OSIsoft®
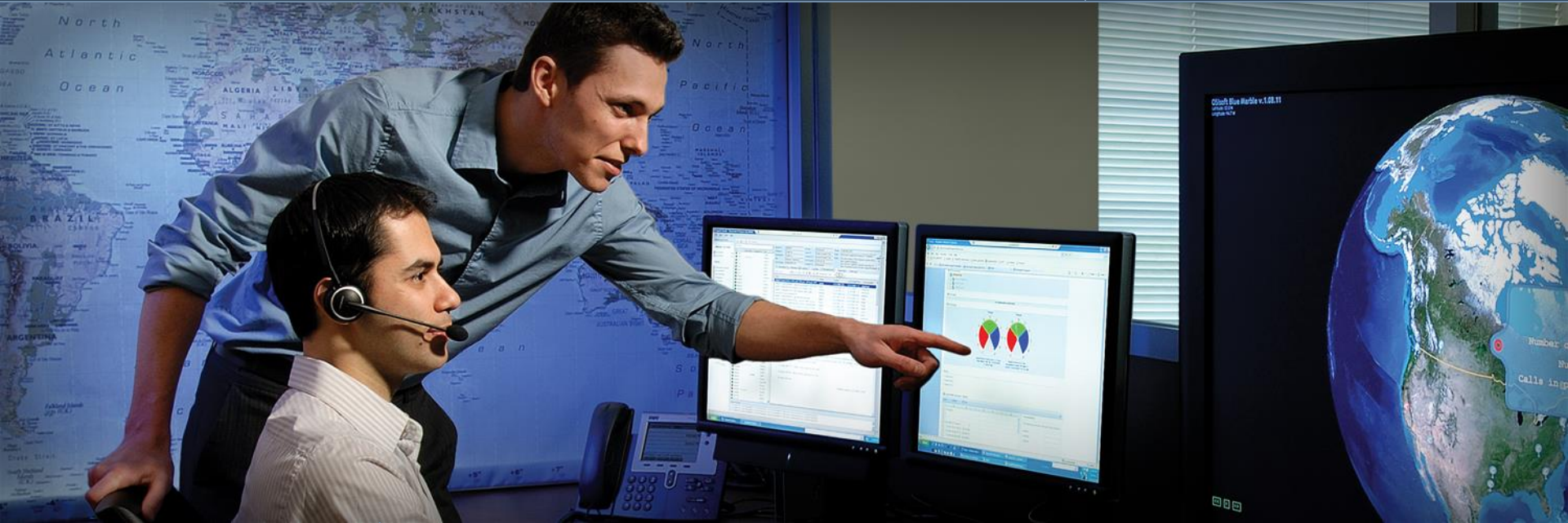
Regional Seminar Series
Benelux

