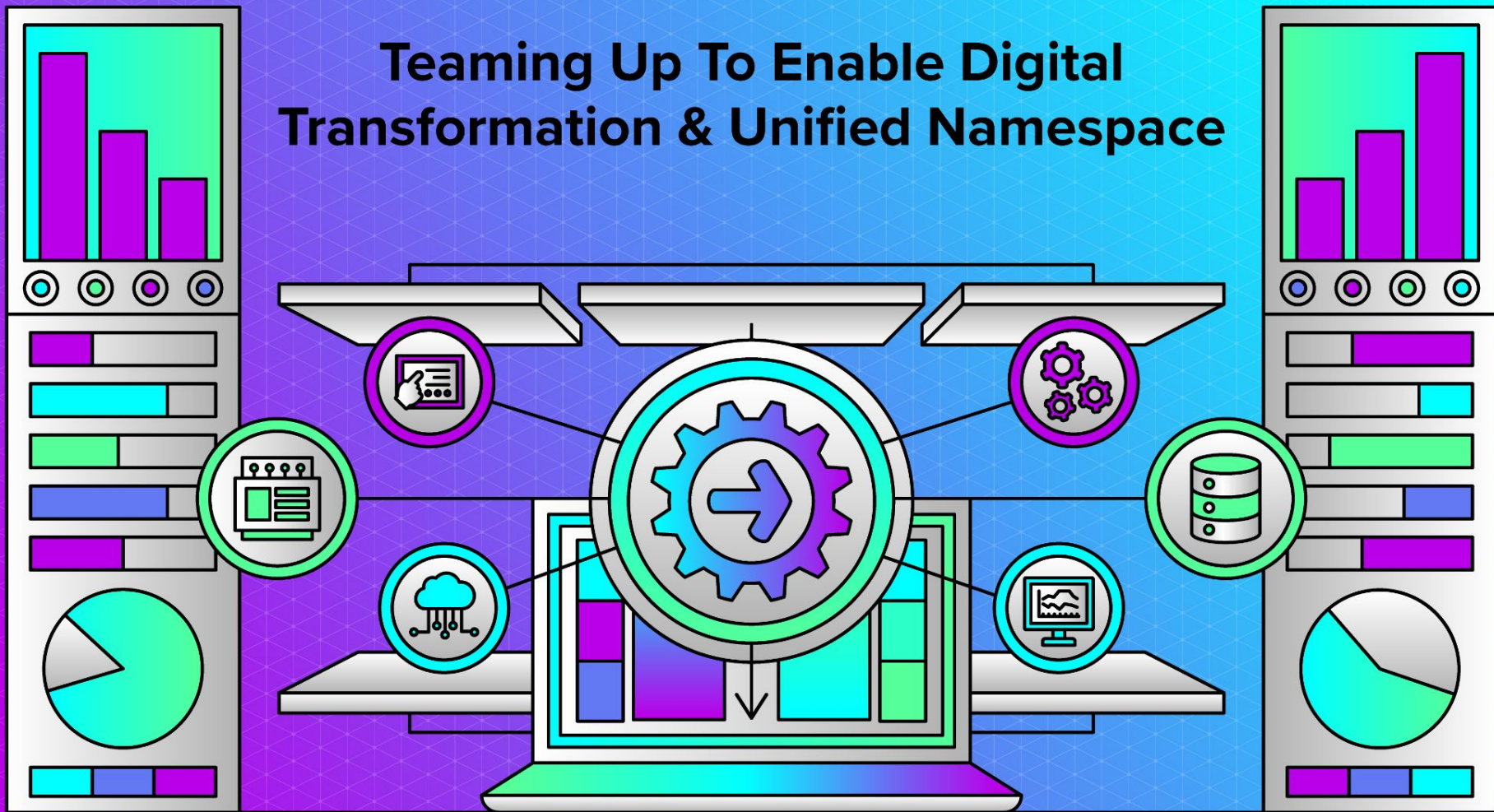


# Teaming Up To Enable Digital Transformation & Unified Namespace



# Today's Speakers



**Kevin McClusky**

Chief Technology  
Architect

*Inductive Automation*



**Arlen Nipper**

President & CTO  
*Cirrus Link Solutions*



**James Burnand**

Chief Executive  
Officer  
*4IR Solutions*



**Benson Hougland**

Vice President  
*Opto 22*

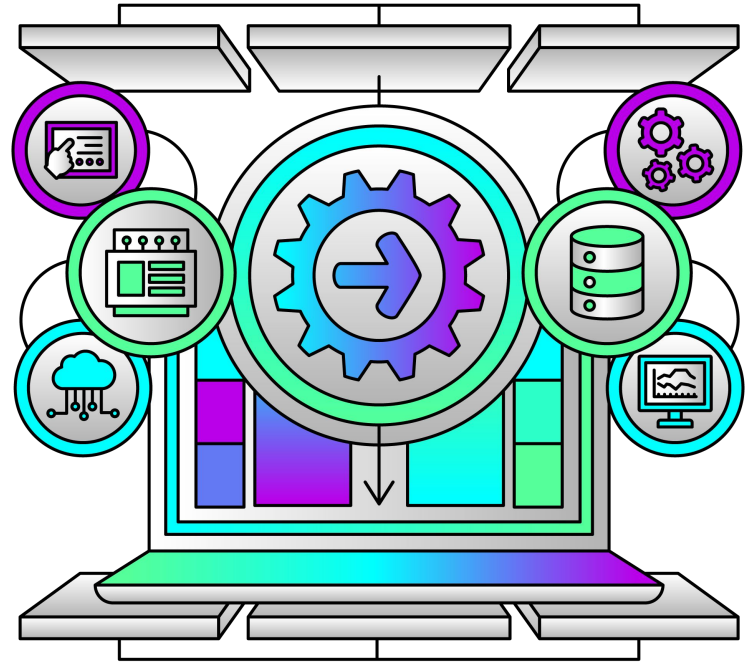


**Mark French**

Director of Design  
Consultation  
*Sepasoft*

# Agenda

- About IA, Ignition & Technology Partners
- Digital Transformation & UNS Use Case
- Solution:
  - 4IR Solutions (Cloud)
  - Opto 22 (Edge)
  - Cirrus Link Solutions (MQTT)
  - Ignition (Visualization)
  - Sepasoft (Analytics)
- Demonstration
- Discussion
- Q&A



# About Inductive Automation

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**22+**

Years in  
the industry

- Over 350 employees in US & Australia
- Profitable every year since 2008
- No outside investors

**65%**

Of Fortune 100  
companies use Ignition

- Over 44% of Fortune 500 companies use Ignition
- Highly diversified customer base across many industries

**100+**

Countries have  
Ignition installations

- Thousands of installations around the world
- 4000+ integrators worldwide





## The Unlimited Platform for SCADA and So Much More

- **Connect, Design, Deploy Without Limits:**
  - One central hub for everything on the plant floor
  - Create any kind of industrial application
  - Web-deploy clients to desktops, industrial displays & mobile devices
- **Unlimited licensing**
- **Industrial-strength security and stability**
- **Trusted by thousands of companies worldwide**

# Inductive Automation Technology Partners

- Solve digital challenges and get even more power from the Ignition platform.
- Strategic Module Partner: Cirrus Link
- Solution Partners: Sepasoft, 4IR Solutions, Opto 22
- Today, we will demonstrate how these partners combine their strengths to enable Digital Transformation, and show a use case.



