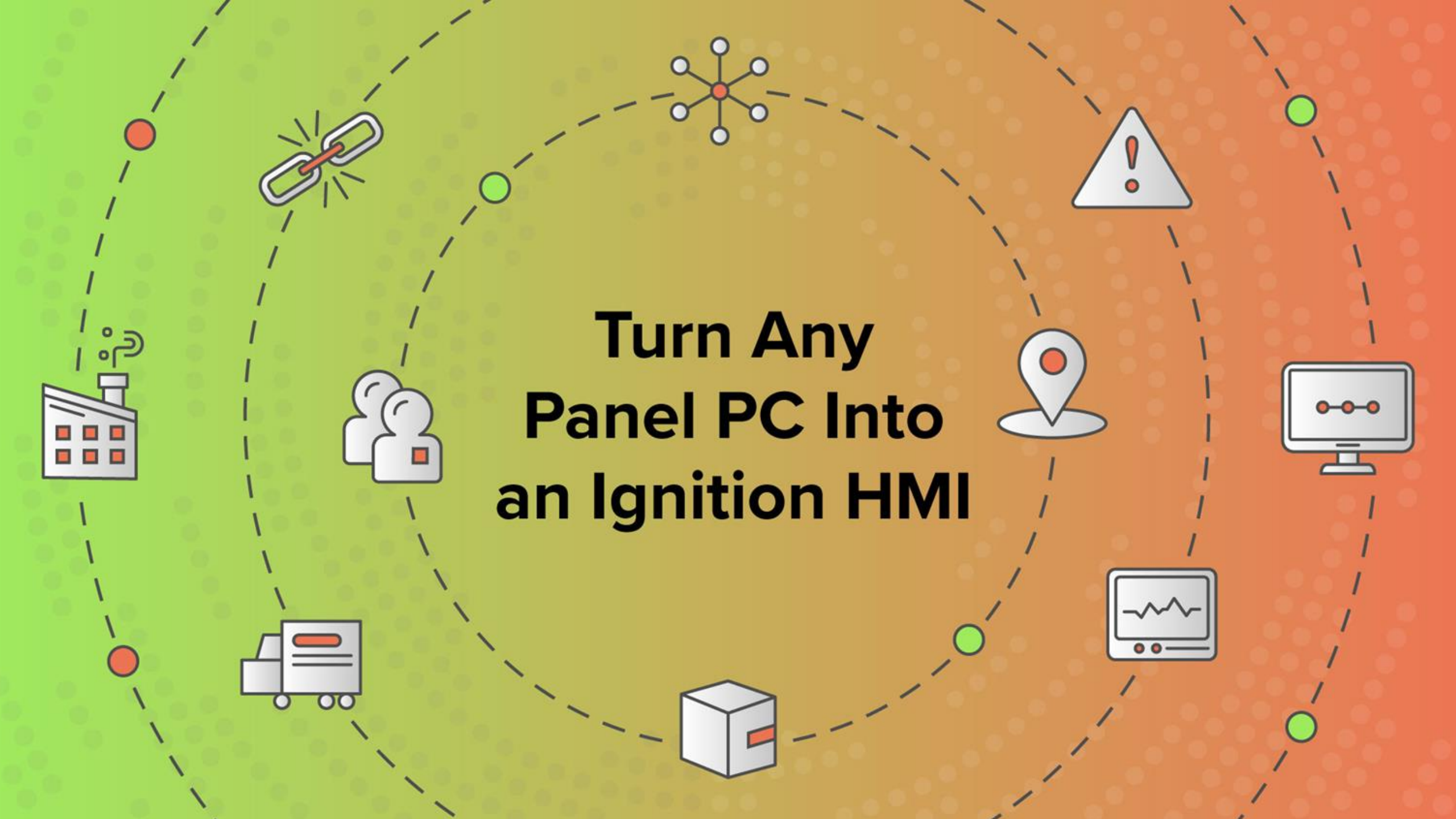

Turn Any
Panel PC Into
an Ignition HMI

Presenters

Don Pearson

Chief Strategy Officer

Inductive Automation

Kent Melville

Sales Engineering Manager

Inductive Automation

Guest Presenter

Ross Sheffler

Control System Integrator

Vertech

Agenda

- HMIs
- Ignition HMIs
- Ignition Edge Panel & Ignition Onboard
- Integrator Case Studies
- Audience Q&A