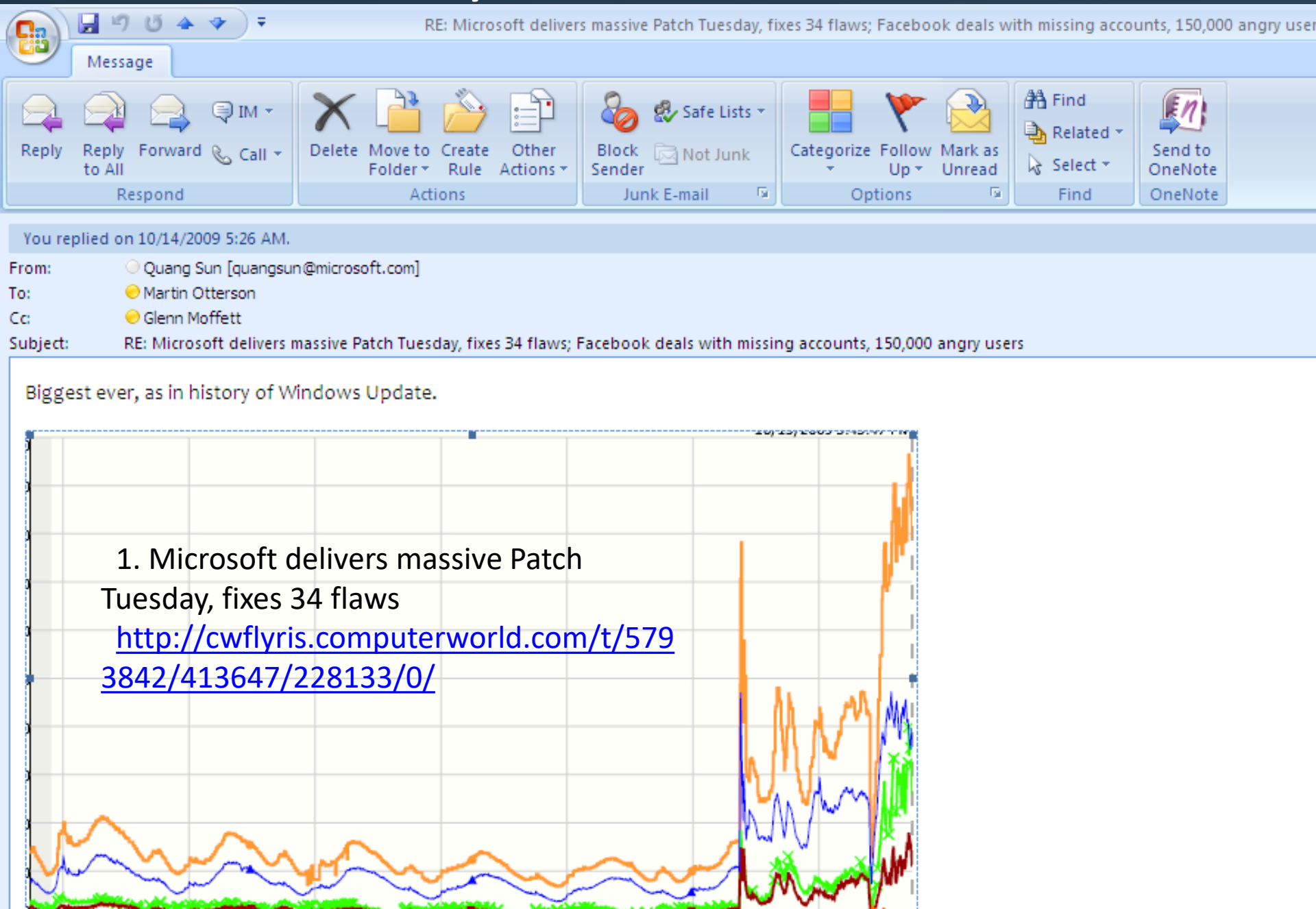Critical Facilities Update

Martin Otterson, Vice President of Europe, Middle East, & Africa
OSIsoft

January 28, 2009

Ideas become real at Cisco Systems

Ideas are reality at Microsoft

RE: Microsoft delivers massive Patch Tuesday, fixes 34 flaws; Facebook deals with missing accounts, 150,000 angry user

Message

| Reply | Reply to All | Forward | IM ▾ Call ▾ | Delete | Move to Folder ▾ | Create Rule | Other Actions ▾ | Block Sender | Not Junk | Categorize ▾ | Follow Up ▾ | Mark as Unread | Find Related ▾ Select ▾ | Send to OneNote |

| Respond | Actions | Junk E-mail | Options | Find | OneNote |

You replied on 10/14/2009 5:26 AM.

From: Quang Sun [quangsun@microsoft.com]
To: Martin Otterson
Cc: Glenn Moffett
Subject: RE: Microsoft delivers massive Patch Tuesday, fixes 34 flaws; Facebook deals with missing accounts, 150,000 angry users

Biggest ever, as in history of Windows Update.