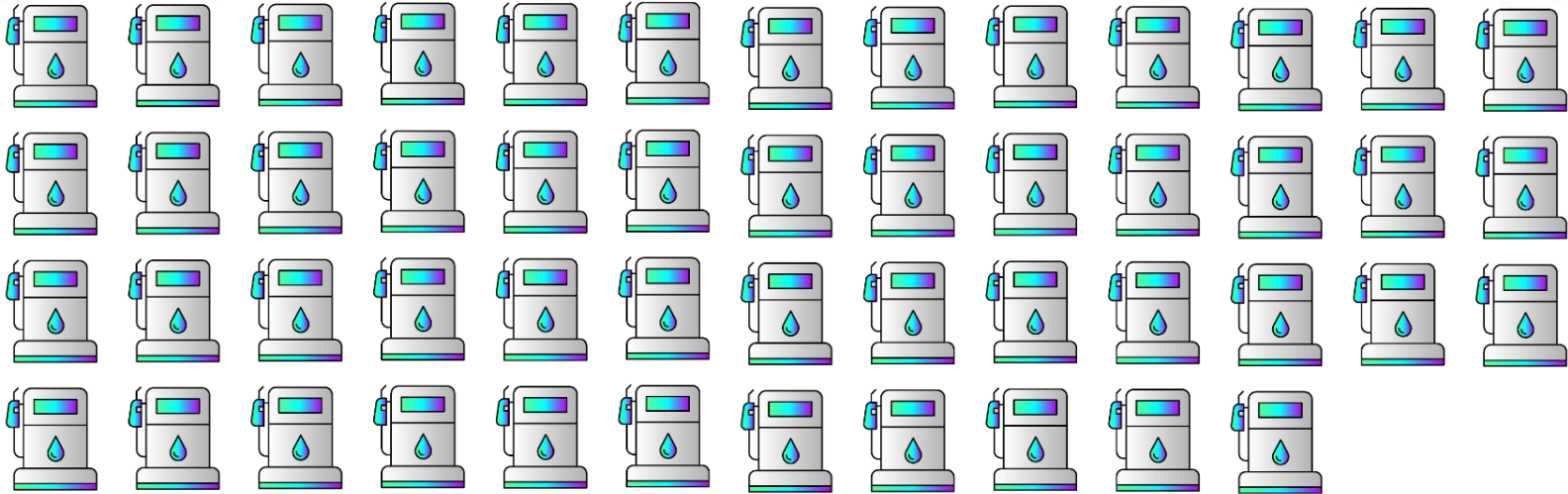
# Use Case

- The Customer: EPIC Stores
  - Main services: fuel storage & delivery, car wash, HVAC, lighting, refrigeration, food & beverage sales, and more



# Use Case - Goals

- Customer's Goals
  - This year: Expand from 5 stores to 50 stores
  - In five years: Become #1 in the convenience-store market





# Use Case - Objectives

## Objectives:

- Gain real-time visibility into operations
- Optimize inventory while reducing costs
- Historize data to learn from the past and inform the future
- Provide local visualization and supervisory control
- Model & publish the data to share across the organization and integrate with other applications (AI, ML, analytics)
- Adhere to strong cybersecurity principles
- Avoid vendor lock-in
- Improve operations at scale

# The Solution: Multi-Site Application

## Requirements:

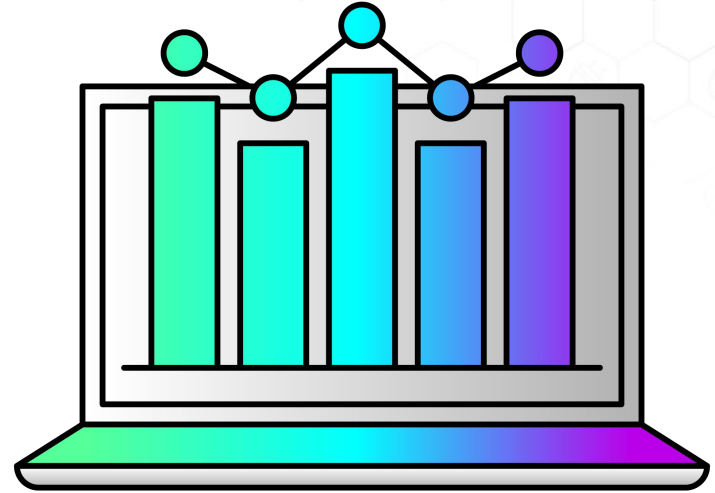
- Monitor all stores
- Monitor refrigeration & freezers
- Real-time profitability tracking
- Weather info
- Manage fuel prices
- Schedule fuel refills
- Monitor the car wash
- Commission new stores from runtime



