



Borderless Networks Roadshow

Cisco EnergyWise

May 19, 2010

Dev Datta– Product Manager, ESTG / LSBU

Agenda

- EnergyWise Overview
- Orchestrator
- Platforms & Roadmap
- Summary

Why EnergyWise and Energy Management



EnergyWise Overview

- Businesses want energy solutions
 - Measure, report and manage power consumption of IT & building systems
- Cisco's solution and vision is **EnergyWise**
 - IOS technology built into foundation products like switches and routers
 - Extends to network attached devices (PCs, IP phones, building controls,)
 - 3rd Party Partners
- **EnergyWise** enables the network as a platform for energy command and control
- **EnergyWise** is part of Cisco's Energy Management solution

EnergyWise Operating Cycle

3) Reduce Consumption by Optimizing Power Delivery Policies



1) Poll Power of Network-Attached Devices: Phones, PCs, APs, Building Systems

2) Show Power Correlation

Convergence of IT and Facility Networks

IT Services and Technologies IP Based

High-Speed Internet

Wireless

VPN

IP Telephony

Audio & Video Conferencing

Visitor Management

Interactive Media

Digital Signage

Building Services and Technologies Non-IP

Lighting

Elevators

24/7 Monitoring

HVAC Sensors

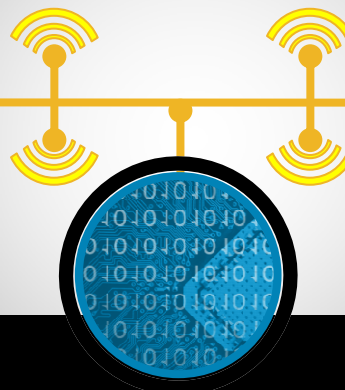
Fire

Video Surveillance

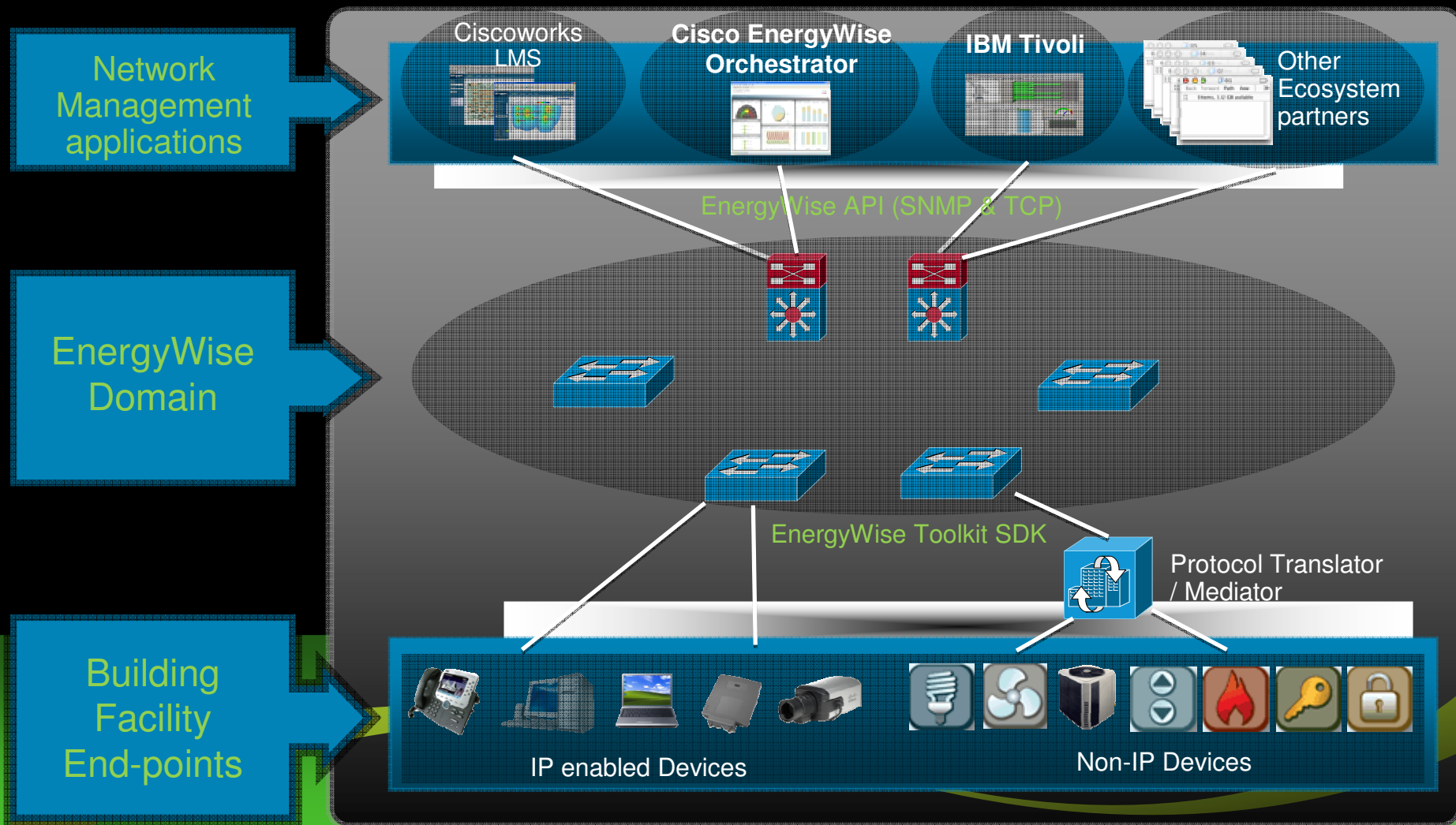
Access

Energy

**The Network Is
the Platform**



Cisco EnergyWise Solution



EnergyWise Ecosystem

Cisco Developer Partners Network



Smart Grid Data Center

Smart Grid Data Center

Mobility



Context-Aware

Wired Location

Wireless Controller



IP Telephony



Cisco Building Mediator



POE & Switching



IT Network

ISR Router Module

Desktop



APC by Schneider Electric | Schneider Electric | CISCO | CiscoWorks LMS

Tivoli software | solarwinds | EnergyWise Orchestrator | Call Manager



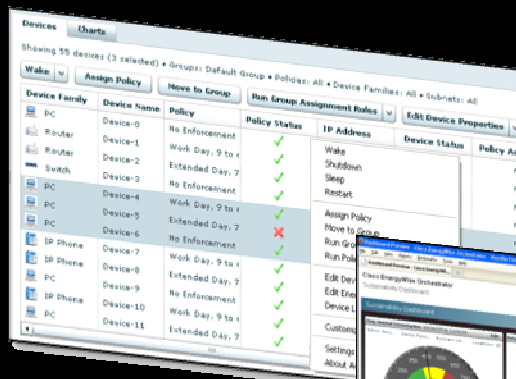
Agenda

- EnergyWise Overview
- Orchestrator
- Platforms & Roadmap
- Summary

Available in June!

EnergyWise Orchestrator

- First **dedicated** power management solution based on Cisco EnergyWise framework.
- Leverage Cisco EnergyWise to **measure, report and regulate** energy consumption of a broad array of IT devices



