan: : Administrator -> Manager			Admin
06/24/2025 13:34:36	Users/Locked: Mn1			Admin
06/24/2025 13:34:43	Users/Unlocked: Mn1			Admin
06/24/2025 13:35:32	Users/Logout			Admin
06/24/2025 13:35:32	Users/Login			System
06/24/2025 13:35:46	Users/Logout			System
06/24/2025 13:35:46	Users/Login			Ketan
06/24/2025 13:35:53	Users/Password changed: Ketan			Ketan
06/24/2025 13:36:09	Auto Feeder ON button pressed	0	1	Ketan
06/24/2025 13:36:09	Auto Feeder OFF button pressed	1	0	Ketan
06/24/2025 13:36:40	Tube Feeding Cylinder ON Degree Changed	0	25	Ketan
06/24/2025 13:37:22	Recipes/Saved: RecipeName.Recipe 1			Ketan
06/24/2025 13:37:34	Recipes/Downloaded: RecipeName.Recipe 1			Ketan
06/24/2025 13:39:12	Batch Start Batch Started			Ketan
	Comments: Batch start comment			
06/24/2025 13:40:10	Batch pause Batch Pause			Ketan
	Comments: Batch Pause due to temp high			
06/24/2025 13:41:18	Batch Resume			Ketan
	Comments: Batch Resume due to normal temp			
06/24/2025 13:42:03	Batch Stop Batch Stop			Ketan
	Comments: Batch stop as per production			

Kreo HMI User Management

Feature

+ Password Complexity
+ RFID Login
+ User Levels
+ Expiration and Warning Settings
+ Log Display
+ Authorization Settings
+ No User Limit
+ Force Password Change
+ Account Lock/Unlock/Permeant Lock
+ Last 3 Password Restriction
+ User Electronic Signatures





State	Name	Group	Logout(ms)
None	Admin	Administrator	0
None	Parle	Administrator	0
None	ad444	Administrator	0
None	Mn1	Manager	0
None	mn333	Manager	0
None	Su1	Supervisor	0

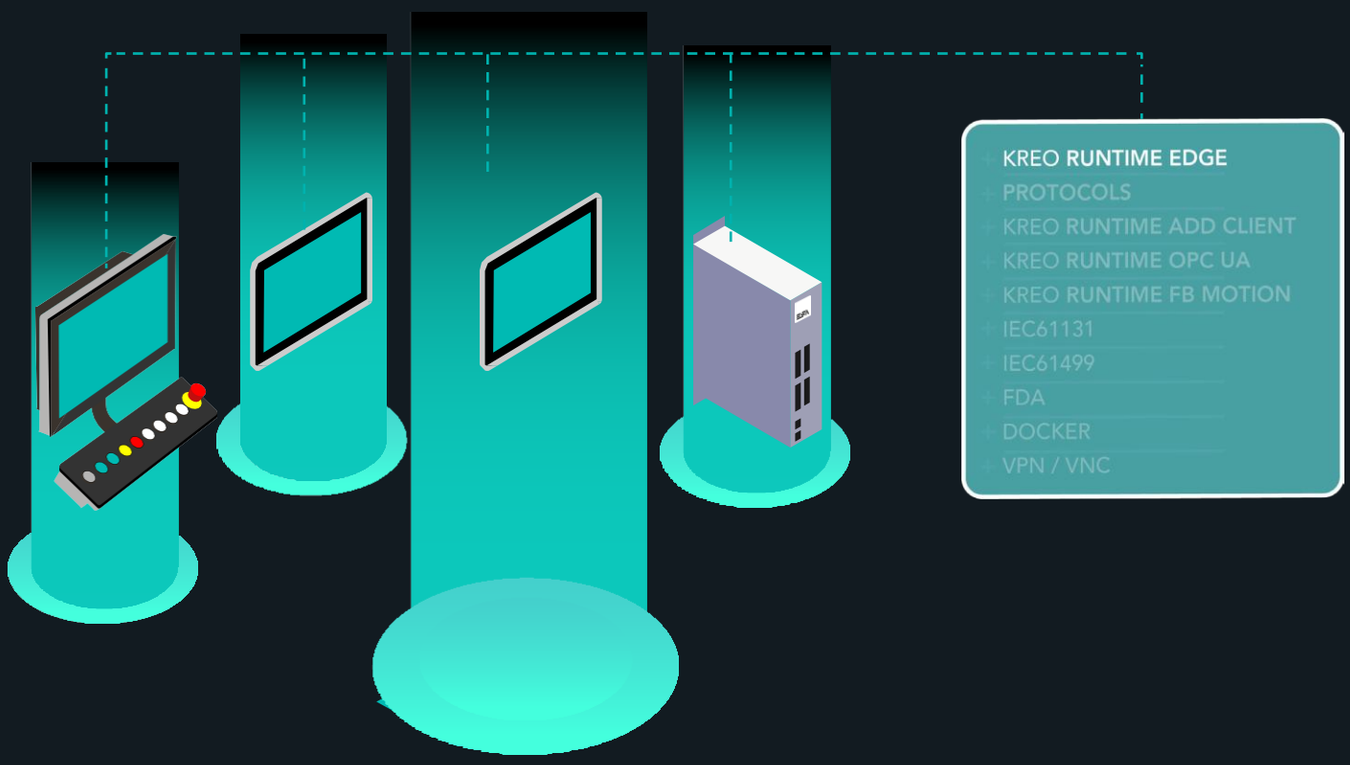
Time	Code	User	FDA Note
06-24-2025 13:35:46	Users / Logout	System	System
06-24-2025 13:35:46	Users / Login	Ketan	Manager
06-24-2025 13:35:53	Users / Password changed	Ketan	Ketan
06-24-2025 14:04:40	Users / Logout	Ketan	Manager
06-24-2025 14:04:40	Users / Login	System	System
06-24-2025 14:04:58	Users / Logout	System	System
06-24-2025 14:04:58	Users / Login	Parle1	Superuser

