RIZING

Hydrogen

The Basic Element of EAM Success

1/13/2020

Rizing to be a category of ONE.

TECHNOLOGY

PEOPLE

PROCESS
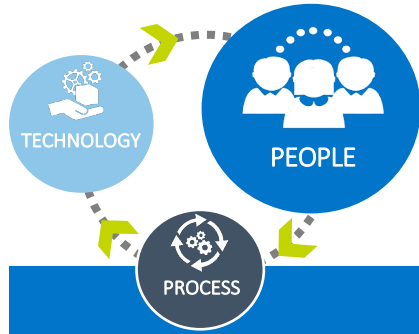
WHO WE ARE

Rizing's objective is to enable every business that uses SAP solutions to achieve a truly intelligent enterprise. We do this for Human Capital Management, Enterprise Asset Management and Consumer Industries with leading SAP technologies, Geospatial Solutions, and our own deep industry experience. Rizing provides services and our proprietary apps leveraging the SAP Cloud Platform to Fortune 500 and small/medium enterprises. Our mission is always to propel SAP customers along the transformation journey in ways that meet their unique business needs.

WHAT WE DO

We are exclusively focused on delivering the ultimate customer experience. Rizing specializes in Human Capital Management (HCM), Enterprise Asset Management (EAM), Consumer Industries, and Geospatial Solutions. We're leading the way to the intelligent enterprise by enabling our clients use of innovation with SAP S/4HANA®, SAP SuccessFactors®, SAP Ariba®, SAP Fieldglass®, SAP Concur®, Qualtrics®, geospatial information systems, and our own proprietary applications built on the SAP Cloud Platform.
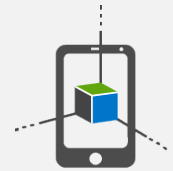
BUSINESS CONSULTING

IMPLEMENTATION SERVICES

SOFTWARE SOLUTIONS

INDUSTRIES WE SERVE

- Energy & Natural Resources
- Discrete Industries

- Financial Services
- Service Industries

- Consumer Industries
- Public Services

Who We Are

Leading global SAP® professional services companies

together since **2012**

CORPORATE STRUCTURE

RIZING

- HCM
- EAM
- CONSUMER INDUSTRIES
- GEOSPATIAL

OUR PEOPLE

850+

employees worldwide

ENVIRONMENTAL HEALTH & SAFETY (EHS) SERVICES

Workplace Safety and Sustainability are top priorities for leading organizations. Rizing has deep industry expertise and understands how evolving EHS and Sustainability requirements uniquely affect each customer.

WIDESPREAD GLOBAL PRESENCE & OPERATIONS

London, UK
Dublin, Ireland
Rotterdam, Netherlands
Walldorf, Germany
Chicago,IL USA
Montreal, Canada
Stamford,CT USA
Sedalia,MO USA
Atlanta,GA USA
Dubai, UAE
Manila, Philippines
Kuala Lumpur, Malaysia
Singapore
Perth, Australia
Melbourne, Australia
Sydney, Australia
Wellington, New Zealand

- ★ Headquarters
- ● Rizing Offices
- ● Service Delivery Centers

NOTABLE CUSTOMERS

EASTMAN

lyondellbasell

ExxonMobil

Chevron

MARATHON

TESORO

bp

HUNTSMAN

TechnipFMC

BHP

HOLLYFRONTIER CORPORATION

andeavor

MONSANTO

Introducing Hydrogen

An SAP Fiori application that provides an intuitive role-based SAP EAM UI across devices and is fully functional offline to support maintenance activities and data collection.

ONLINE OR OFFLINE MAINTENANCE ACTIVITIES
Use data and capture new events and issues while in the field, even without data connectivity.

ROLE BASED/CONFIGURABLE
Screen layout and actions are determined based on configured roles. No programming needed.

EXTENSIBLE
Plugins allow for endless possibilities to extend Hydrogen to customers' needs.

Middleware Optional
Hydrogen communicates with S/4 or ECC through either our custom JSON Adapter or Gateway without the need for middleware.