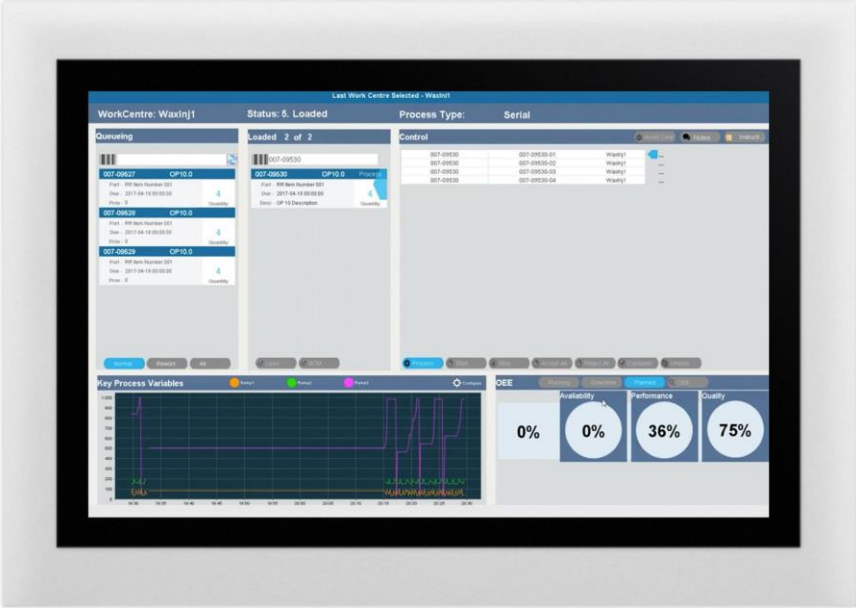
Ignition!®
by inductive automation
The Unlimited Platform for SCADA and So Much More
• Connect, Design, Deploy Without Limits:
- One central hub for everything on the plant floor
- Create any kind of industrial application
- Web-deploy clients to desktops, industrial displays & mobile devices
• Unlimited licensing
• Industrial-strength security and stability
• Trusted by thousands of companies worldwide

A Different Kind of HMI Webinar

- We’ve done many webinars about designing HMIs with Ignition software.
- Today, we’re going to talk about creating HMI machine solutions with Ignition software and your choice of hardware.

What is an HMI?

- Human-Machine Interface: A user interface that connects a person to a machine, system, or device.
- In industrial settings, HMIs are used to:
  - Visually display data (including graphs, charts, buttons, dashboards, etc.)
  - Track production time, trends & tags
  - Oversee KPIs
  - Monitor machine I/O
  - View & manage alarms
  - And more
- Unlike SCADA, HMIs don’t collect and record information or connect to databases.

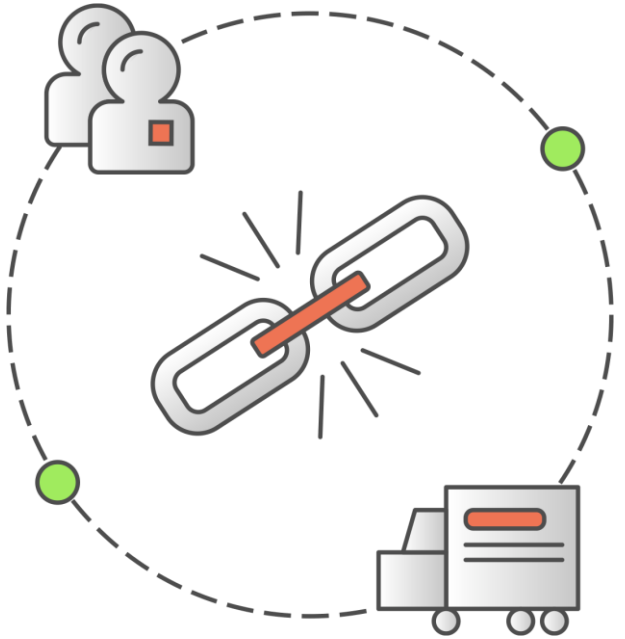


What is an HMI?

- Mainly used by operators, engineers, system integrators
- Can be on the plant floor, on mobile or remote devices, in the cloud, or the edge of the network
- Made up of hardware and software (HMI software often comes with the hardware)
- HMI software can be installed on any of the following hardware:
  - Built-in or embedded screens on machines
  - Graphic terminals
  - Panel-mount displays
  - Regular PCs
  - Mobile devices and wearables

HMI Hardware in the Supply Chain

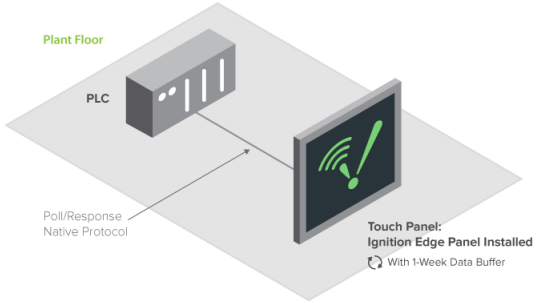
- Many industrial companies rely on proprietary hardware such as Allen-Bradley Panel Views for HMIs.
- This locks many companies into expensive products from one vendor.
- Recent supply-chain problems are causing long lead times, making it hard to get traditional HMI hardware in a timely manner.
- With microchip shortages, limited warehouse space, and backed-up shipping containers, these supply-chain issues are unlikely to change in the near future.



Ignition Edge Panel

Ignition Edge Panel is a standalone HMI software product.

- Rapidly build local HMIs for field devices and industrial HMIs
  - Vision or Perspective visualization modules
  - Ignition Designer included
- See real-time machine status
- Control your processes (stop and start)
- One-way alarm notification
- Basic trending
- Local-client fallback
- OPC UA connectivity
- Cross-platform



What is an Ignition HMI?

