

OSIsoft Strategic Alliances

Mark Peterson
OSIsoft
Feb 24th, 2012

Microsoft

- The Microsoft & OSIsoft Alliance
- Microsoft Industry approach & Reference Architectures
- OSIsoft PI & Microsoft Technology Integration
 - Next Generation Business Intelligence
- Microsoft Technology Centers

Cisco

- The Cisco & OSIsoft Alliance
- Collaborative infrastructures
- Cisco UCS express & The PI System
- Cisco Live! 2012 - Online Demo

Strategic Alliance Partners



**Real-Time Data
Infrastructure**

Microsoft

**Productivity tools
& Technology
Platform**



**Network Comms
Video and Data
Connectivity**



- OSIsoft migrated the PI System to Windows NT in 1993
 - OSIsoft was #3 ISV to sign up for VBA in 1997
- OSIsoft has a strong Microsoft technology relationship & focus – OSIsoft is an early adopter of numerous Microsoft technologies
 - OSIsoft is a Globally managed Microsoft ISV Partner: One of few in the Manufacturing & Resources sector
- OSIsoft has a strong and dedicated Microsoft Alliance team with reciprocal resources from Microsoft



Microsoft Industry approach and Solution Areas



Financial Services

Banking

Capital Markets

Insurance



Manufacturing & Resources

Discrete Manufacturing

Oil & Gas, Mining

Power & Utilities

Process Manufacturing

Consumer Goods *



Retail

Retail

Hospitality



Communications & Media

Telecom

Media & Cable



Public Sector

Government

Public Safety & National Security

Health

Education

Microsoft EMEA M&R FY12 Field team



Microsoft Industry Reference Architectures



Power & Utilities

SERA
Smart
Energy
Reference
Architecture



Oil & Gas

MURA
Microsoft
Upstream
Reference
Architecture



Process Mfg.

ChemRA
Chemical
Reference
Architecture



MURA - collaboration



Microsoft, Upstream Reference Architecture • MURA Declarative I...

None

On this page search for: laaocf

3

Search Criteria

Search Criteria

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14-S-14			X		
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16-S-14			X		
34-S-14			X		
24-S-14			X		
27-S-14			X		
44-S-14			X		

OSIsoft PI Trend

3

Enabling Declarative Integration for Composite Solutions by Leveraging an Upstream Reference Architecture

By Paul Nguyen and Abdallah Fateen, Microsoft

Companies working in upstream oil and gas have developed a rich array of tools and technologies to meet the technical, operations, and business challenges for this vast and complex industry. But making these tools and technologies work together efficiently, reliably, and cost-effectively has itself been a vexing challenge.

Upstream technical and business professionals must be able to select individual tools and technologies to best meet the challenges specific to their companies and then integrate those tools and technologies into seamless and flexible composite solutions. These composite solutions are vital to enabling the data sharing, collaboration, and cooperation to support the integrated operations needed to meet twenty-first-century energy demands.

Traditionally, application integration has required custom, point-to-point connections that are maintenance-intensive and costly.

Microsoft and participating partners are defining an upstream reference architecture that will provide guidance and support for the upstream oil and gas industry. One specific benefit of the reference architecture: it will facilitate declarative integration, a term used to describe how individual applications can configure and connect at run time. Declarative integration is crucial to delivering the composite solutions required by upstream oil and gas.

This paper describes technical details for implementing composite solutions using declarative integration. An example scenario that involves a technical search for unstructured information and access to real-time field data initiated from a geospatial component is used, which includes applications from three Microsoft partners.

For more information on the Microsoft Upstream Reference Architecture (MURA) initiative, including the white papers on the vision and high-level road map, visit <http://www.microsoft.com/mura>.

Created January 2011
Updated January 2012

Microsoft

ArcGIS Map Web Part

Map plots / zooms to selected data

Map highlights / zooms to single record

OSIsoft PI Trend

(4) User s...

OSIsoft PI Tab

PointCross Search Criteria Web Part

PointCross Search Results Web Part

lects a / from results

of temp, pressure, production 00 Pressure

0_Pressure

Trend



*Delivering continuing customer success with the PI System,
the industry leading Real-time data infrastructure*

*The worldwide leader in software, services and solutions
that help people and businesses realize their full potential.*



The key to realizing the opportunities for customer value is combining the power of the OSIsoft PI System Real-time data infrastructure with the reach of Microsoft's flexible, extensible enterprise technology.

Key Initiatives extending the value of Real-time data



Through the partnership and integrated solutions, OSIsoft and Microsoft support key initiatives that drive the use of Real-time data across organisations and create additional value from people, information and technology.