Difficulties of Diverse User Experiences

BUSINESS PRESSURES

- Manual paper-based processes

- Limited or no connectivity

- Training is time consuming

- Low user adoption due to poor user experience

- Inconsistent UI across devices

- Too many fields to scroll through to get to what you need

SYSTEM CHALLENGES

- Initial & ongoing support costs associated with UX and/or mobile solutions

- Customizations that aren't supported as standard

- Issues with connectivity as some systems require users to be online to make updates, meaning data entered may be lost

- Inability to access SAP EAM across multiple device types

Online or Offline Maintenance Activities

Consistent and modern UX supporting all devices

- Desktop, tablet, mobile
- Windows PC, Mac, iOS, Android
- Smart delta synchronization to reduce sync times

Support for workorders, notifications & material management

- Object lists
- Measurement points
- Goods receipt and goods issued
- Access and upload attachments
- QR/barcode scanning on any field or input screen
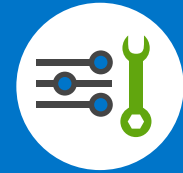
View and edit information immediately to streamline the work process, ensuring accurate data capture and reducing paperwork

Supported Transactions Through Hydrogen

Hydrogen does not directly show any SAP transactions. Instead, the business process supported by the transaction is mapped into a UI5 interface and enabled to work offline in Hydrogen. The business processes supported by the following list of transactions has been enabled in Hydrogen:

AP MODULE	TCODE	PURPOSE
PM	IH01	Functional location structure
	IE01	Create Equipment
	IE02	Change Equipment
	IE03	Display Equipment
	IE4N	Equipment Installation and Dismantling
	IW28	List Edit Notifications
	IW29	List Notifications
	IW21	Create Notification
	IW22	Change Notification
	IW23	Display Notification
	IW3K	Component Overview Initial Screen
	IW31	Create Work Order
	IW32	Edit Work Order
	IW33	Display Work Order
	IW42	Overall Confirmation Completion
MM	MIGO_GR	Goods Movement
	MIGO_TR	Transfer Posting
	MIGO_GI	Goods Issue
	ME51N	Create Purchase Requisition
	ME52N	Change Purchase Requisition
	ME21N	Create Purchase Order
	ME22N	Change Purchase Order
	MMBE	Stock Overview
QM	QE51N	Inspection Lot Selection

Role Based & Easily Configurable

Role-based configurations

- Allow users to see just the fields and information they need
- Create as many as you need based on Employee or vendor grouping
- Configure once for all platforms

Configure themes

- For better use outdoors
- Create a theme to support your organization's colors
- Standard image support for adding a logo or icon

Empowers users to engage with their enterprise system of record in a personalized, simple, and flexible way.

Extensible Plugins Now Included

Extensible plugins allow you to easily add new functionality. Below are examples available upon request.