Measure & Benchmark

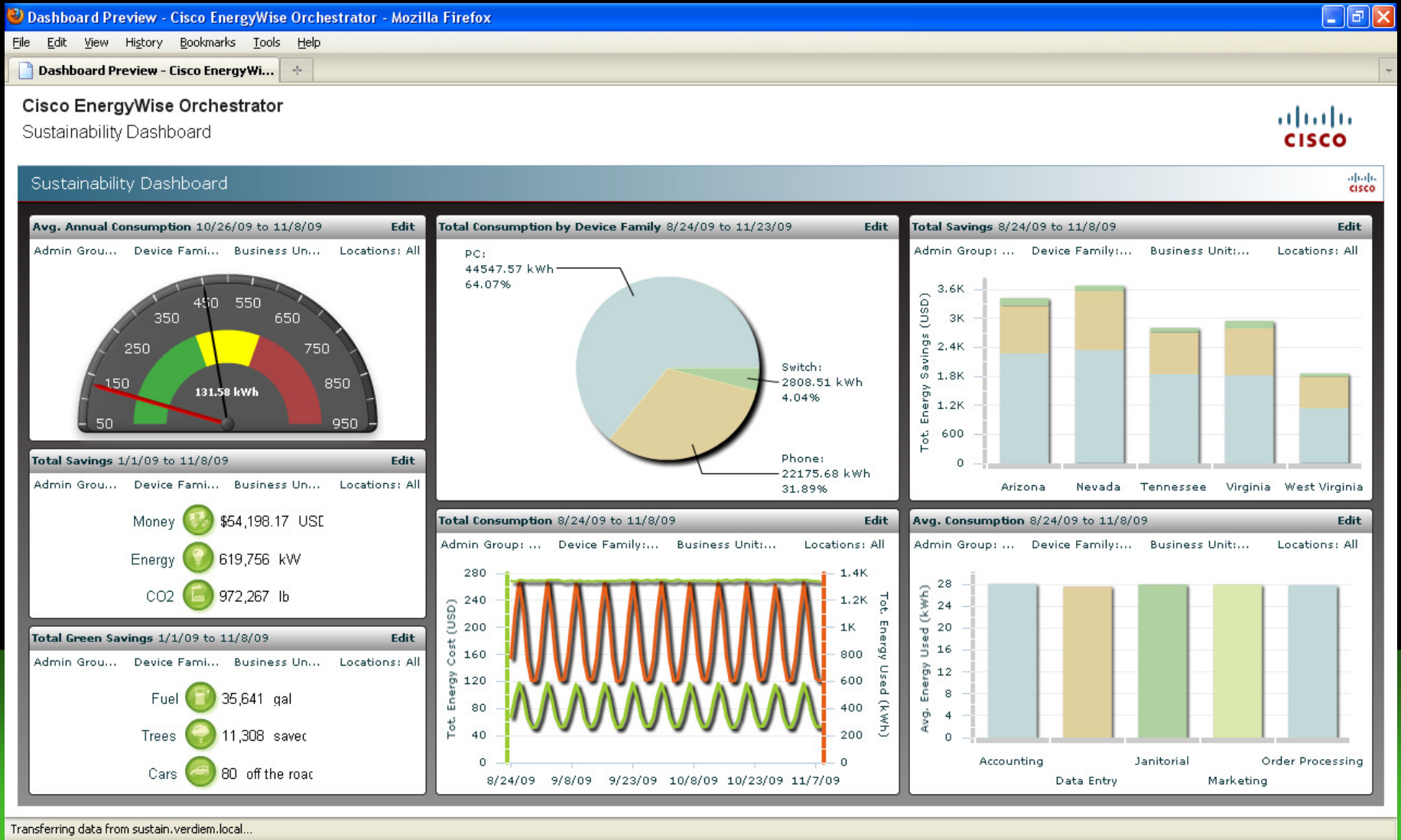


Report & Monitor



Manage

Orchestrator: Sustainability Dashboard

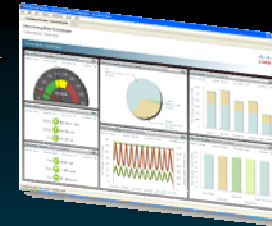


Cisco EnergyWise Orchestrator

PC and PoE Power Management

Management Server, Console, and Database

- Configure and manage endpoints
- At-a-glance view of rolled-up data



Cisco EnergyWise Orchestrator Sustainability Dashboard

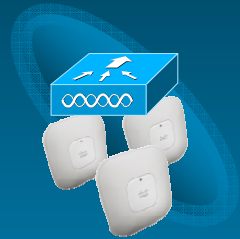
PC Client

- Collects and uploads *Time in State* data
- Enforces policies locally
- Initiates communication with server



Cisco EnergyWise in Cisco IOS

- Normalizes power levels & policies
- Proxies for legacy devices



Wireless



IP Telephony



Cisco EnergyWise PC Client

Agenda

- EnergyWise Overview
- Orchestrator
- Platforms & Roadmap
- Summary

EnergyWise Platform and IOS Support



Catalyst 2900
12.2(50)SE or higher
IP Base feature set

Catalyst 3560-E & 3560
12.2(50)SE or higher
IP Services feature set

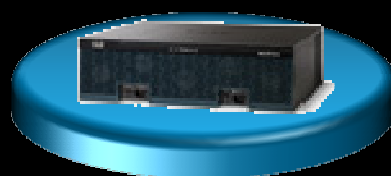
Catalyst 3750-E & 3750
12.2(50)SE or higher
IP Services feature set