1. Microsoft delivers massive Patch Tuesday, fixes 34 flaws
http://cwflyris.computerworld.com/t/5793842/413647/228133/0/
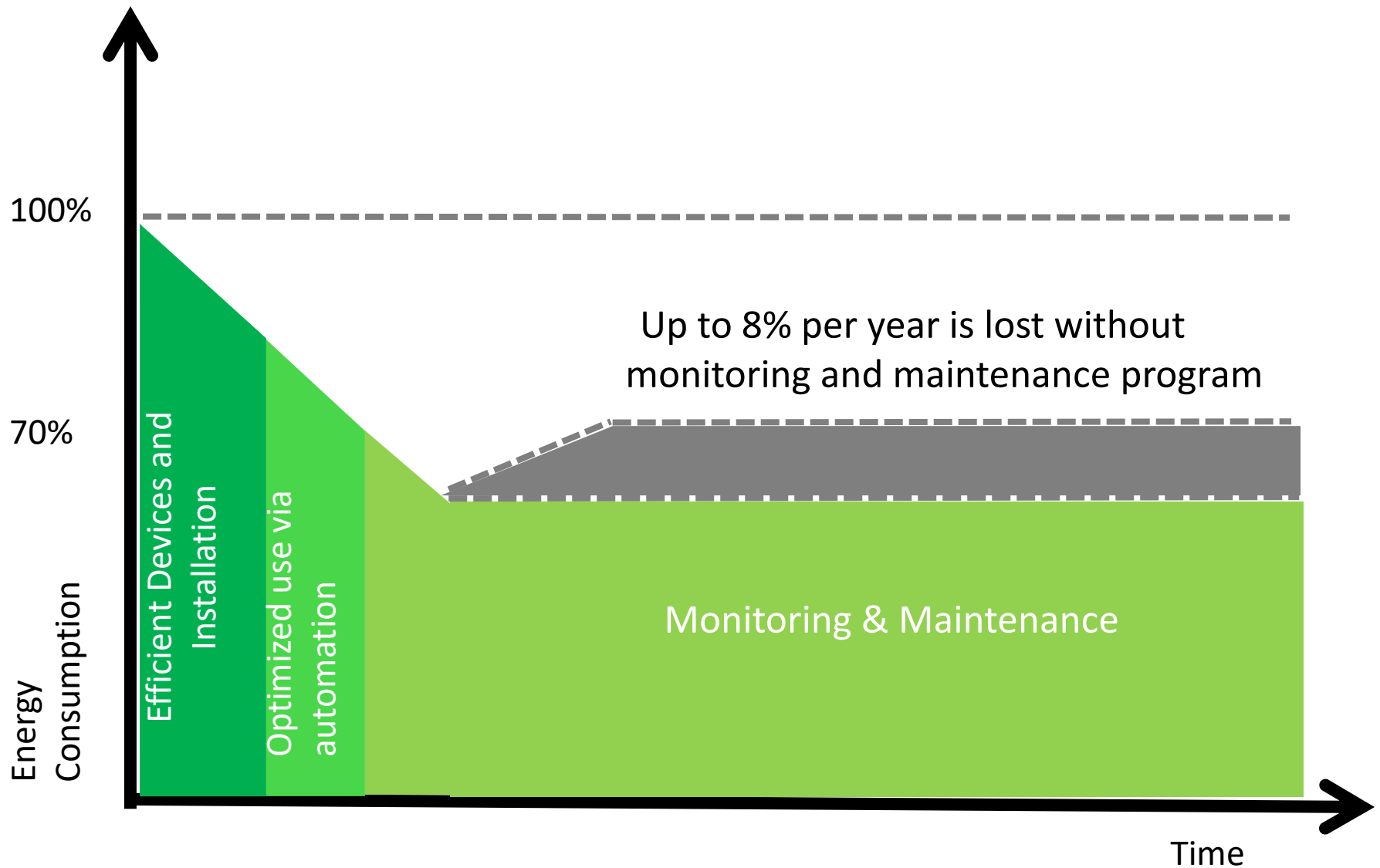
Lines of Business/ Operations

IT Infrastructure

Data Center Infrastructure

Facility Infrastructure

Did you know PI can be applied to these infrastructure's for great value

Empowering Business in Real Time.