Panel PC

Ignition Edge
Panel License

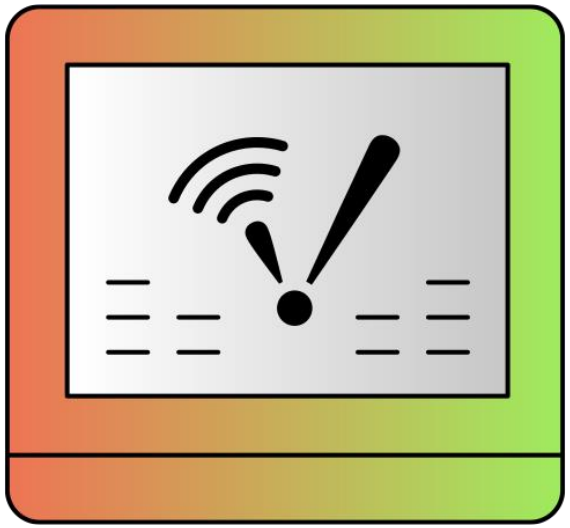
Ignition HMI

Solution: Use Ignition as a replacement for a traditional HMI

What is an Ignition HMI?

Options:

- Install Ignition Edge Panel onto an existing panel PC.
- Buy a Panel PC or an industrial PC and install Ignition Edge Panel onto it.
- Buy an Ignition Onboard panel PC with Ignition Edge Panel pre-loaded and pre-licensed.

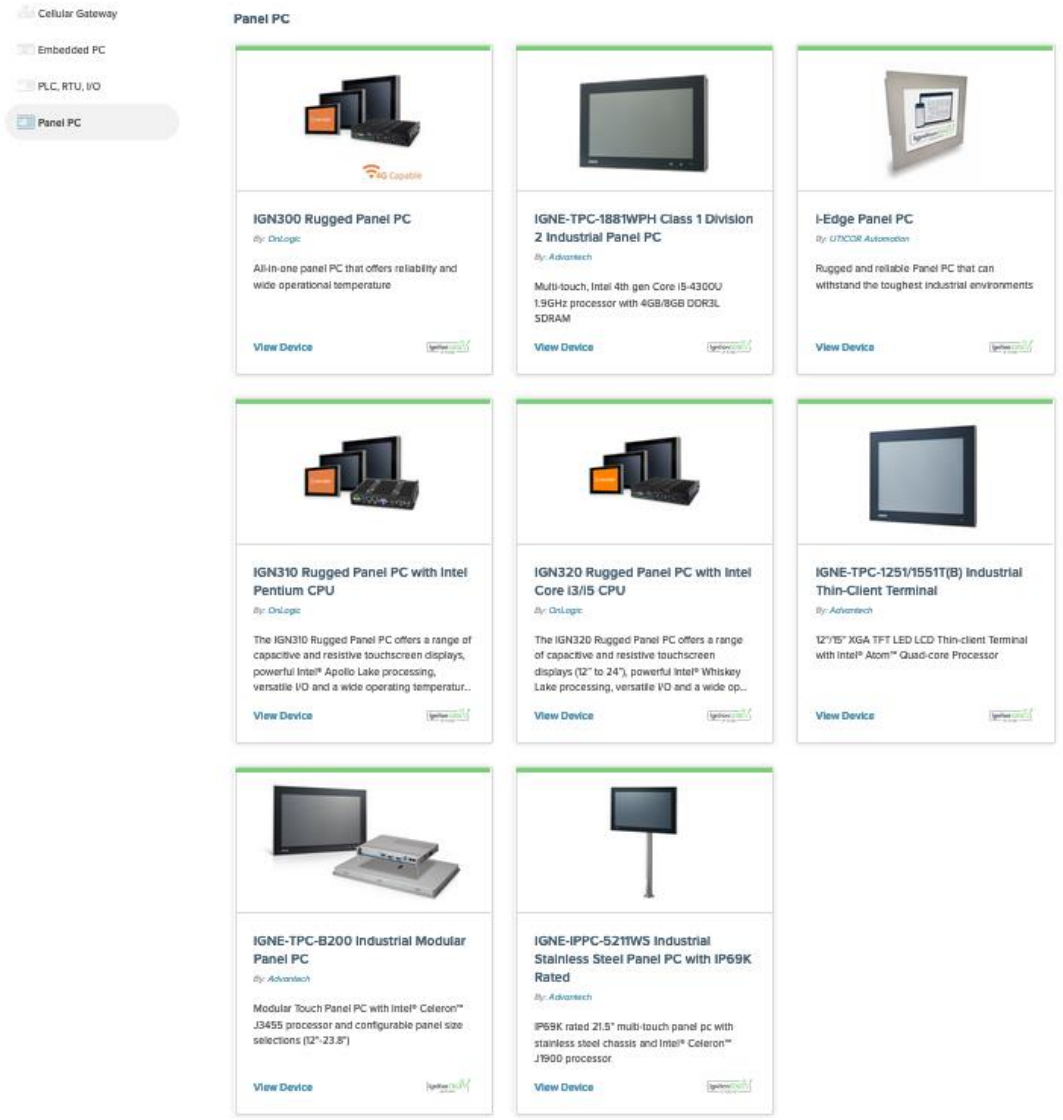


Ignition Onboard

Ignition Onboard

Find Panel PCs with Ignition Edge Panel pre-loaded and pre-licensed

Browse Onboard listings at: https://inductiveautomation.com/onboard#panel-pc-section-anchor



