AAFCPAs

IT Security Update

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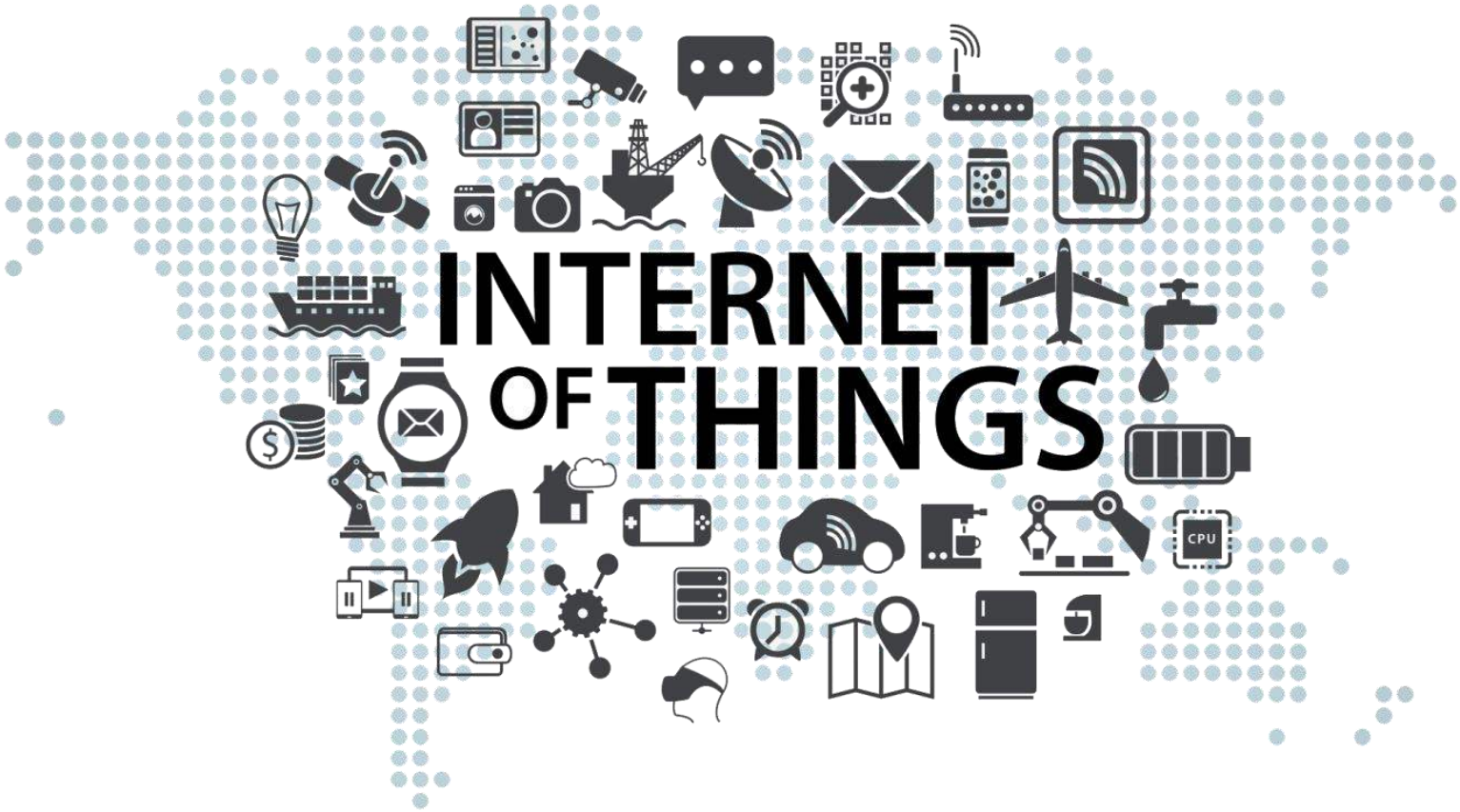
Security Update

Internet of Things IoT

Vassilis Live from the North America CACS 2017 IT Security and Audit Conference

Wireless…Secure or Not Secure?


INTERNET
OF THINGS
CPU

IoT – What is It?

So, what is IoT?

- It is the connectivity and exchange of data among “smart” devices. “Smart” is used to identify the fact that those devices have the capability to collect data via different input methods, and then send that data to processing “brains” for analysis. Based on certain algorithms, the device then responds.

IoT – What is It?

Examples Home

- Car- service scheduling and monitoring
- Fitbit- health tracking
- Refrigerator or dishwasher- performance issue or tells you to buy milk
- Thermostat- controls heating and cooling based on occupancy
- Baby monitor- check in on junior
- Hot water heater- vary temp or vacation mode

Examples Office

- The vending machine in your office
- Internet based wireless phones
- Printers
- Alarm systems
- HVAC systems
- Lighting automation
- Electric and gas metering
- Health monitors- for insurance premium reduction

"Estimate of 26 Billion connected devices by 2020"

- Gartner

IoT – Does This Look Familiar?

Things
Cell Phone
Thermostat

Gateway
Home/Work Router

Network
(oh Boy)

Applications
Financial Applications
Personal Data

Microsoft Dynamics GP

IoT – Security Concerns

Passwords

How Complex are the admin/user passwords?

IoT – Security Concerns

Accounts

Default Accounts (Admin and Manufacturer)

IoT – Security Concerns

Patching

Is it a blessing or curse?

IoT – Security Concerns

Communication Protocols – Encryption

What standards are used?

Are they secure?

IoT – Security Concerns

Source Code

Software for some of those devices is low quality.

IoT – Security Concerns

Privacy

Where is the data going and who has access to it?

IoT – What Can You Do?

Assess! Assess! Assess!

Know your environment.
Assess what the risks are and plan accordingly.

IoT – What Can You Do?

Be Up to Date with Patching

Minimize the risk of penetration.

IoT – What Can You Do?

The Most Current & Secure Ways to Communicate

Minimize the risk of interception…

IoT – What Can You Do?

Segregate IoT Devices from Other Systems

If an IoT device is hacked, the damage is contained…

IoT – What Can You Do?

Perform Vulnerability & Penetration Tests – Phishing

Discover your environments holes before hackers do…

Run, at minimum, annual drills…

IoT – What Can You Do?

Educate / Inform

Train your organization on the latest trends…

LIVE From North America CACS 2017

Computer Audit, Control, and Security

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Wireless- Secure or Not Secure?

Mr Anderson

AAFCPAs' Mr Anderson was recently sent to Starbucks.

What WIFI did you sign into today?

Logging onto Marriott's WIFI also exposes you.

Questions & Comments

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