QM – QE51N

- Inspection lots results recording
- Usage decision

GIS Mapping

- GEF Integrated
- Technical Objects
- Notifications
- Work Orders
- Navigate to create and details screen
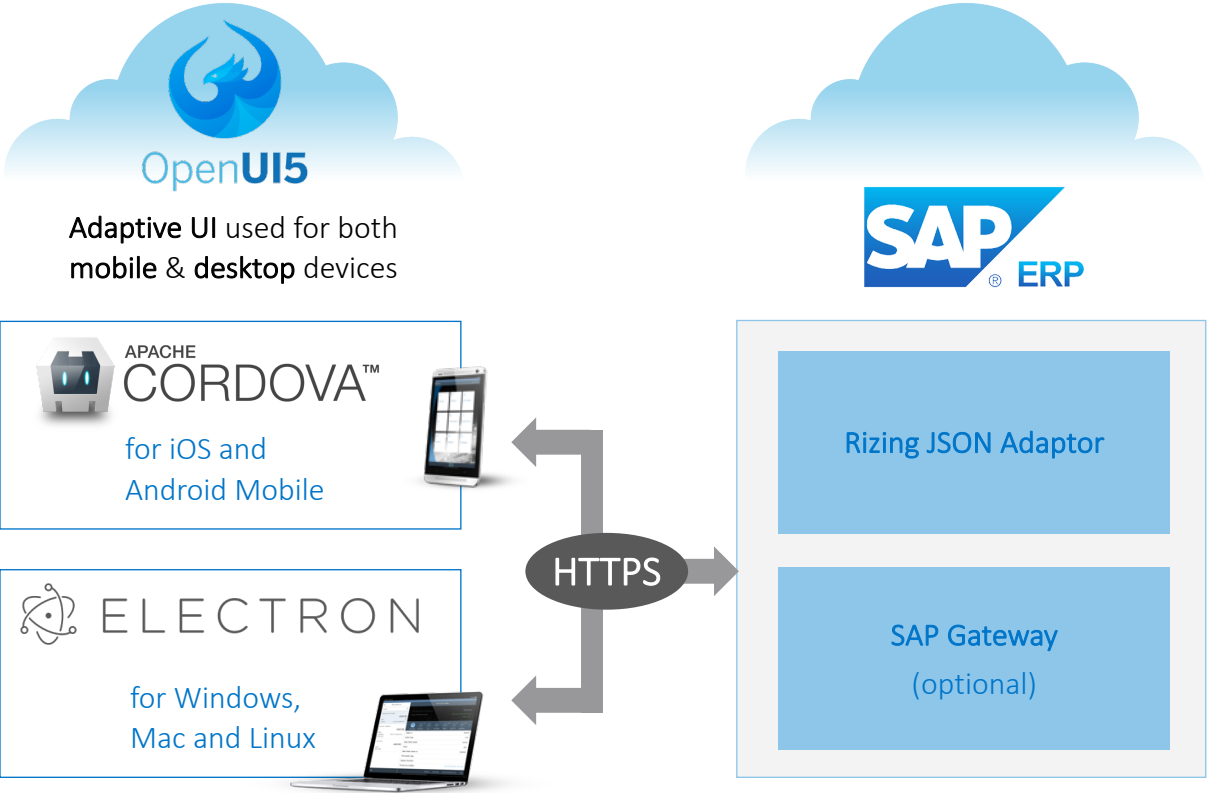
Stock Overview

- Equivalent to MMBE

After Event Recording

- Record events after the fact
- Based on equipment
- Standing Order can barcode
- Creates new Notification
- Confirms time
- Consume Materials

Extend Hydrogen without making changes to the core application or requiring additional consulting resources after Go Live.
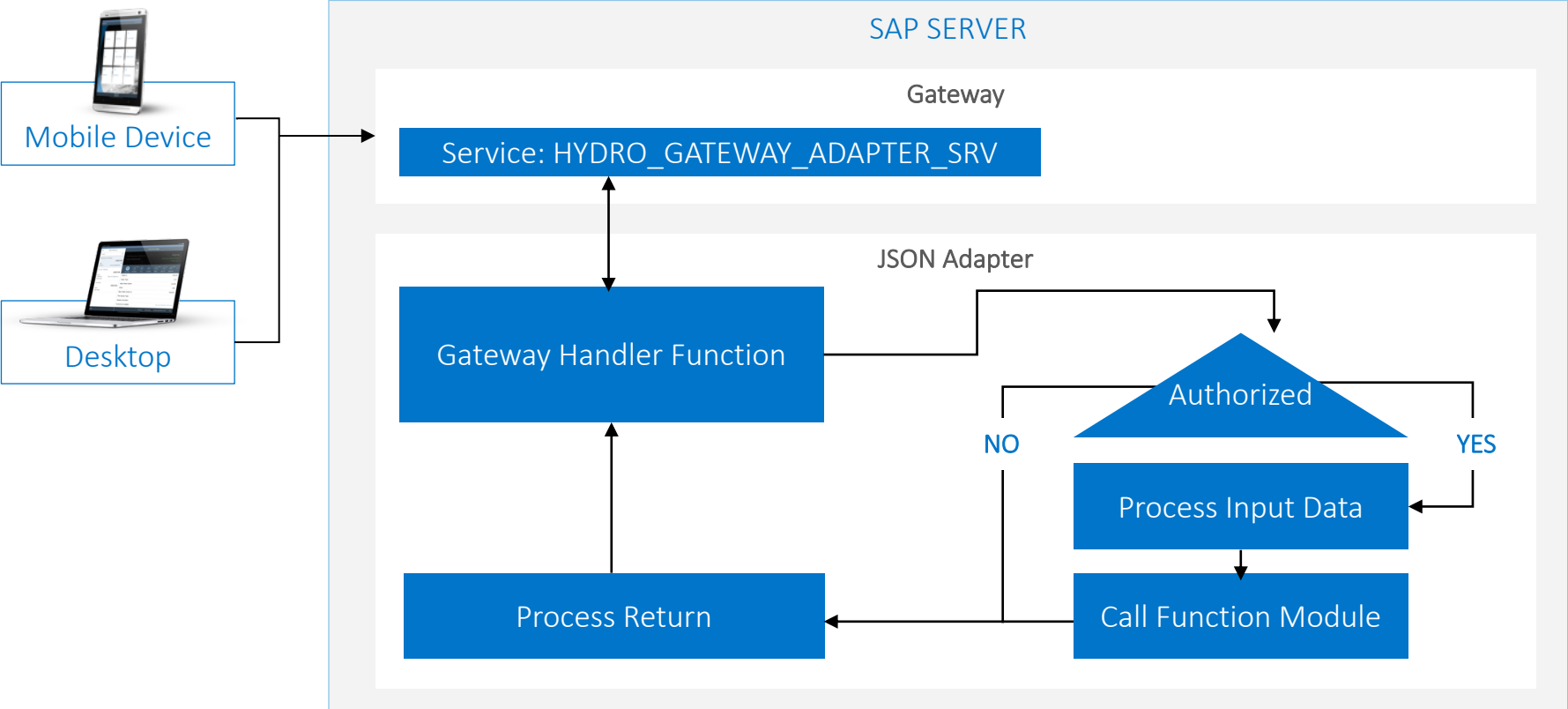
Simple Architecture

