



# Centralized Power Management for the Enterprise

**Mark Phinick, BigFix**

# Agenda



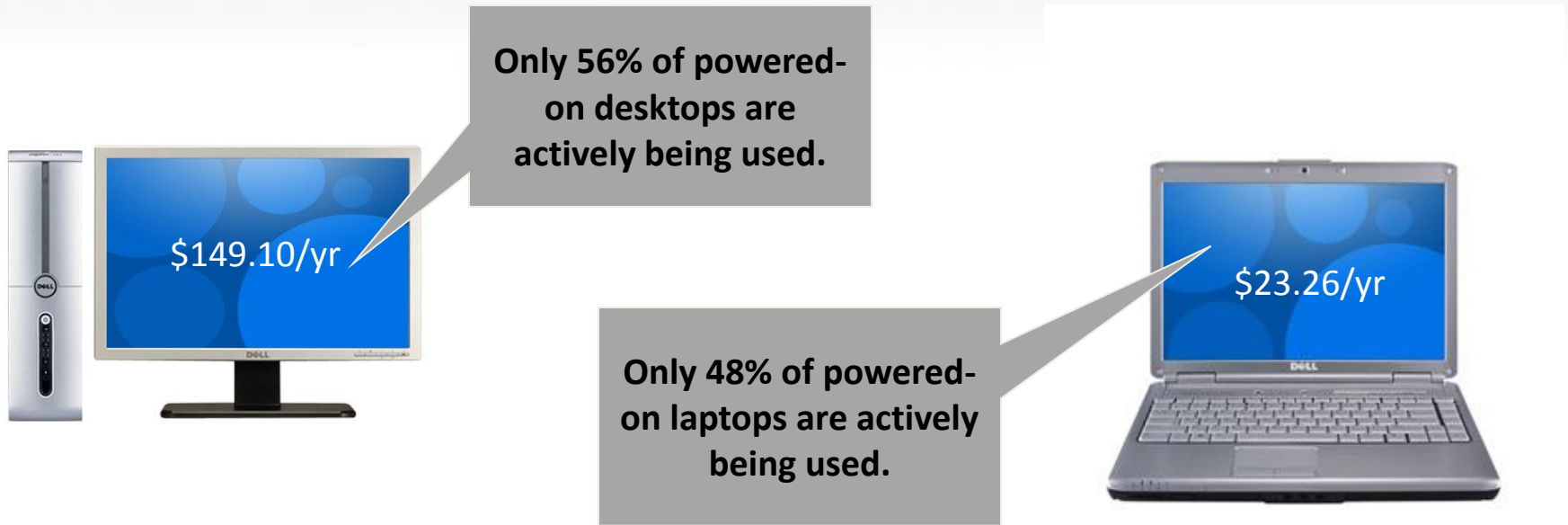
- The Opportunity and Concept
- Challenges to Adoption
- Keys to Success
- The BigFix Approach
- Customer Success

# Computer Power Management



*The Concept is Simple...*

*Automatically turn off computers and monitors that aren't in use*



*The Benefits are Clear... Save Money, Save the Environment*

# Challenges to Adoption



- “I don’t know which computers are candidates for Power Management”
- “I will lose my work if my PC suddenly shuts down or hibernates.”
- “We can’t patch machines that are powered down”
- “There are times when I need to connect to my PC remotely – and that’s why it needs to stay on 24x7.”
- “We have PCs *and* Macs”
- “Green isn’t relevant to my job”
- “We’d like to but have no budget”