# Use Case - Addressing the Needs

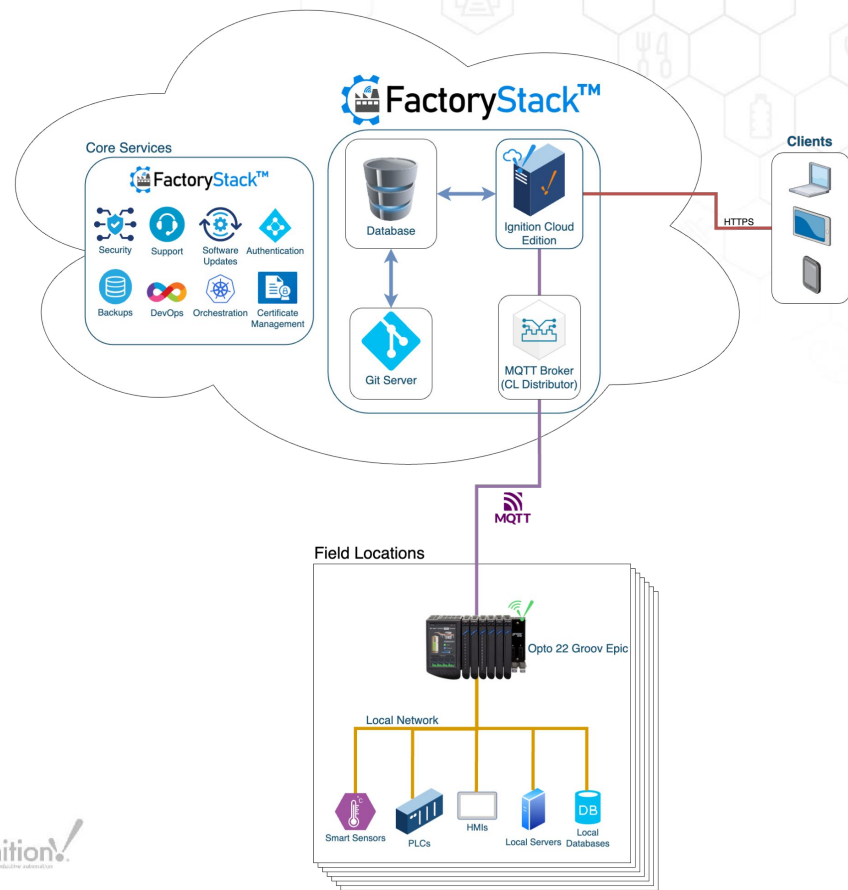
To achieve their goals, EPIC Stores needs to do more with their data:

- Enhance efficiency
- Streamline operations
- Leverage edge and cloud, data analytics, and emerging technologies
- Use data to make better decisions
- Set up a Unified Namespace as the foundation for Digital Transformation

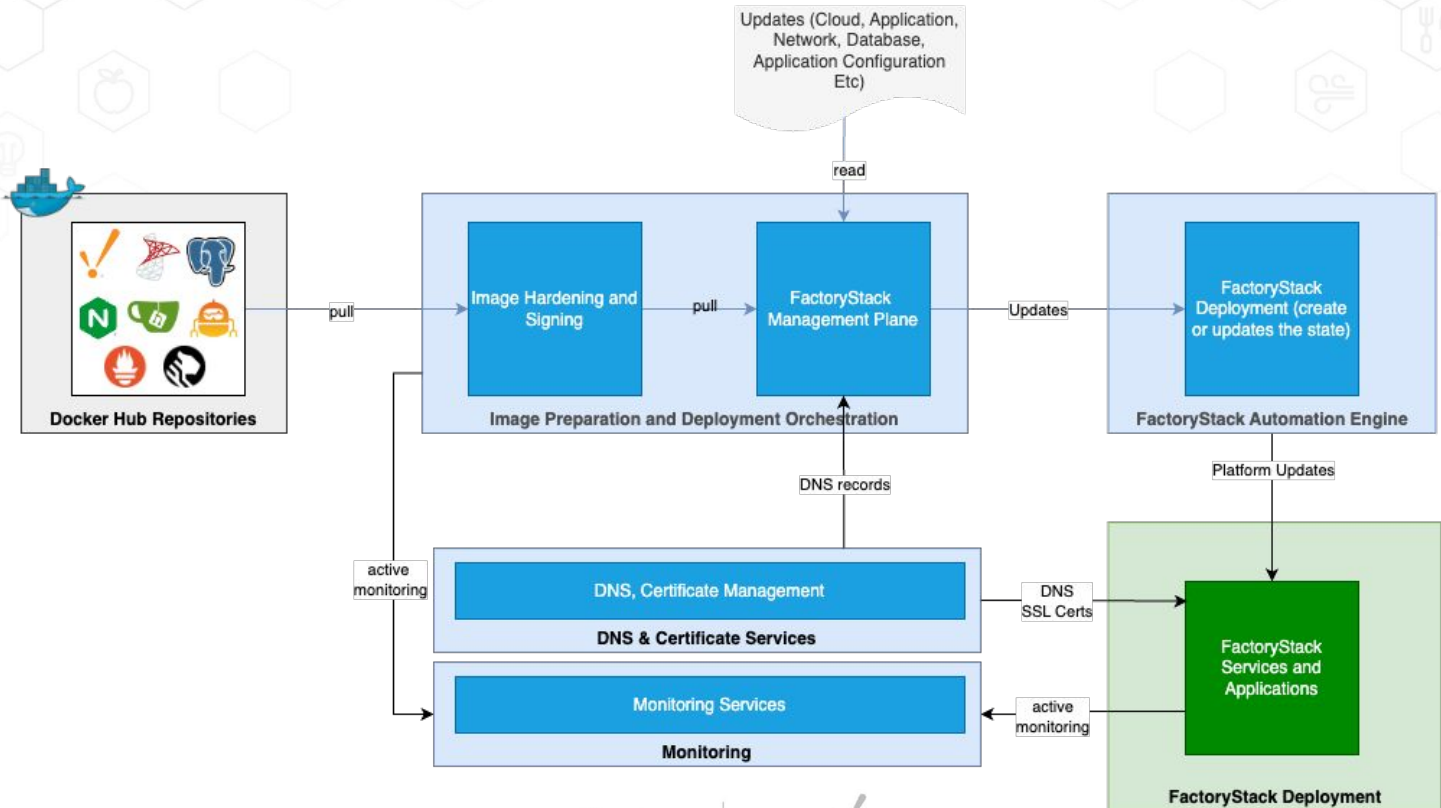


# 4IR: Cloud Infrastructure

- Fully Managed FactoryStack™ including:
  - Ignition
  - MQTT
  - Database
  - High Availability
  - 24/7 Support, Remotely Monitored
  - Upgrades, Updates included
  - Hardened and secured
  - SSL Certificates
  - IdP with MFA Enforced
  - Integrated Git Server



# 4IR: Deployment Process





# Opto 22: Edge

## Convenience Store edge functionality:

- Analog & digital sensors & actuators
- Real-time control
- Data modeling (UDTs)
- Local visualization
- Cybersecure
- Remote management
- Outbound, report-by-exception communications



*Live edge-based application*

# Cirrus Link

- Cirrus Link brings MQTT and Sparkplug to Ignition
- Easily build a UNS in Ignition with Cirrus Link MQTT modules
  - MQTT Engine UNS View
  - MQTT Transmission UNS Tag Publisher