R - Read
W - Write
H - Hide
S - Super User

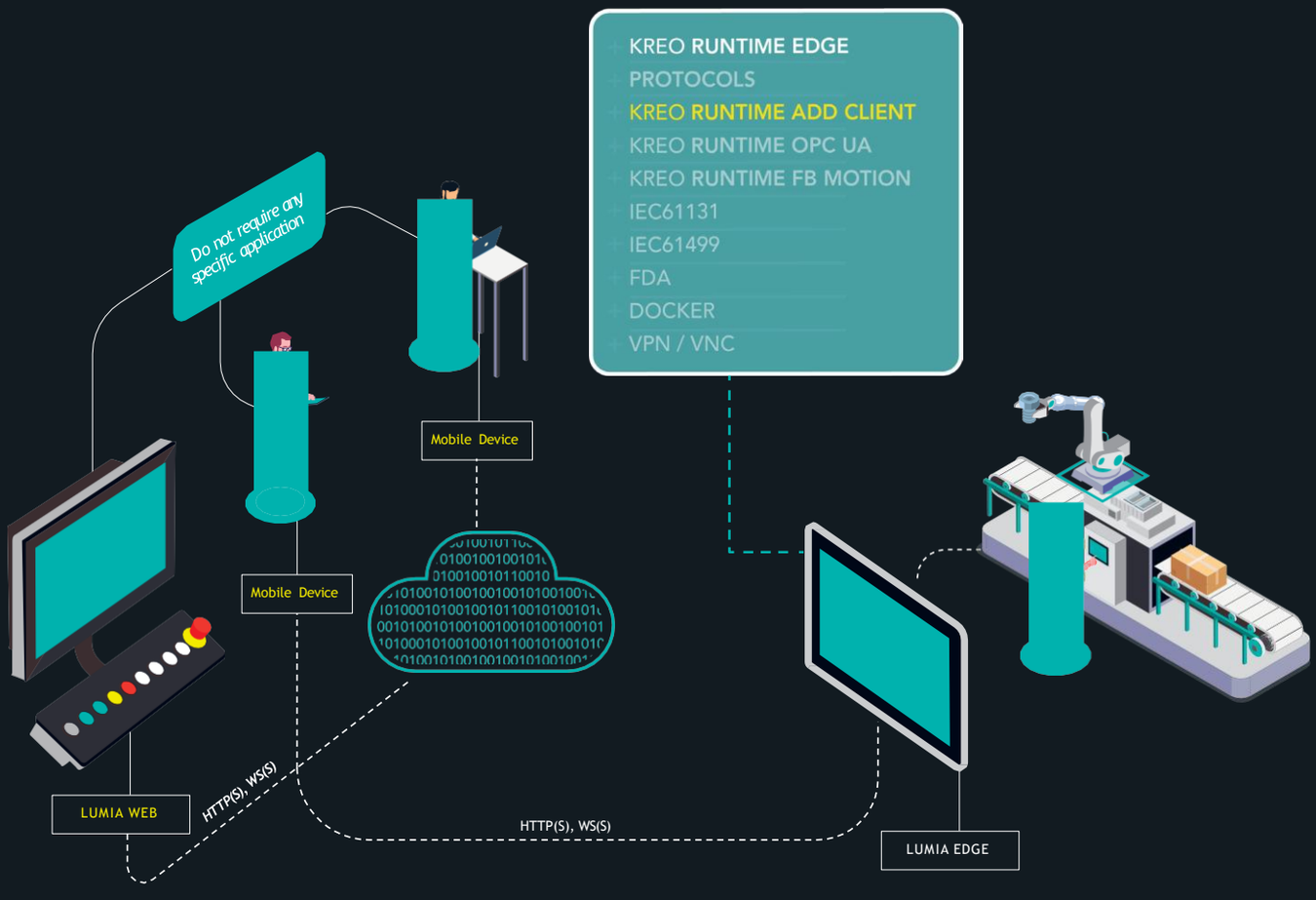
GROUP AUTHORIZATIONS

USER GROUPS	Authorization1	Logo	Ack (Alarm)	Home	Logoff	Shutdown	Exit	Machine Speed	Stirrer Speed	Mode Select	Tube Select	Homing	Counter Reset	Auto Feeder1 on/off	Auto Feeder2 on/off	Pressing For Alu. on/off	Tube Heater-1 on/off	Tube Heater-2 on/off	Vacuum Pump Cleaningon/off	Stirrer Motor on/off	J. Hopper Heater on/off	Transfer Pump on/off	Buzzer Disable	Machine Bottom Light	Degree setup (All)	Consicutive Rejection Set Count	Bin Full Set Count	Bin Full Count Reset	Reed Switch Set Timers (All)	CAM Setup (All)	Product Hopper Level - Low Level Set	Product Hopper Level - High Level Set	Product Hopper Level - Delay Set	Manual Setp (All)	Interlock Setup (All)	Camera Setup	Switch to Camera App	Camera Light	Trigger	Servo Setup Tab	Heater Setup Tab	Tube heater-1 on/off	Tube heater-1 Max set temp	Tube heater-1 set temp	Tube heater-1 Min set temp
Administrator	R	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
Manager	W	W	W	W	W	W	R	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
Supervisor	R	W	W	W	W	W	R	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
Operator	H	W	W	W	W	W	R	R	R	W	W	W	R	W	W	W	W	W	W	W	W	W	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
System	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Superuser																																												