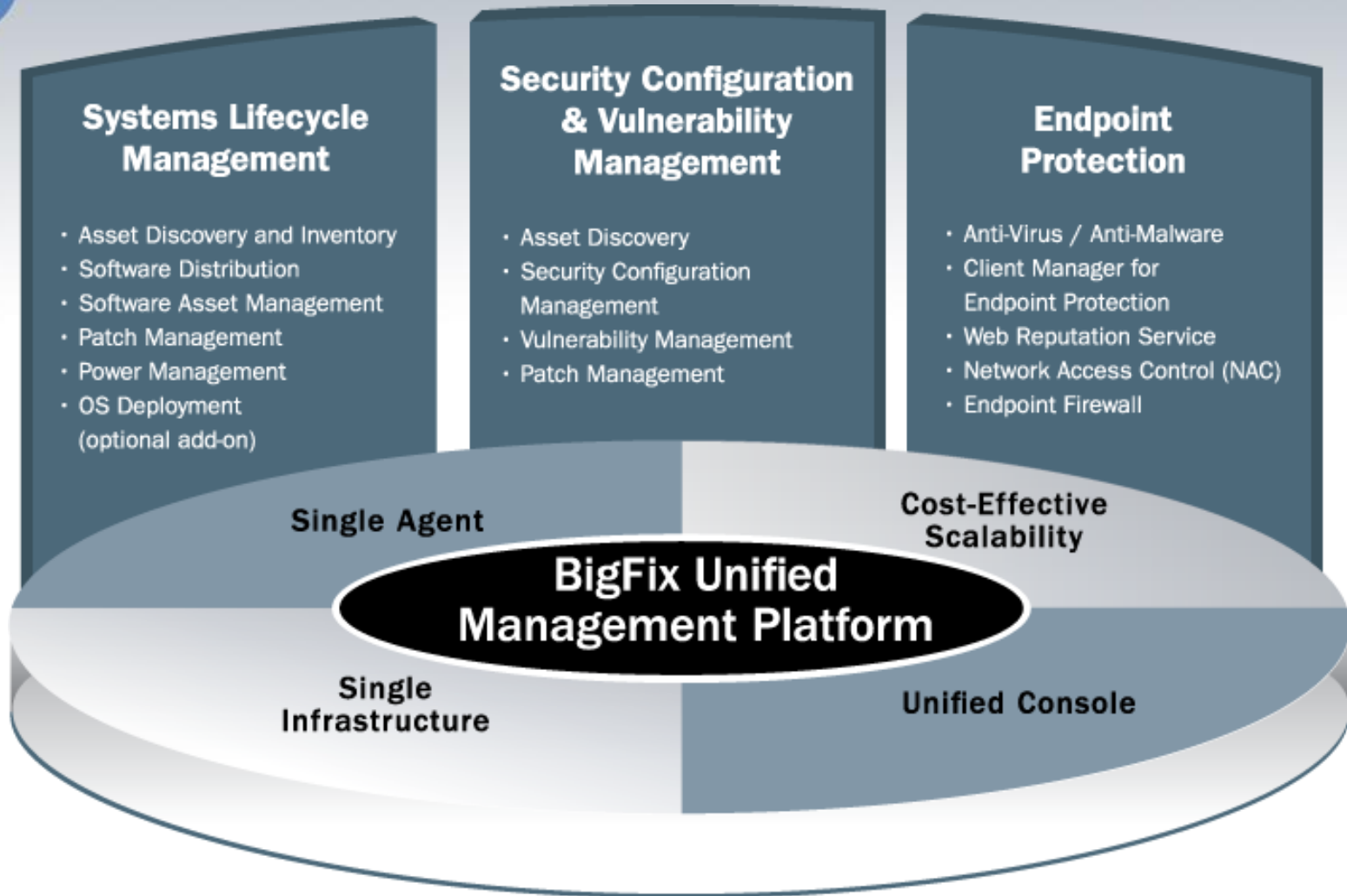
# “Green” Security and Systems Management