Adaptive UI used for both mobile & desktop devices

APACHE CORDOVA™
for iOS and Android Mobile

ELECTRON
for Windows, Mac and Linux

HTTPS

SAP ERP
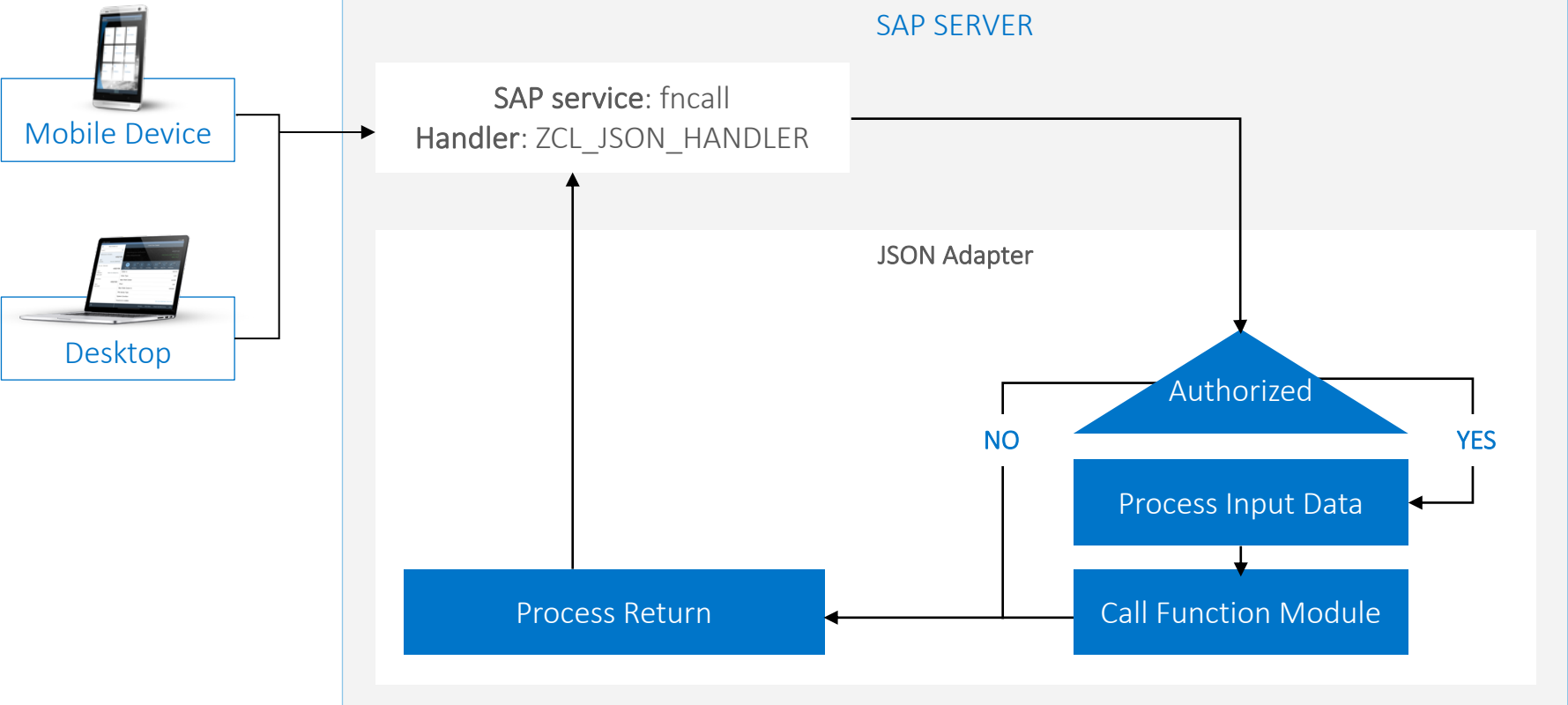
Rizing JSON Adaptor

SAP Gateway
