Self-directed Analytics and Reporting with OSIsoft Cloud Services

Dustin Johnson & Don Morrison

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OSIsoft and Seeq

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Advanced Analytics to get more value from OSIsoft PI Systems

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Advanced analytics: application of big data, machine learning, and other innovations to derive insights and improve outcomes

AUTOMATION/CONTROL SYSTEMS

NEW SENSOR TECHNOLOGY

REMOTE AND MOBILE ASSETS

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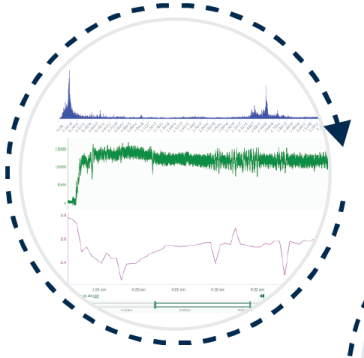
Seeq Capabilities

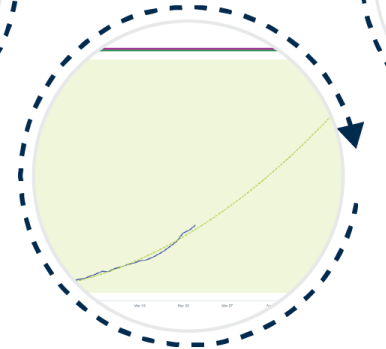
Diagnostic
Why did it happen?



Benefits

Root cause investigations on/of historical data sets

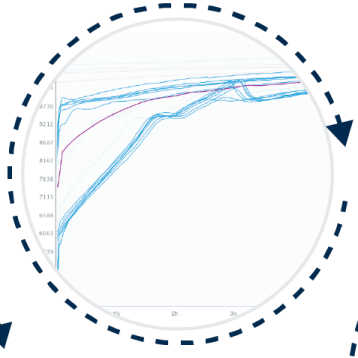
Predictive
What will happen?



Benefits

Increase asset availability and improve batch outcomes

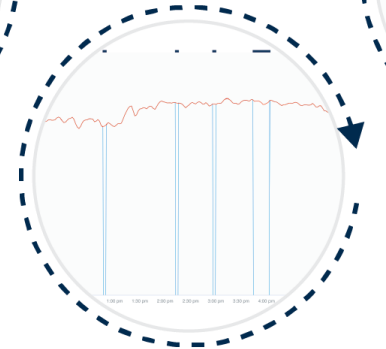
Monitoring
What is happening?



Benefits

Advisory real-time and prediction view of process and asset status

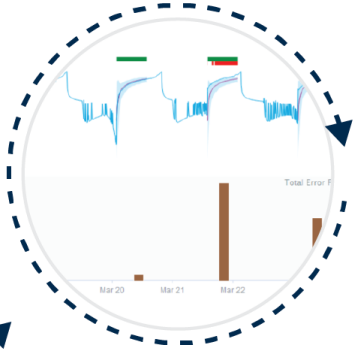
Prescriptive
What should happen?



Benefits

Evaluate options to make decisions that optimize outcomes

Descriptive
What happened?



Benefits

Create and share insights to inform decisions plant wide

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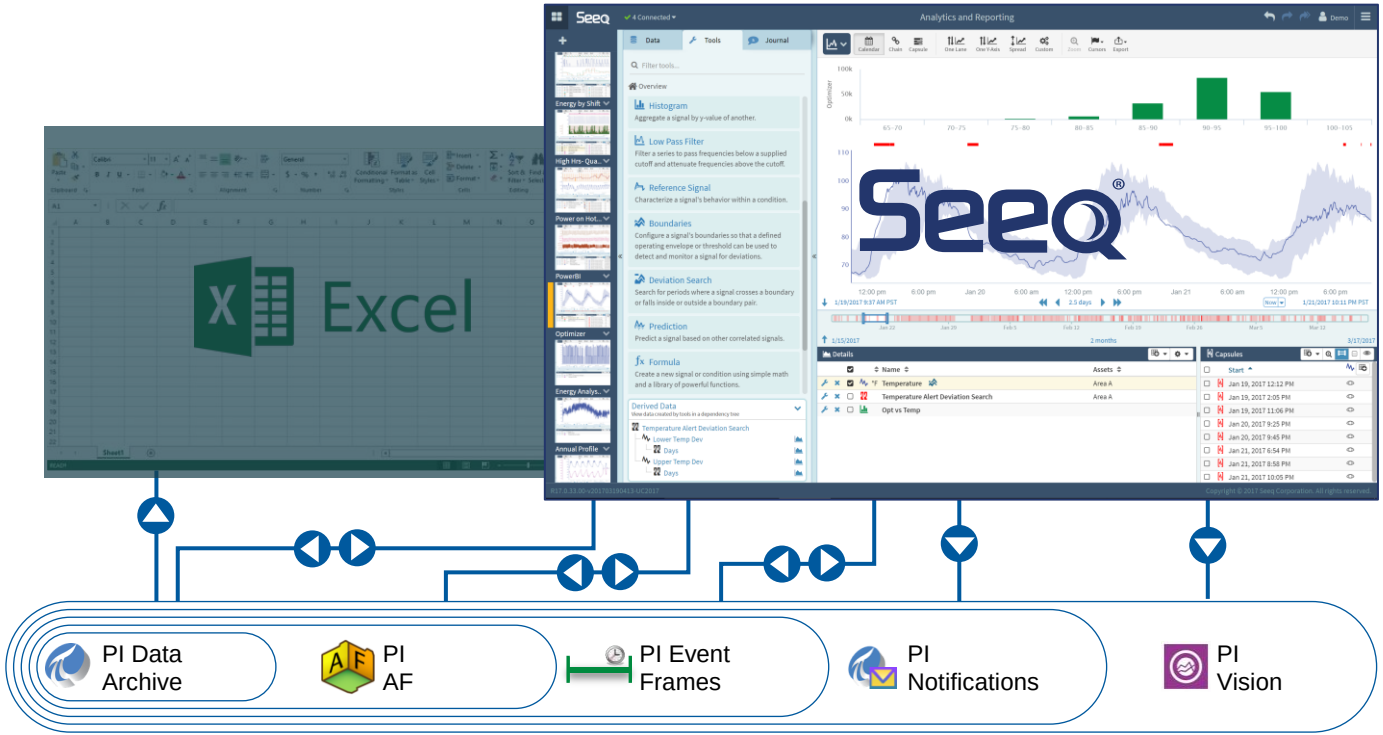
OSIsoft and Seeq Integration



Active Directory Integration for LDAP

Seeq is Advanced Analytics for OSIsoft PI System

Keeps PI System as source of record

Increases value of PI System investments

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Streamlined setup

- Connecting OSISoft PI System to OCS is straightforward and done almost entirely through the web UI.
- Connecting Seeq to OCS takes minutes.
- Total setup time for this demo was an hour.

