



HOME AUTOMATION

AN INTRODUCTION

BILL JAMES, APCUG ADVISOR, REGION 8

VP, COMPUTER CLUB OF OKLAHOMA CITY

HOME AUTOMATION

- What is Home Automation?
 - Home automation refers to the automatic and electronic control of household features, activities, and appliances.
- What is Required?
 - Internet Connection
 - Wi-Fi Router
 - Smartphone or tablet
 - Connected appliances and devices
 - Voice operated Controller or Host (optional)

HOME AUTOMATION

- Reasons for Home Automation
 - Convenience of Control of Many Devices
 - Security
 - Door Locks
 - Cameras
 - Motion Sensors
 - Lighting
 - Garage Door Openers

HOME AUTOMATION

- Energy Savings
 - Connected bulbs are LED and low wattage
 - Can be controlled 'on demand'
 - Can be controlled remotely
 - Thermostats

HOME AUTOMATION

- Types of Home Security
 - ADT
 - Vivent Smart Home
 - Cox Home
 - Independents Contractors

HOME AUTOMATION

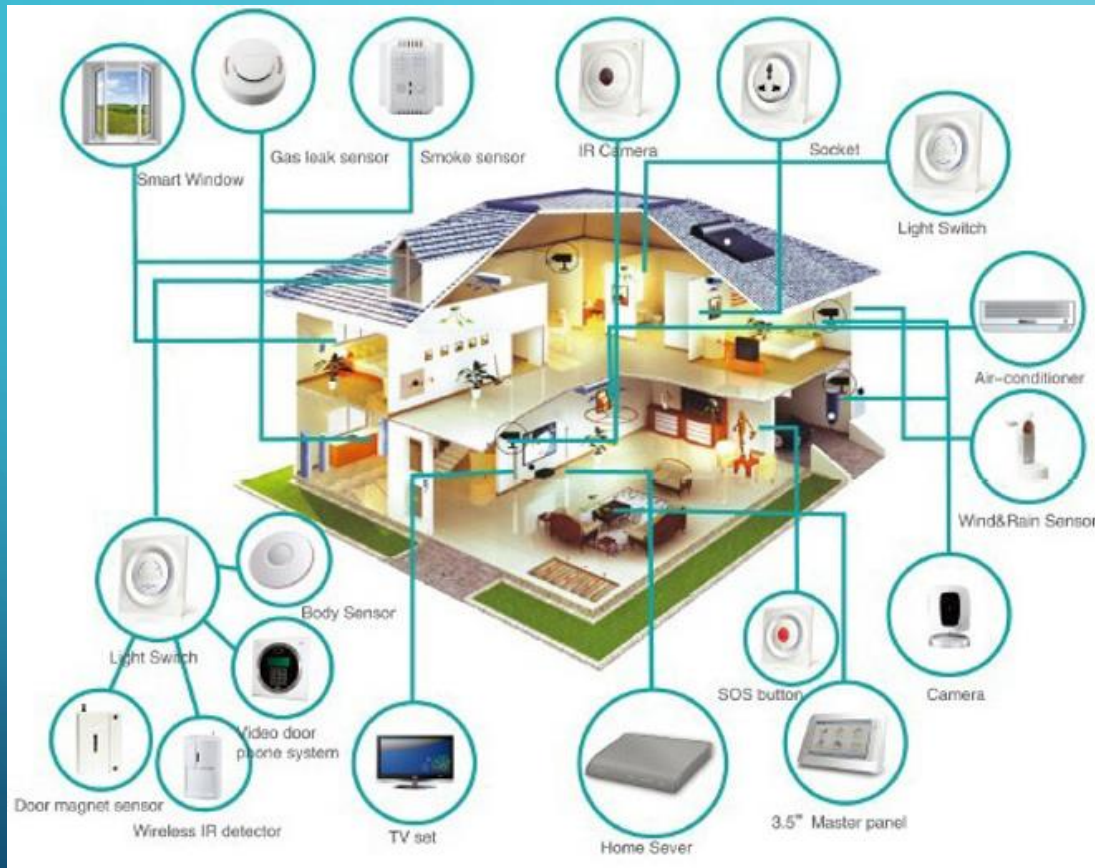
- Costs
 - Installation
 - Monthly Fees
 - Equipment
 - Activation

HOME AUTOMATION

- Do It Yourself DIY
- Devices cost but you can monitor free
- Systems
 - Hub Required
 - Easy connectivity
 - Usually only 1 Hub required to control everything
- Devices
 - Mostly not connected
 - Require multiple apps to control everything

HOME AUTOMATION

- Standalones. These devices can be installed and controlled independently with a smartphone or tablet through wi-fi
 - Thermostats
 - Lighting devices
 - Door Bells
 - Door Locks
 - Wi-Fi Smart Plugs
 - Household appliances



- There are many different devices that make up today's smart home.
 - Thermostats
 - Door locks
 - Speakers
 - Refrigerators
 - Crock pots
 - Robots
 - Vacuum cleaners
 - Personal assistants
 - Baby monitors
 - Security systems
 - Door bells
 - Garage door openers
 - Plugs and switches
- Most people start to develop a smart home with lighting

HOME AUTOMATION



- Types of hubs or controllers
 - Google Home *or*
 - Amazon Echo, Dot *or*
 - Samsung Smart Things *or*
 - Logitech Harmon
 - Supplied controller (i.e. Hue hub)
- Cost - \$50 to \$200

