OSIsoft®

USERS CONFERENCE 2016

April 4-8, 2016 | San Francisco

TRANSFORM YOUR WORLD

Enterprise Level Situational Awareness for Assets and Infrastructure

Presented by **Marshall Worthey**

CRITIGEN

© Copyright 2016 OSIsoft, LLC

Who is CRITIGEN?

Our vision is to transform the way our world thinks and communicates

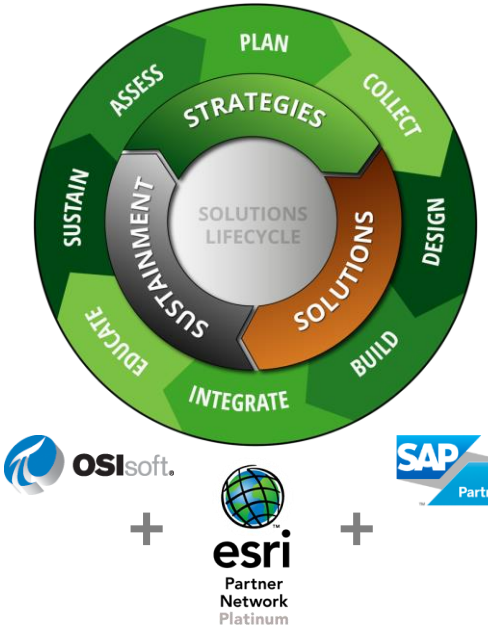
Our mission is to unlock the power of location
by integrating spatial relationships and technology with business data and processes,
leveraging our unique perspectives and innovations
to revolutionize decision-making

© Copyright 2016 OSIsoft, LLC

CRITIGEN

- We are a premier, full-lifecycle provider of:
  - Enterprise integration of geospatial data and systems
  - Geospatial application development (web, desktop, mobile)
- We are an Esri GIS Platinum Partner
- We connect Esri GIS with:
  - PI System and PI Integrator for Esri ArcGIS
  - SAP Mobile, HANA, EAM, and other ERP
- Our customers are in the Commercial, and Federal, State and Local government markets

Strategy + Process + Technology

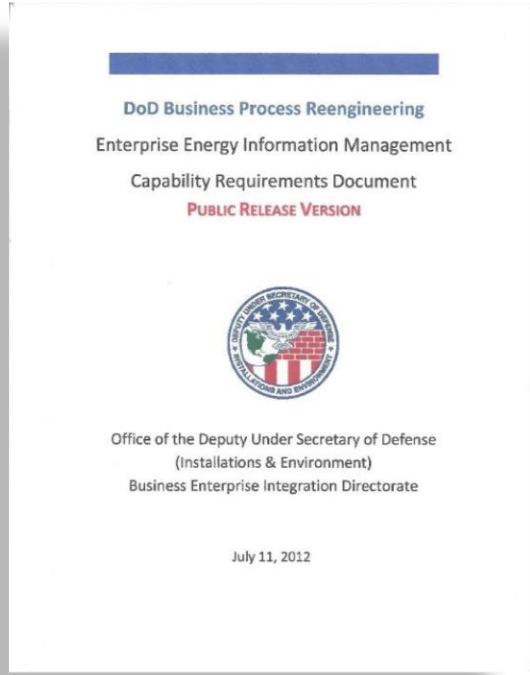


© Copyright 2016 OSIsoft, LLC

Business Challenge: Obtain actionable information from enterprise to asset across DoD

- With more than 350,000 buildings and 600,000 road vehicles, the federal government is our nation's largest energy consumer
- Federal mandate: Increase efficiency:
  - Monitor energy consumption (installation to building)
  - Identify opportunities to gain efficiencies
  - Facilitate reporting

USACE Challenge: Monitor energy consumption for 200+ Installations with hundreds of smart metered buildings each – without drowning in the data


DoD Business Process Reengineering

Enterprise Energy Information Management

Capability Requirements Document

PUBLIC RELEASE VERSION

Office of the Deputy Under Secretary of Defense
(Installations & Environment)
Business Enterprise Integration Directorate

July 11, 2012

"The ability to collect, analyze and monitor Information across the enterprise is crucial"