(optional)

Hydrogen can be securely deployed in your existing SAP EAM landscape with no middleware required keeping cost of ownership low
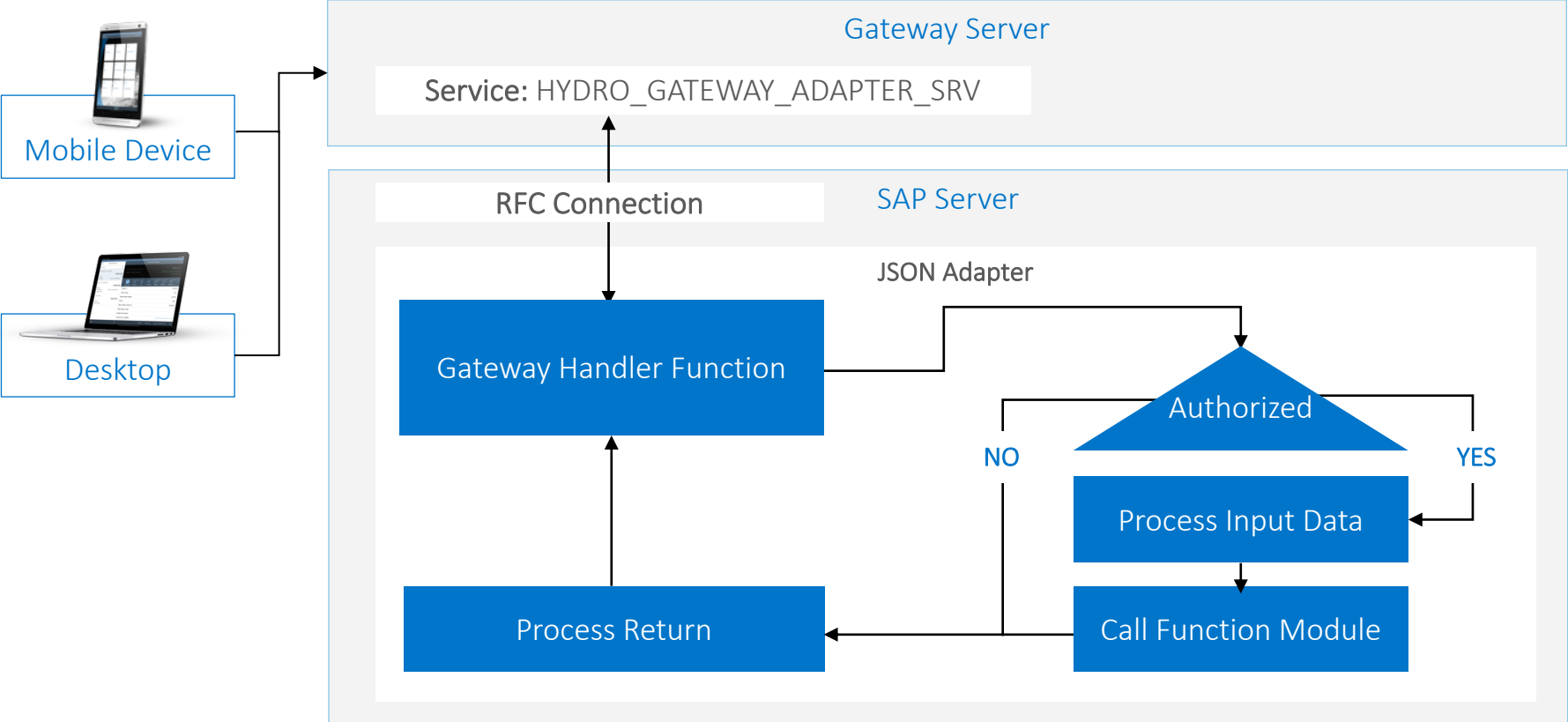
Hydrogen Embedded Gateway Communication