Why PI FOR Energy Management

Up to 8% per year is lost without monitoring and maintenance program

100%

70%

Energy Consumption

Efficient Devices and Installation

Optimized use via automation

Monitoring & Maintenance

Time

Empowering Business in Real Time.

Critical Facilities PI System Data Flow

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Facilities, Data Center and IT Interfaces
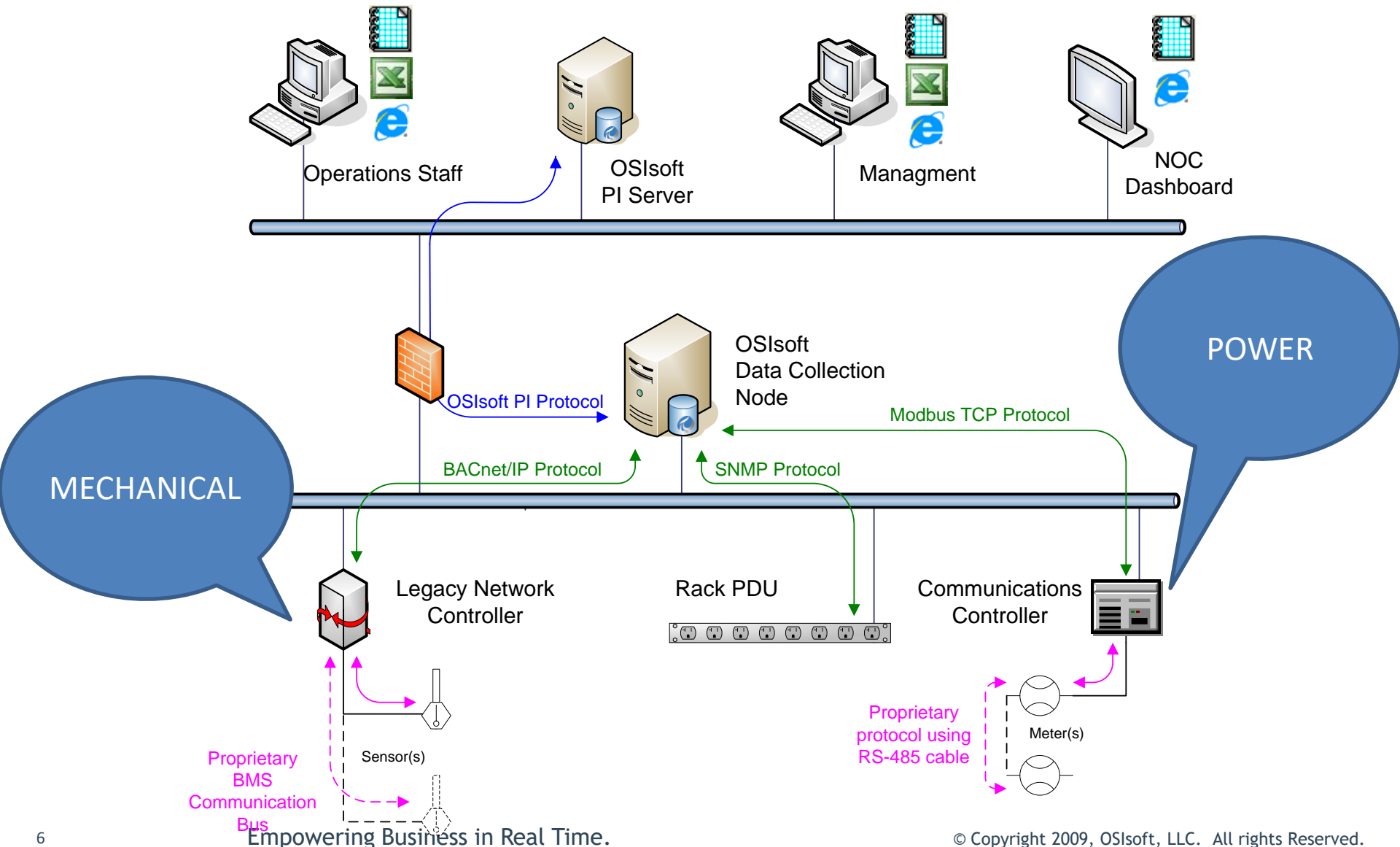
- POPC, RDBMS