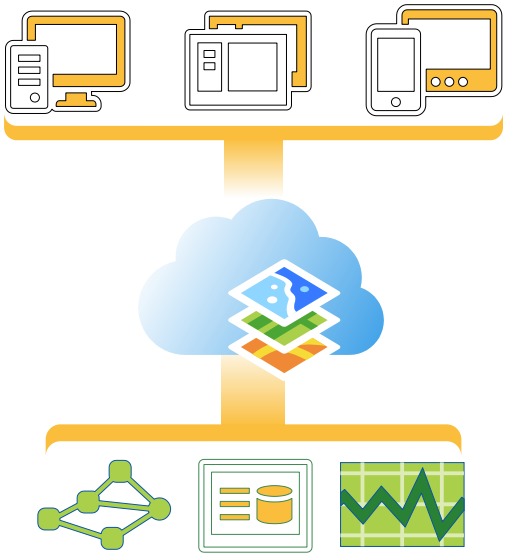
© Copyright 2016 OSIsoft, LLC

How the PI System was Applied

CRITIGEN

esri

OSIsoft.



Energy InSight
on any platform

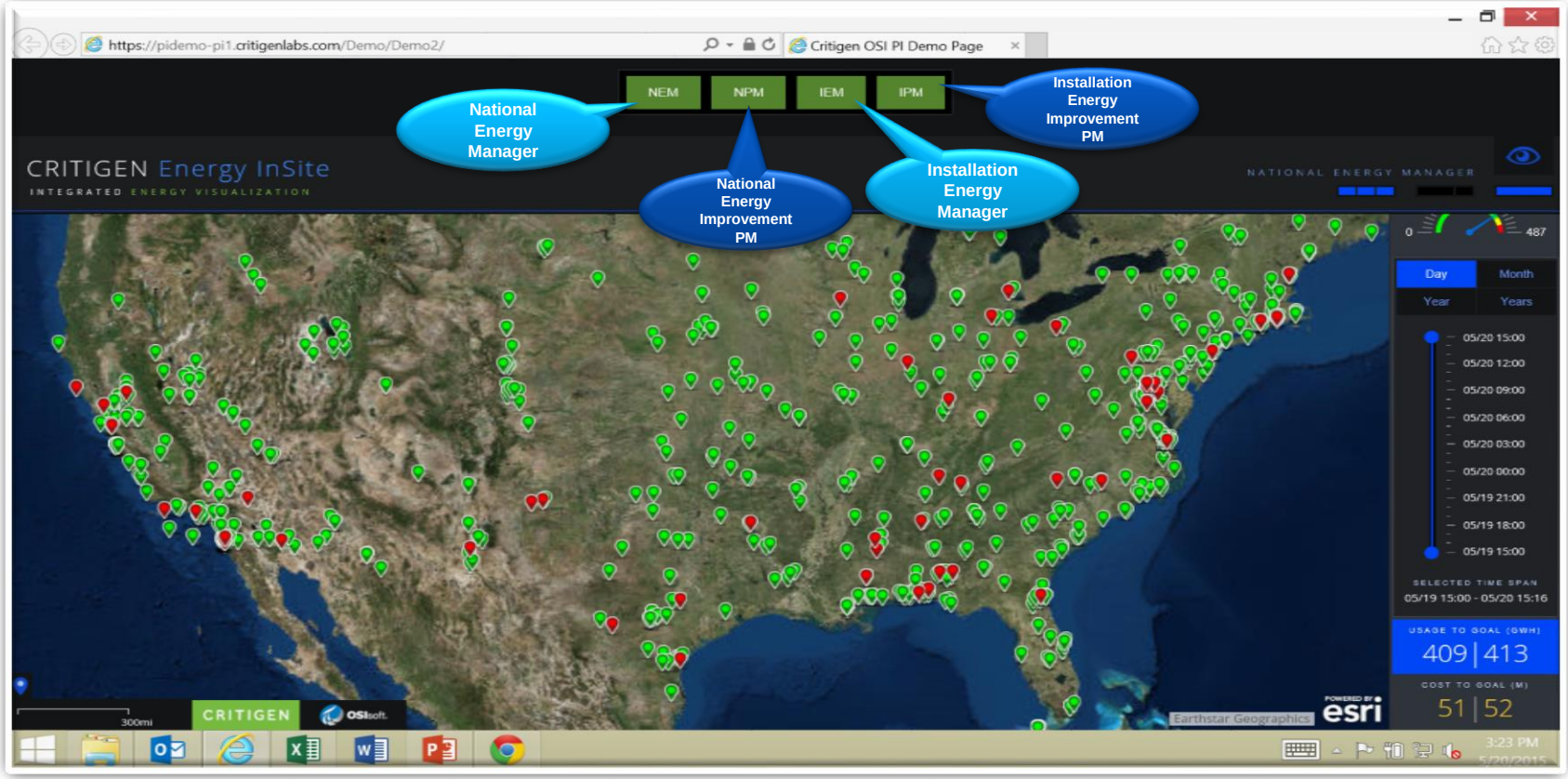
ArcGIS Server +
ArcGIS Online

PI System +
PI Integrator for Esri

Data Driven, Actionable Knowledge Across the Enterprise

© Copyright 2016 OSIsoft, LLC

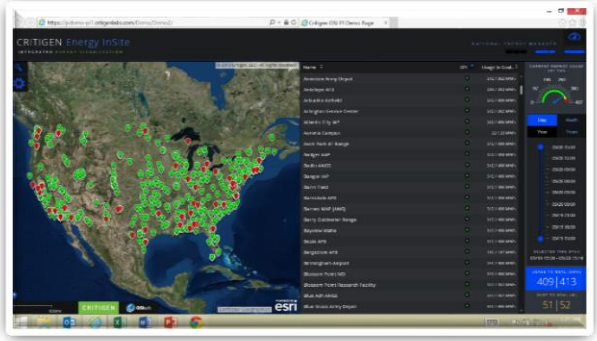
Role Based Access for Users

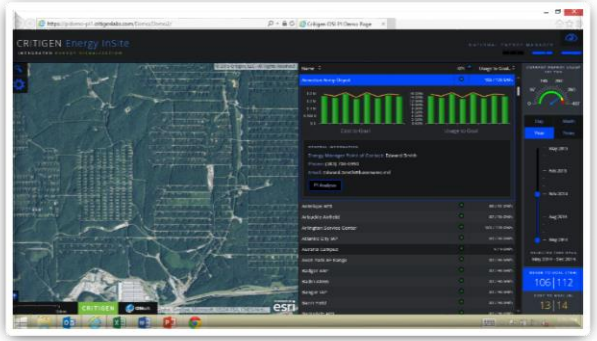


© Copyright 2016 OSIsoft, LLC

Enterprise View: National to Installation

- **Executive enterprise view of energy performance by organization:**
  - ✓ Installation
  - ✓ Command (e.g. AMC)
  - ✓ Region
- **'At-a-glance' enterprise view for decisions and policy that:**
  - ✓ DePIcts energy consumption vs. goals via the integration of sensor data, PI System and GIS
  - ✓ Identifies installations targeted for energy improvement projects
  - ✓ Ties to business systems (e.g. real property systems) to associate with asset owner or tenant
  - ✓ Ties energy consumption to policy/plan compliance
  - ✓ Provides information at the installation or across the enterprise