# Ignition Platform

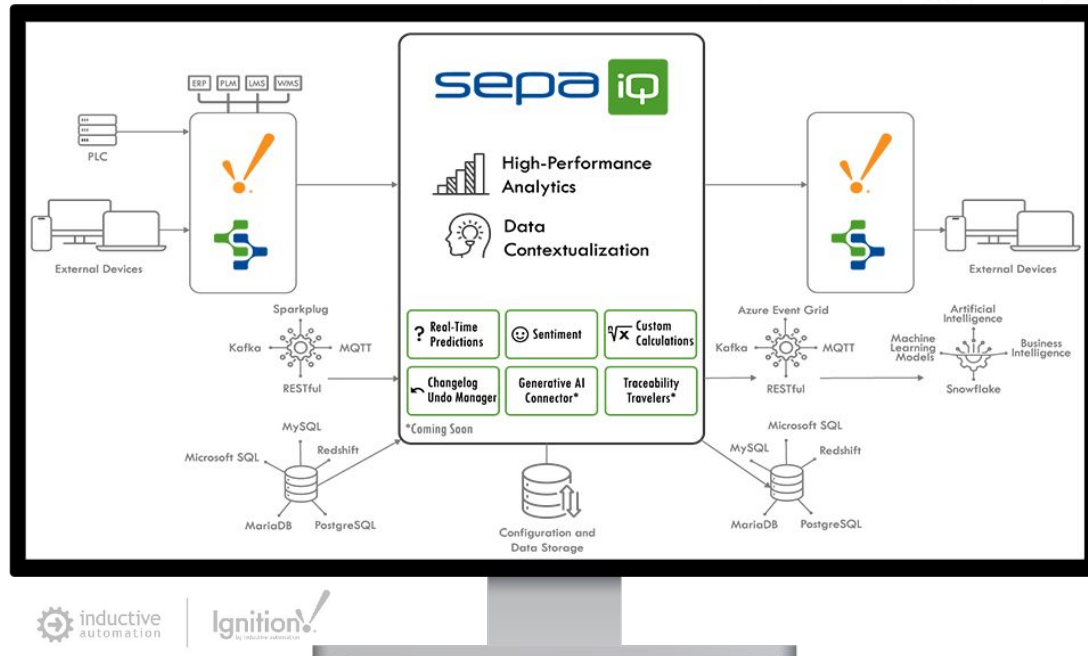
- Visualization of data and processes
- Build & view industrial applications on web browsers, mobile devices, touch panels, workstations, and more
- Unlimited tags and connections
- Highly scalable architectures