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Demo configuration

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DEMO

Getting into Seeq

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Demo configuration

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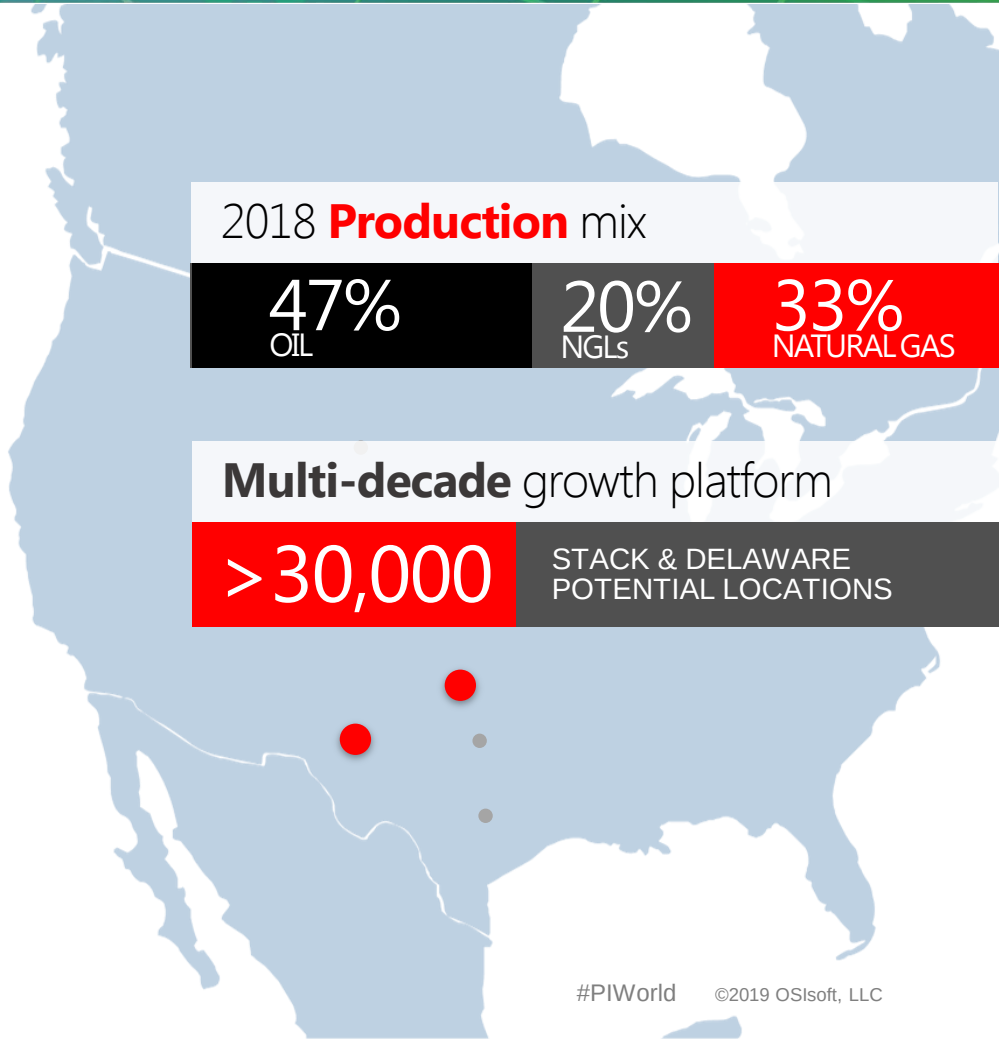
About Devon Energy

- **Balanced** oil and gas portfolio
- **Industry Leader** in technology
- **Large Inventory** of future projects
- **Culture** of innovation



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Making Better Decisions with Data

SCADA SYSTEM DATAPOINTS

6.5MM

>10,000 UPDATES PER SECOND

STALE data

Transmitter **ANOMOLIES**

INCONSISTENT data rates

VENDOR specific

Data **QUALITY**

AGGREGATE summaries

Model **NORMALIZATION**

Enterprise **CAPATIBILITY**

TRUSTED data

ACTIONABLE intelligence

Operate by **EXCEPTION**

Globally **ACCESSIBLE**

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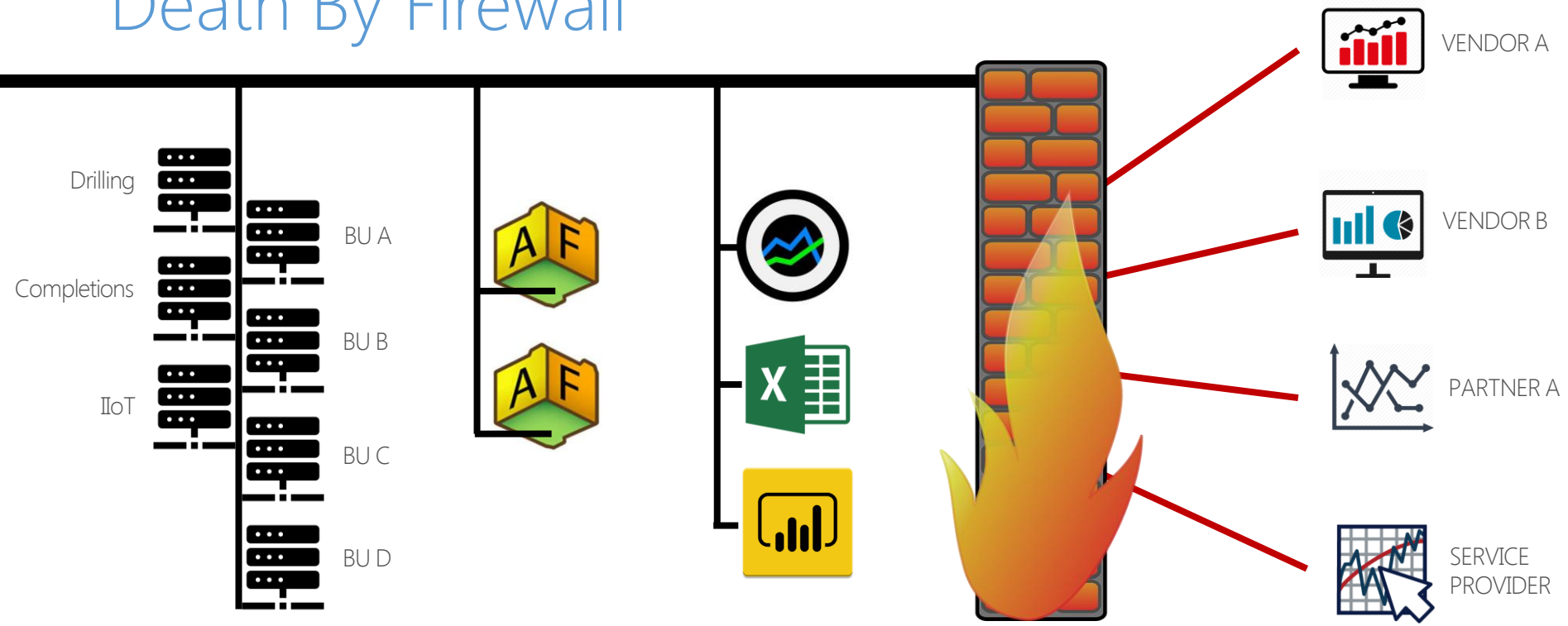
Death By Firewall



Archive Collectives | AF | User Tools | 3rd Parties

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Easier Data Sharing

Archive Collectives | AF | User Tools | 3rd Parties

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OSIsoft Cloud Services Beta
USER EXPERIENCE

