



# INDUSTRIAL INTERNET OF THINGS (IIOT) CAPABILITIES

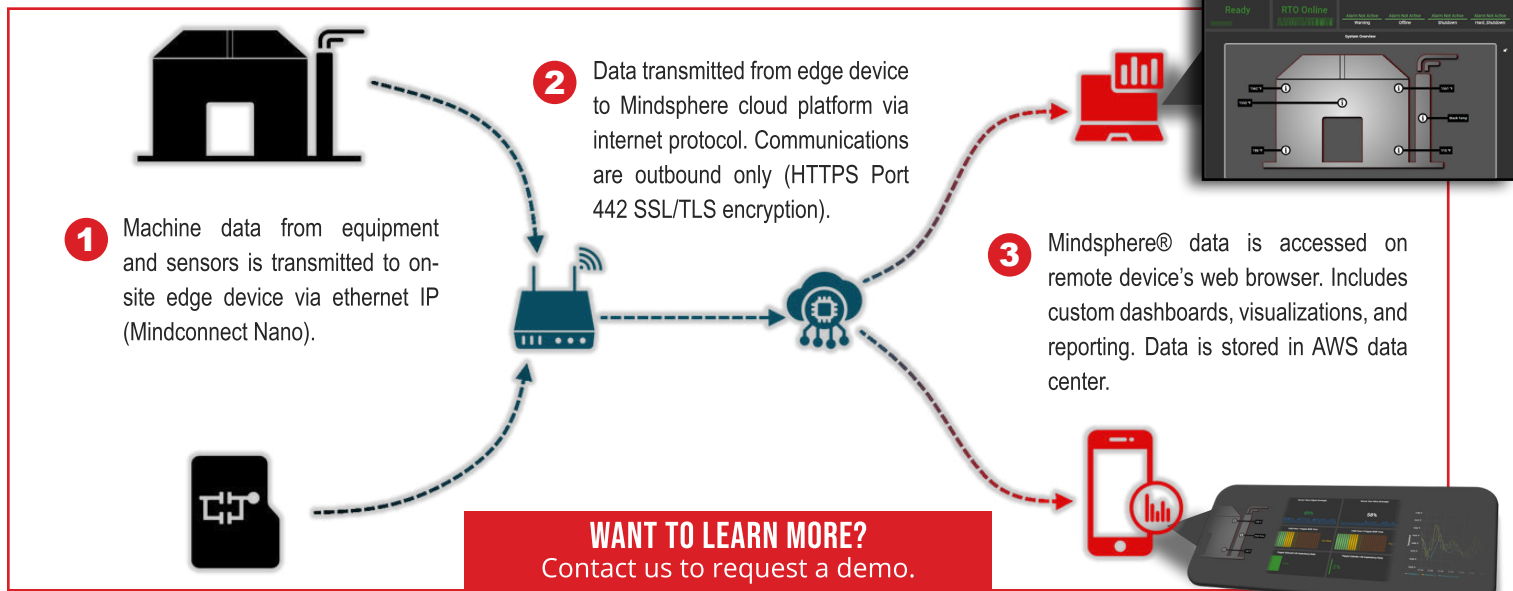
## HARNESS YOUR POLLUTION CONTROL EQUIPMENT DATA

Anguil has been an innovator in industrial pollution control since 1978 and we believe Industrial Internet of Things (IIoT) is the future. That's why our team has been hard at work developing an industry leading IIoT-connected platform that makes it effortless to remotely monitor your environmental equipment system status and operating conditions.

**What would it be worth if you could see all your pollution control data in one place?**



## HOW DOES ANGUIL'S IIOT PLATFORM WORK?



## ANGUIL'S IIOT PLATFORM

Anguil is developing IIoT-connected capabilities for environmental technology that remotely monitors system status and operating conditions.