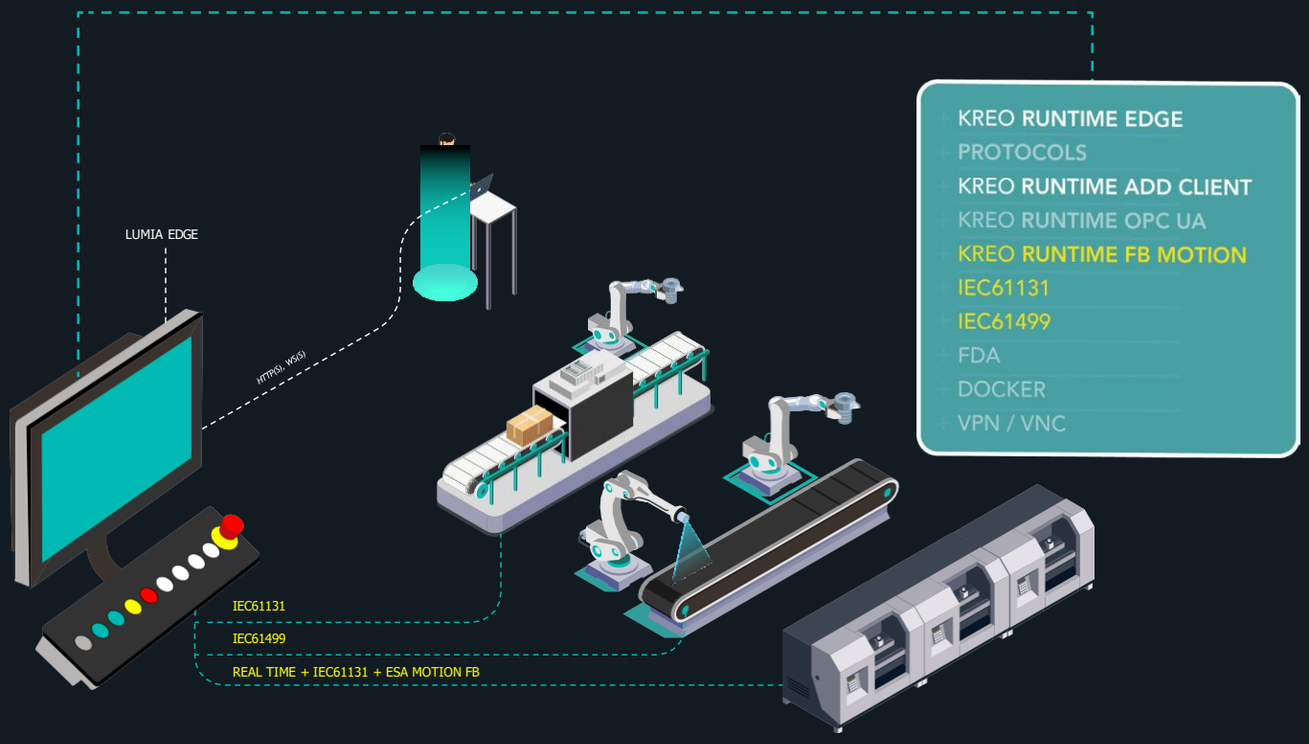
LOCAL CLIENT - LUMIA EDGE



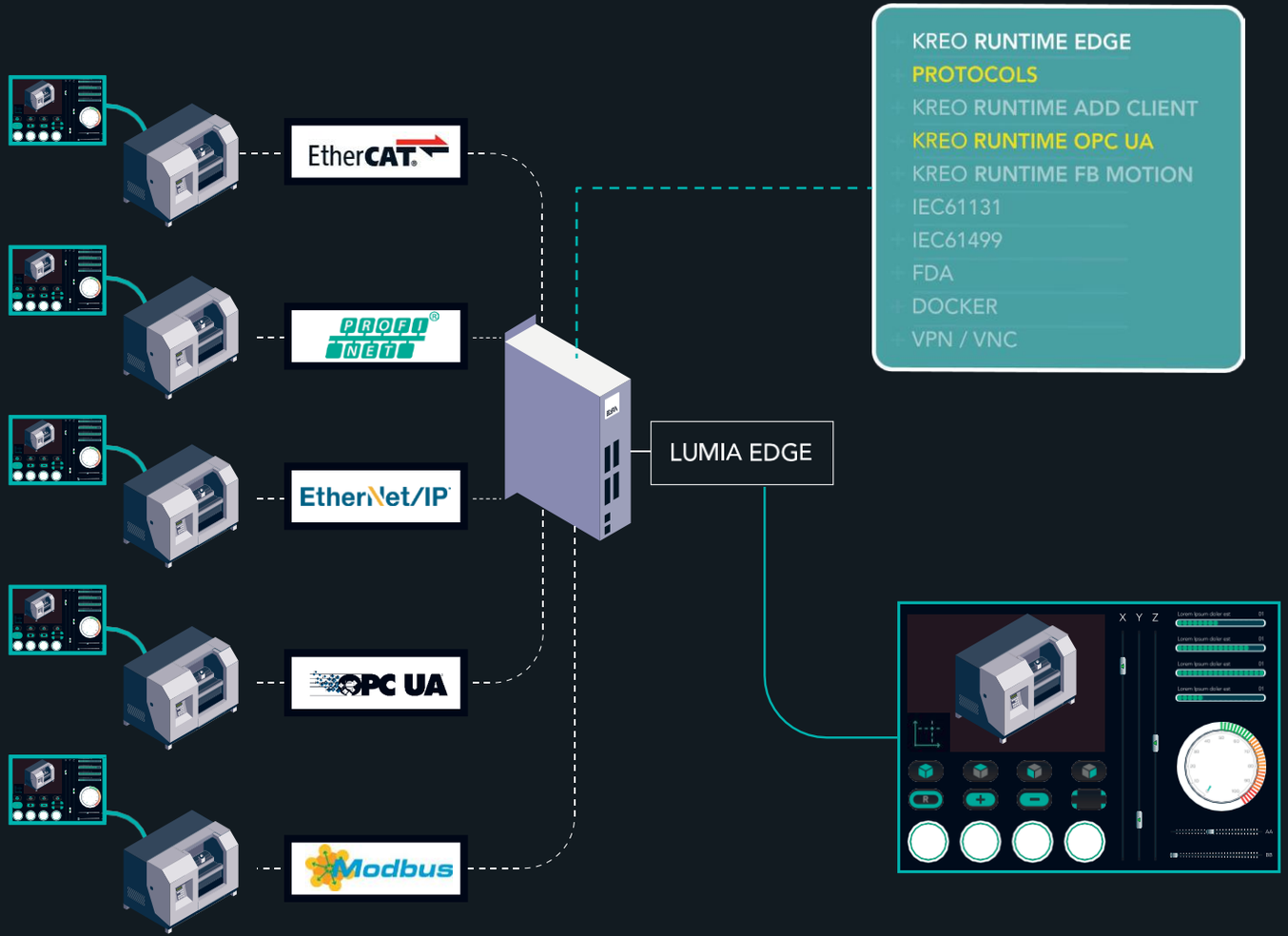
MULTI-CLIENT



