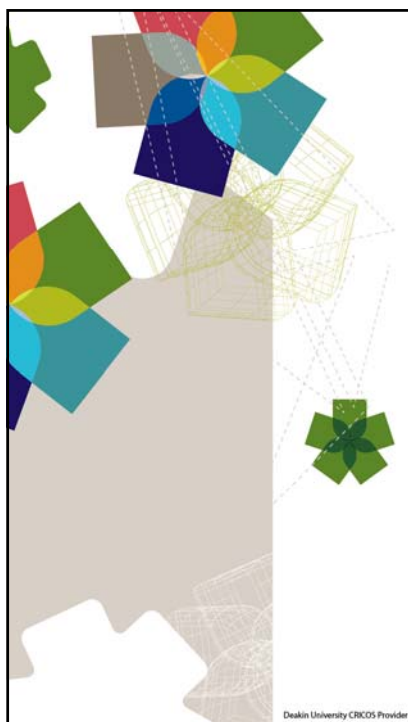




Energywise @ Deakin

Craig Warren



Deakin University CRICOS Provider Code: 001138



The Journey

- Access Layer Upgrade
 - Driven by EOL equipment
 - Gigabit need
- Tender
 - What else did we want?
 - Zero Conf
 - Smart Macros
 - Energy measurement, saving

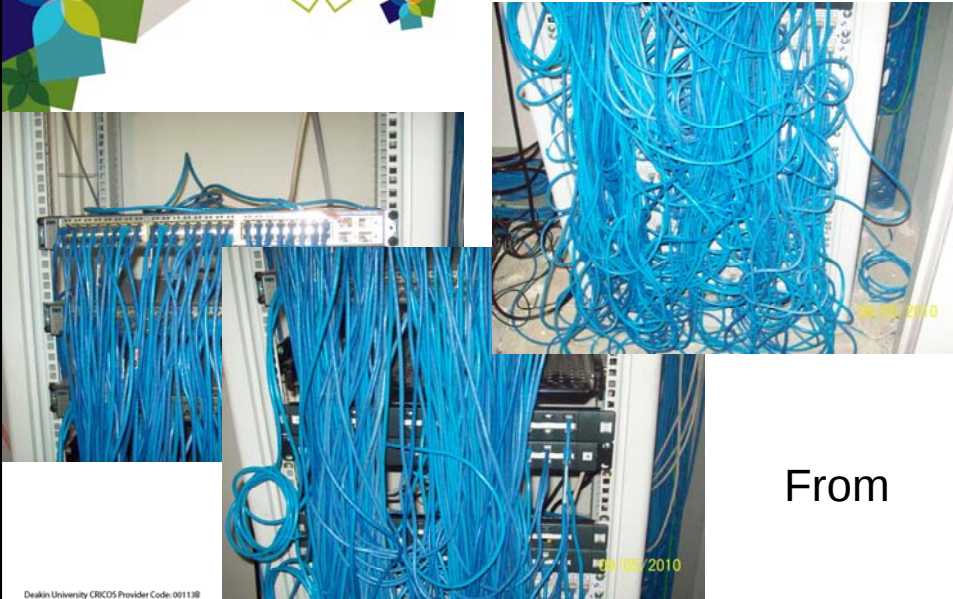
Deakin University CRICOS Provider Code: 001138



Size of the Journey

- 190 closets
- 400+ switches
- 900 WAPs
- 5,500 IP phones
- 7,500 PC's
- 150 Digital Signs
- 8 months of effort

Deakin University CRCOS Provider Code: 001138



From

Deakin University CRCOS Provider Code: 001138



The Access Layer solution

- Cisco 3750X switches
 - With StackPower
 - Zero Config
 - Smart Macros

DEAKIN
UNIVERSITY AUSTRALIA

Deakin University CRCOS Provider Code: 001138



Why Zero Config & Smart Macros

- Building Turn key
- Consistency
- 802.1x wired – shortcomings

Deakin University CRICOS Provider Code: 00113B



What Green Strategy?

- Paint some rooms green
- Buy energy star rated equipment
- Virtualise – we've done that
- Put PC's to sleep or hibernate
 - <http://windows.microsoft.com/en-AU/windows7/Sleep-and-hibernation-frequently-asked-questions>
- If the network is the computer, perhaps it can be the power switch!

Deakin University CRICOS Provider Code: 00113B




Why do we need a green strategy?

- Preparing for the next big wave?
- Social Responsibility
- We're regional
 - Aquatic Science Research – Tuna and Tides
 - The biggest carbon fibre furnace in the Southern Hemisphere
- We're on the road again!
- \$

Deakin University CRICOS Provider Code: 001138




Why?



Deakin University CRICOS Provider Code: 001138




Why?



Deakin University CRCOS Provider Code: 001138




Why?