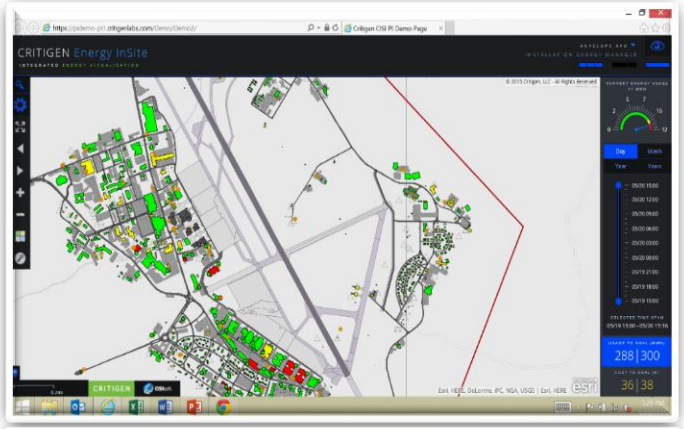


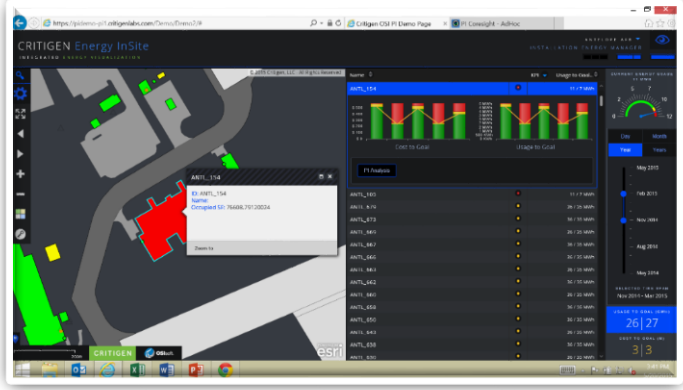


© Copyright 2016 OSIsoft, LLC

Installation View: Installation to Building

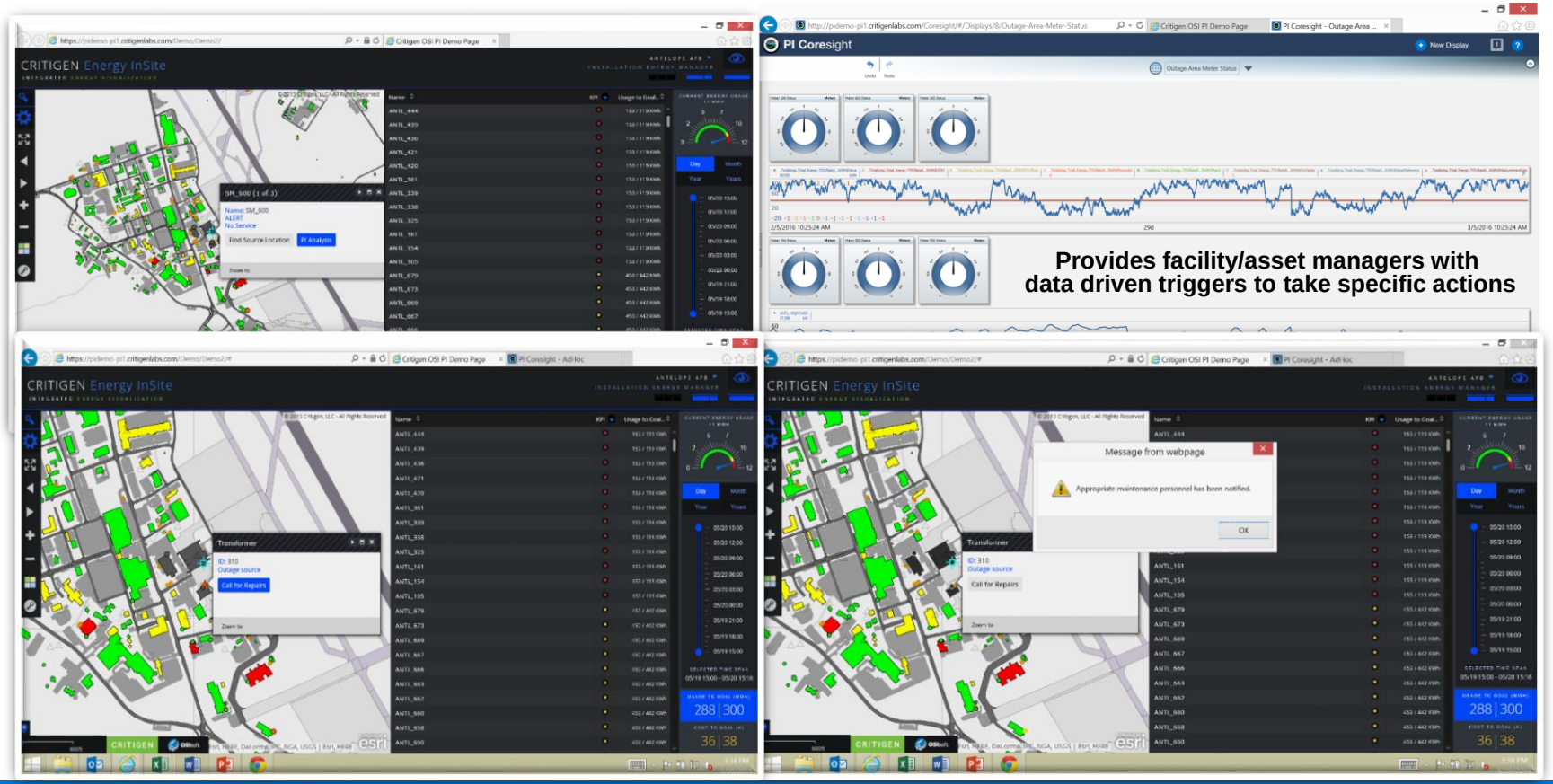
- **Provides energy/facility managers with an <u>installation view</u> of energy performance by:**
  - ✓ Depicting energy consumption vs. goals via the integration of sensor data, PI System and GIS
  - ✓ Installation roll up
  - ✓ Facility (e.g. Building Number)
  - ✓ Meter or other asset
- **Provides an 'at-a-glance <u>installation view</u> that:**
  - ✓ Ties to business systems (e.g. real property systems) to associate with asset owner or tenant
  - ✓ Ties condition, alerts and status to the map – at any point in time