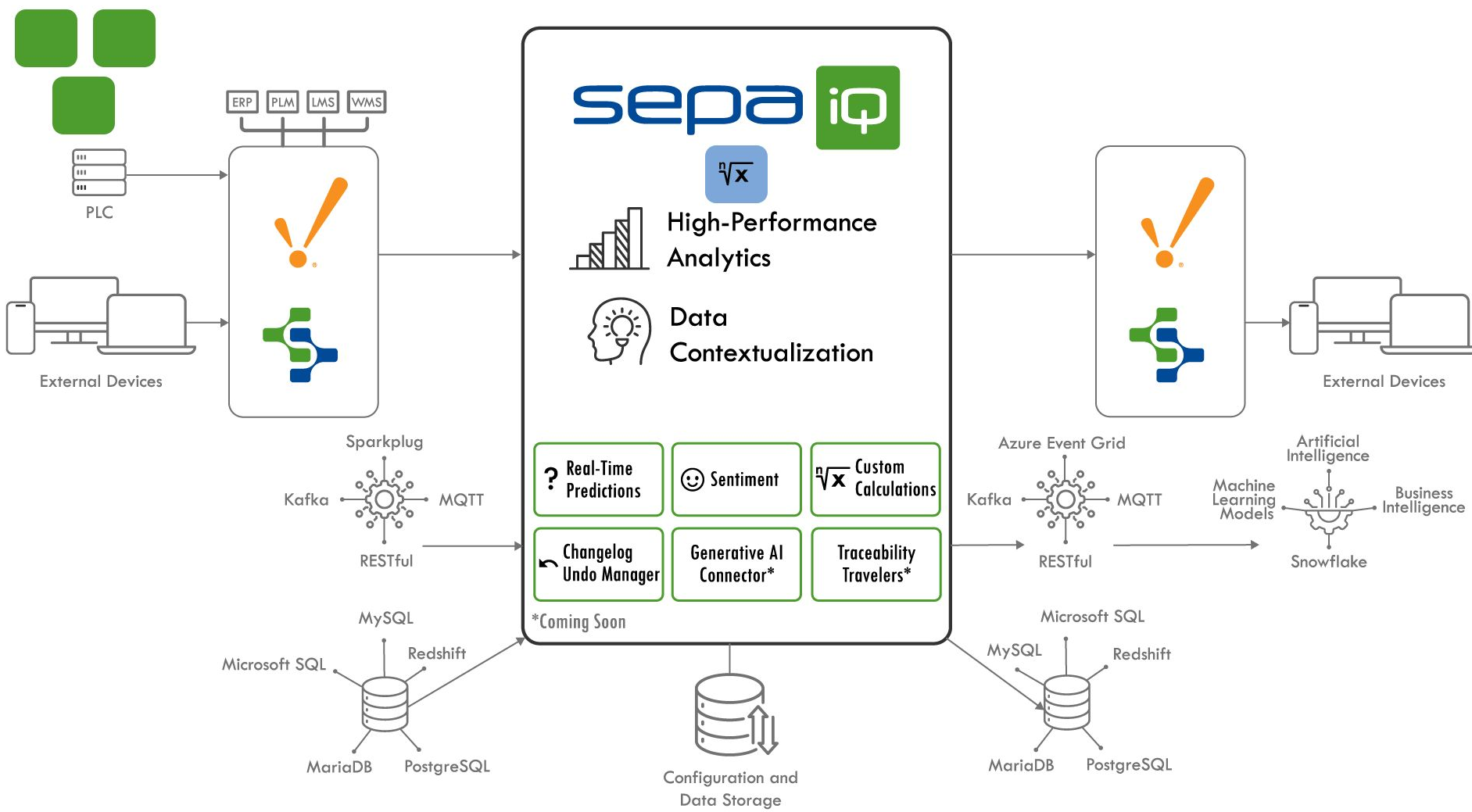


# Sepasoft

## SepalQ Analytics Platform

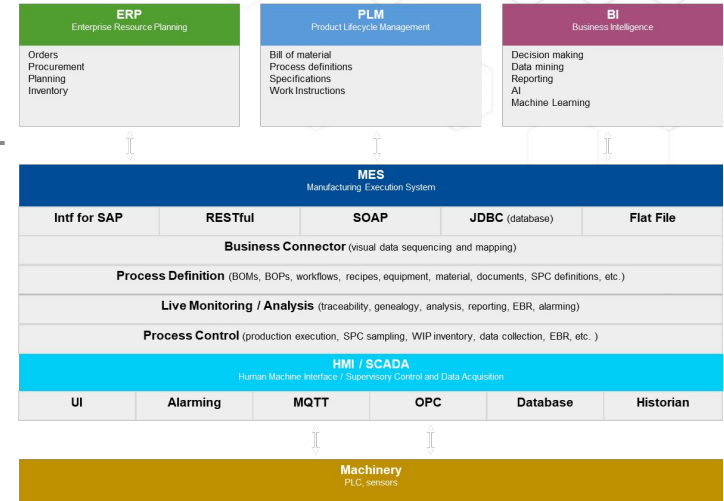
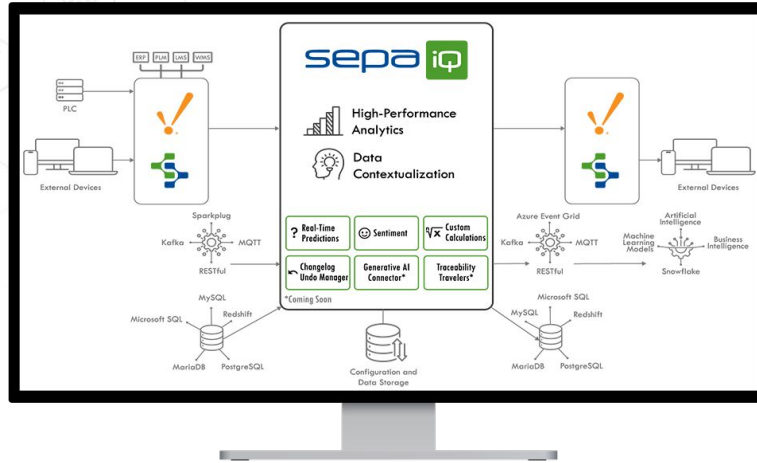
- Connectivity with native support for Ignition
- Providing Data Contextualization
- High Performance Analytics including Machine Learning and AI Tools
- Scalable Architecture







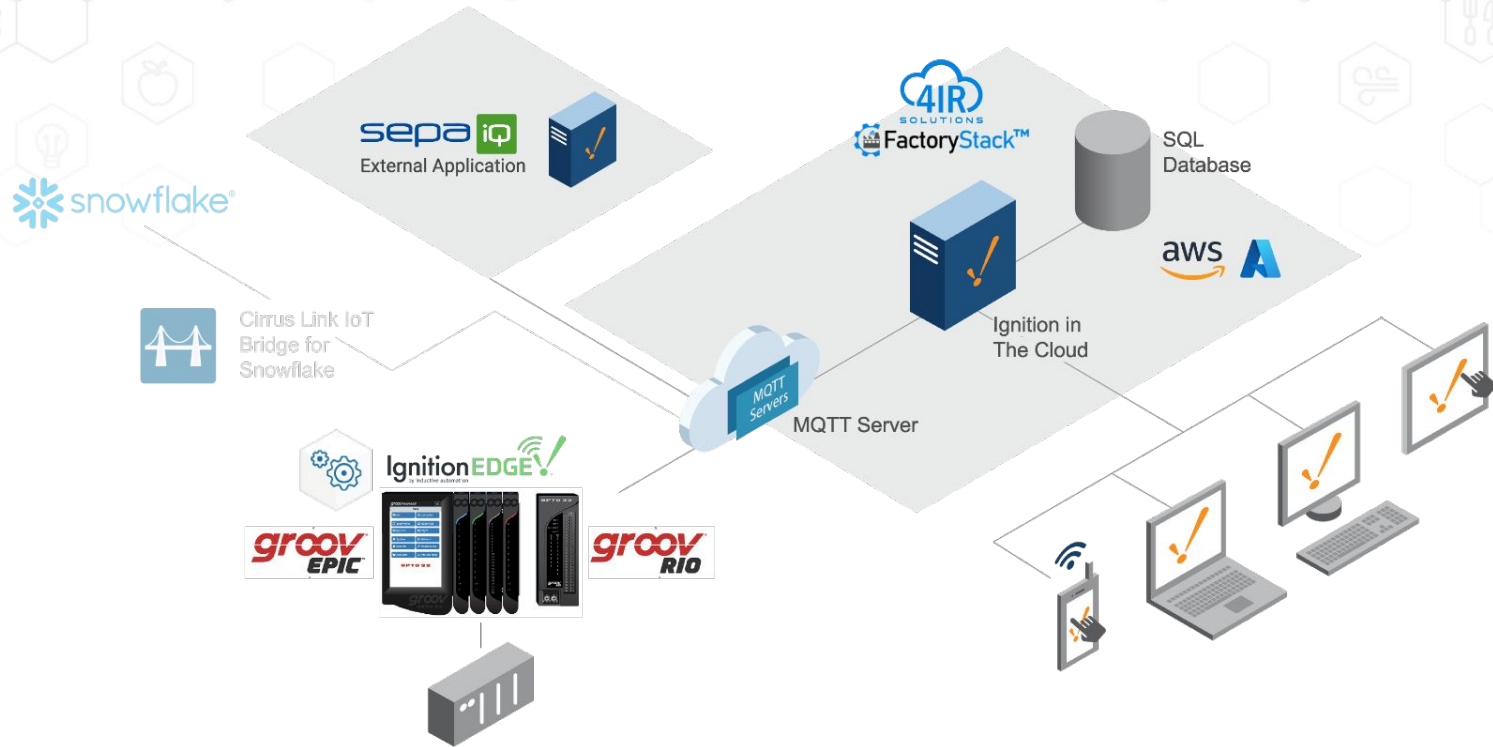
# Sepasoft



## MES Capability on Ignition

- Leverage Data in Ignition for Definition, Control, and Tracking Processes
- Integrated Graphical Tools
- Full System Scripting Library Support