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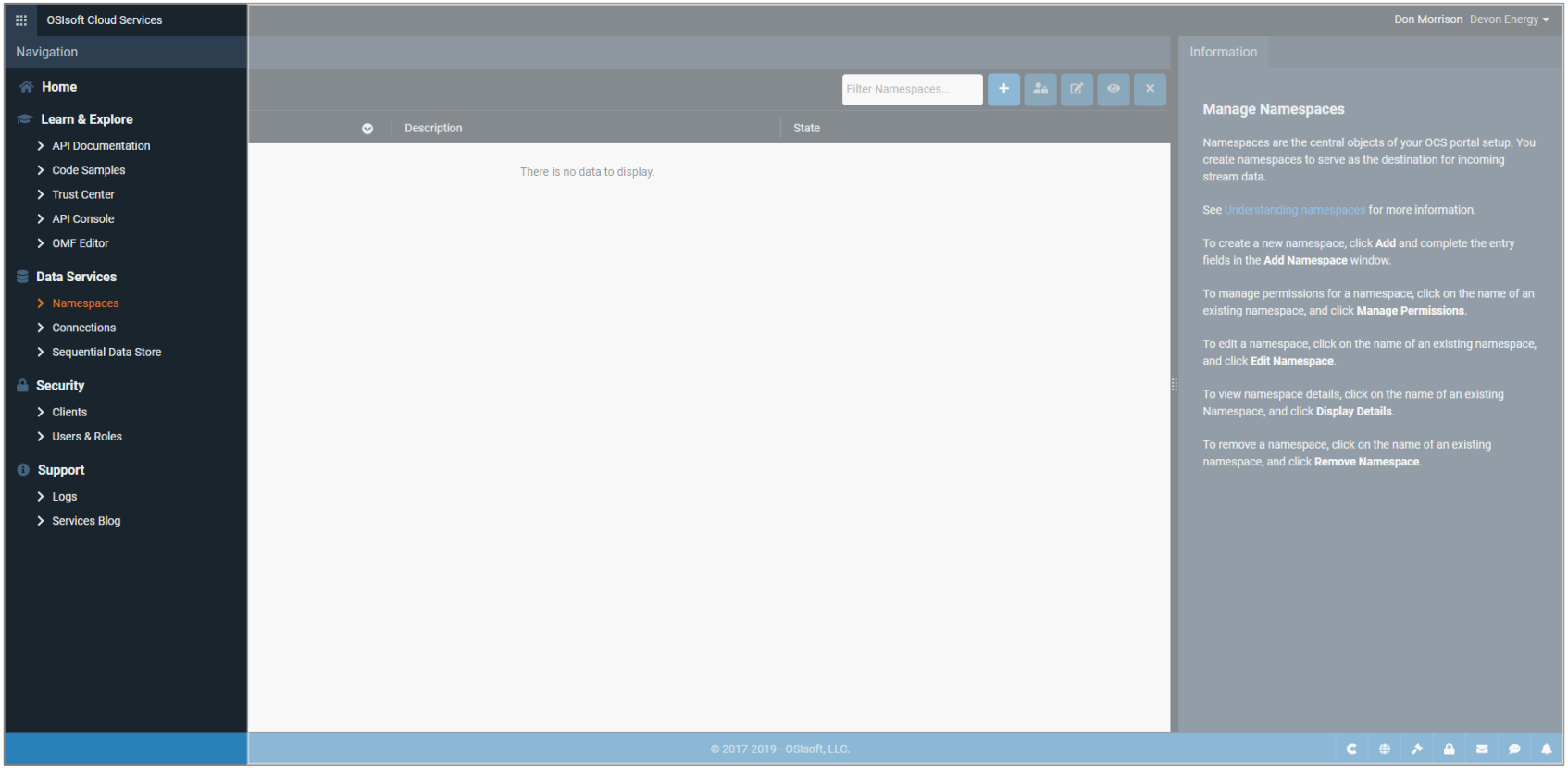
OCS Menu



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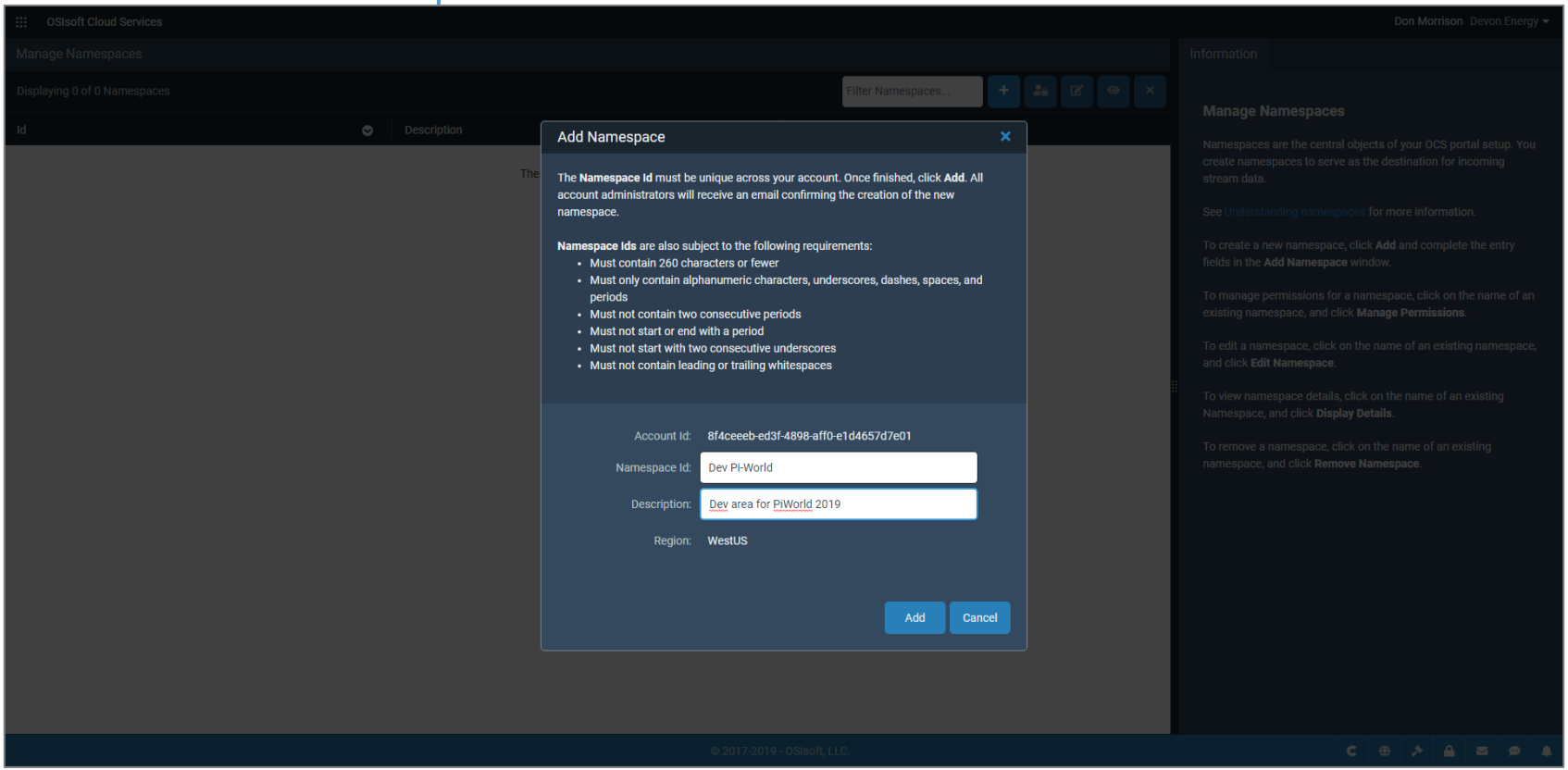
OCS Namespaces



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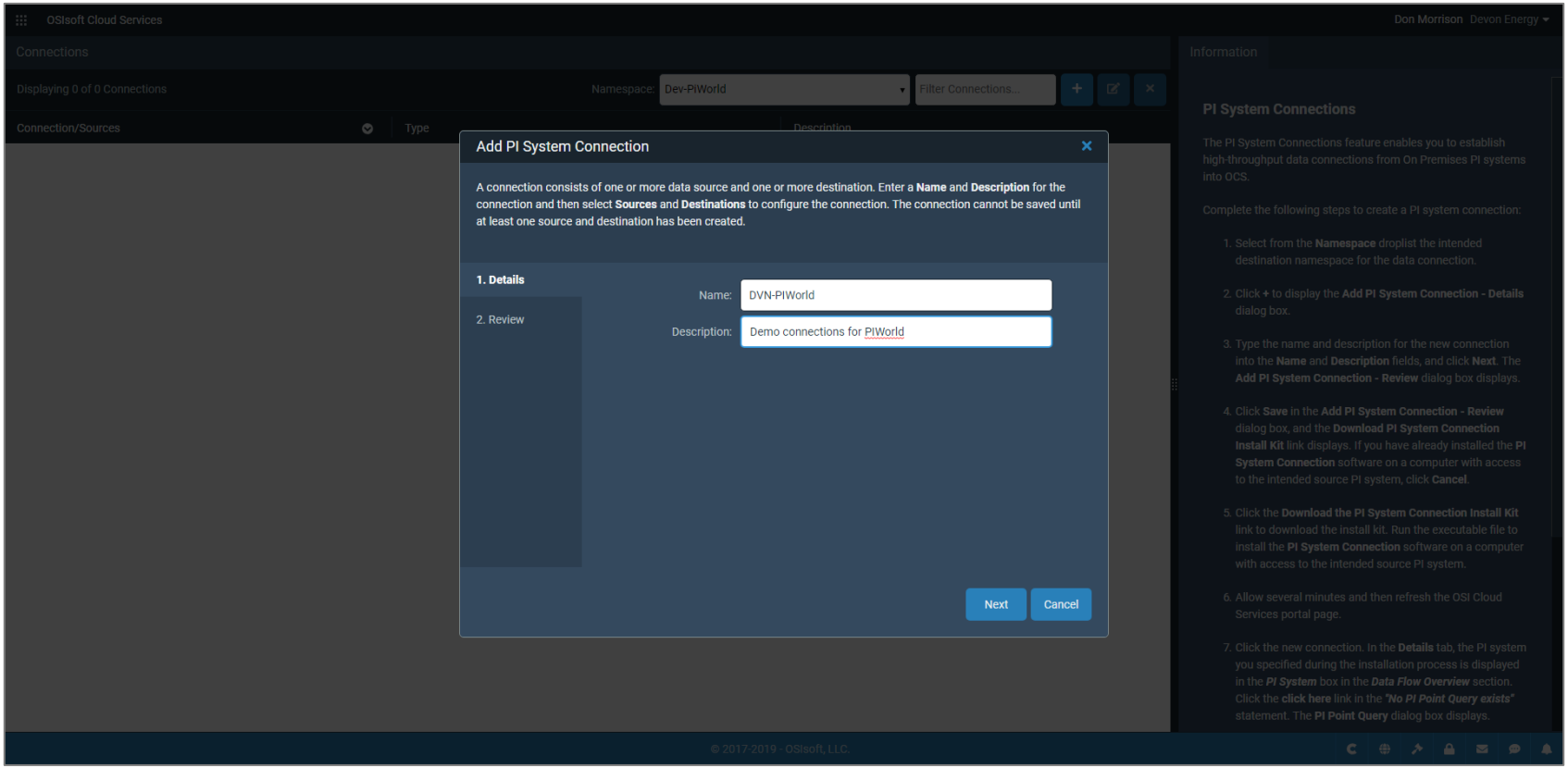
OCS Connections



