



# Wireless Network Current (#CTPG6)

*Presented by Craig Coolidge of CDW*



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Thank you for being here today

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# Wireless Network Current

## Outline

### 4 Popular Topics

- 802.11AC vs. 802.11N
- Site Survey
- Wireless Management
- Identity Management

### Polls

### Q&A and Discussion

- During/after each topic
- At the end

# Wireless Network Current

## 802.11AC vs. 802.11N

*The 802.11 wireless network design will drive changes to the infrastructure (switches, cabling, POE budget, etc...). The amount of change is determined by the density and data consumption (number of devices, applications, etc...)*

### 802.11AC

#### Channel Width

- Wave 1: 80MHz
- Wave 2: 160MHz

#### Throughput

- Wave 1: 1.3 Gbps
- Wave 2: 7 Gbps

#### Spectrum - 5GHz

#### MIMO

- Wave 1: MIMO
- Wave 2: MU-MIMO

#### Gigabit Wi-Fi

VS

### 802.11N

Channel Width – 40Mhz

Throughput – 600 Mbps

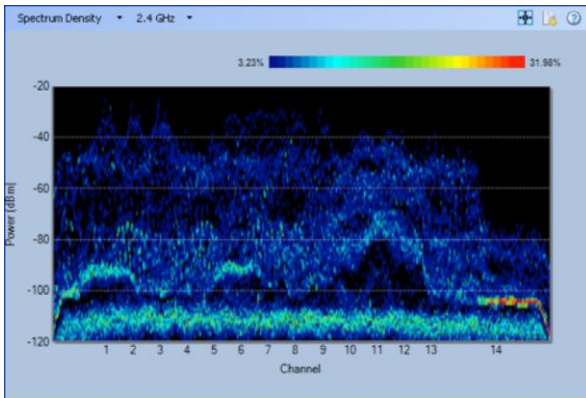
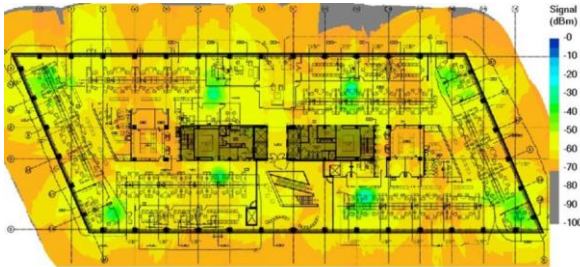
Spectrum – 2.4 GHz and 5GHz

MIMO

100 Megabit Wi-Fi

# Wireless Network Current

## Site Survey



- Why?
  - How Many
  - Where
  - Cabling pulls
  - Density (Users and Devices)
- Type
  - Predicted
  - On-Site
- Costs
- Details
- Benefits



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## Do I need it?

- At what point
- Number of sites

## Own it or Use it

- Upkeep and Maintenance
- Operational Expense
- Feature and Functionality Limitations?

# Wireless Network Current

Wireless Management: On-Premise or Cloud



# Wireless Network Current

## Identity Management

- Users and Devices
- Website limitations?
- AAA – Authentication, Authorization, and Accounting
  - RADIUS – Authentication and Accounting
  - TACACS+ – AAA
- Access Policies
  - CISCO ISE (Identity Services Engine) - RADIUS
  - Aruba ClearPass – RADIUS and TACACS+
  - Microsoft NPS - RADIUS
- EAP Types
  - EAP-TLS – Certificates or PKI
  - PEAP – Microsoft AD
- Guests – Specific Account, Facebook, Temporary Credentials, Scheduling
- Acceptable Use Policy

# Questions

*We'll now open it up for questions*



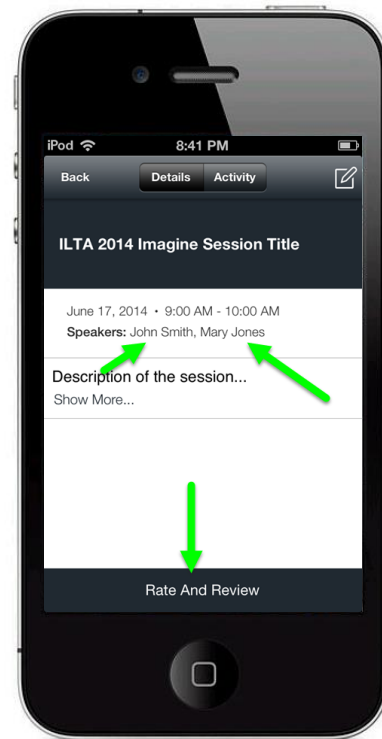
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# Thank You