Analytics



Collaboration



Visibility

Microsoft Technologies: Integration

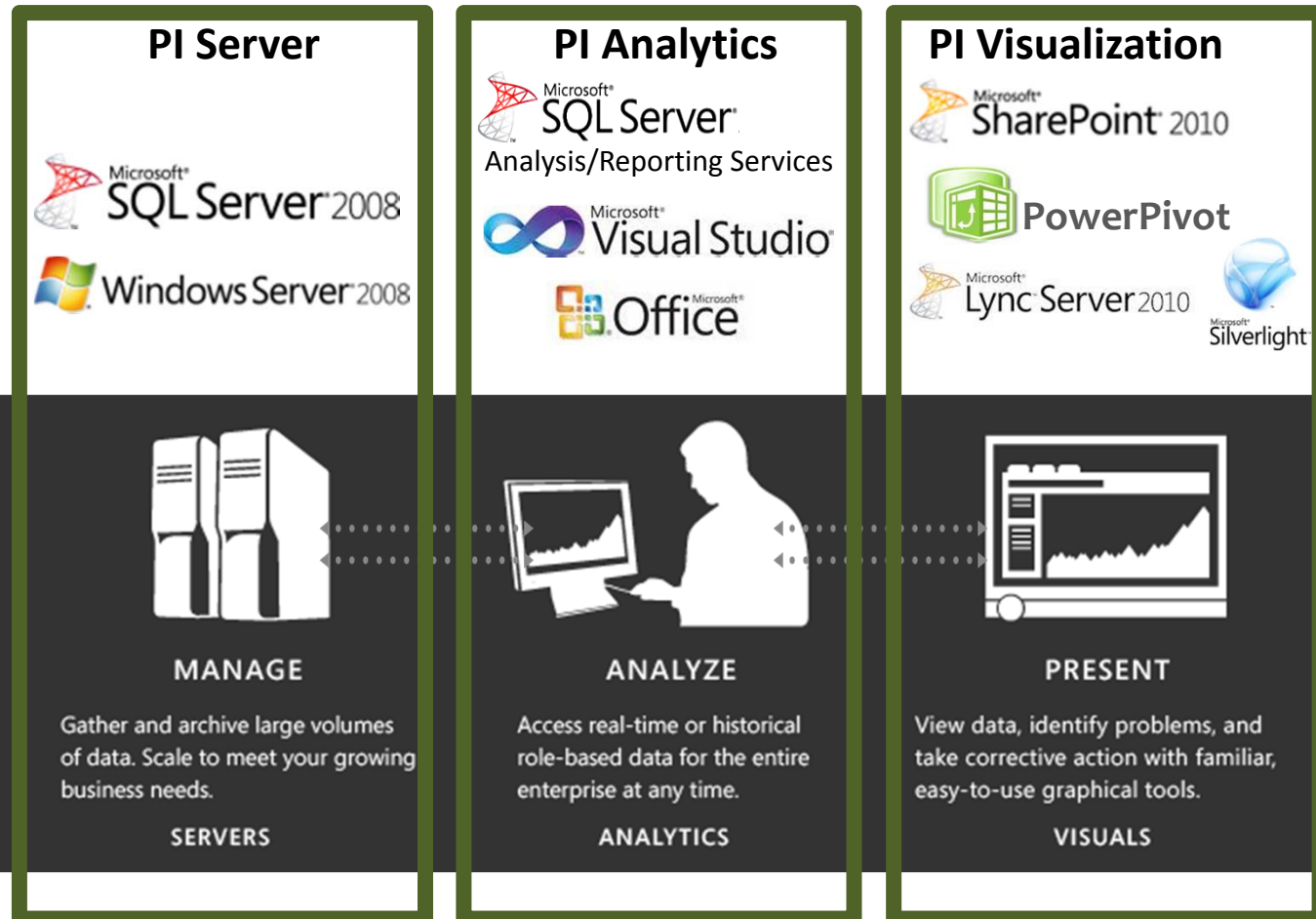


PI System Requires:

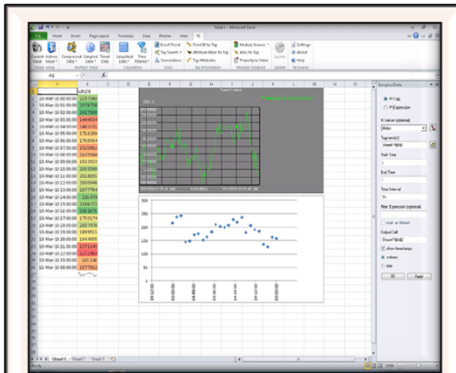
- Windows Server
- SQL Server
- Office
- SharePoint

Advanced Features:

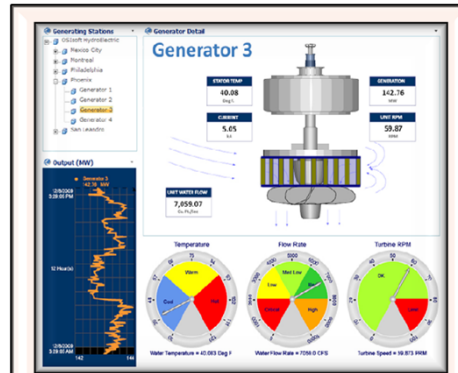
- SharePoint ECAL
- SQL Enterprise
- OCS/Lync
- Visual Studio



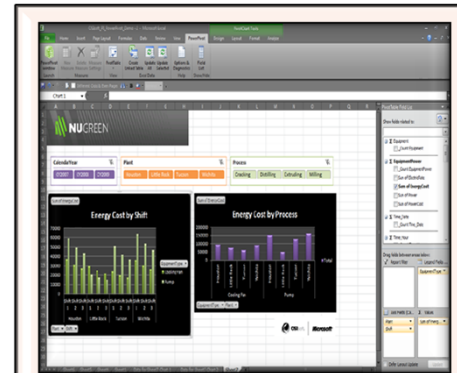
Microsoft Integration: PI for Office 2010



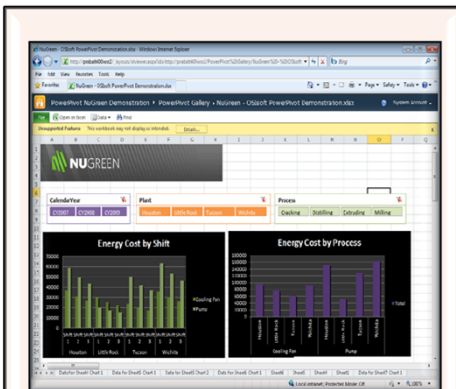
PI DataLink for Excel 2010



PI WebParts for SharePoint 2010



PI and PowerPivot for Excel 2010

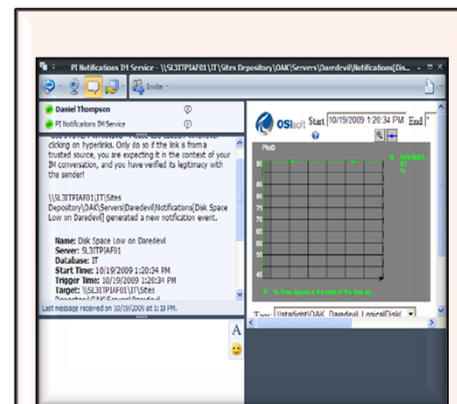


PI and PowerPivot for SharePoint 2010

PI OLEDB Enterprise 2010

PI Web Services 2010

PI Data Access Technologies



PI Notifications Lync Delivery Channel



PI Coresight



Intuitive user interface

Fast display creation

Easily share displays

Easy to deploy

Lightweight Client

browser with Microsoft Silverlight

PI System 2010 and Microsoft Integration



Business User Experience

Microsoft Office 2010

Communication and BI Platforms

Microsoft Lync

Microsoft SQL Server

OSIsoft | Microsoft Roadmap Alignment

PI System 2010

PI Clients <ul style="list-style-type: none"> PI WebParts 2010 PI DataLink 2010 PI for Office 2010 	Business User Experience Microsoft Office 2010
PI Analytics <ul style="list-style-type: none"> PI Notifications PI for StreamInsight PI Advanced Calculation Engine 	Communication and BI Platforms Microsoft Lync, Microsoft SQL Server
PI Data Access <ul style="list-style-type: none"> PI OLEDB Enterprise 2010 PI Web Services 2010 PI JDBC 2010 	Business Collaboration Platform Microsoft SharePoint 2010
PI Server <ul style="list-style-type: none"> PI Historian Asset Framework 	Data Infrastructure Microsoft SQL Server 2008 R2