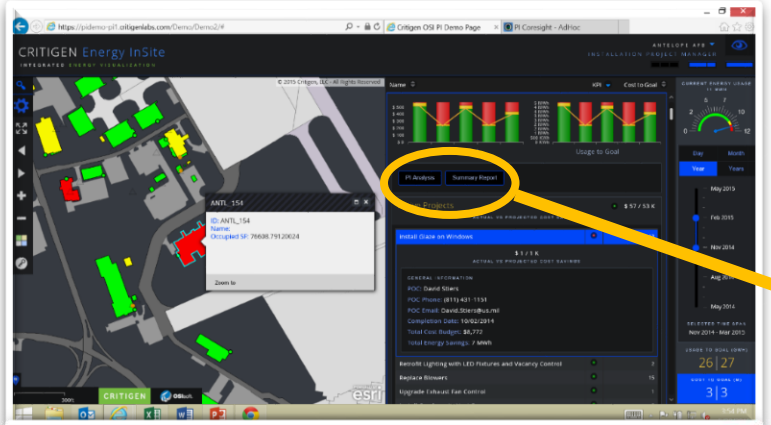
© Copyright 2016 OSIsoft, LLC

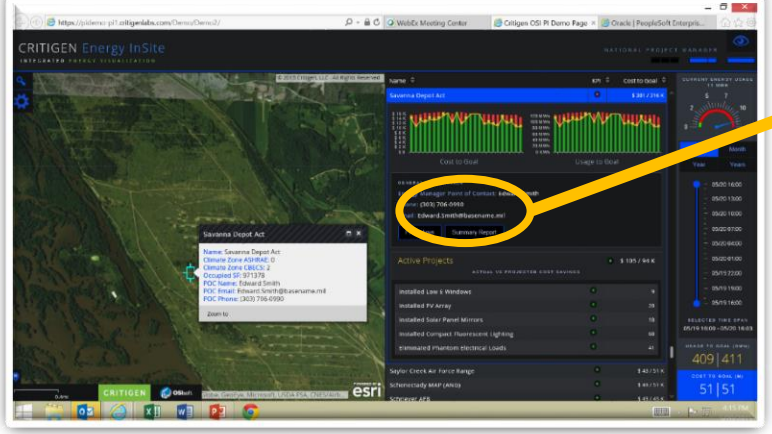
Installation: Energy Use, Troubleshooting and Notification