- Modbus, Perfmon

- SNMP, Windows Event Log, Ping

- SNMP Traps, TCP Response, Syslog

- IP Flow (NetFlow)

- IPMI (in development)

- BACnet

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■BACnet stands for building automation and control network

■BACnet provides a common protocol to interface with building automation and control systems. Typical building devices that can provide data are HVAC, lighting, and fire/safety systems

■BACnet is supported by many leading building control systems vendors:
- Automated Logic Corporation
- Johnson Controls Incorporated
- Siemens Building Technologies
- Tridium

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- The BACnet protocol defines a number of services that are used to communicate between building devices

- The PI BACnet interface supports **BACnet/IP** over Ethernet

- The interface supports a BACnet Query Tool
  - Allows "Who-Is" query which returns a list of any listening BACnet devices
  - The returned list can be used to directly configure PI tags

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BUSINESS SITUATION

Campus purchasing over $30M in utilities. Decision making is based on dated information that's hard to access.

SOLUTION

PI System with interfaces to plant control system and meters, building submeters, and building automation systems.

Measurements include hot water meters, electric meters including substations, assorted gas and oil meters, chilled water meters, and steam meters.

BENEFITS

Faster Decision Making – Data that took a month to access now available in real time. Information manually distributed to 80 cost centers now available electronically

Continuous Process Improvement – Facilities and financial analysts collaborating to make profitable decisions

Reduced Costs – Manual data management automated. Invaluable in commissioning 120 new heat exchangers

Empowering Business in Real Time.

Empowering Business in Real Time.
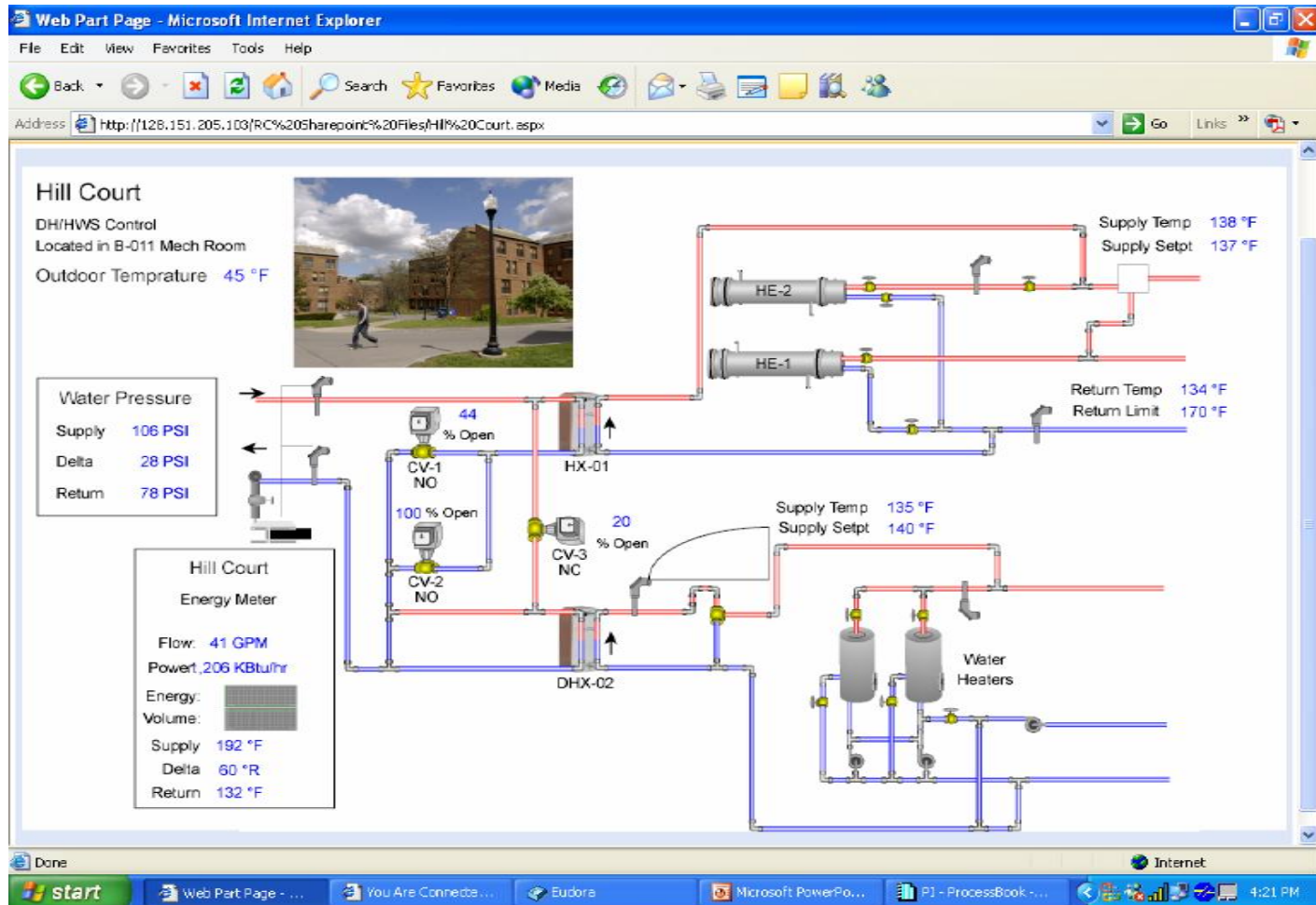
BUSINESS SITUATION