# Architecture



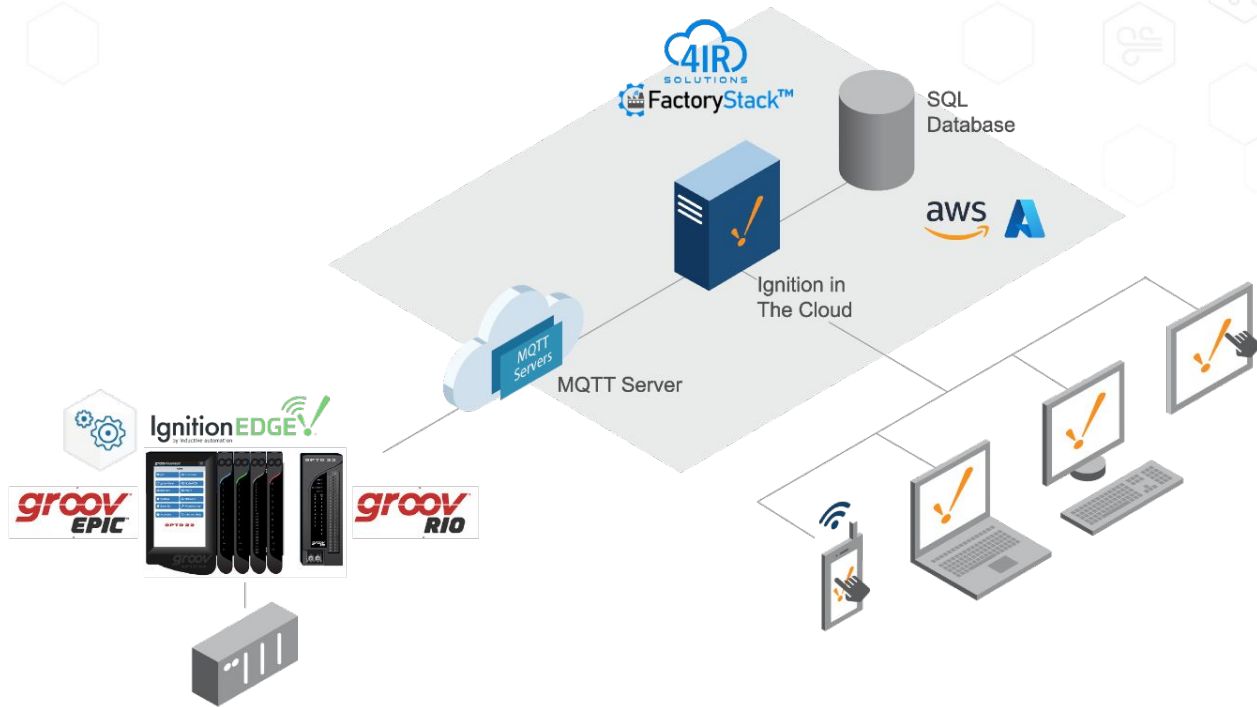
# Architecture



# Architecture

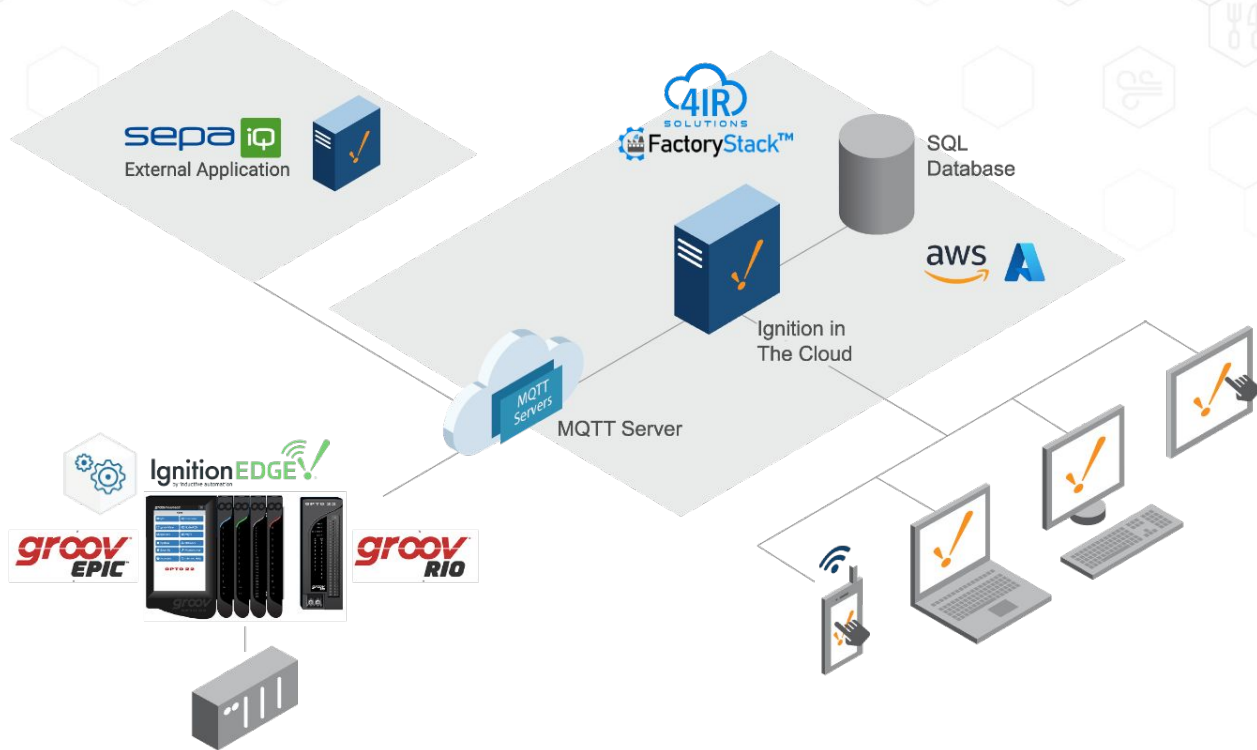


# Architecture

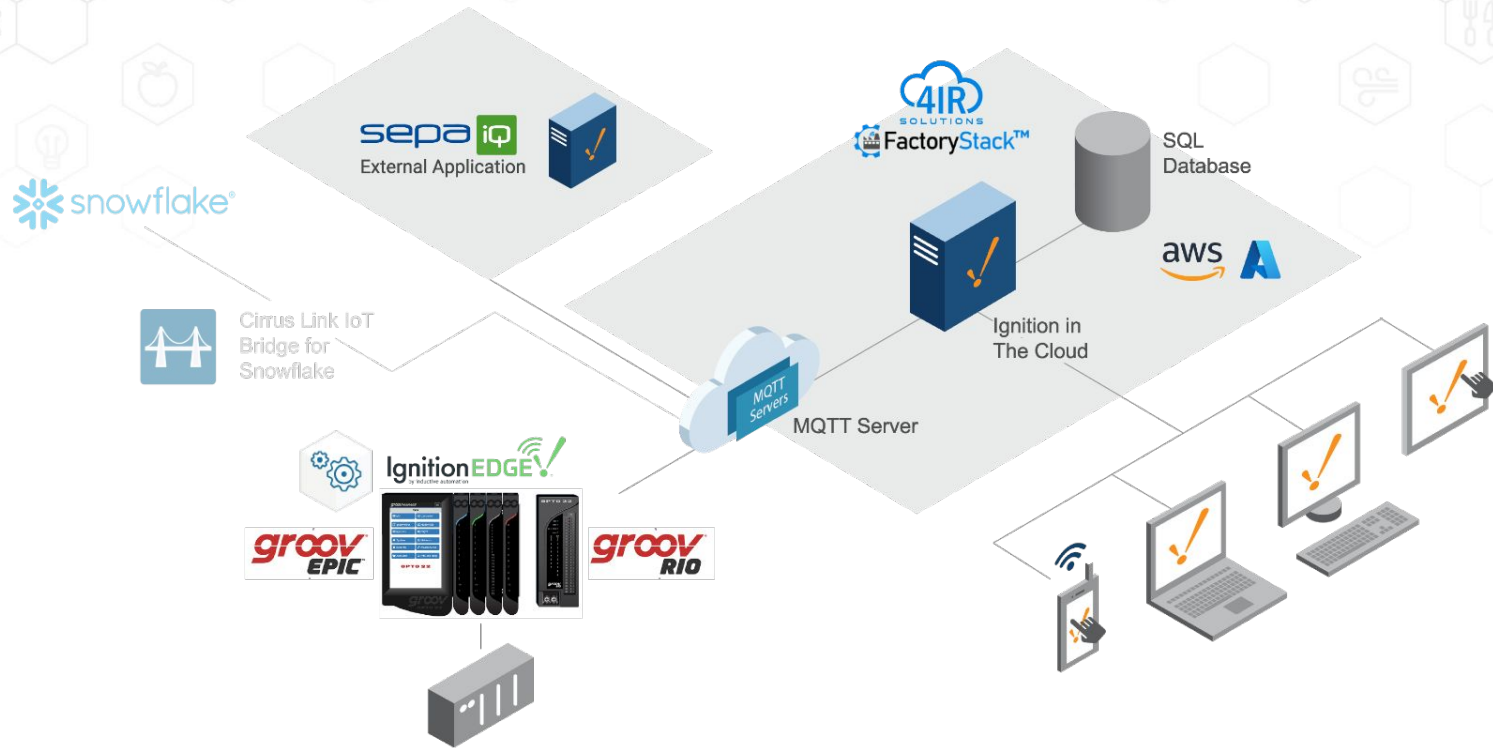




# Architecture



# Architecture



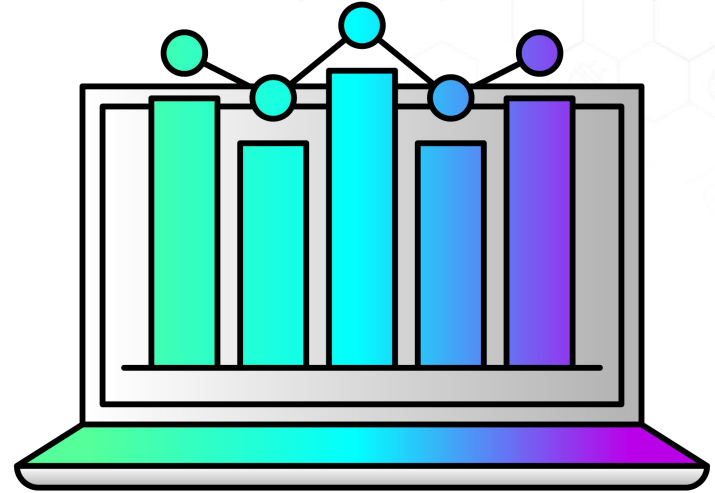
# Demonstration

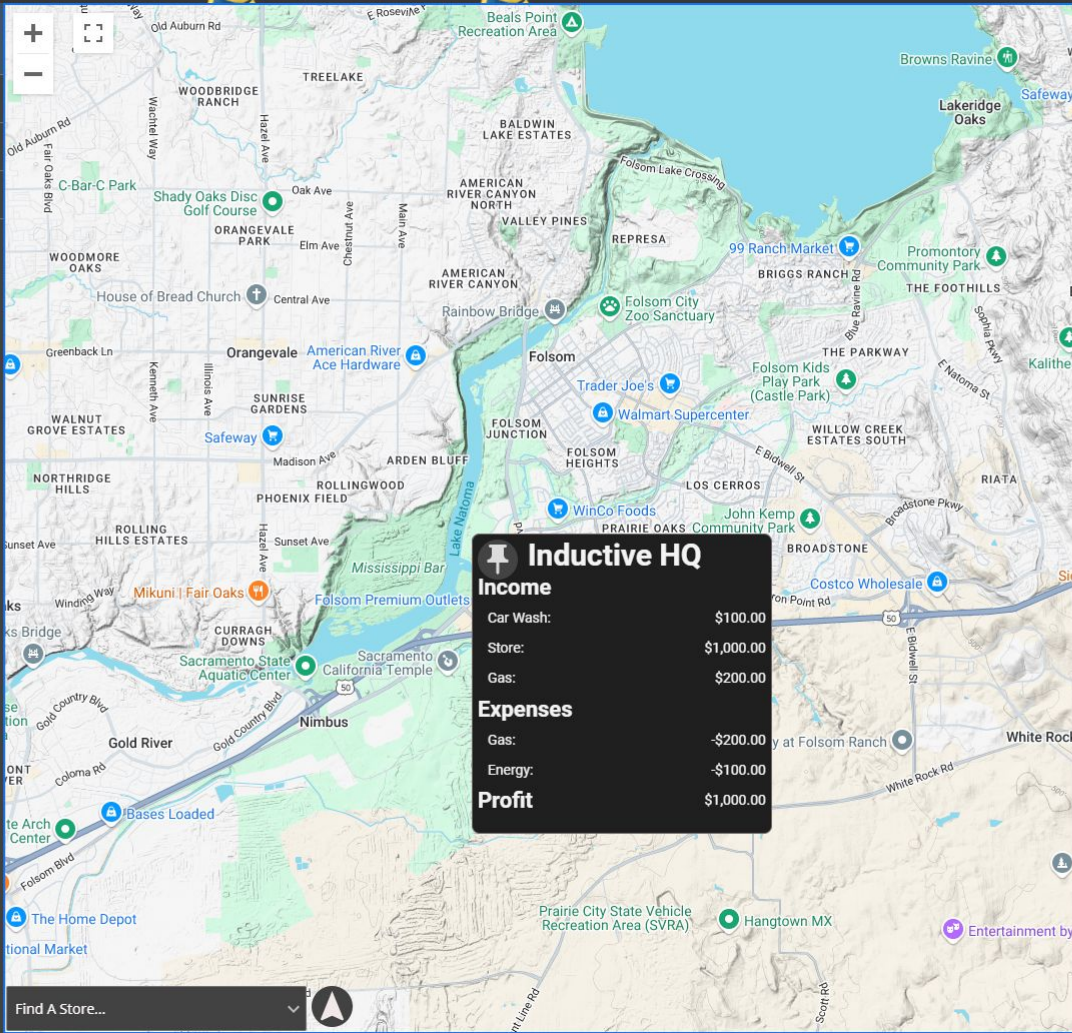


# Goals Achieved

EPIC Stores achieved their goals by doing more with their data:

- ✓ Enhance efficiency
- ✓ Streamline operations
- ✓ Leverage edge and cloud, data analytics, and emerging technologies
- ✓ Use data to make better decisions
- ✓ Set up a Unified Namespace as the foundation for Digital Transformation





## Inductive HQ ()

### Fuel



### Fuel Level



### Refill Fuel

Refill Amount 

1,000

REFILL FUEL

## Screens

Dashboards

Light Controls

## Car Wash



Ready To Start

## Freezer

Freezer Compressor kW  
3.2  
Freezer Door Open  
false

## Weather

Summary  
Sunny  
Temperature F  
73.5

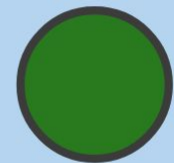


# CAR WASH

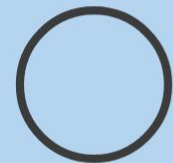
## STATS

CARS WASHED LAST 7 DAYS	0	\$0.00
CARS WASHED LAST 24HRS	0	\$0.00