Hydrogen JSON Adapter Communication

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Mobile Device

Desktop

SAP SERVER

SAP service: fncall
Handler: ZCL_JSON_HANDLER

JSON Adapter

Authorized

NO   YES

Process Input Data

Process Return   Call Function Module

Hydrogen Separate Gateway Communication

RIZING

Gateway Server

Service: HYDRO_GATEWAY_ADAPTER_SRV

Mobile Device

Desktop

SAP Server

RFC Connection

JSON Adapter

Gateway Handler Function

Authorized

NO

YES

Process Input Data

Process Return

Call Function Module

Security is a Priority

Save time and stay consistent by using security rules in place

- Adheres to SAP Role Based Security
- Support for Single Sign-on

Detailed system security and encryption protocols in place

- 256 bit AES-CBC encryption per the WebCrypto API standard used to store user credentials
- Cordova-sqlcipher-adapter encrypts the local SQLite database storage

Hydrogen Roadmap

The roadmap is driven by extending the value proposition to additional EAM functions and vertical markets.

TODAY

- Manage work orders, measurement documents and notifications
- Work order materials
- Materials Management including serialization
- Attachments
- OpenText Integration

- Inspection Results Recording and Usage Decisions
- Single Sign-On (SSO)
- Linear Asset Management (LAM) integration
- Flexible plugin architecture

PLANNED INNOVATIONS

- GIS integration with SAP GEF
- After-event recording
- Continuous technical and functional improvements

FUTURE DIRECTION

- Planning and Scheduling for technicians and leads
- Operational reporting
- Crew reporting
- CATS
- SAP Work Clearance Management (WCM) integration

The Benefits are Clear

IMPROVE PRODUCTIVITY

- Capture issues when found
- Update order status immediately
- Improve asset reliability & uptime
- Eliminate paper-based maintenance work

LOWER TOTAL COST OF OWNERSHIP

- Lower infrastructure costs without middleware
- Easily create as many roles as you need
- Lower support and maintenance costs
- Quicker time to value with faster setup
- Lower training and support costs due to consistent UX

FLEXIBLE & USER FRIENDLY

- Role based configuration allows users to focus on just the fields they need
- Faster processing leads to increased labor productivity
- Improved user adoption due to standardization across all device types

Hydrogen Key Features

RIZING

Suitable for Every Role
Role based configuration so people only see and act on the information required

Fully Functional Offline and Online
Work orders and important related information such as object lists and measurement points can be viewed and edited both online and offline

Fast and Easy Master Data Search
Enables users to find the technical object they are looking for quickly and to take action

Standard Work Order Data Across All Devices
Includes all standard header fields, long text, operations, objects and costs

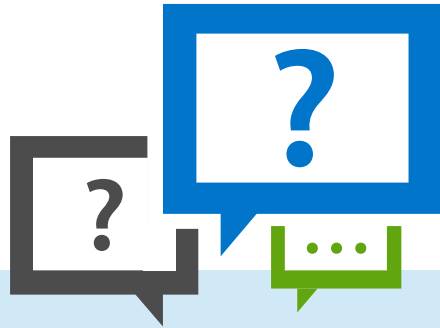**Exceptional User Experience**
Same look and and feel across all devices

Smart Syncing
Delta synchronization to reduce sync times

Configurable Themes
With UI5 create themes for indoor/outdoor use as well as company branding

Integration Out of the Box
Supports PM and MM functionality

QUESTIONS?

Thank you!

FO R MORE INFORMATIO CONTACT US AT
PRODUCTS@RIZING.COM