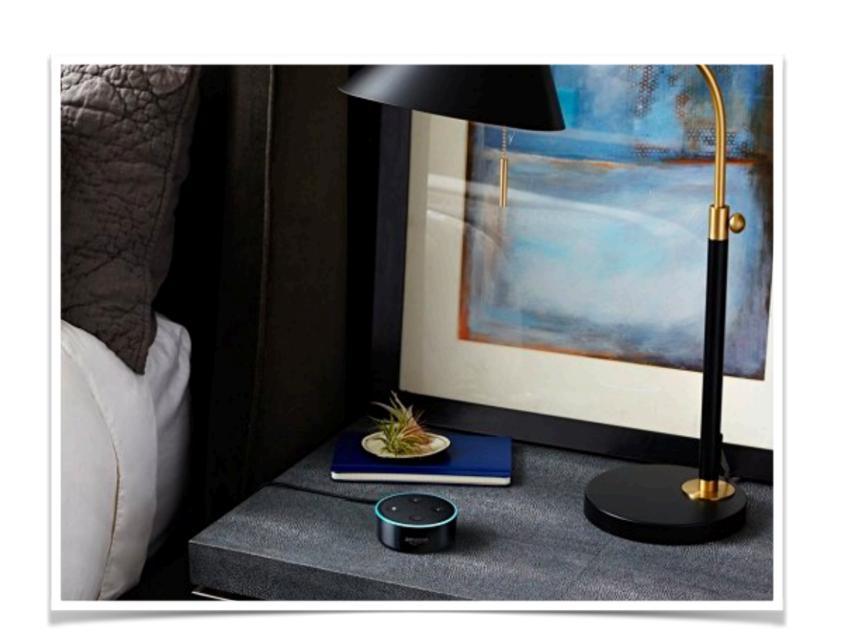






# Cove Apple Club





February 22, 2017



# Tonight's Topics

- Airplane Mode!
- Tales from the sea
- Tap's latest trick
- coveappleclub.com is now encrypted!

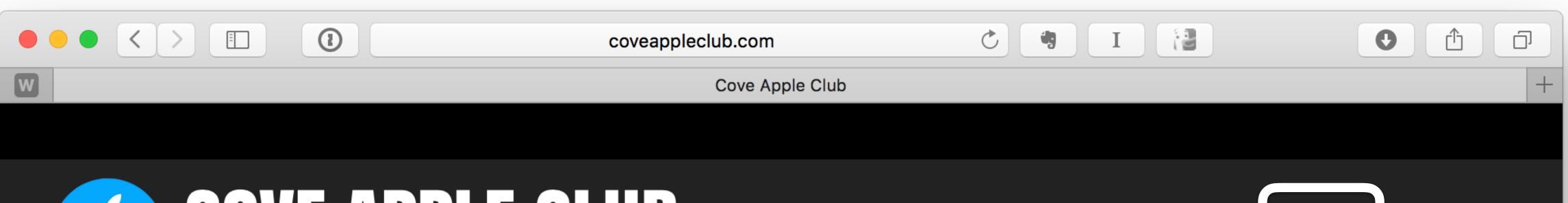
# Our Last Meeting...

- Thanks to the shoreside crew:
  - Dan Priebe
  - Jef Walker
  - Jean Paquet



# Support the Cove Apple Club







HOME MEETINGS EMAIL LIST SHOP ARCHIVES

#### SHARE. LEARN. LAUGH!

Join over 100 Cypress Cove residents and members in the Cove Apple Club, and you'll learn more and get a lot more fun and productivity out of all your Apple gear!

We meet twice a month, year-round. Check our <u>upcoming meeting schedule</u> and plan to join us at our next meeting!

If you're new to the world of Apple, an old Machead from years back, or even a frustrated Windows user, you will find something interesting and entertaining at each of our meetings. Our meetings are fun and informative, with topics presented covering the range from beginner to advanced.

Our focus is on Apple products, but we often also look at other new technologies not specific to the Apple platform, ranging from computer security to Internet telephony to changes in the industry to neat new tech gadgets of interest to everyone.

All Apple products are fair game at our meetings: iPad, iPhone, iPod and Macs of all sizes, as well as the huge world of Apple software, hardware and accessories.