MULTI-RUNTIME



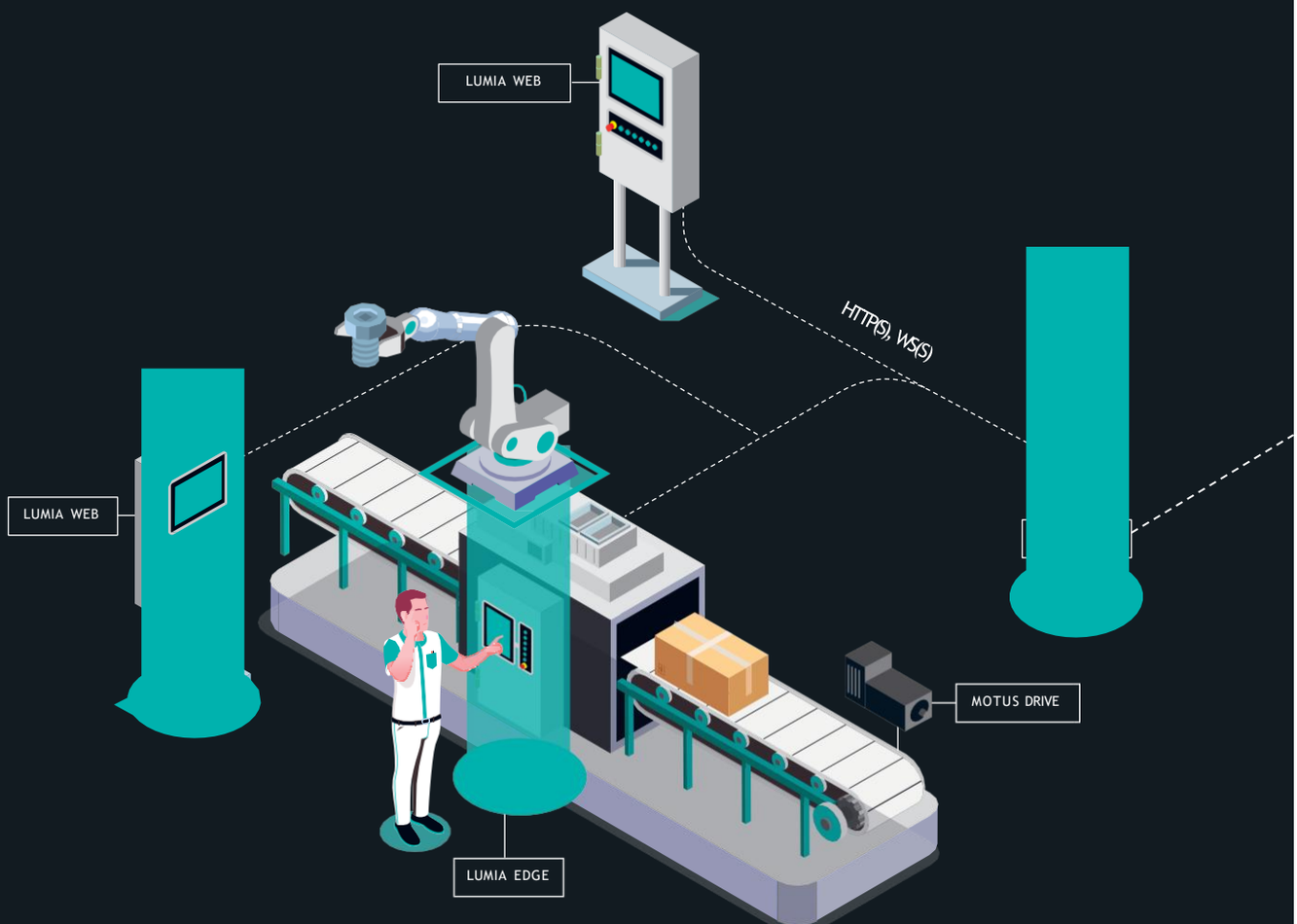
MULTI-PROTOCOL



REMOTE MAINTENANCE

- KREO RUNTIME EDGE
- PROTOCOLS
- KREO RUNTIME ADD CLIENT
- KREO RUNTIME OPC UA
- KREO RUNTIME FB MOTION
- IEC61131
- IEC61499
- FDA
- DOCKER
- VPN / VNC