Ignition Edge Panel HMI Advantages

- Doesn’t require a specific piece of hardware; choose whatever hardware you need
- Replace failed HMIs more quickly and affordably
- Development environment is included, not licensed separately
- Offers parallel functionality as data collection software
- Mix and match Ignition Edge Panel with other Ignition Edge products

Ignition Edge Panel

Mix & Match With Other Ignition Edge Products

Ignition Edge IIoT

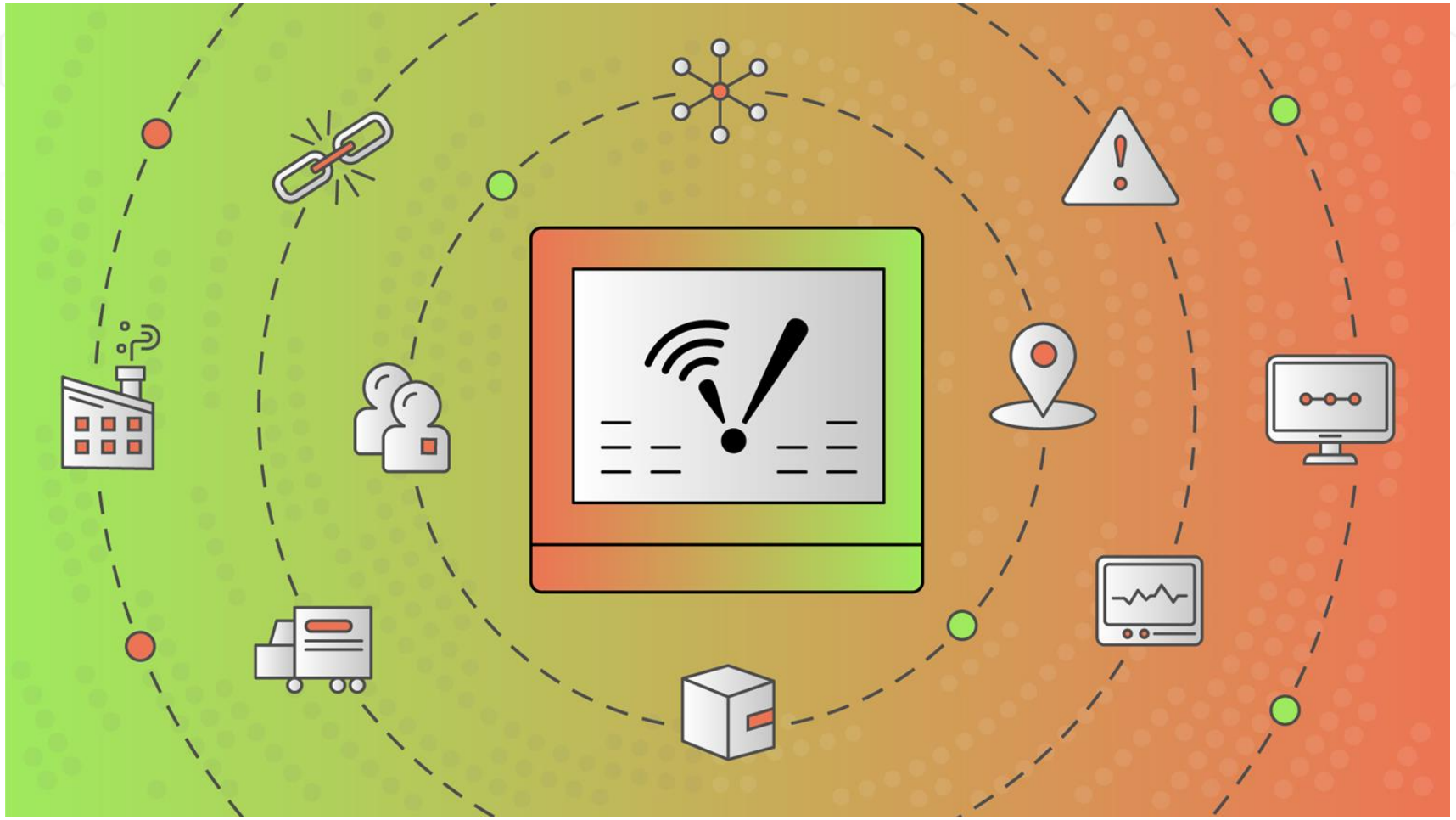
Ignition Edge Panel

Ignition Edge Compute

Ignition Edge Sync Services

Ignition Edge EAM

Integrator Case Studies



Case Study: Landfill Applications

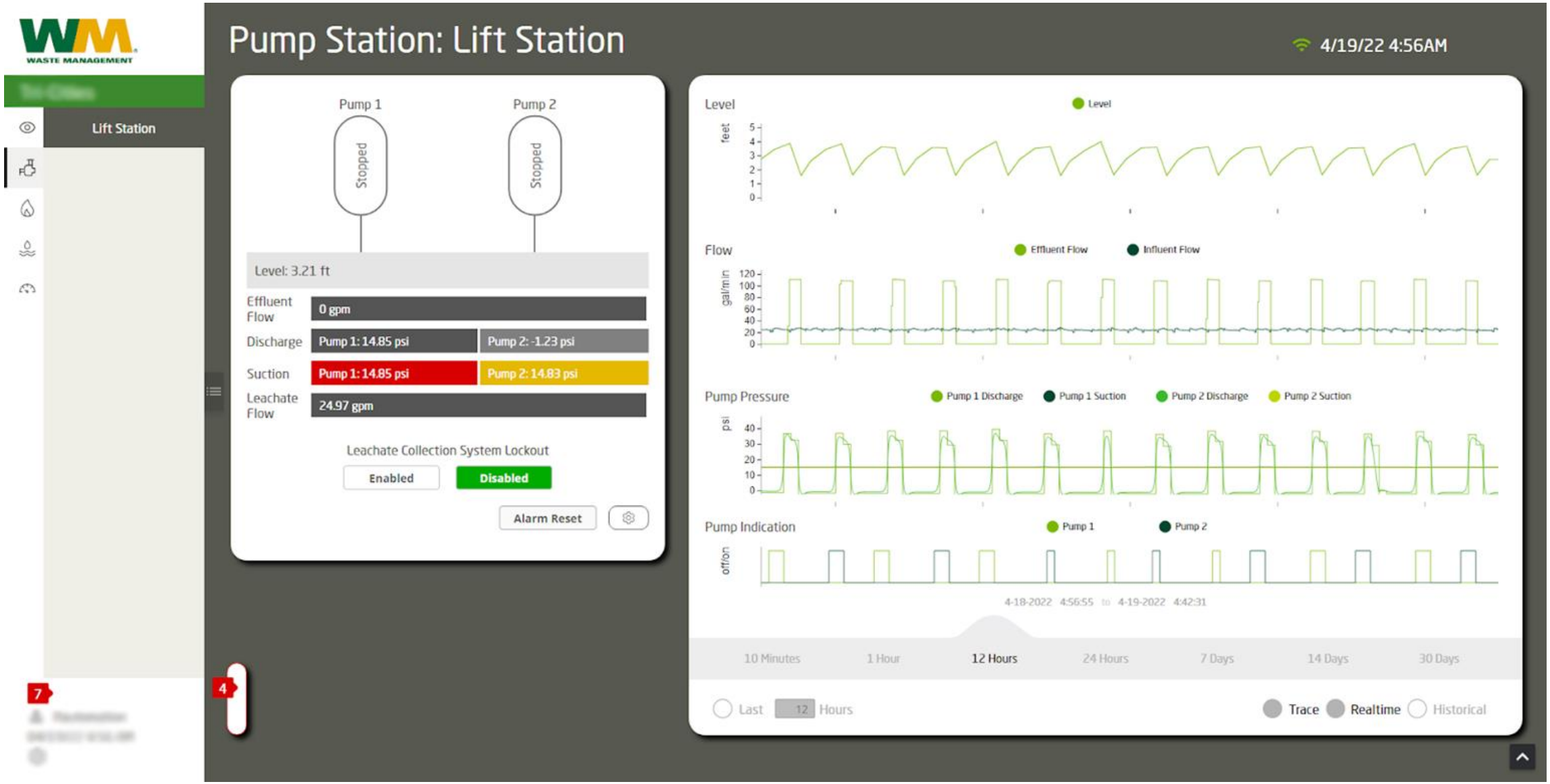
- Two projects: Landfill applications
- Both projects collecting data from multiple assets and displaying them from a single touchscreen so operators can control devices to a single point.
- Uses Edge Panel for local site control.