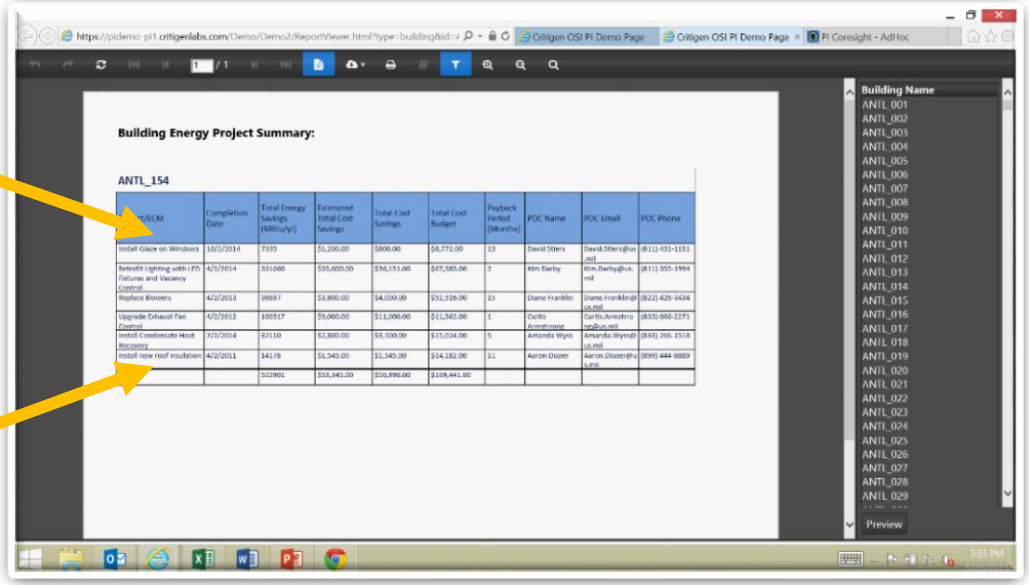


© Copyright 2016 OSIsoft, LLC

National and Installation PM Roles: FEMP 3.0 Reporting





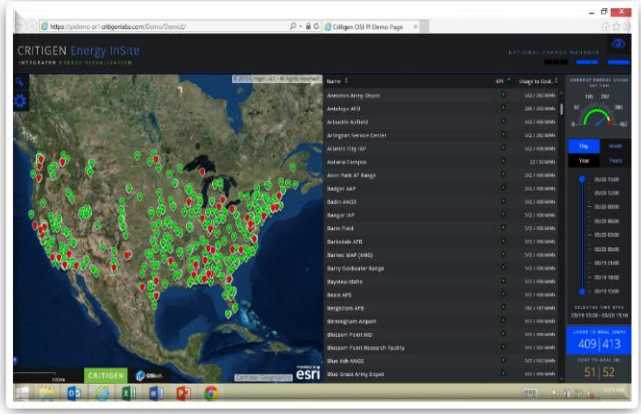


© Copyright 2016 OSIsoft, LLC

Using InSite to meet the goals of the USACE WAVE program

COMPANY and GOAL

USACE Huntsville Energy Information Management Program required a prototype for the Wide Area Visualization Environment to monitor energy consumption at installations based on user role



CHALLENGE

Monitor energy consumption for 200+ Installations with hundreds of smart metered buildings each – without drowning in the data

- Federal policies and mandates driving the need
- Integration of operational intelligence with place and time

SOLUTION

Integration of smart meter data stored in the PI System with GIS and real property data via the PI Connector for ArcGIS in an intuitive user interface

- PI System
- PI Coresight
- PI Integrator for Esri ArcGIS
- ArcGIS for Server
- Agile Development of Custom UI Driven by OSD and USACE requirements

RESULTS

USACE Huntsville is utilizing InSite to demonstrate WAVE functionality and goals across the DoD to drive the EIM program forward

- WAVE Development is in progress
- Initial deployments expected GFY 17

© Copyright 2016 OSIsoft, LLC

Contact Information

Marshall Worthey
Federal Program Manager
Critigen
Marshall.worthey@critigen.com
(719) 651-9361

© Copyright 2016 OSIsoft, LLC

Questions

Please wait for the **microphone** before asking your questions

State your **name & company**

Please remember to…

Complete the Online Survey for this session

http://ddut.ch/osisoft

© Copyright 2016 OSIsoft, LLC

감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado

PI System integration with GIS makes the Map your Dashboard

© Copyright 2016 OSIsoft, LLC

OSIsoft®

USERS CONFERENCE 2016

April 4-8, 2016 | San Francisco

TRANSFORM YOUR WORLD