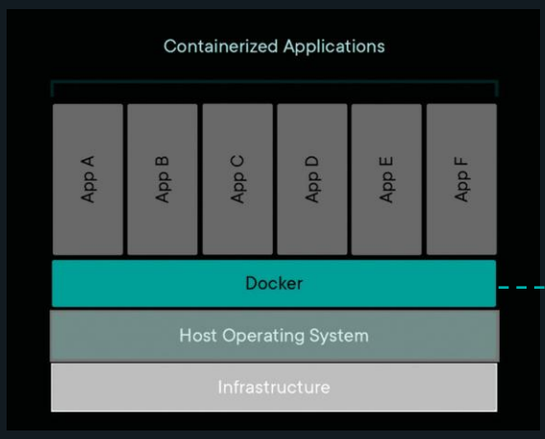
MULTI-EDGE

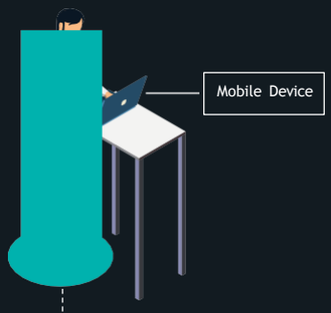


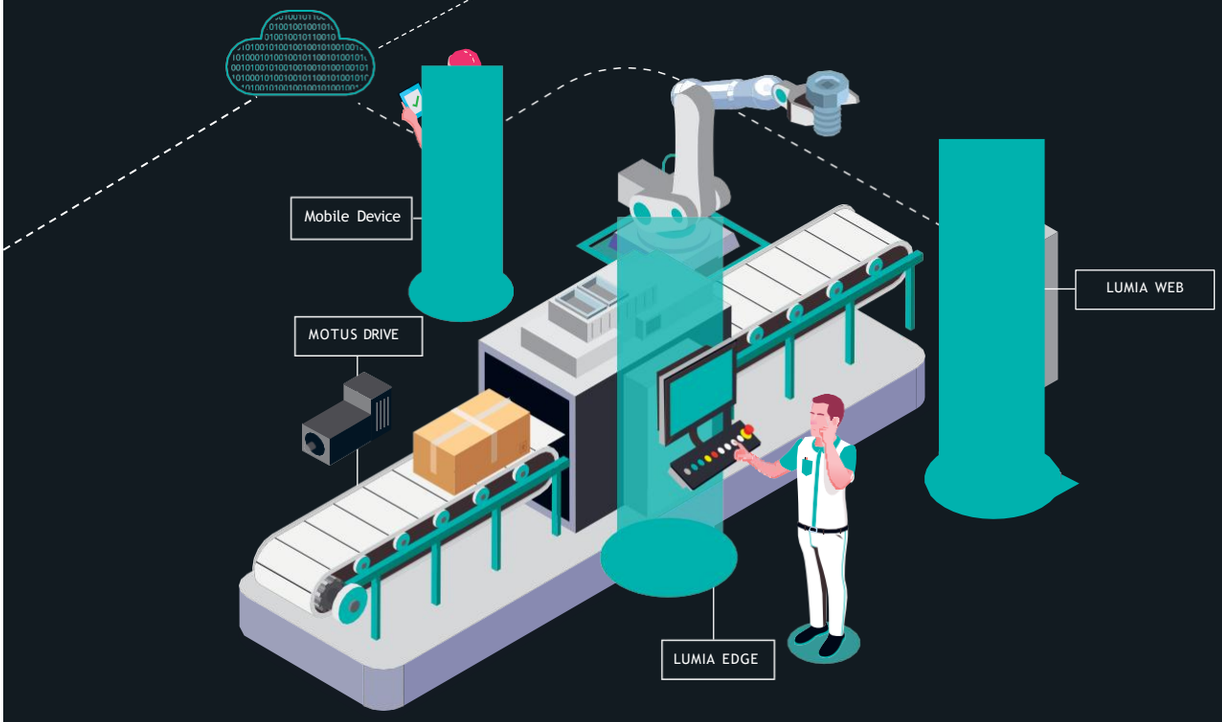
DOCKER CONTAINERS

Linux Docker is the containerization technology that enables the creation and use of Linux containers. With Docker the customer has the possibility of installing and running third party applications together with the predefined application provided with the Lumia platform.