PI Data Access

- PI OLEDB Enterprise 2010
- PI Web Services 2010
- PI JDBC 2010

Business Collaboration Platform

Microsoft SharePoint 2010 Enterprise

PI Server

- PI Historian
- Asset Framework

Data Infrastructure

Microsoft SQL Server 2008 R2 Enterprise



OSIsoft PI Coresight on *video*

 Windows® Phone

PI System: Putting it all together



Financial and Performance Meters

Revenue vs. Budget

Commercial Availability



Real-time

Anything in En

External Source



Microsoft SharePoint 2010

Tree navigati

Project

Control



User Presence Enabled

Using Office Communication Services to show presence
Ability to IM, email, phone for immediate attention



Microsoft Office Communications



2010 Server 2007 R2

Integrated with Real-t

based on tree navigati

de p and & project outp

es or state change

down capability



Real-time IM Alerts

Notifications to the right person, based on who is online
Escalate for immediate attention



PI Notifications IM Service - \\SL3ITPIAF01\...

Daniel Thompson
 PI Notifications IM Service

\\SL3ITPIAF01\IT\Sites
 Depository(OAK)Server\Daredevil\Notifications[Output
 Low on Daredevil] generated a new notification event.

Name: Output Low on Daredevil
Server: SL3ITPIAF01
Database: IT
Start Time: 10/19/2010 1:20:34 PM
Trigger Time: 10/19/2010 1:20:34 PM
Target: \\SL3ITPIAF01\IT\Sites
 Depository(OAK)Server\Daredevil

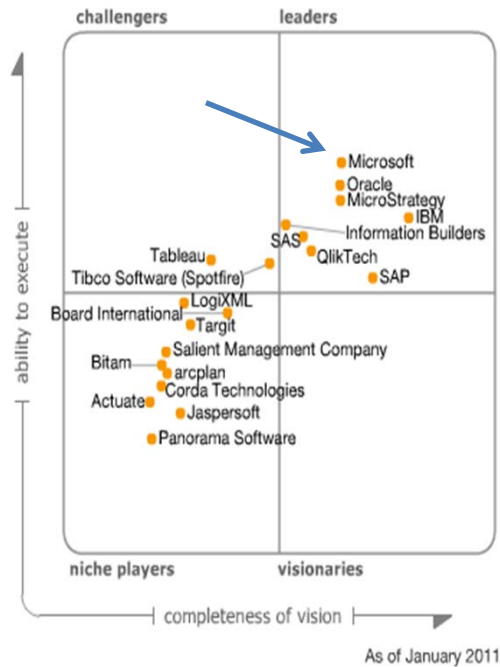
Last message received on 10/19/2010 at 1:18 PM.

5	Red Rock	87	87	89	23:45:36	38880	40046.4	505440
6	Green Rock	93	92	92	1:12:00	36360	37087.2	545400
				95	8:24:00	38160	36252	534240

Microsoft - The #1 BI Vendor

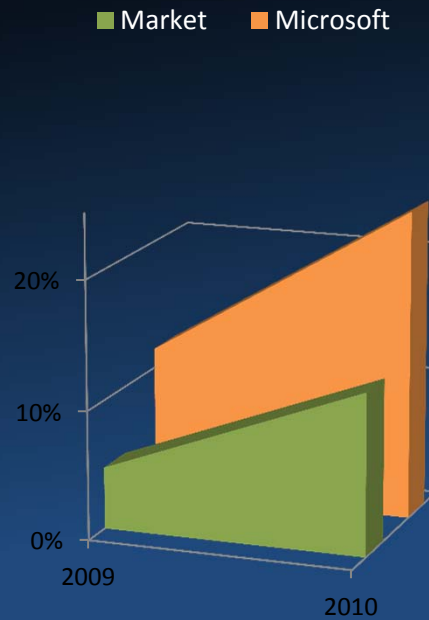


Most Recognized



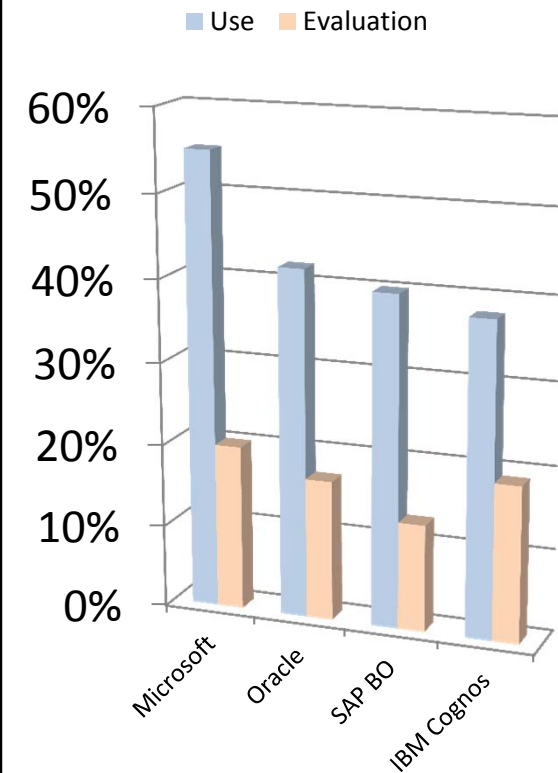
Source: Gartner, Inc., Magic Quadrant for Business Intelligence Platforms, Rita L. Sallam et al, January 27, 2011

Strongest Growth



Source: Gartner Business Intelligence market revenue growth rates

Most Deployed



Q: Are You Using, Planning, to Use or Evaluating BI Products from the Following Vendors?