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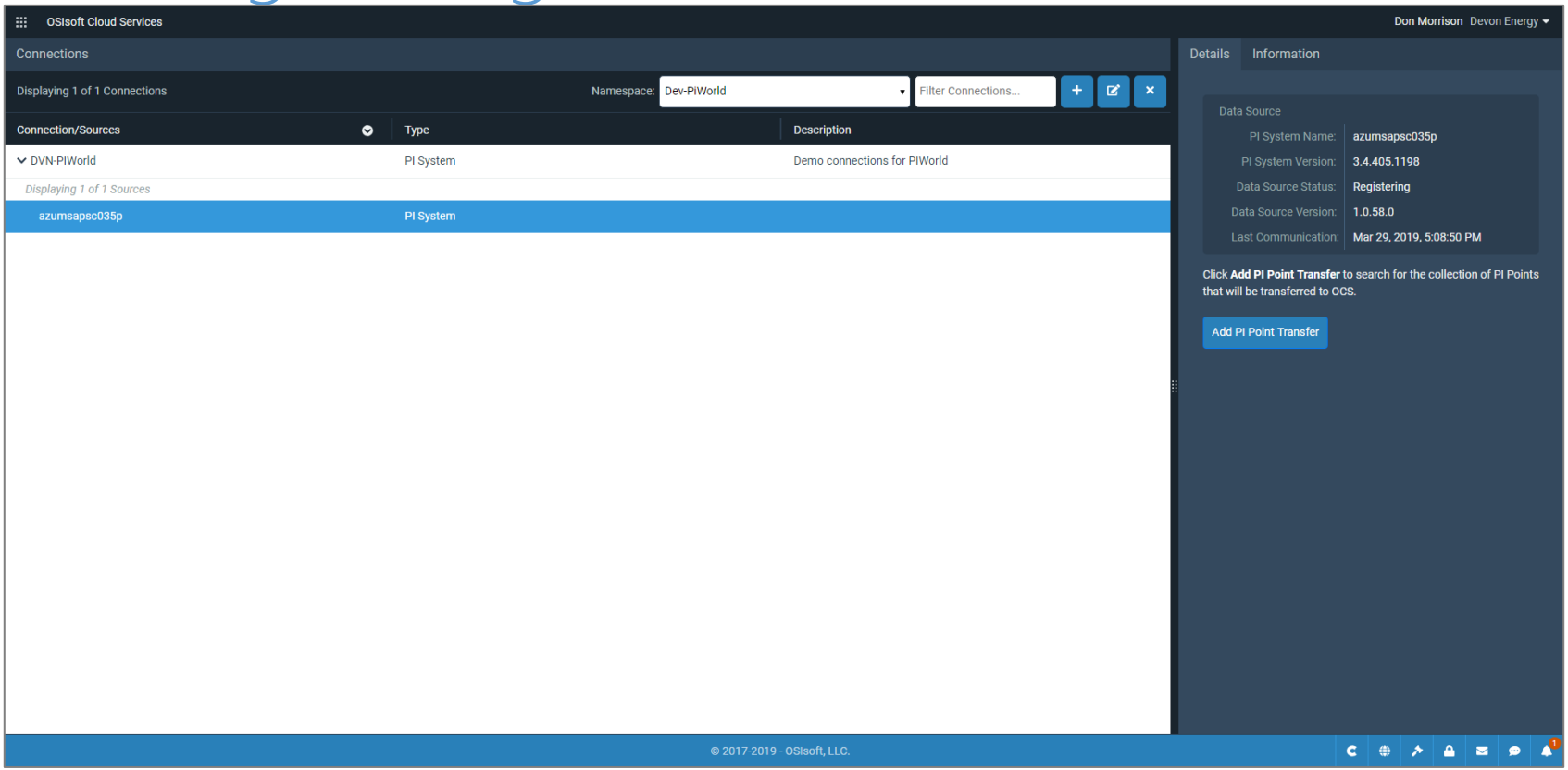
OCS Agent Registration



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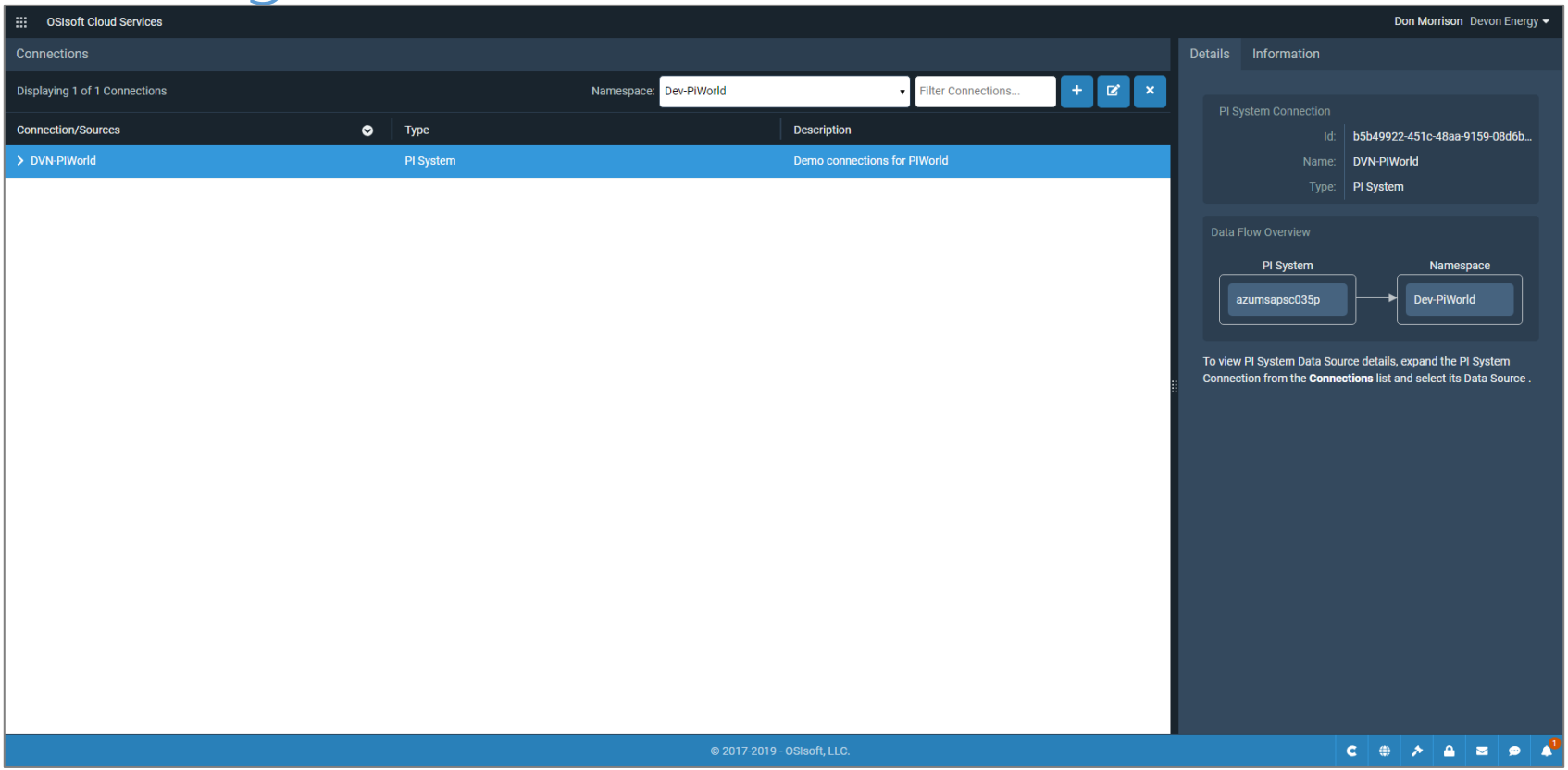
OCS Agent Connection