Executive management set a vision for creating a world class computational resource for the research staff

SOLUTION

PI System with IT Monitor interfaces (PI PerfMon, PI Ping, PI TCPResponse, PI SNMP, etc.)

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BENEFITS

Faster Processing – Real time dashboard now available to research staff to optimize job scheduling

Continuous Process Improvement – Historical information available to drive future improvements

Reduced Costs – A 16% reduction in data center energy costs while maintaining a high service level

Computational Infrastructure Status

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Stay Tuned for More Information

- Active member of Green Grid

- Sponsoring Data Center Operations research at Georgia Tech

- Active Industry Group Member

  - Datacenter Dynamics

  - Uptime Green Symposium

  - Regional participation in Association For Computer Operations Management (AFCOM) chapters

- Chill OFF II – Data Center Pulse

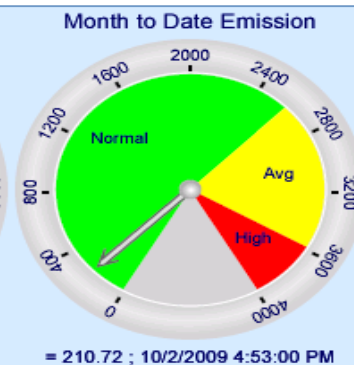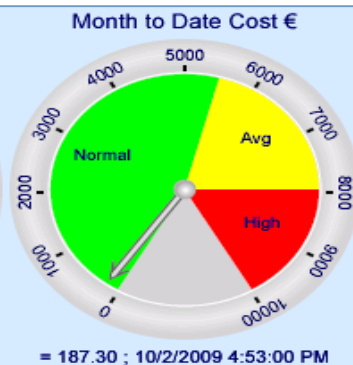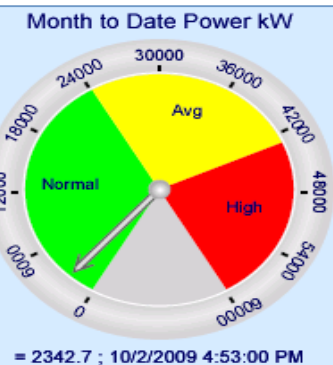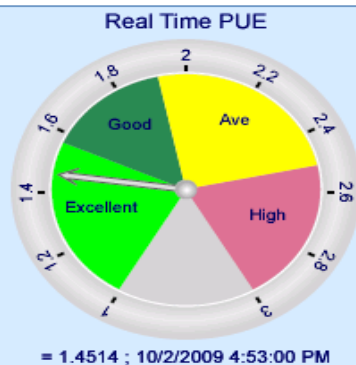Empowering Business in Real Time.