Source: InformationWeek Analytics 2010 BI and Information Management Survey

The next wave: SQL Server 2012



MISSION CRITICAL CONFIDENCE



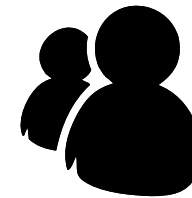
Enable **mission critical** performance and availability at **low TCO**

BREAKTHROUGH INSIGHT



Unlock **new insights** with pervasive data discovery **across the organization**

CLOUD ON YOUR TERMS



Create **business solutions fast**, on your terms across server and private or public cloud

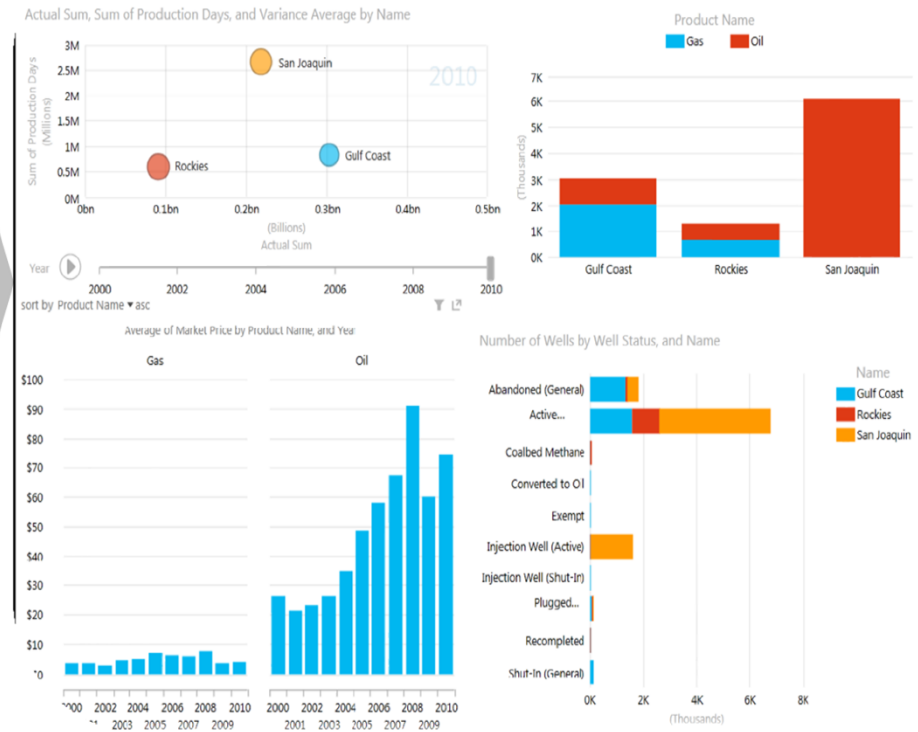
all in.

Rapid Data Exploration



*“Only **28%** of potential users are using the standard BI platform of choice in organizations”*