- KREO RUNTIME EDGE
- PROTOCOLS
- KREO RUNTIME ADD CLIENT
- KREO RUNTIME OPC UA
- KREO RUNTIME FB MOTION
- IEC61131
- IEC61499
- FDA
- DOCKER
- VPN / VNC



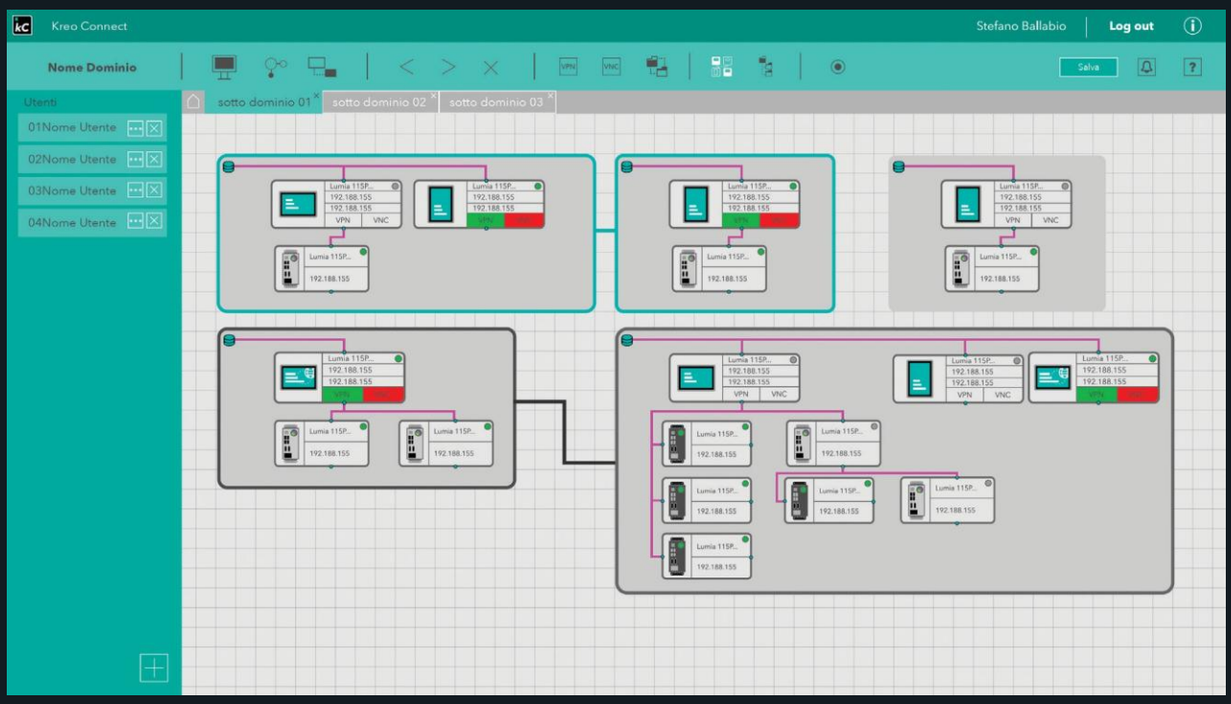




Kreo Connect

Kreo Connect

Easy, secure and efficient access to the machine anywhere and anytime in order to provide high level support.
The machine builder service team can improve the support activities reducing dramatically reducing both the response delay and the cost.
The support engineer having a standard internet connection can access the control unit, the HMI and all the devices connected to the OT network.
The debug and fix of the application is almost immediate.



Cross platform application available for Windows and Linux OS.

Remote desktop allows to lock the remote input to avoid remote operators working on the HMI while during maintenance operations.

VPN traffic is routed to multiple devices of the OT local network so it is possible to establish the VPN tunnel with the complete machine network.

The domain can manage an unlimited number of endpoints, an unlimited number of Users and Groups and unlimited traffic.

Allows the creation of domain and subdomains. This architecture let the machine builder to provide the required access to the customer assigning required privileges.