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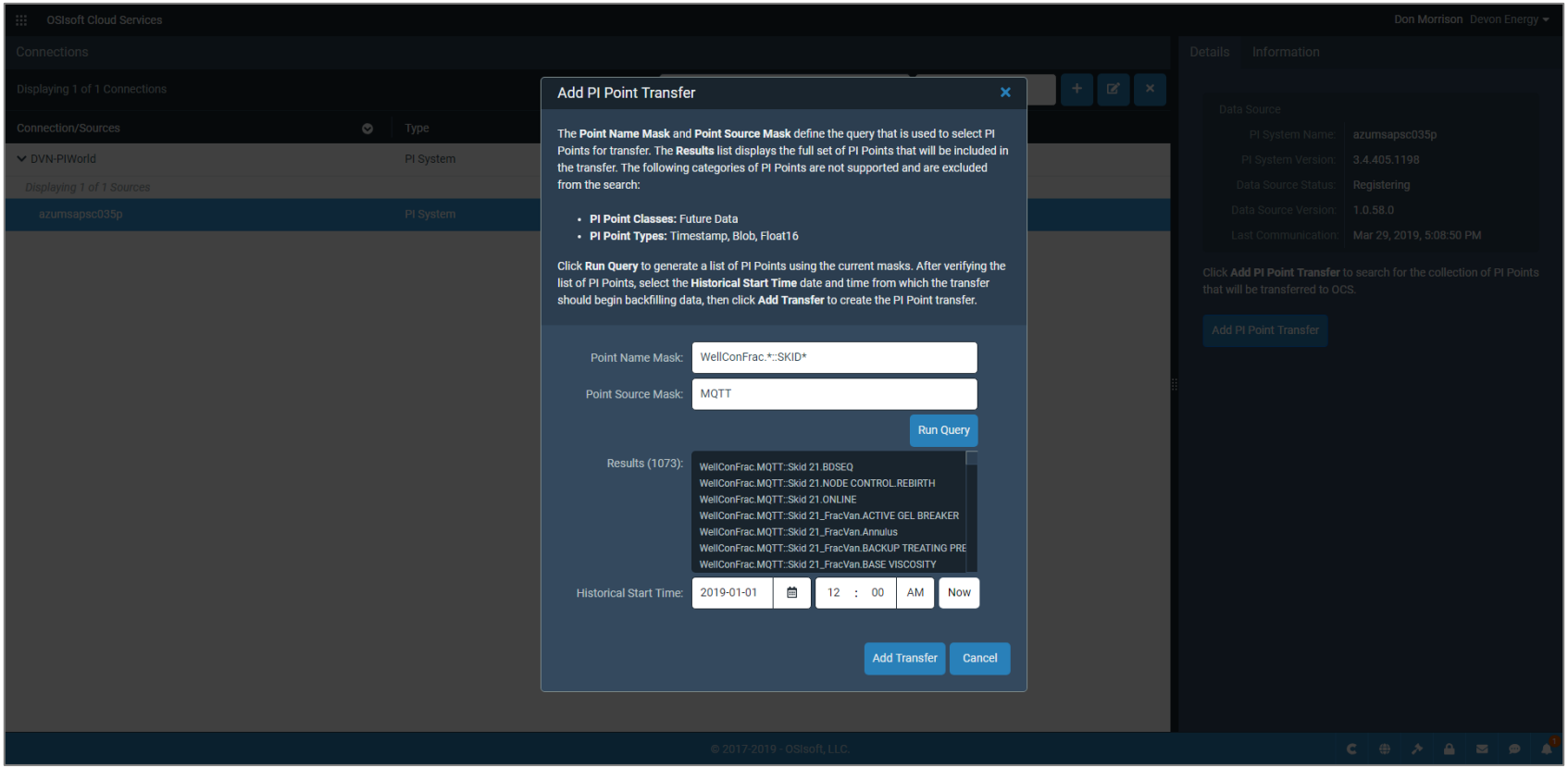
OCS Point Transfer



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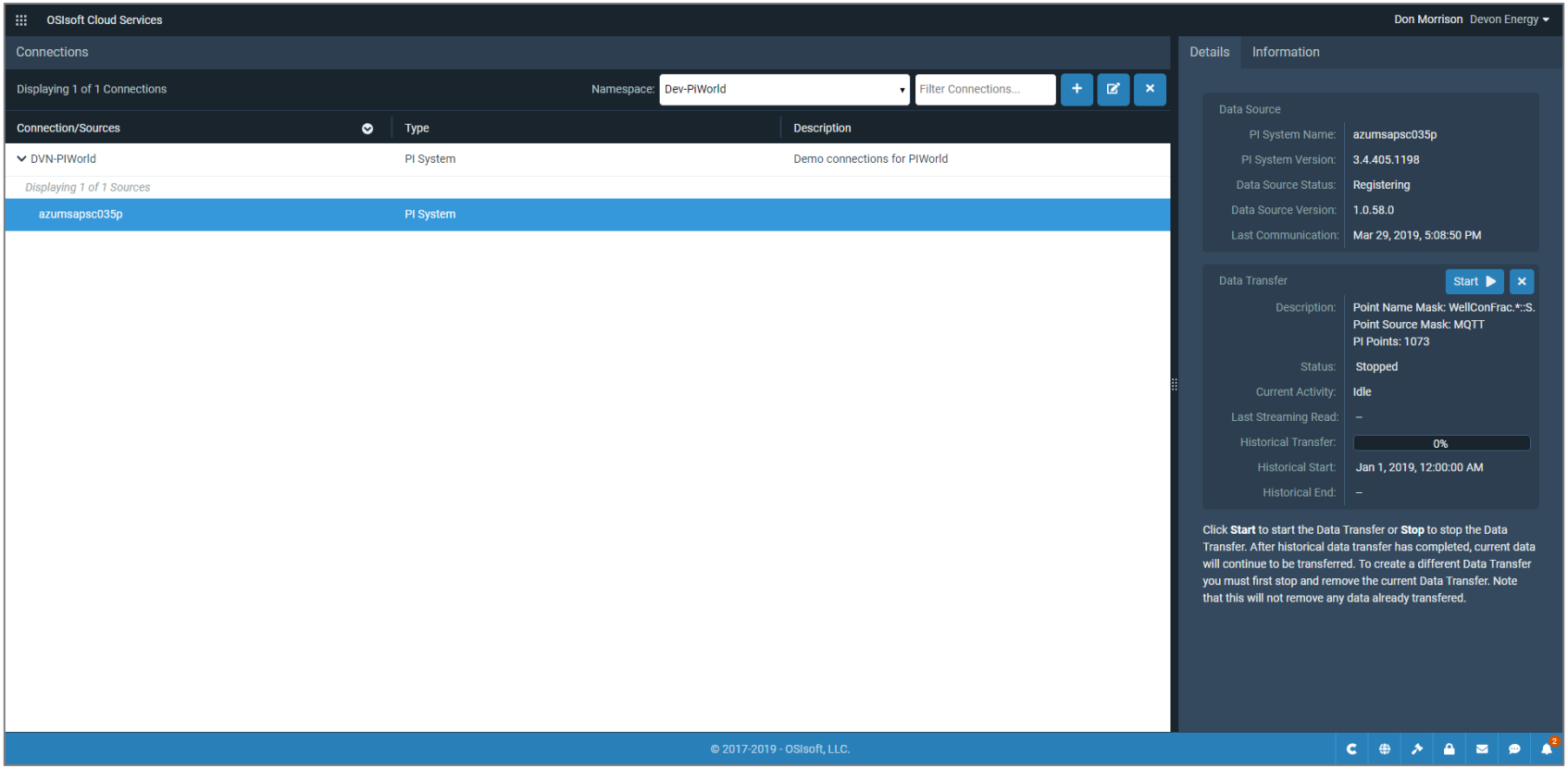
OCS Data Transfer