Oil and Gas Analysis 2000-2010



Mashup

Stunning, interactive

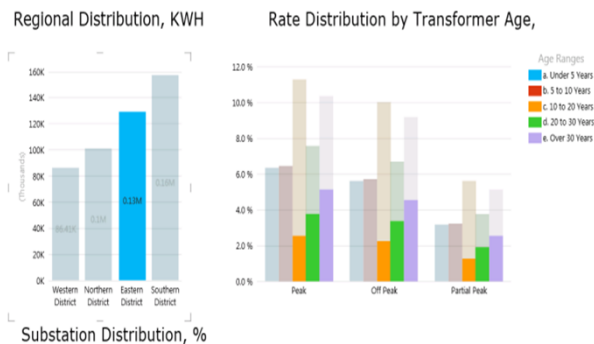


Microsoft SQL 2012 - BI: *Power View*

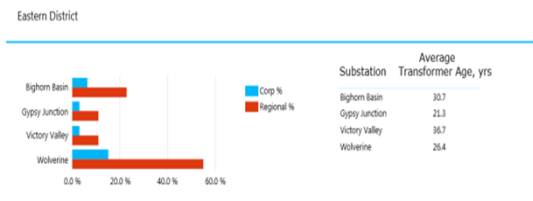


Interactive Analysis

Regional Power Distribution - Past 30 Days

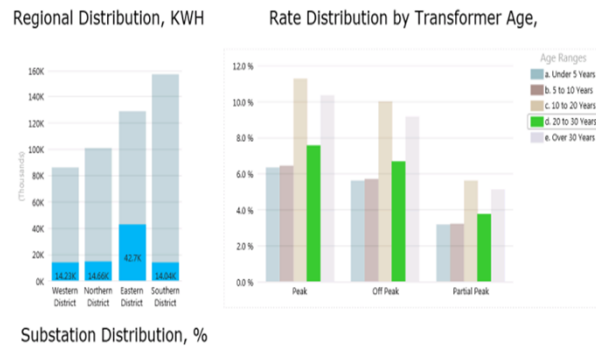


Substation Distribution, %

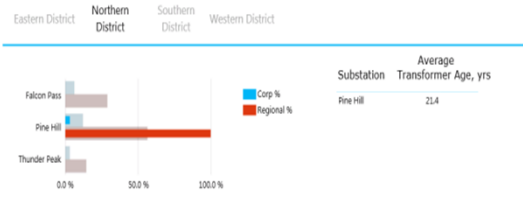


Distribution by District

Regional Power Distribution - Past 30 Days

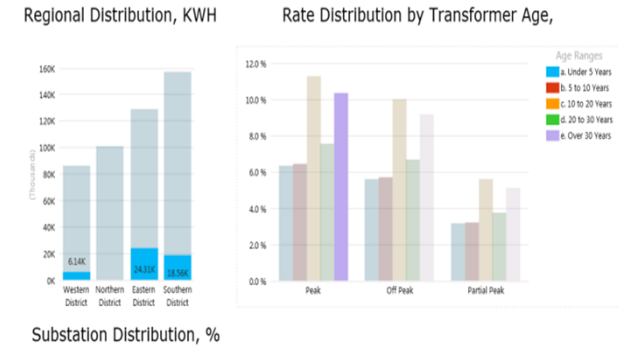


Substation Distribution, %

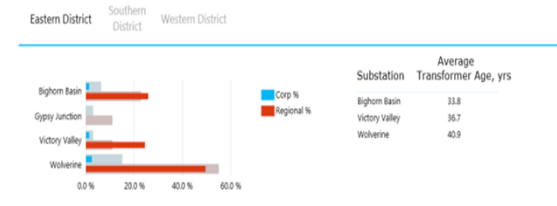


Distribution by Transformer Age

Regional Power Distribution - Past 30 Days



Substation Distribution, %



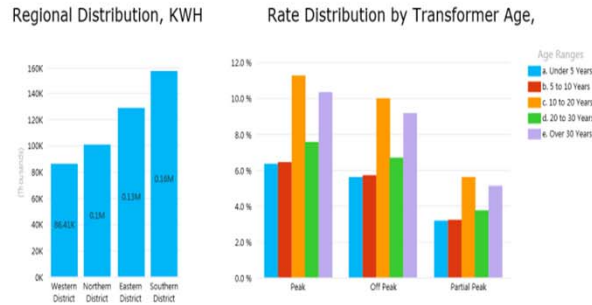
Distribution by Age and Rate

Microsoft SQL 2012 - BI: *Power View*

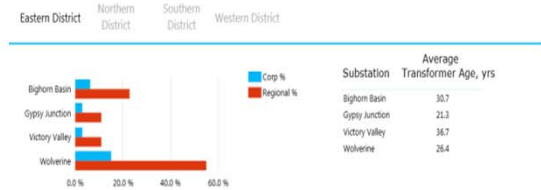


Multiple Views \ Pages

Regional Power Distribution - Past 30 Days

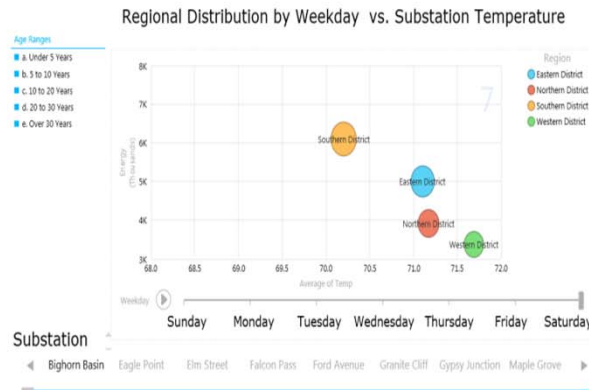


Substation Distribution, %



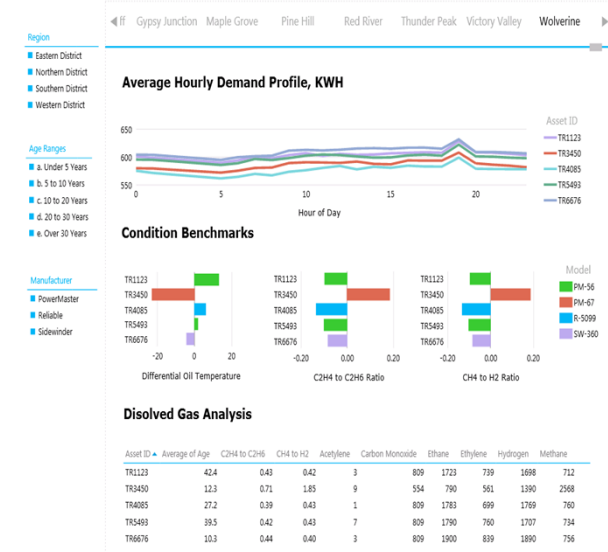
Aging Asset Risk Assessment

Power Distribution Profile - Past 30 Days



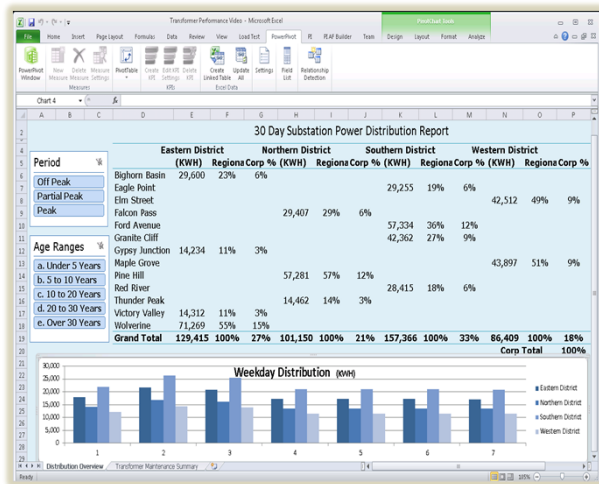
Weekday Distribution Profile

Substation Transformer Condition and Benchmarking

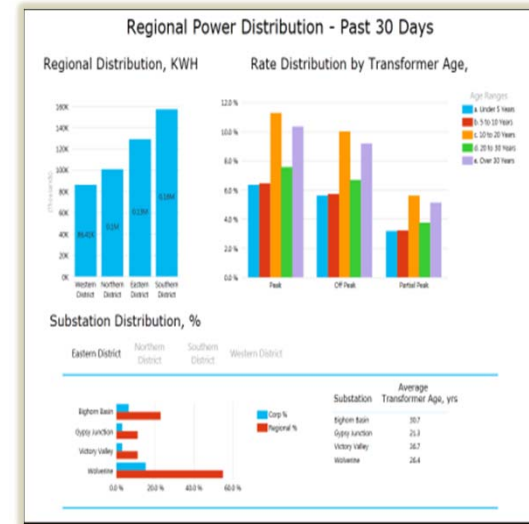


Equipment Condition Benchmarking

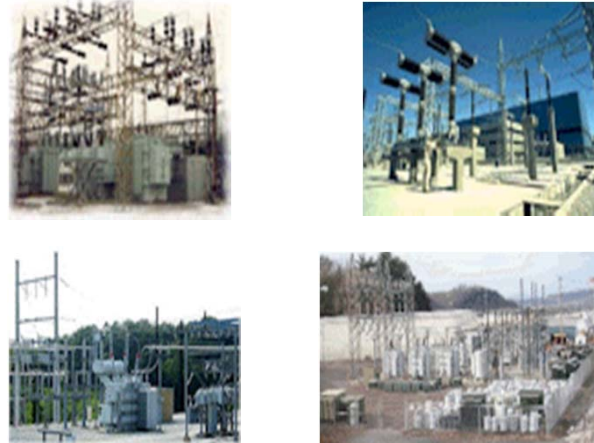
Next Generation Business Analytics



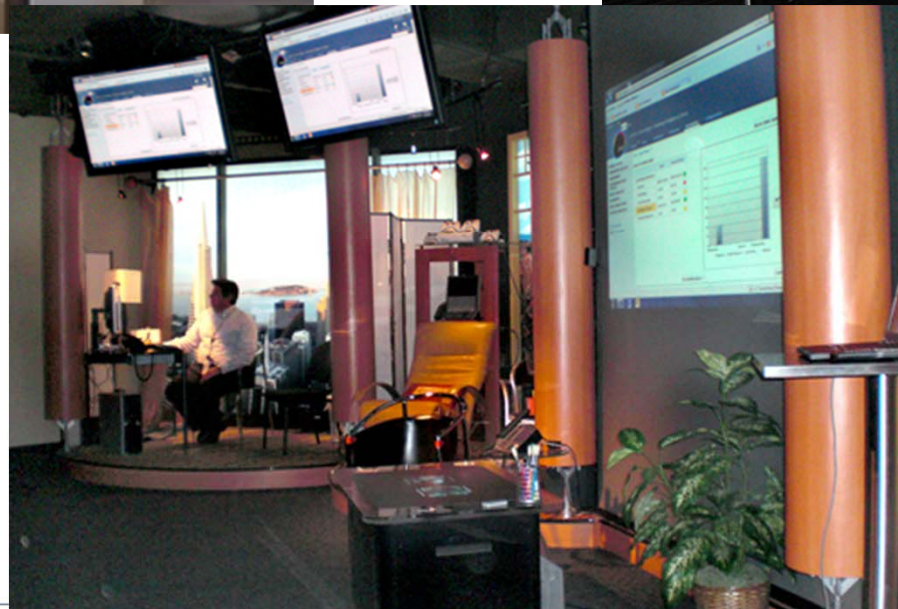
PowerPivot