Case Study: Landfill Applications

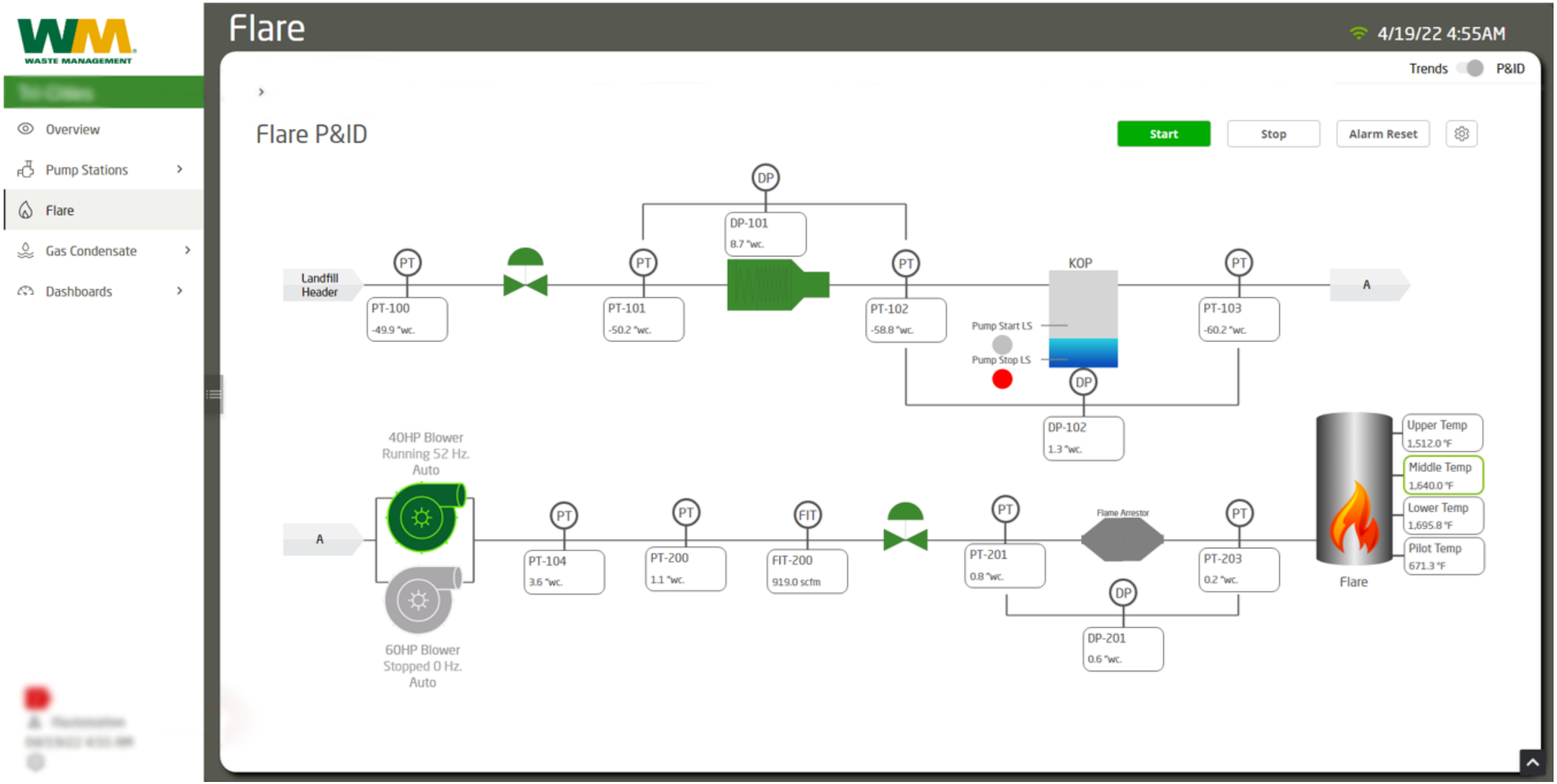
- Also collects and pushes data to an Enterprise Ignition system that collects and displays data for the entire organization.
- Having local command and control of a site is required even when communication outages occur with the Enterprise system.
- Edge Panel enabled reuse of many of the same views developed for the Enterprise system.