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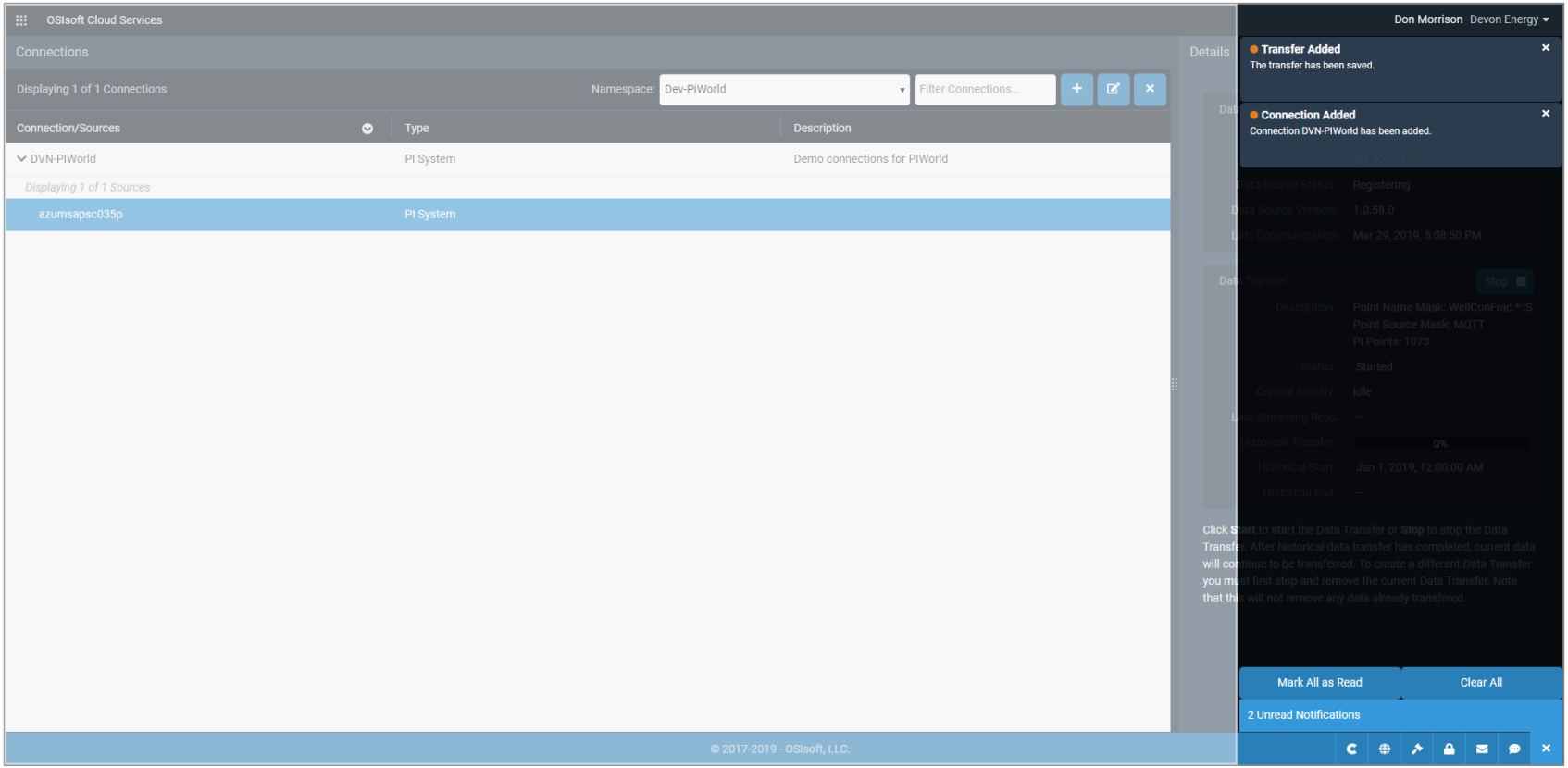
OCS Notifications



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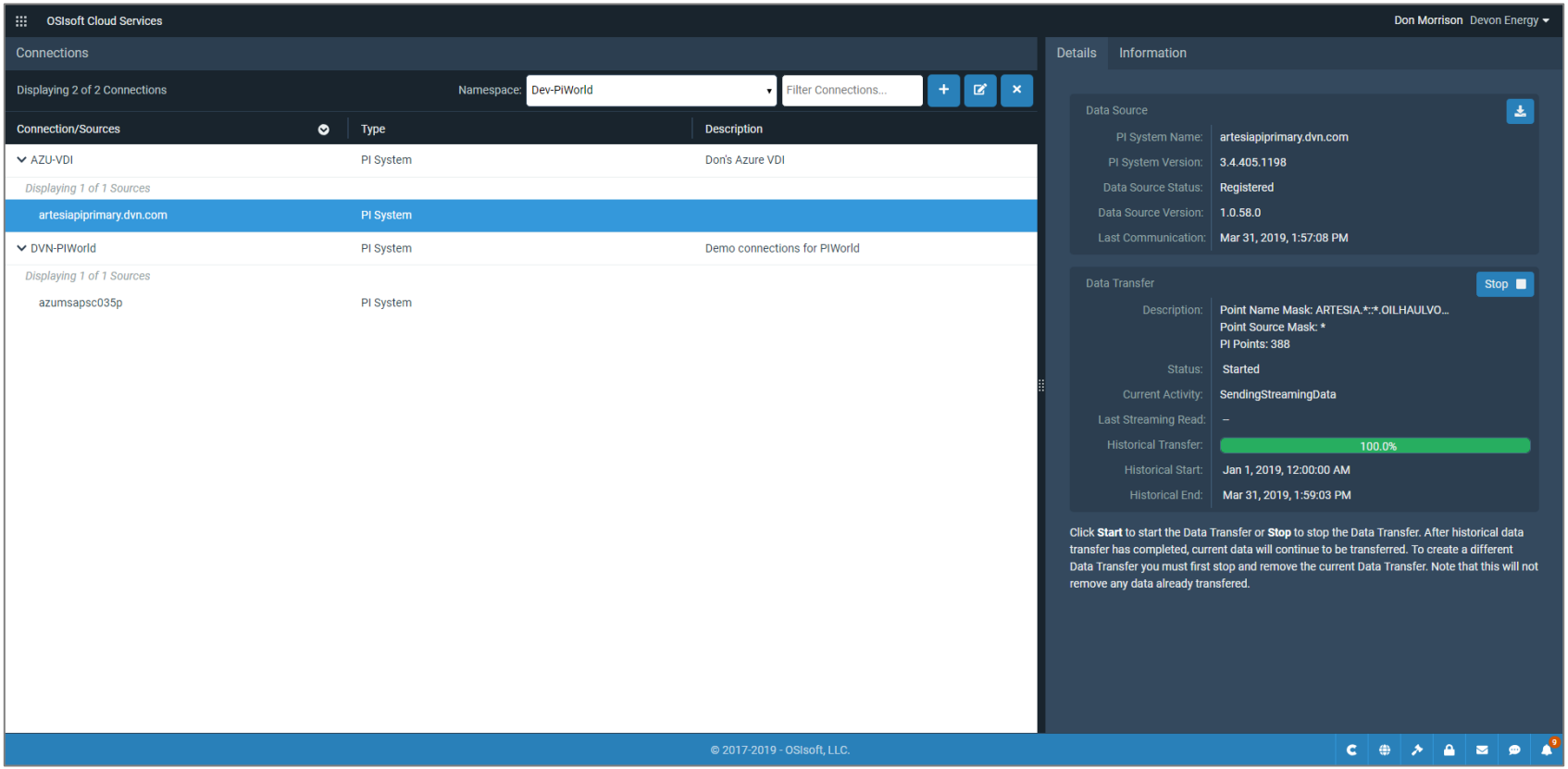
OCS Transfer Status