Power View



Microsoft Technology Centers (MTC's)



- MTC's are "free" Microsoft resources Customers can use
- Well resourced environments for customer meetings, briefings, architectural workshops, demonstrations

EMEA plan for MTC's in 2012:

- Implement "production" PI systems in selected MTC's
 - Initially 3 locations, London, Paris & Munich
 - (Russia Q1 2012, Dubai Q1 2012)
 - Not a virtual demo - Real-time monitoring & reporting of MTC data center environment (servers, cooling, temperature, sensors etc)
 - Showcase and hands-on environment for customers
 - Latest PI2010 & Microsoft technology integration
 - Small scale Datacenter/Facility type environment



The Cisco & OSIsoft Alliance

Empowering Business in Real Time.

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OSIsoft and Cisco have been Partners since 2004:

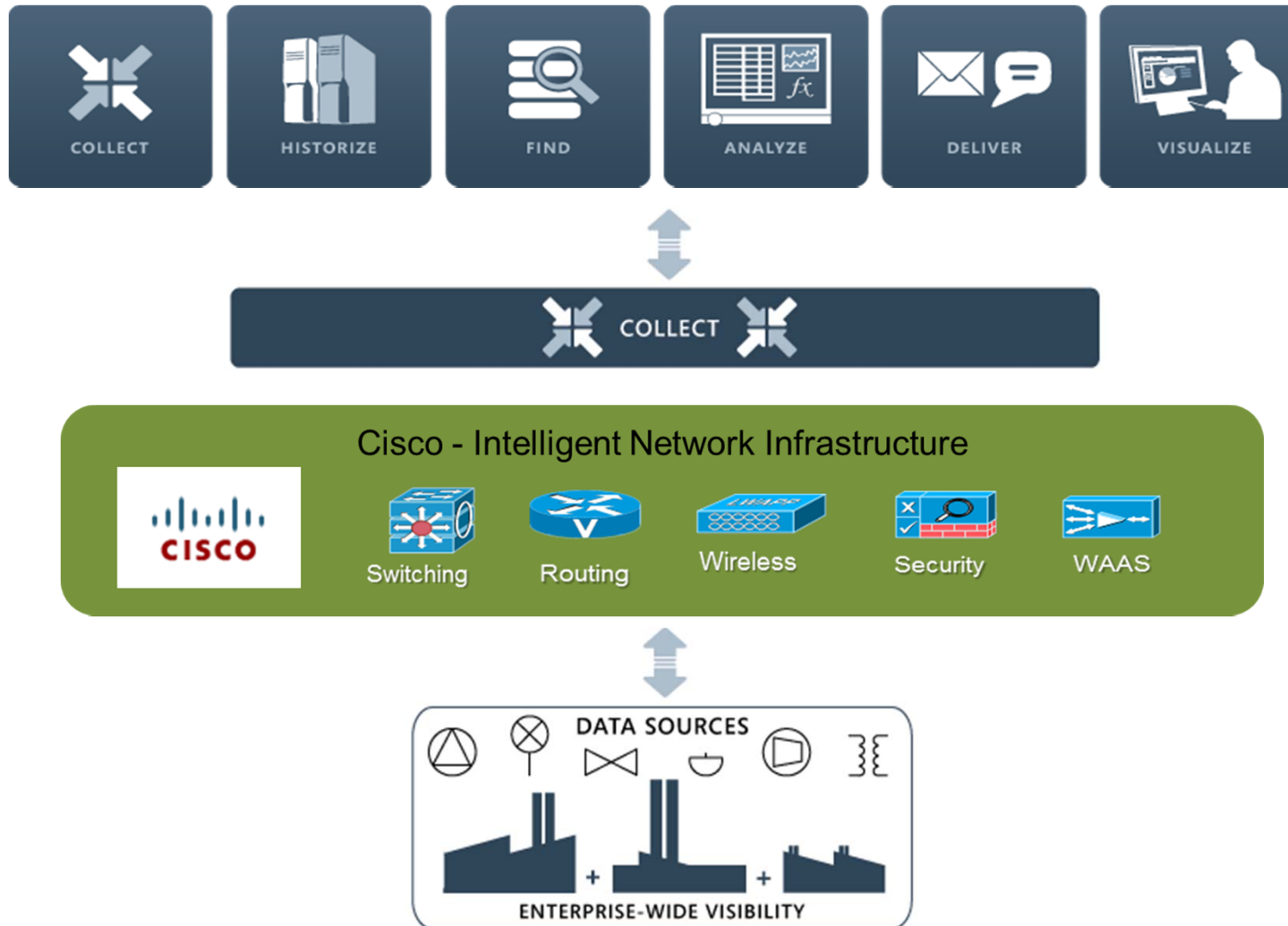
Partnership Value

The combination of the OSIsoft PI System & Cisco's Converged Communications infrastructure provides best-in-class, real-time data collection, analysis, and visualization that leverages Cisco's voice, video & audio capabilities to address an ever increasing set of real-world challenges.

Trend

Cisco is continuing to drive more value into their network devices - including the capability to now run traditional IT services and applications in Network Devices such as routers and switches.