- Developed using Siemen's Mindsphere® software, a leader in global automation technology
- Designed to leverage your existing data to improve equipment performance, lower maintenance costs, and prevent unplanned downtime while keeping data safe
- Brings data alive with Graphical Overviews, KPI Dashboards, Live Trending, and Document Repositories

## NOW ACCEPTING PILOT CUSTOMERS!

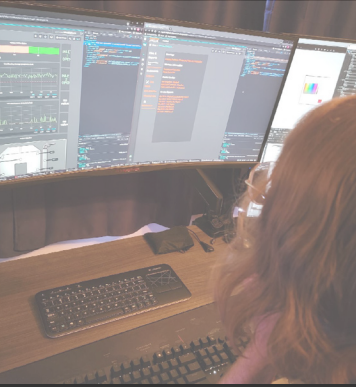
We are ready to show you how our IIoT pilot platform can maximize your data possibilities. Anguil is now accepting applications for pilot customers.

With minimal cost, high value, and no long-term obligation, our dedicated IIoT experts will guide you through our easy and secure pilot set-up process. Limited spots are available. Contact us today to reserve your spot in Anguil's premier IIoT pilot program.

**APPLY NOW**



# ANGUIL IIOT PILOT PROGRAM FACT SHEET



## IIOT PILOT QUICK FACTS



### HOW TO APPLY

Fill out and submit the IIoT Pilot Application page on the Anguil web site. An Anguil IIoT team member will follow up to determine eligibility.



### TECHNICAL REQUIREMENTS

Our pilot participants must have at least one Anguil oxidizer, or be an Anguil service customer, and have an open plant network allowing Anguil access to establish connectivity. Anguil's IIoT team can help determine if you meet the technical requirements.



### LENGTH OF PILOT

Once technical requirements are met and the platform is implemented, the initial pilot program duration is **six months**.

### What is the Industrial Internet of Things (IIoT)?

The Industrial Internet of Things (IIoT) refers to interconnected sensors, instruments, and other devices networked together with computers' industrial applications, including manufacturing and energy management.<sup>1</sup>

### What makes IIoT different than the Internet of Things (IoT)?

In both cases, device(s) connect to the internet enabling device intelligence and data transmission between the device(s) and the cloud. The primary difference between the two is the target audience/environment. IoT is largely focused on consumer devices and markets, striving to make consumers' lives more convenient. IIoT takes the same principles and technologies and applies them to industry, manufacturing, and systems management.<sup>2</sup>

### What is Anguil's IIoT solution?

Anguil's IIoT solution is a secure, cloud-hosted solution built using industry standard protocols and datatypes developed by an interdisciplinary team. It is designed to be IIoT-as-a-Service, specific to Anguil equipment and services, scalable for diverse customer needs and types.

### What is it not?

Anguil's system is NOT a DCS/SCADA system nor is it a remote control software. At this time, it is a data collection and interpretation tool only.

### Why is Anguil developing an IIoT solution?

- **Anguil as an Industry Leader:** Cloud technology and remote operations are being adopted by industries at a rapid pace, providing Anguil an opportunity to lead in this burgeoning market.
- **Customer Demand:** Customers continue to ask for enhanced remote monitoring services. Anguil is tackling IIoT from the customer perspective and strives to meet customer needs.
- **Enhanced Service Capabilities:** Using the data and information collected via IIoT devices, Anguil can expand our own service abilities, providing an improved experience for all customers.

### Did Anguil design their own IIoT software or did they partner with a software provider?

Anguil has partnered with Siemens and is building our IIoT solution using their Mindsphere® IIoT-as-a-service software platform.

### What is Siemens Mindsphere®?

Siemens Mindsphere® is a leading IIoT-as-a-service platform.

- **IIoT-as-a-Service:** Empowers customers and partners to build and integrate personalized IIoT applications on the Mindsphere® platform.
- **Collect, Monitor Analyze:** Connect assets and data to the cloud. Analyze data in real-time. Gain insights that improve efficiency and reliability.
- **Reliable and Secure:** Ensured data encryption and separation based on multi-tenant environment. High reliability by running every service in multiple zones and regions.<sup>3</sup>

### Why Did Anguil Choose Mindsphere®?

The Siemens Mindsphere® platform provides complex development components and tools, giving Anguil the flexibility to develop the best, most secure IIoT solution for the pollution control equipment industry. Mindsphere® is built and backed by Siemens, a leader in global automation technology.