Catalyst 4500 & 4900
12.2(52)SG or higher
IP Base feature set

Catalyst 6500
12.2(33)SX14 or higher



EtherSwitch Modules
12.2(50)SE or higher



Integrated Services Routers (ISR i.e. 1900/2900/3900) G2
15.1(1)T



Catalyst 2960-S
12.2(53)SE1 or higher
IP Base feature set



Catalyst 3750-X & 3560-X
12.2(53)SE2 or higher
IP Services feature set



IP Phones 69xx, 89xx, 99xx series
support POE on/off

*March 2010 IOS release will have
EW client & Wake Up Call feature*

Agenda

- EnergyWise Overview
- Orchestrator
- Platforms & Roadmap
- Summary

EnergyWise Benefits



Lower
Operating
Costs



Comply with
Government
Regulations



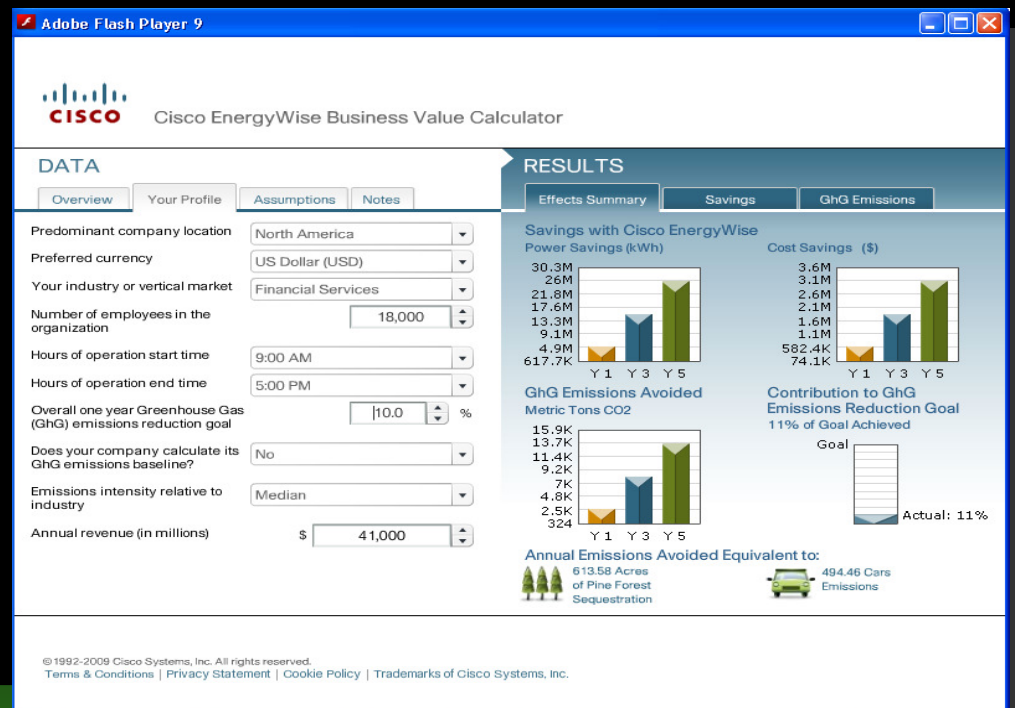
Corporate
Social
Responsibility

EnergyWise Summary

- Architecture for network-based power measurement, reporting and management
- Convergence of IT and Facility Networks:
Phones, wireless APs, PCs/laptops, lighting, heating, ventilation, air conditioning, security, access control,...
- Cisco end-to-end solution
- Orchestrator will be available starting in June
- Another Cisco seismic market transition is beginning...

Cost Calculator

1. Create customer profile
2. Correlate power usage
3. Demonstrate savings in:
 - Watts
 - Dollars
 - Carbon emissions



www.cisco.com/go/energywise/

Q & A

www.cisco.com/go/energywise