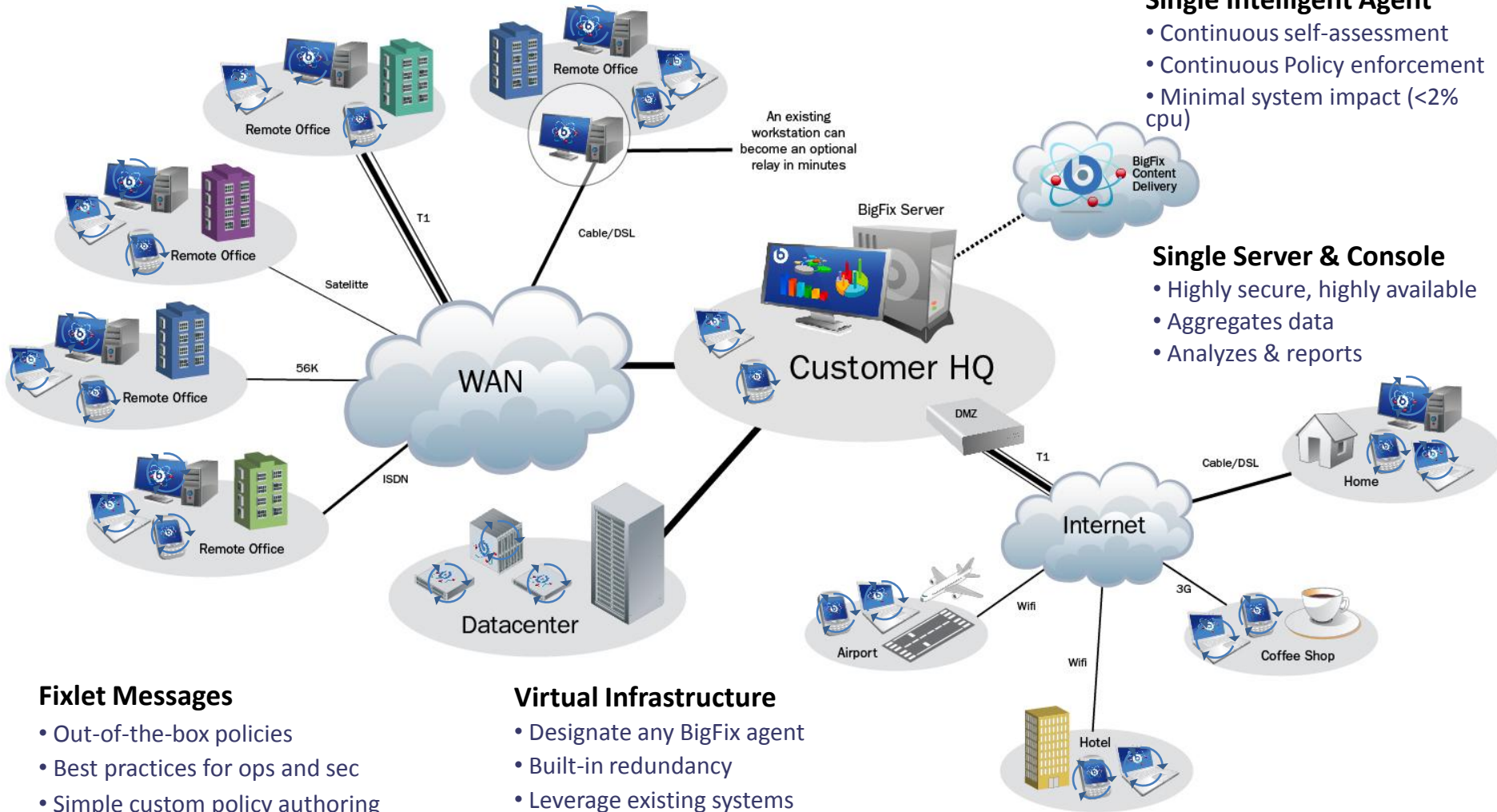
- What is it?
  - Identify computers that are candidates for power management
  - Wake PCs and Macs when a patch/config change is necessary
  - Patch system and verify remediation in real time
  - Put computer back to sleep
  
- Traditionally, this requires point products for:
  - Software Asset Management
  - Power Management
  - Patch Management