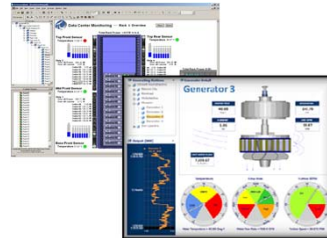
PI System & Cisco: Collaborative Infrastructures



Cisco UCS-Express & UCS with OSIsoft PI System



UCS Server Platform



Integrated Service Router G2

&



Services Ready Engine

+

**OSIsoft PI System.
The Industry leading
Real-Time Data
Infrastructure platform**

=

“Best of Breed” solutions that bring new value to customers

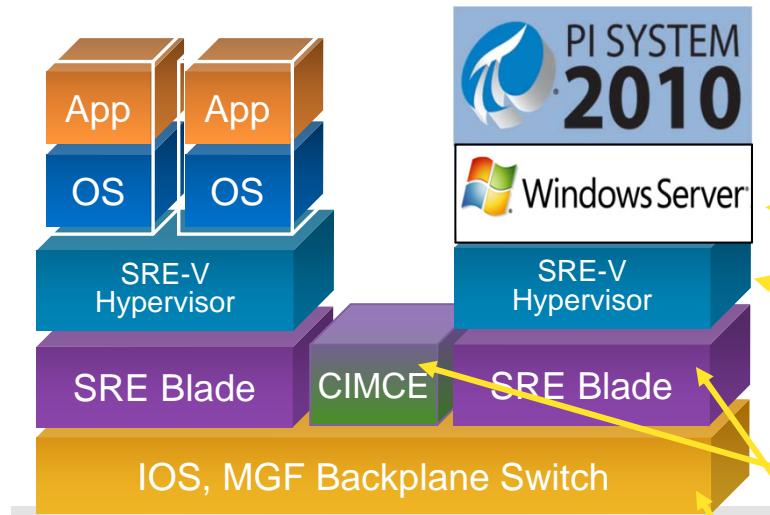
Cisco provide Small footprint, high performance Network integrated server platforms for application deployment

Low power server infrastructure that reduces energy consumption and Simplifies management and deployment

Great solution to support a Real time data infrastructure provided by PI – especially in distributed / Branch/Site environments

PI On the Cisco ISR G2 - Layered View

UCS Express - Simplifying Remote Plant/Site Deployments



PI System 2010 for Data Collection, Management, Analysis and Visualization

Platform for Edge Applications
Microsoft Windows Server certified

Server Virtualization

Cisco SRE Virtualization powered by VMware vSphere Hypervisor™ (ESXi)

Dedicated Blade Management

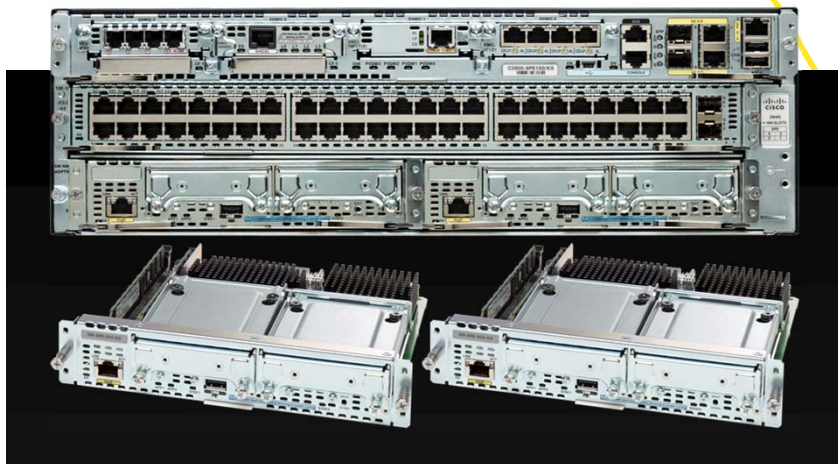
Cisco Integrated Management Controller
Consistent management for UCS family