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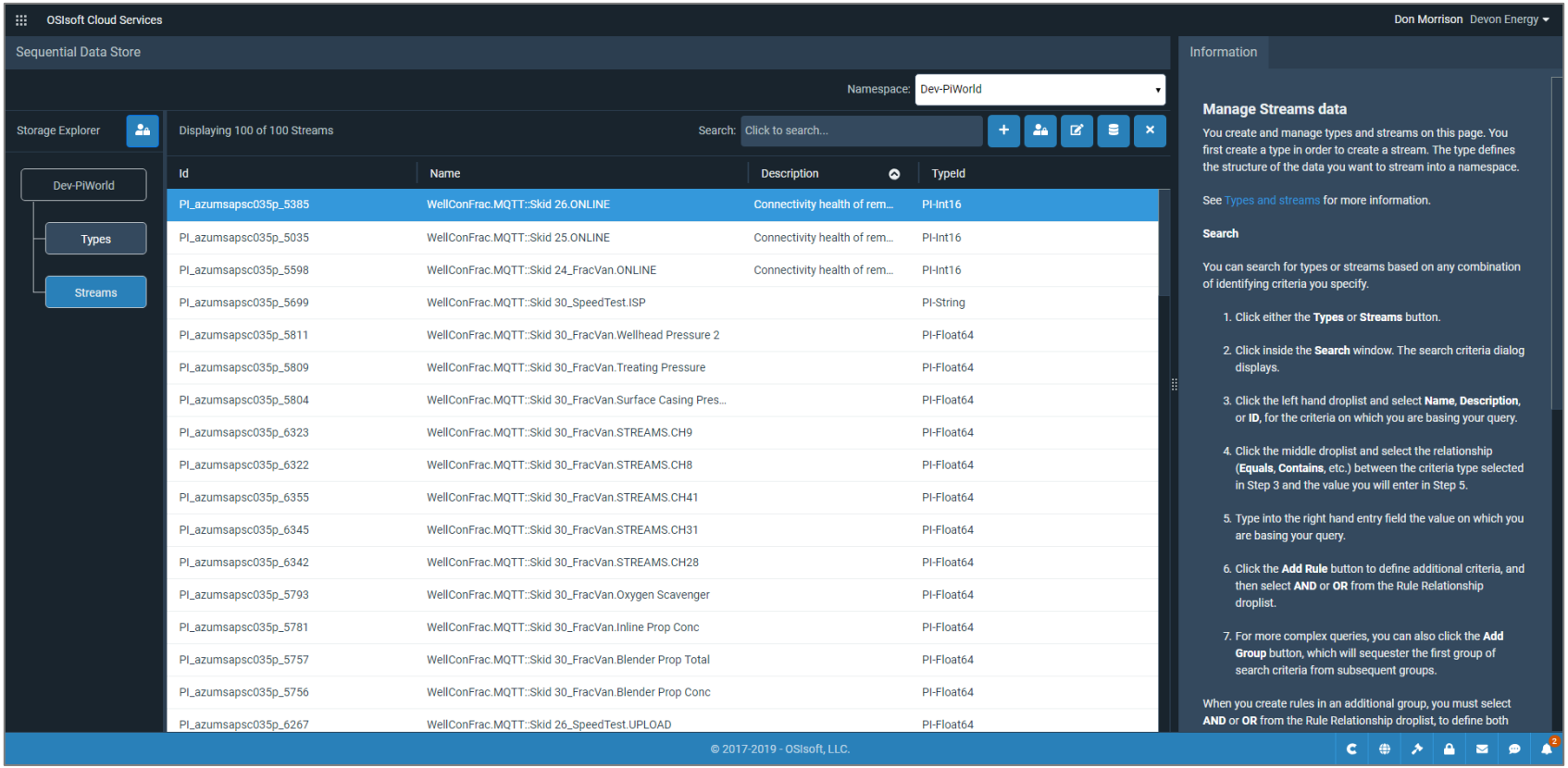
OCS Streams



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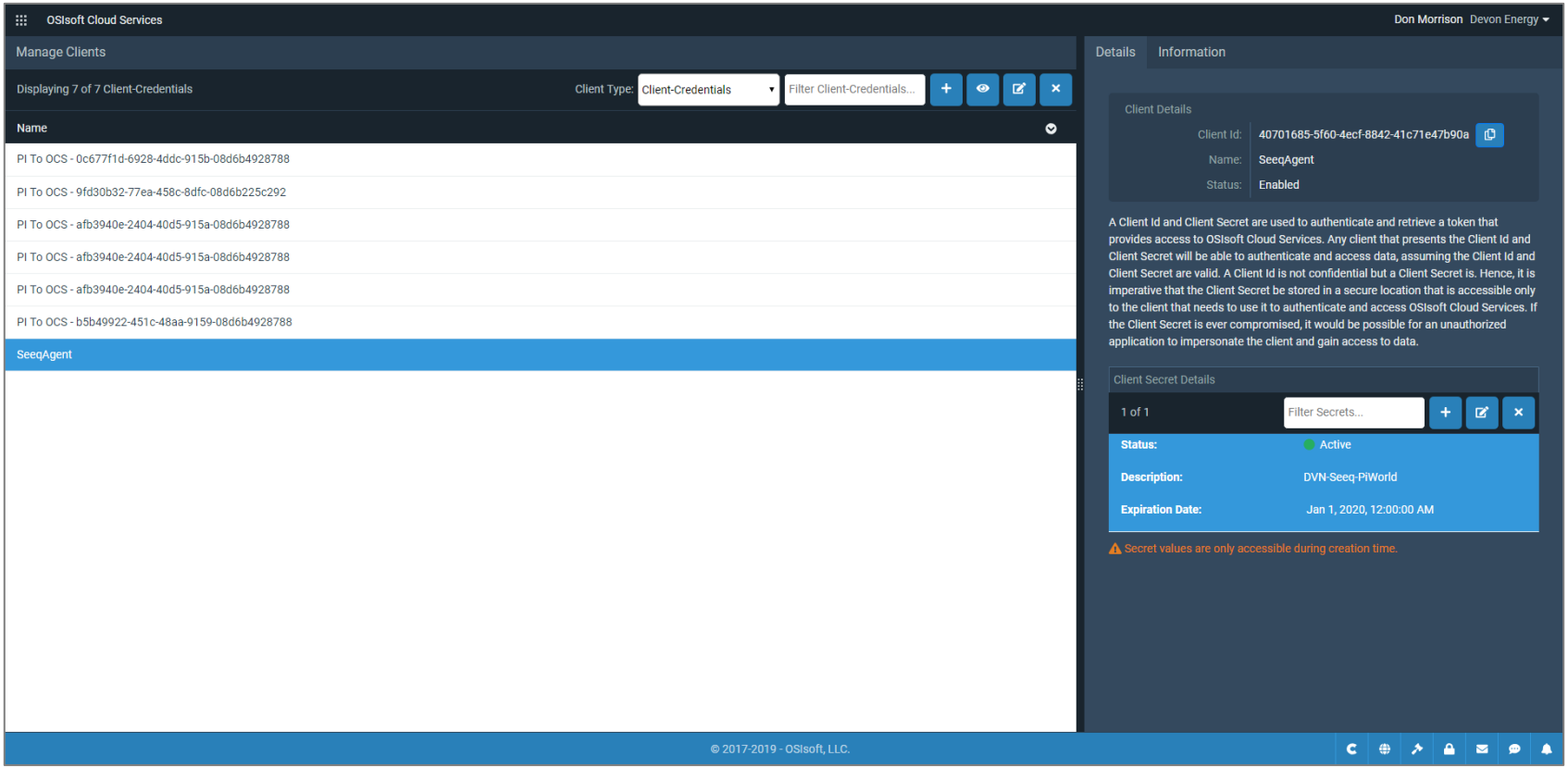
OCS Clients