HOME AUTOMATION

- What are Hubs?
 - Smart home automation hubs are a one-stop solution for unifying your connected gadgets
 - Allows controlling them from one simple app on your Smartphone or Tablet
 - Support different connectivity protocols
 - Support for IFTTT (If This Then That) to configure and trigger your connected devices
 - Voice Activated

HOME AUTOMATION

- What Can a Home Automation Hub Do?
 - Turn on your lights and other connected devices from one app.
 - Daily Reminders
 - Interact with your daily calendar
 - Find locations of businesses
 - Tell the Weather and News
 - Customize tasks with IFTTT (If this, then that)

HOME AUTOMATION

- IFTTT Explained

- IFTTT is a cloud-based if/then engine that allows users to write simple home automation rules (“recipes”) for popular smart devices like Philips Hue, Lutron, Nest, Belkin Wemo and SmartThings.
- The platform also supports online services such as Twitter, Facebook and SMS messaging.

HOME AUTOMATION

- IFTTT (If this, then that) Overview
 - Triggers are the "this" part of an applet.
 - They are the items that "trigger" the action.
 - For example, from an RSS feed, you can receive a notification based on a keyword or phrase.
 - Actions are the "that" part of an applet.
 - They are the output that results from the input of the trigger.

HOME AUTOMATION

- Applets (formerly known as recipes) are the predicates made from Triggers and Actions.
- For example, if you like any picture in Instagram (trigger), the photo will be sent to your Dropbox account (action).
- Ingredients are basic data made available from a trigger.
- For example, the data that are available from the email trigger include subject, body, attachment, received date, and the sender's address.

if  then 

If sunset, then switch on Lamp

if  then 

If every day at 10:00 PM, then switch off Lamp

if @ then 

HOME AUTOMATION

- Using simple Applets or recipes, IFTTT can control your lights, motion, thermostat, etc.
- Applets are readily available for both Android and iOS
- www.ifttt.com

HOME AUTOMATION

Examples:

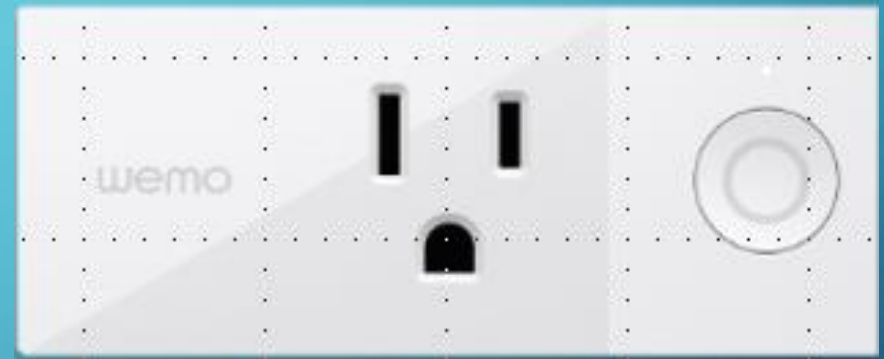
 if	 then
If it's 30 minutes before sunset on weekdays, turn on my WeMo table lamp	
by homeseer  1  0	
 if	 then
Call me immediately if a special emergency code was used to unlock my home	
by homeseer  0  0	
 if	 then
If I leave home, run a HomeSeer event to lock my doors, shut off my lights and adjust my thermostat	
by homeseer  10  2	

HOME AUTOMATION

- Getting Started
 - Make a Plan
 - Decide what you would like to automate
 - Keep it simple
 - DIY – Do it yourself
- IFTTT Website – free recipes www.IFTTT.com

HOME AUTOMATION

- Wemo Mini Smart Plug
- PEACE OF MIND WITH REMOTE CONTROL
- When a light or appliance is plugged into a Wemo Mini Smart Plug, you can turn it off from your phone or tablet no matter where you are.
- You'll never have to worry that you accidentally left the iron on or coming home to a dark house again.



HOME AUTOMATION

- **CONTROL YOUR HOME FROM ANYWHERE**
- The Wemo Mini Smart Plug lets you control your electronic devices right from your phone or tablet.
- The Smart Plug uses your existing home Wi-Fi network to provide wireless control of lamps, heaters, fans, and more--with no subscription or hub required.
- Simply plug the Wemo Mini Smart Plug into an electrical outlet, plug a device into the Smart Plug, and control your device using the free Wemo app.

HOME AUTOMATION

- Whether you're unwinding on the couch or vacationing in the Caribbean, you'll be able to remotely control your lights and appliances from anywhere in the world.
- Compatible with Echo, Dot, Google Home and IFTTT

HOME AUTOMATION

- SUMMARY:
- Large variety of **home automation options** available to you.
- Scan your property with video cameras, lock or unlock the doors, and turn on or off the lights from anywhere in the world.
- Control the temperature in your house, play music in selected rooms, and more.

HOME AUTOMATION

- All you need is a computer or a mobile phone to easily control and monitor the many aspects of your home.
- Home automation can also be enhanced with a home security system to offer added security for your home and family.

QUESTIONS?

INTRODUCTION TO HOME AUTOMATION

Bill James, APCUG Region 8 Advisor
VP, Computer Club of Oklahoma City
wjames (at) apcug.org