# BigFix Unified Management Platform



# The Power of Distributed Intelligence



# BigFix Power Management



- **Centralized Power Management**
- **Multiplatform**
  - Covers both Windows and Mac
- **Facilitates High Rates of User Adoption**
  - Client-side dashboards to increase buy-in and end-user engagement
  - Save work in applications prior to shut down or restart
- **Granular Control Over Power Profiles and States**
  - Targets: Individuals, groups, buildings, divisions, and more
- **Scales to today's network environment**
  - Manages up to 250,000 devices on one server
  - Excels in highly distributed environments
- **Payback in months – typically don't have to capitalize**

# Overcoming PM Complexities in Practice



- **Cures PC Insomnia**

- By intelligently measuring user idle time, overcomes issue where computers don't enter low-power modes when they should

- **Enables IT Maintenance**

- Scheduled Wake from Standby, Distributed Wake-on-LAN, and Last Man Standing

- **Accounts for Hardware Differences**

- Override power and CO2 assumptions by hardware profile, location, and monitor type for more accurate reporting

- **Adjust Min Sleep States**

- Maximizes power savings by adjusting min sleep state

The screenshot shows a Windows-style dialog box titled "Power Assumptions Override Wizard". The main heading is "Power Assumptions Override Wizard". Below the heading, there is a descriptive paragraph: "This Wizard will enable you to override for targeted computers the power assumptions used in the Power Tracking Information Dashboard." Underneath, it says "Override assumptions for targeted computers:". The dialog contains several sections, each with a radio button for "Use dashboard default" and a text input field for a custom value:

- Set Cost:**  Use dashboard default,  Cost per kWh to: \$.08
- Set CO2 Emissions:**  Use dashboard default,  Set CO2 per kWh to 1.0 Lbs.
- Set Computer's Active Power Draw:**  Use dashboard default,  Set power draw to 100 Watts
- Set Computer's Power-Managed Power Draw:**  Use dashboard default,  Set power draw to 10 Watts
- Set Monitor's Active Power Draw:**  Use dashboard default,  Set power draw to 80 Watts
- Set Monitor's Power-Managed Power Draw:**  Use dashboard default,  Set power draw to 5 Watts
- Set Hard drive Sleep Power Savings:**  Use dashboard default,  Set power draw to 8 Watts

At the bottom right, there are two buttons: "Finish" and "Cancel".