- Waterfront WAP Upgrade
- Times 3 more campuses
- We've IP-enabled all of our AV equipment
- We've started working with Facilities
 - Slowly breaking through on access control
 - Slowly breaking through on IP surveillance
 - Nirvana – Building Control
- Everything is becoming IP enabled

Deakin University CRCOS Provider Code: 001138

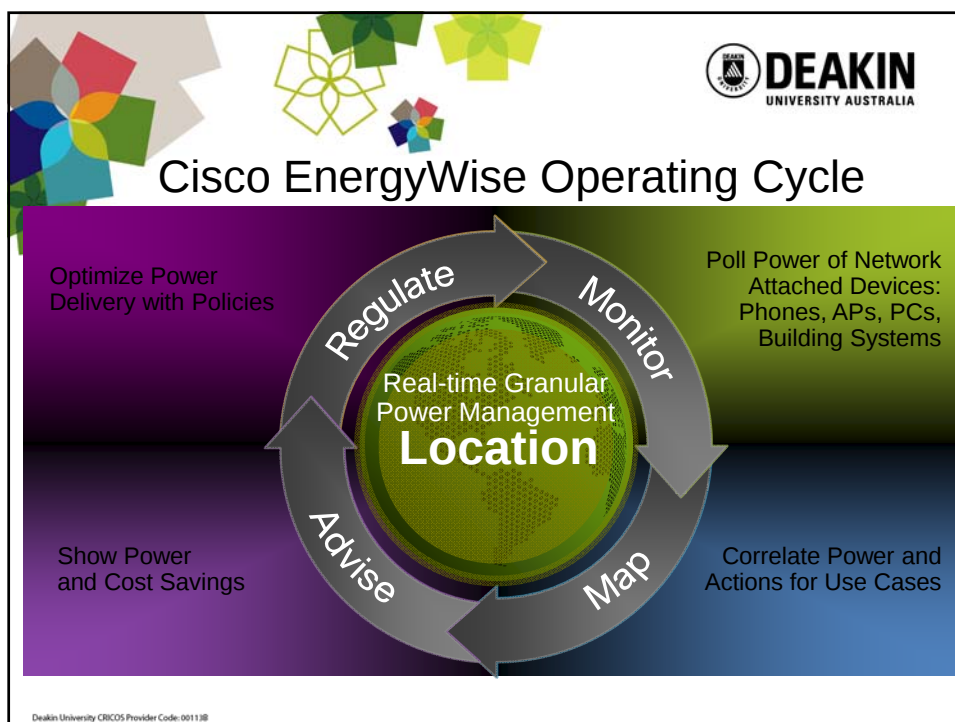


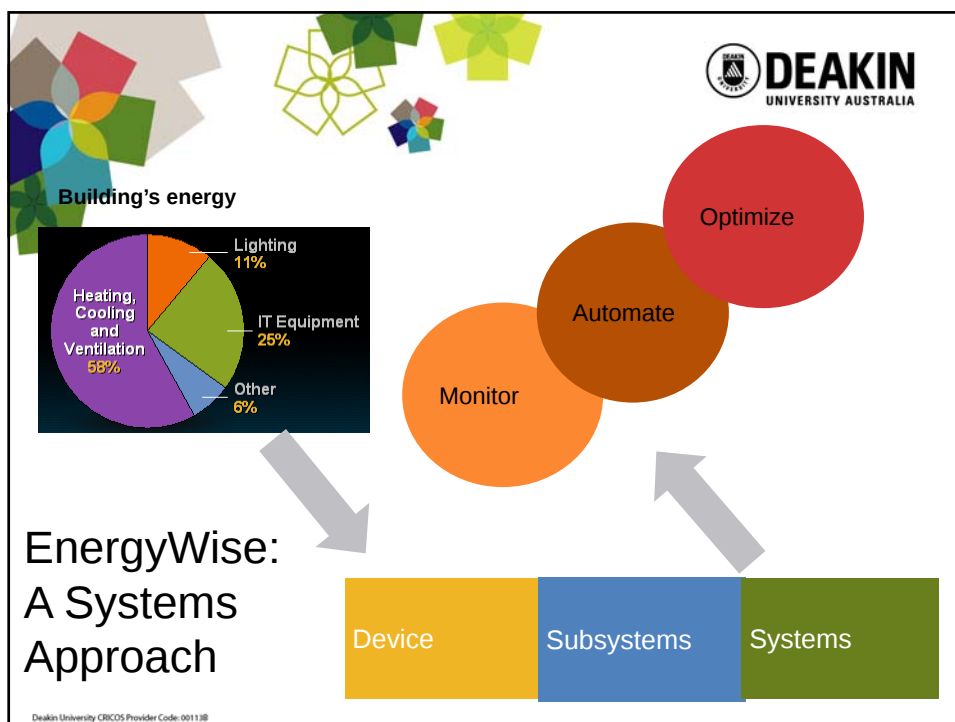

Energywise

http://www.webopedia.com/TERM/C/Cisco_EnergyWise.html

Cisco EnergyWise is a [Green IT](#) technology that takes a [network](#)-based approach to communicate messages that measure and control energy between network devices and [endpoints](#). With Cisco EnergyWise the [network](#) discovers Cisco EnergyWise manageable devices, monitors their power consumption, and takes action based on business rules to reduce power consumption. Cisco EnergyWise uses a unique domain-naming system to query and summarize information from large sets of devices, making it simpler than traditional network management capabilities. Cisco EnergyWise has a management interface that allow facilities and network management applications to communicate with endpoints and each other using the network as a unifying fabric. The management interface uses standard [SNMP](#) or [SSL](#) to integrate Cisco and third-party management systems.

Deakin University CRCOS Provider Code: 001138





Energywise Consumption & Control

- Power measurement and control
Understand the power consumption of IP connected devices
Query power information using a network-based approach
- Time-of-day policies to control EnergyWise devices
Polices created on switch to notify and control power

Deakin University CRCOS Provider Code: 001138



Deakin's Green/Energywise Plan

- Stage 1 – Recording
- Stage 2 – Tactical & Practical
- Stage 3 – Data Centre
- Stage 4 – Building Management Systems

Deakin University CRCOS Provider Code: 001138



Where are we at?

- 200 switches have been upgraded, 200 to go
- Energywise has been enabled on all the switches
- The Management Application has been installed
- Let the fun begin!

Deakin University CRCOS Provider Code: 001138