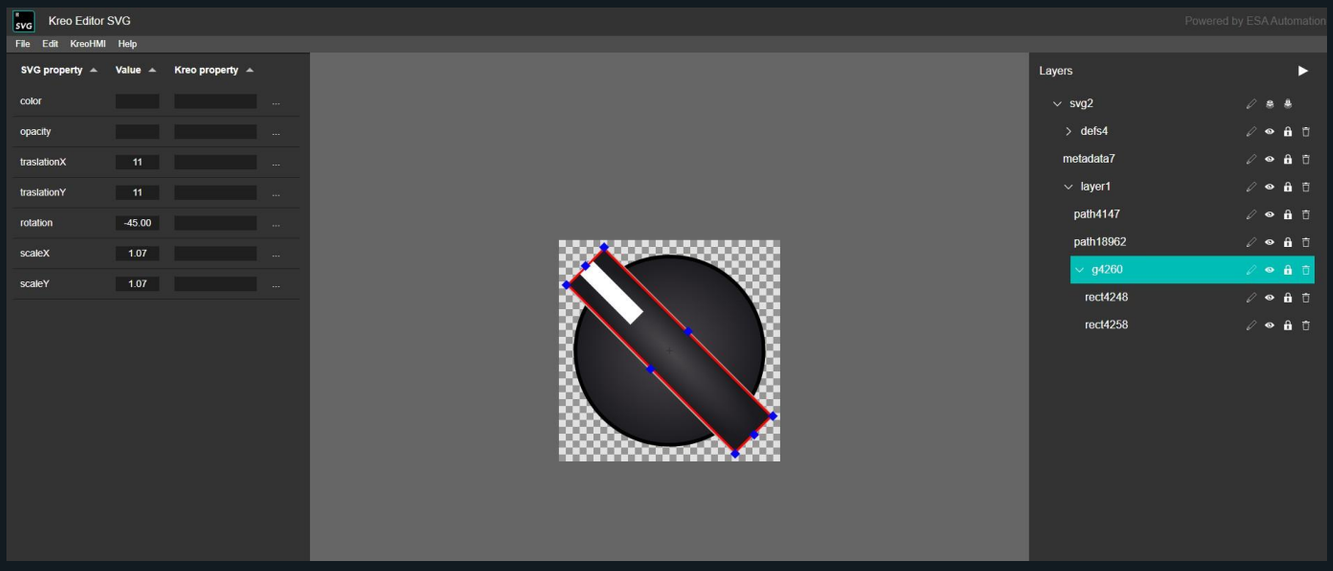
+ **Preinstalled in all LUMIA lines of products**
+ **Cloud based solution for maintenance and data collection**
+ **No need of modifying any firewall policy nor IT configuration**
+ **Based on standard https protocol**
+ **Remote desktop, file transfer, chat**
+ **VPN for the online debugging and application update**
+ **TLS 1.2 security protocol for the highest security level**

KREO SVG CONVERTER

Create your own SVG graphics library by yourself.

Kreo SVG
Converter

KREO SVG CONVERTER is the utility that allows the user to develop the graphic libraries of Kreo HMI starting from a generic SVG object.
The object can be developed by a graphic studio or downloaded directly from internet.
There is no limitation; any object can be animated and inserted in a Kreo HMI library.
The user interface of KREO SVG CONVERTER is totally graphic and it is not necessary to write any HTML5 source code.



- **Fully web based utility continuously updated**
- **Only a simple registration on the ESA website (www.esa-automation.com) is required**
- **A powerful SVG editor is included that allows the user to group the graphical layers**
- **Definition of Kreo properties with association to the SVG layers**
- **Different animation possibilities (translation, rotation)**
- **Color management of the different levels**

Visit the new website
esa-automation.com
The complete range of ESA products.
ESAWARE SUITE
tutte le forme
dell'autom
Software
Celle robotizzate ad
alta integrazione
SOFTWARE
Approfondisci
PANEL
Approfondisci
VESA
Approfondisci
BOX
Approfondisci
ERGO_ALL IN ONE
Approfondisci
MOTOR
Approfondisci
INOX
Approfondisci
HANDHELD
Approfondisci
DRIVE
Approfondisci
I/O
Approfondisci
ROBOTIC
Approfondisci
ENERGY
Approfondisci
PUSH BUTTONS
Approfondisci
di Innovazione Industriale
Prodotti > IPC > LUMIA Panel IPC - Soluzione Modulare
LUMIA Pan
Soluzion