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Business **EXAMPLES**

- WELL STIMULATION DATA ENHANCEMENT
- OIL TANK HAULING DETECTION
- SUBMERSIBLE PUMP CYCLE DETECTION

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Well Stim Operations

* https://corporate.exxonmobil.com

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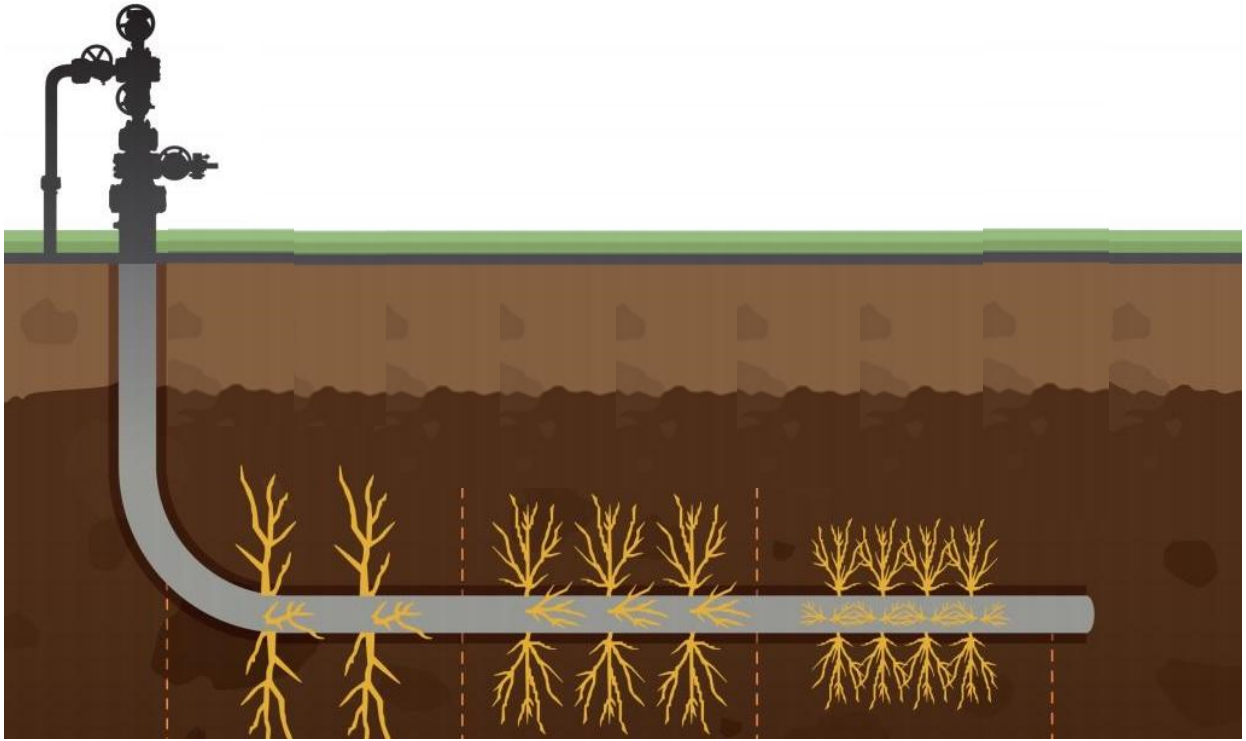
Well Stim Operations



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Well Stim – Data Enhancement

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Well Stim

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Oil Hauling – Event Detection

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Oil Hauling – Event Detection

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DEMO

Haul Off

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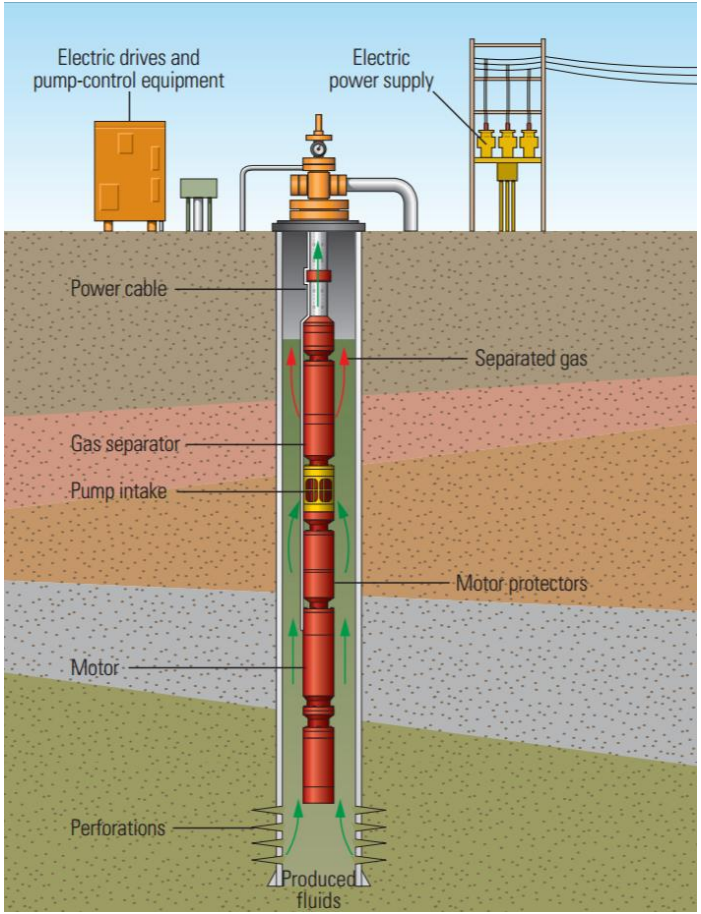
Electric Submersible Pump

- Extract lots of fluid!
- Expensive equipment
- Frequent On/Off Cycles cause premature motor failure
- Expensive to replace/repair



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ESP – Cycle Detection

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DEMO

ESP High Cycles

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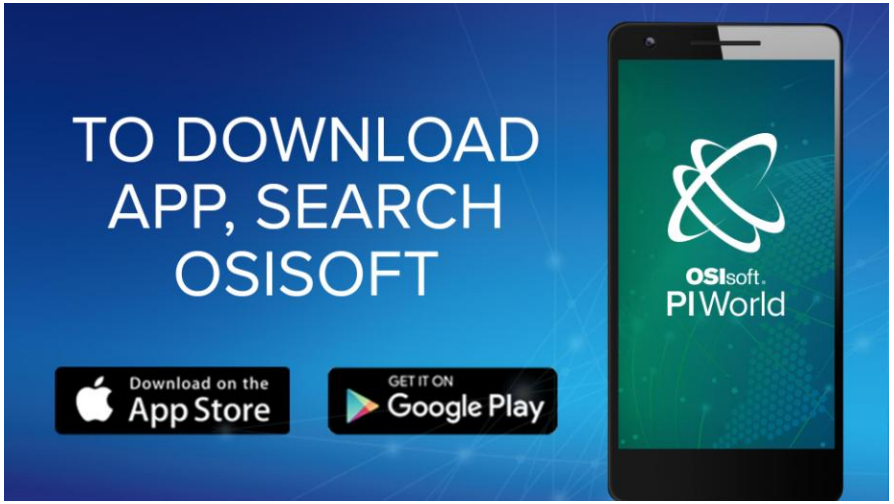
Questions?

Please wait for the **microphone**

State your **name & company**

Please remember



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