- First step is understanding and benchmarking your operations

- PI has capabilities to help you in the areas of Critical Facilities and IT

- We would be happy to talk with you further and understand your situation to see how PI could create value

- Stay up to date by visiting our Critical Facilities and IT industry page

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Microsoft on PI in the Data Center

"We are using the **OSIsoft PI System to monitor all the critical points within our data centers**, and in turn are laying the foundation for a **high-availability, global Live infrastructure**,"

"**The return on investment is tremendous.** We are enabling innovation through increased collaboration, social networking and commerce—leading to breakthroughs in software plus services. We are setting industry standards **with increased utilization of facility resources, real time business continuity, and green computing technologies**. As we continue to expand our Live services, the combination of **OSIsoft and Microsoft technologies** are bringing new levels of performance and reliability to our world-class data centers."

File   Edit   View   Favorites   Tools   Help

Back | Search   Favorites

Address   http://parint01/Displays/EMEA.aspx | Go   Links »

EMEA

EMEA KPI's

Real Time PUE
= 1.4514 ; 10/2/2009 4:53:00 PM

Month to Date Power kW
= 2342.7 ; 10/2/2009 4:53:00 PM

Month to Date Cost €
= 187.30 ; 10/2/2009 4:53:00 PM

Month to Date Emission
= 210.72 ; 10/2/2009 4:53:00 PM
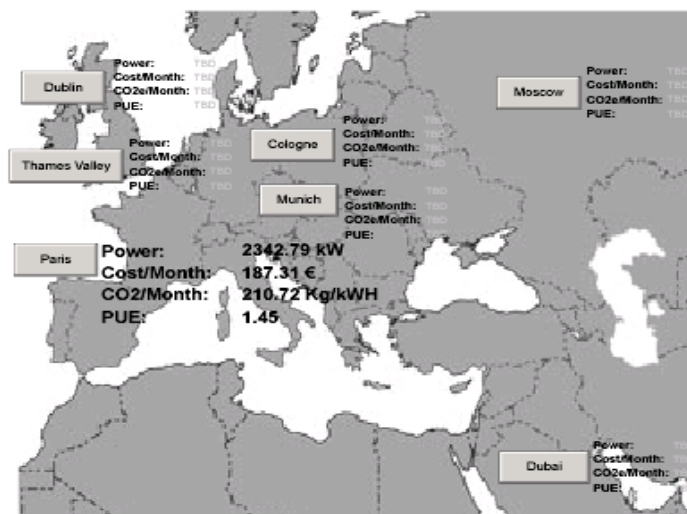
Navigation

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  - Dubai
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  - Munich
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      - SANs
    - Servers
      - Collectors
      - PI Servers
    - Storage
      - HP Storage
  - Thames Valley

EMEA MTC's

Microsoft Technology Centers — EMEA

Dublin
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Moscow
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Thames Valley
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Cologne
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Munich
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Paris
Power: 2342.79 kW
Cost/Month: 187.31 €
CO2/Month: 210.72 Kg/kWH
PUE: 1.45

Dubai
Power: TBD
Cost/Month: TBD
CO2e/Month: TBD
PUE: TBD

Done   Local intranet

Call To Action

- Leverage PI for your IT / Facilities environment

- Baseline today

- Understand your infrastructure and power usage

- Make improvements and gain efficiencies

- **Apply the PI System (infrastructure) you use to run your business...**

    ...to the infrastructure your business relies on to run.

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Thank you