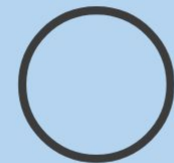
## TIMER PROGRESS



START  
CAR  
WASH



LED  
PAUSE




MANUAL  
START  
ACTIVE

## RINSE



FUEL STATION

PUMPS



USD PRICING

LOCAL CURRENCY (USD)

REG

\$5.20

\$5.20

PLUS

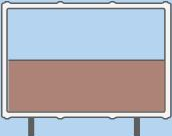
\$5.80

\$5.80

PREM

\$5.60

\$5.60



25,000  
50%





BULK TANK

FUEL ON ORDER

DELIVERY ACTIVE

PUMPS ACTIVE

SIMULATE LEVEL



PUMP DATA

Fuel Pump Visits

Regular

0

Plus

0

Premium

0

LAST DAY

TOTAL TAKINGS

REGULAR

\$0.00

PLUS

\$0.00

PREMIUM

\$0.00

Fuel Pump Visits

Regular

0

Plus

0

Premium

0

LAST WEEK

TOTAL TAKINGS

REGULAR

\$0.00

PLUS

\$0.00

PREMIUM

\$0.00

Fuel Pump Visits

Regular

0

Plus

0

Premium

0

LAST MONTH

TOTAL TAKINGS

REGULAR

\$0.00

PLUS

\$0.00

PREMIUM





\$0.00

Regular

Plus

Premium

TEA



BIG APPLE

79.0°F | 23.0°C

WIND SPEED

NULL

TEST

2.0MPH | 5.0KPH

7 DAYS: \$0.00

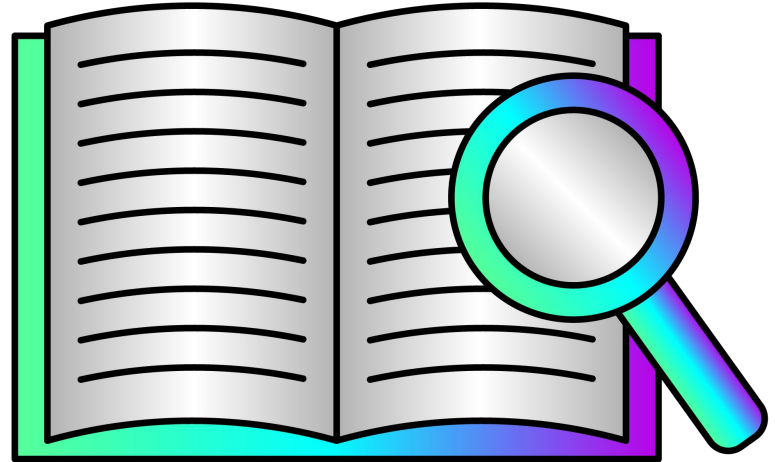
YTD: \$0.00

# Additional Capabilities Coming This Year

- Ignition 8.3
  - New Event Streams Module
  - New Perspective Module native drawing editor, form generator, and offline mode
  - New Gateway UI

# Learn More

- Let's team up for Digital Transformation and UNS. Start by learning more about IA's Strategic Partner Cirrus Link Solutions and Solution Partners Opto 22, Sepasoft, and 4IR Solutions.
  - <https://inductiveautomation.com/partners/solution-partners/>
  - <https://inductiveautomation.com/ignition/modules#cirrus-link-solutions>





**Ready to Try Ignition for Yourself?**

Download the full version for free at:  
**[inductiveautomation.com](http://inductiveautomation.com)**



**[inductiveuniversity.com](https://inductiveuniversity.com)**

*Ignition User Manual also available at:  
**[docs.inductiveautomation.com](https://docs.inductiveautomation.com)***

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Contact International Distribution Manager Yegor Karnaukhov at: [ykarnaukhov@inductiveautomation.com](mailto:ykarnaukhov@inductiveautomation.com)



# Questions & Answers



Call us at: **800-266-7798** Email us at: [accountservices@inductiveautomation.com](mailto:accountservices@inductiveautomation.com)



For Inductive Automation Australia, call: **1300 10 8088**

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