Multipurpose x86 Blades

Cisco Service Ready Engine modules
House up to 4 server blades in ISR G2

Single-device Network Integration

House all devices in ISR G2 chassis
Multi-Gigabit Fabric backplane switch

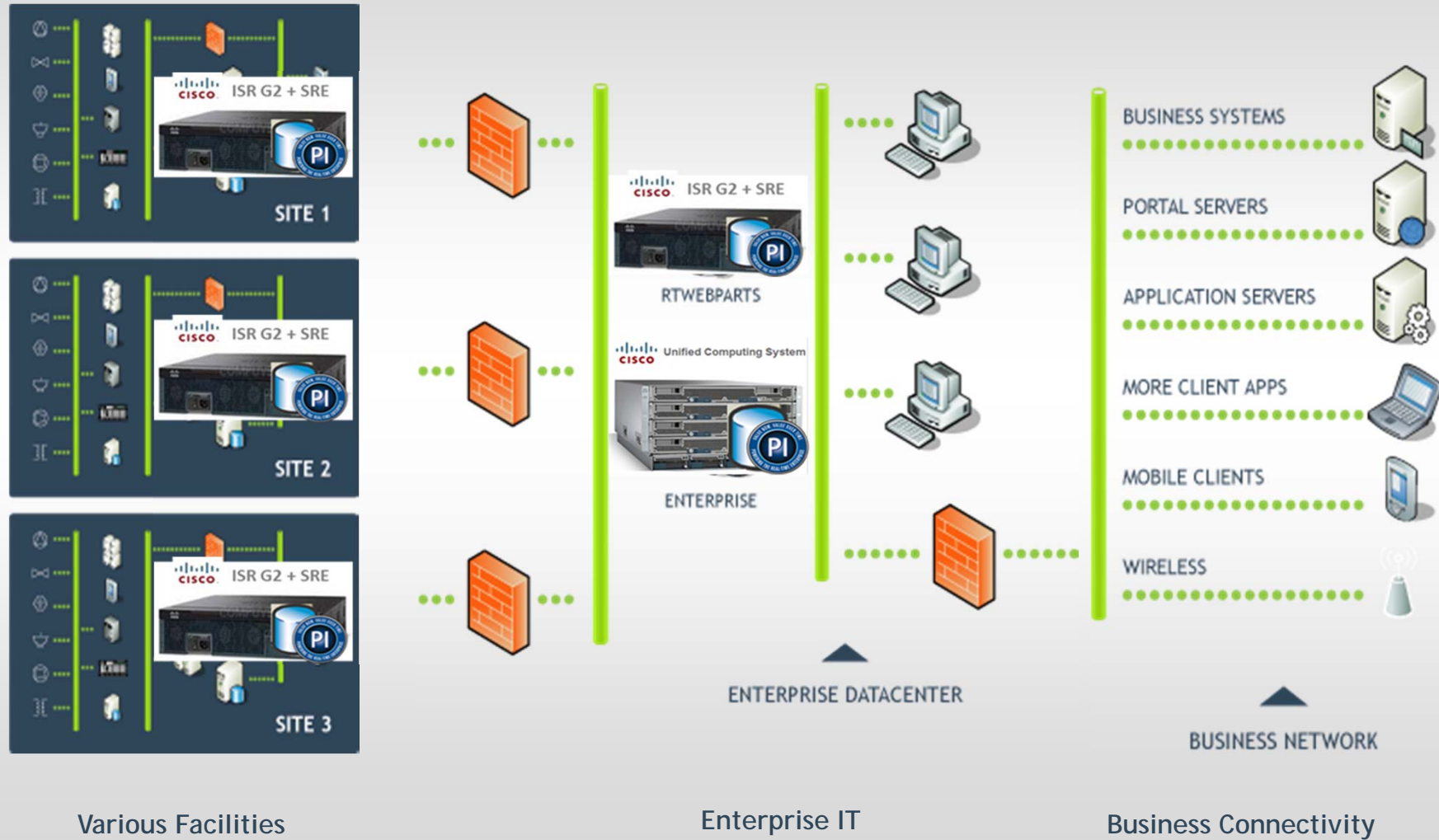


For organizations looking at ways to deploy their PI System Interfaces to smaller, more remote PI Servers, they have a **new option, the Cisco UCS – Express.**

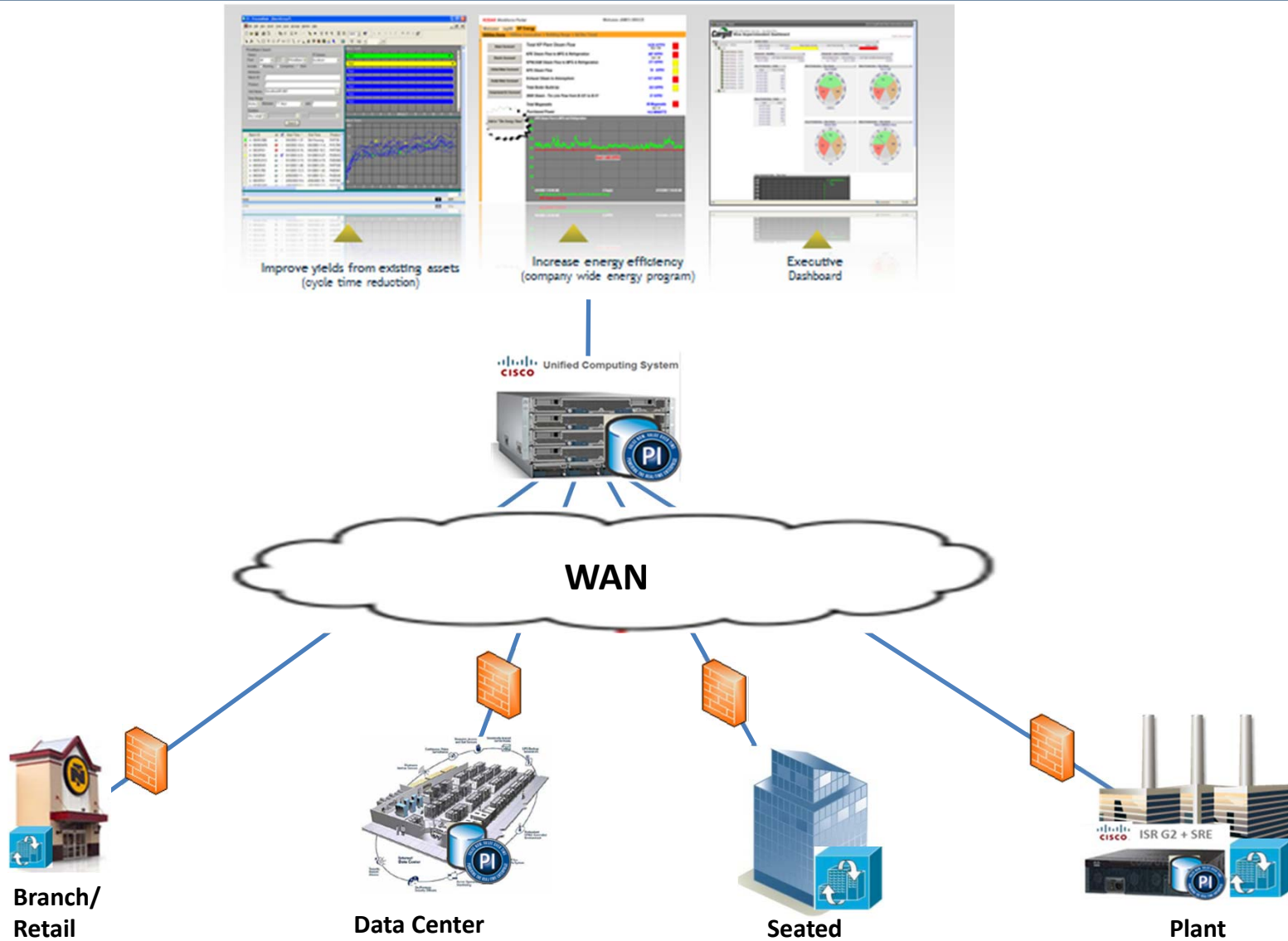
The Cisco UCS-E is part of the Cisco Integrated Service Router (ISR G2) networking device family that delivers value in terms of cost savings from features and performance to deployment and ongoing maintenance.

This can reduce the cost time required to managing the physical infrastructure for PI Systems while providing added security & performance benefits.

Example PI Enterprise Architecture with underlying Cisco Network and Compute Infrastructure



Smart Connected Enterprise



Cisco Live! 2012: Online Demo



Cisco Blog > Manufacturing

Cisco Live UK Demo Part 2: Workforce enablement with CEBT, OSIsoft and Collaboration

February 2, 2012 at 6:16 am PST

Peter Granger

1,265 Likes

This is Cisco Live UK: Day 3, Part 3

You'll remember in my previous blog (part 1) that we said that the Workforce Enablement demonstration shows the integration between OSIsoft (one of Cisco's Partners in the industrial telemetry and asset management field) integrated with Cisco cross-architectures: so we have Borderless networks, Data Center and Collaboration technologies. We also have an application called CEBT – which is a workforce enablement application (Collaboration-Enabled Business Transformation Introduction brochure -- click here)

Cisco live!
January 30 - February 3, 2012 - London, UK

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Blogs at a Glance

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