Case Study: Landfill Applications

Case Study: Landfill Applications



Case Study: Landfill Applications



Case Study: Landfill Applications

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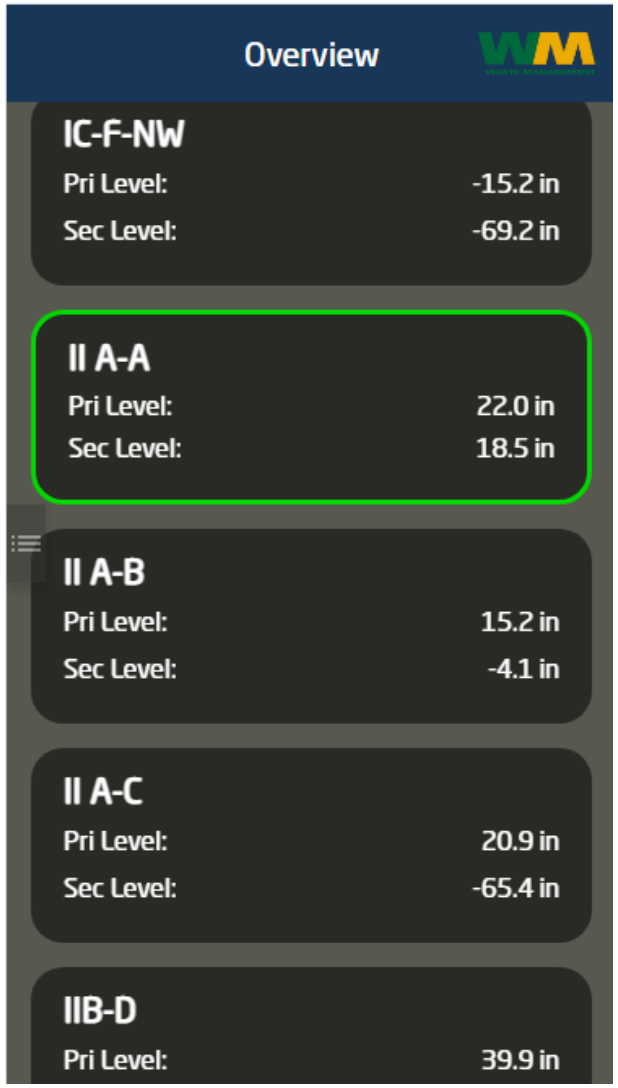
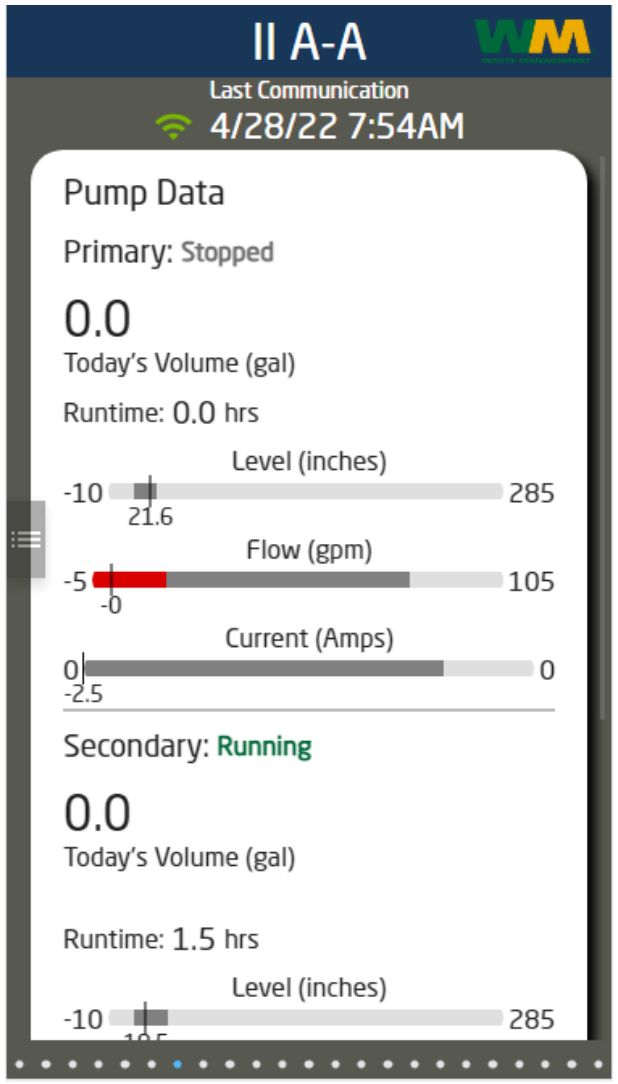
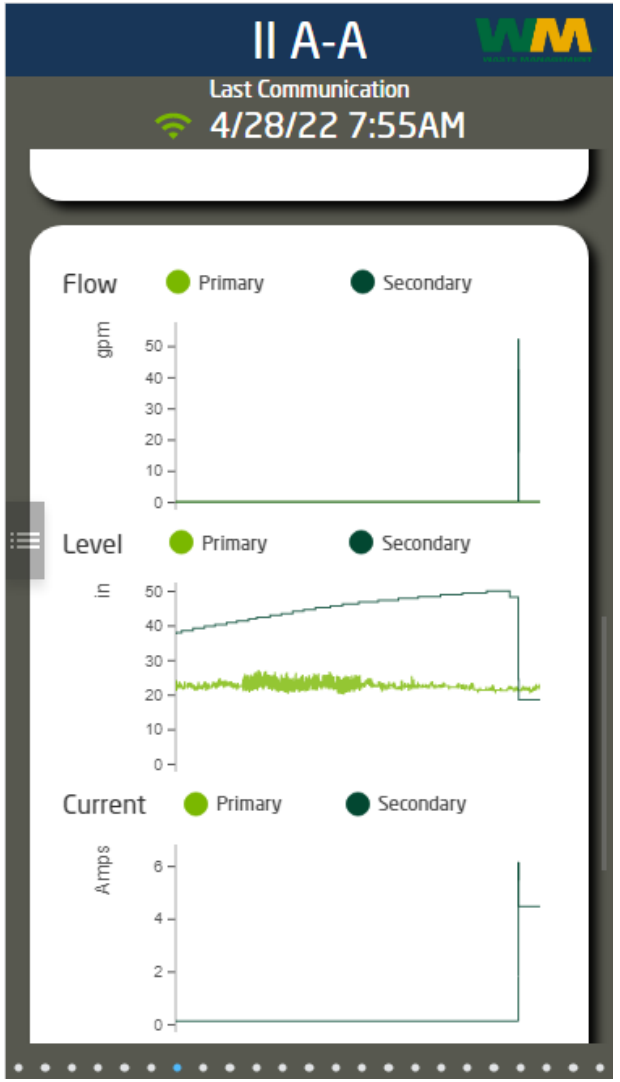
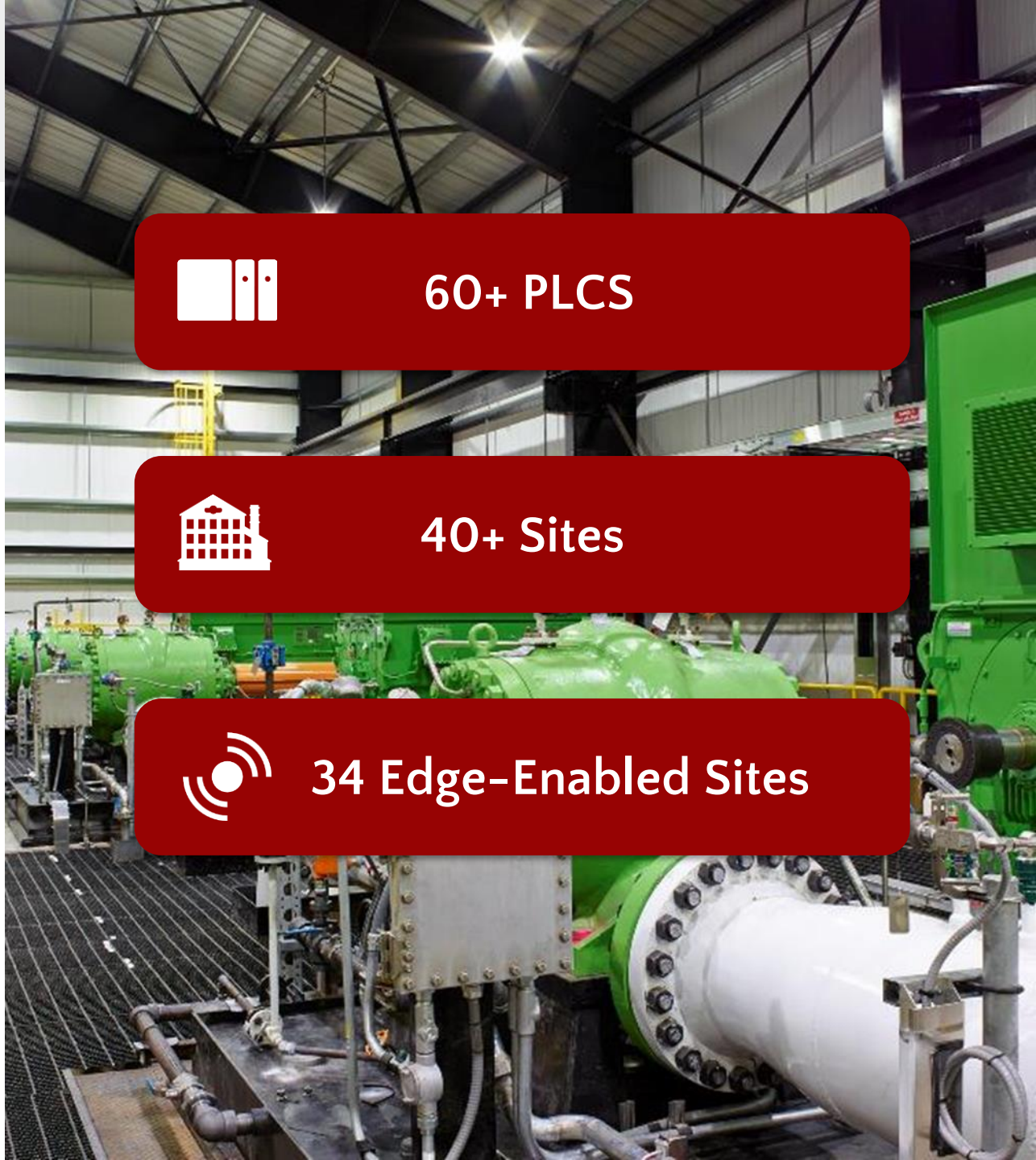