# Customer Profile: Top 5 Public School District



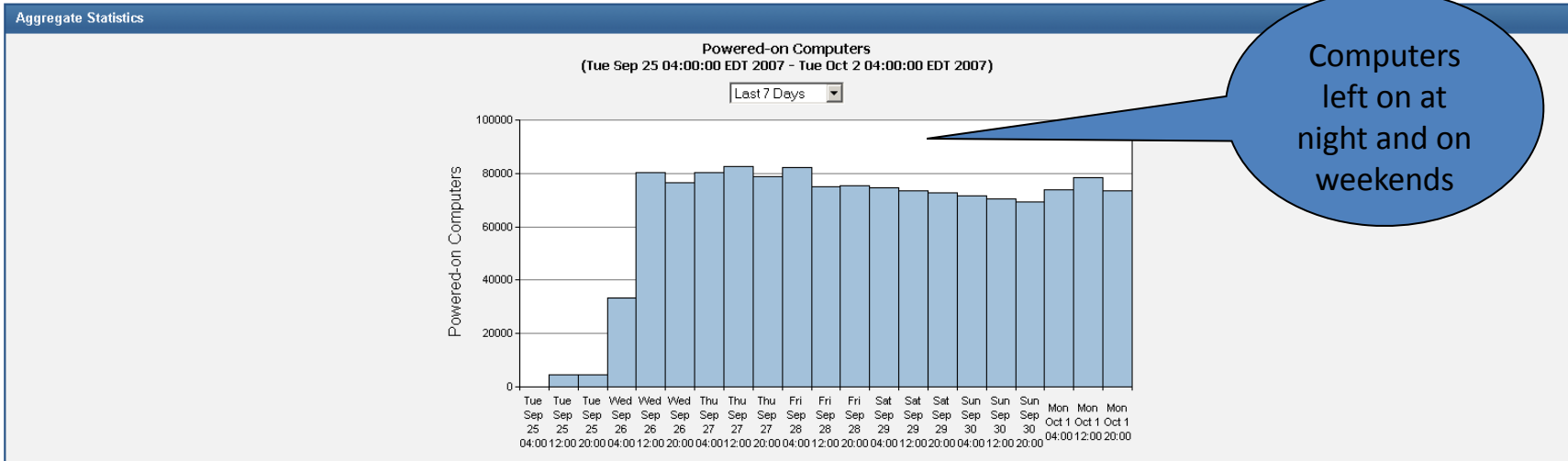
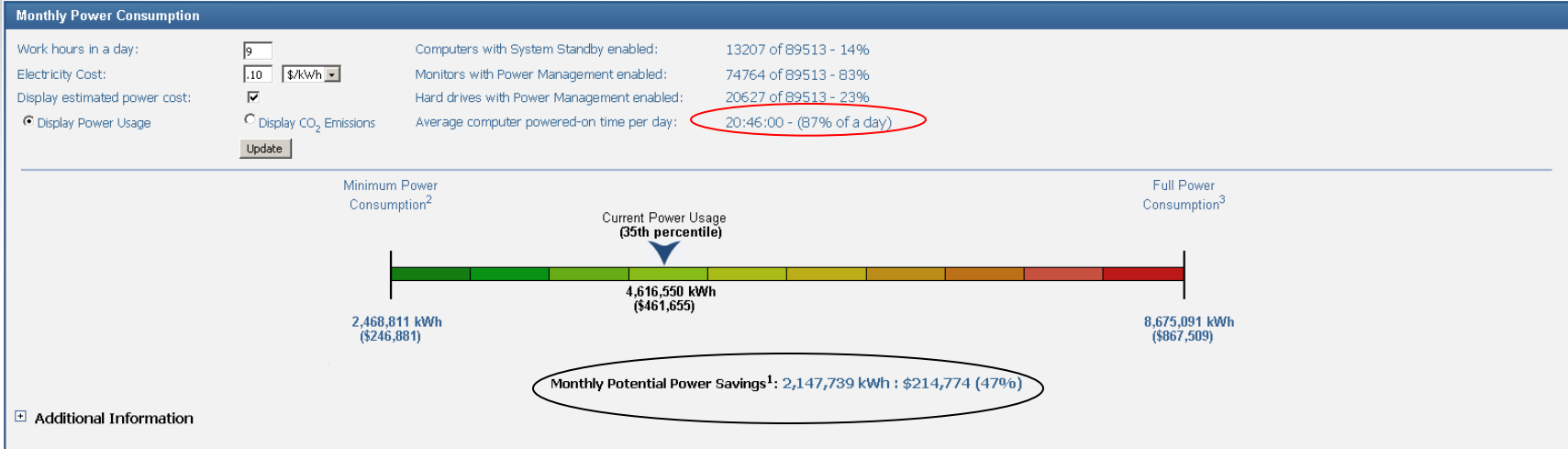
- 120,000 PCs and Macs
- 370 distributed locations
- Estimated YR1 Savings : \$2.6M
- Actual YR1 Savings: \$4.2M
- All systems patched within 7 minutes



*“BigFix has been easy to install, easy to operate, and very flexible. It’s currently working exactly as we expected from the proof-of- concept.”*

– Director of Network Systems

# Power Usage - Before



# Power Usage - After



### Monthly Power Consumption

Work hours in a day:  Computers with System Standby enabled: 13794 of 90497 - 15%

Electricity Cost:  \$/kWh Monitors with Power Management enabled: 75833 of 90497 - 83%

Display estimated power cost:  Hard drives with Power Management enabled: 21475 of 90497 - 23%