1 (1): Wikipedia; Boyes, Hugh; Hallaq, Bil; Cunningham, Joe; Watson, Tim; (October 2018). "The industrial internet of things (IIoT): An analysis framework"

2 (1): Wikipedia; Boyes, Hugh; Hallaq, Bil; Cunningham, Joe; Watson, Tim; (October 2018). "The industrial internet of things (IIoT): An analysis framework"

3 <https://siemens.mindsphere.io/en>



## ANGUIL IIOT PILOT PROGRAM FACT SHEET



### IIOT PILOT QUICK FACTS



#### PLATFORM SOFTWARE

Anguil's IIoT-as-a-service platform is built on Siemens' Mindsphere® software, a leader in global automation technology.



#### PILOT COST

There is no charge to participate in Anguil's IIoT pilot program, nor any expectation to purchase upon completion. However, minimal set-up costs may be required.



#### DATA SECURITY

Keeping our pilot customers' data safe is of utmost priority. The Siemens Mindsphere® platform guarantees a secure data experience, including ensured data encryption and separation based on multi-tenant environment.

#### How does Anguil's Mindsphere® IIoT solution work?

1. Machine data from equipment and sensors is transmitted to onsite edge device
2. Data is transmitted from edge device to Mindsphere® cloud platform via internet protocol
3. Data is accessed on remote devices through custom dashboards, visualizations, and reporting.

#### Is Anguil's IIoT solution out of the box or custom designed for every customer?

Our pilot program participants get the opportunity to design the screens they want to see. While Anguil's IIoT pilot program includes standard capabilities, these features are modified to fit the equipment set up of every participant.

#### Why is Anguil seeking pilot customers?

We have released an initial version for pilot use and are seeking additional users to utilize the system, test and provide feedback for product enhancements.

#### What are the technical requirements required of IIoT pilot customers?

Anguil's pilot program has a very low barrier to entry once basic requirements are met. For our initial pilot program, Anguil is seeking customers with one or more systems at one or multiple locations. Pilot participants will need to provide Anguil's IIoT team technical access to their oxidizer's control panel.

#### What is expected of pilot program participants? How much effort is required?

Anguil's IIoT team will lead you every step of the way through your equipment evaluation, IIoT platform connectivity, and user training. In return, it is expected that participants will provide Anguil with regular feedback on the system usefulness, ease of use, and future feature roadmapping.

#### Does Anguil's pilot program cost anything?

It does not cost anything to participate in Anguil's pilot program, but some minimal investment may be necessary to meet connectivity requirements.

#### What capabilities are included in the Anguil IIoT pilot program?

This initial pilot platform includes the following report capabilities: Graphical Overviews, Key Performance Indicator (KPI) dashboards, Live Trending, and Documentation Repositories. Our goal is to explore more capabilities with customers through the IIoT program.

#### What security measures keep my data safe throughout the pilot process?

All data is encrypted in transit and we utilize sub-tenants to separate data out in the platform. The data from your equipment will not be seen by any other users and will not be used by Anguil without permission for any purpose outside of platform support.

#### What does Anguil do with the data from my equipment?

Anguil will use all pilot feedback to improve our product offering and tailor it to the needs of future users.

#### What happens after the pilot is over?

Anguil pilot customers will be offered the option to continue IIoT services and purchase an IIoT service package suited to your needs. Or, you can end your engagement with no pressure to purchase.

#### How do I sign up for Anguil's pilot program?

Complete the form on Anguil's web site to be considered for Anguil's pilot program. Limited spots are available. A member of Anguil's IIoT team will follow up and assess your company's eligibility for program participation.