Case Study: Upstate NY

- Brock Solutions is leading a multi-year program to uplift a water SCADA system
  - Using Ignition SCADA to deliver a sustainable, modern solution
  - Addressing critical obsolescence and cyber security concerns
  - Upgrading PLC hardware, Drives, and implementing new sensing hardware
- Extensively leveraging Ignition's edge computing capabilities



BROCK solutions

Case Study: Upstate NY

Ignition Edge

- 45 Sites utilize Ignition Edge Panel
- Found at edge of the network, and communicate back to centralized server via MQTT
  - Device control
  - Operator alarm
- Sites are critical, so need to have local control if network with central fails
  - More cost-efficient than having full-blown Ignition at each of the sites
- Was able to grab PC panels off the shelf from Advantech

BROCK solutions

Solutions to Keep You Running

Download Ignition Edge at:
inductiveautomation.com

Browse Ignition Onboard Panel PCs with Ignition Edge Panel pre-loaded and pre-licensed at:
inductiveautomation.com/onboard

Ready to Try Ignition for Yourself?

Download the full version for free at:
inductiveautomation.com

inductiveuniversity.com

Ignition User Manual also available at:

docs.inductiveautomation.com

THE

DISCOVER

GALLERY

Submissions Due by April 30

Submit your project at: https://icc.inductiveautomation.com/discover-gallery-2022

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Italy	EFA Automazione S.p.A	www.efa.it
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South Africa	Element8	https://element8.co.za
Switzerland	MPI Technologies	https://mpi.ch

Contact International Distribution Manager Annie Wise at: awise@inductiveautomation.com

Questions & Comments

Today's Guest

Ross Sheffler: rsheffler@vertech.com

Ignition! by inductive automation

Call us at: **800-266-7798**
Email us at: **sales@ia.io**

Melanie Hottman
Director of Sales
x247

Jim Meisler
x227

Ramin Rofagha
x251

Lester Ares
x214

Vannessa Garcia
x231

Shane Miller
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