Display Power Usage  Display CO<sub>2</sub> Emissions Average computer powered-on time per day: **09:04:00 - (38% of a day)**

---

Minimum Power Consumption<sup>2</sup> (0th percentile) **Realizing Savings of 26 million kWh per year** Full Power Consumption<sup>3</sup>

2,451,119 kWh (\$245,112)  
 2,438,714 kWh (\$243,871) 8,812,968 kWh (\$881,297)

Monthly Potential Power Savings<sup>1</sup>: 12,405 kWh : \$1,241 (1%)

Additional Information

### Aggregate Statistics

#### Powered-on Computers (Mon Oct 8 20:00:00 EDT 2007 - Wed Nov 7 19:00:00 EST 2007)

Last 30 Days

Computers powered-off at night and on weekends

# 6 Steps for a Successful PC Power Mgmt Program



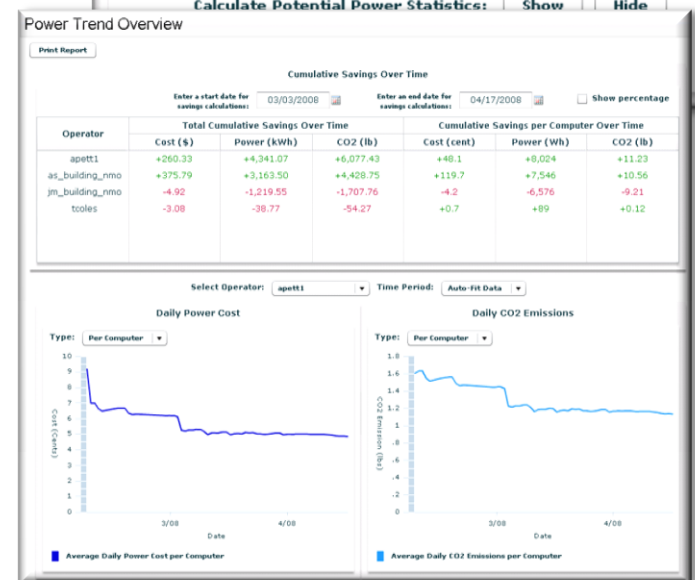
1. Understand current usage patterns are.
  - Turn tracking feature on all computers
2. Identify per-user or per-LOB usage requirements.
  - Plan for types of policies,
3. Model “what-if” scenarios for each power profile
4. Start with conservative estimates and policies, then gradually increase
5. Consider “opt-in” programs to drive user adoption
6. Give management access to reports to share cost savings and project progress

### Potential Power Usage

This section allows you to select Power management goals and see its potential effect on your power usage.

<b>Monitor Power Management</b>	Current: 10 of 13 - 76.9 %
	Goal: <input type="text" value="13"/> of 13 - <input type="text" value="100"/> %
<b>Standby Power Management</b>	Current: 6 of 13 - 46.2 %
	Goal: <input type="text" value="13"/> of 13 - <input type="text" value="100"/> %
<b>Daily On-Time</b>	Current: 14 : 04 - 58.6 %
	Goal: <input type="text" value="10"/> : <input type="text" value="48"/> - <input type="text" value="45"/> %

Calculate Potential Power Statistics:



# Who Benefits?



Stakeholder	Business Value
IT Operations	Wake computers up to perform maintenance (e.g. patch, AV updates)
Facilities, Finance	Reduce annual electricity costs
Investor/Media relations	Increase environmental stewardship
Users	No negative impact on productivity
Asset Manager	Monetize how applications are used
CFO, CIO	Extend PC life cycle, defer upgrade costs
Security and Compliance	Ensure continuous compliance
Energy/Sustainability	Lower carbon footprint

*“Green” Security and Systems Management helps streamline processes, reduce infrastructure costs and increase workforce productivity*

# How do I learn more?



- Accuvant
- ACS
- Forsythe
- IBM
- Johnson Controls, Inc.
- Trend Micro