Find out more about the club, our meeting schedule and how you can get in on the fun. Click the links below for details, and be sure to join our <u>email list</u> for all the latest updates.









#### COVE APPLE CLUB

Have fun & do more with your Apple gear!

MEETINGS

HOME

**EMAIL LIST** 

**SHOP** 

**ARCHIVES** 



The next time you need some new Apple or other tech gear (or anything else from the 20,000,000 items in stock!), start your online shopping session with our link to Amazon.com. Your purchase will earn a little money for the Cove Apple Club, which we save up all year for a big Holiday Party for all members of the club! We update club members on the earnings every month.

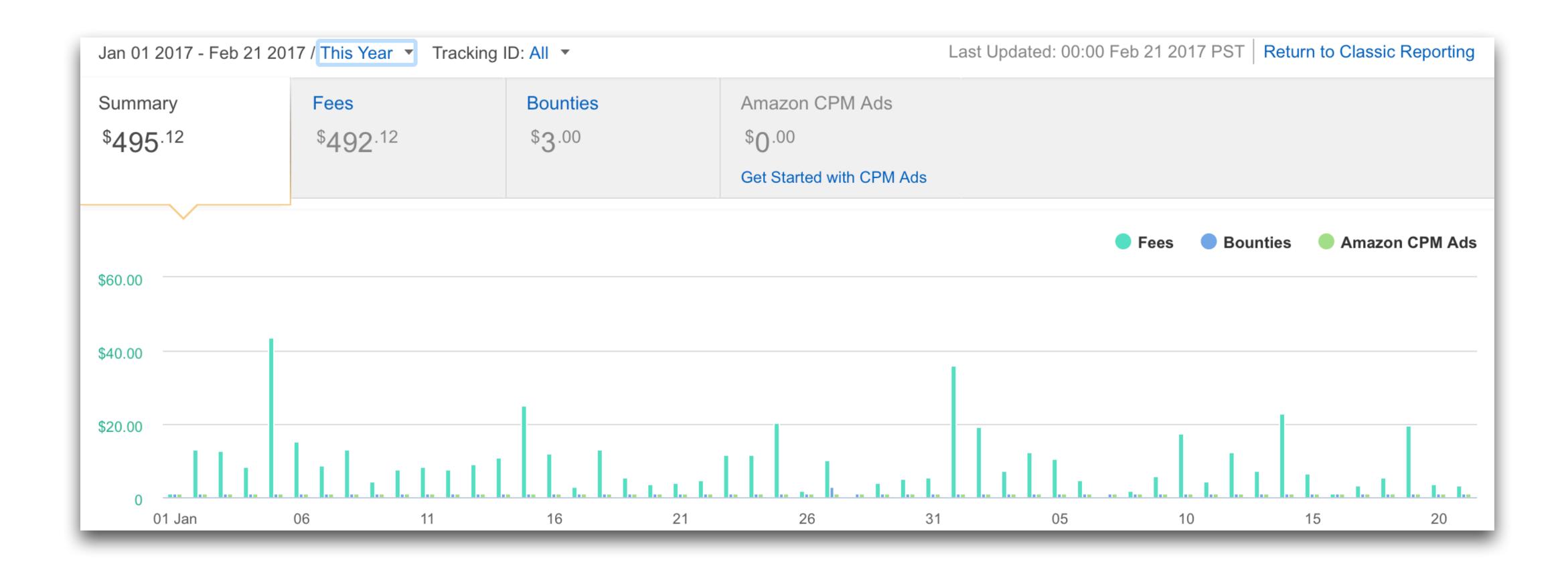
So be sure to click the Amazon logo below when you need to shop for Mac products online...and "give back" to the Cove Apple Club -- without costing you an extra cent! Thanks!

#### THREE EASY WAYS TO USE THE AMAZON SHOPPING LINK

- 1. Just click here you'll be sent to the Amazon.com homepage.
  - 1. Once you arrive at the Amazon homepage, BOOKMARK that page:
    - 1. In Safari on Mac, type Cmd-D
    - 2. In Safari on iOS, tap the Share widget, then tap Add to Favorites or Add Bookmark.
- 2. Drag this link to your Favorites bar in your Web browser. Then it's handy anytime you want to visit Amazon.
- 3. Just click the Amazon banner ad below.

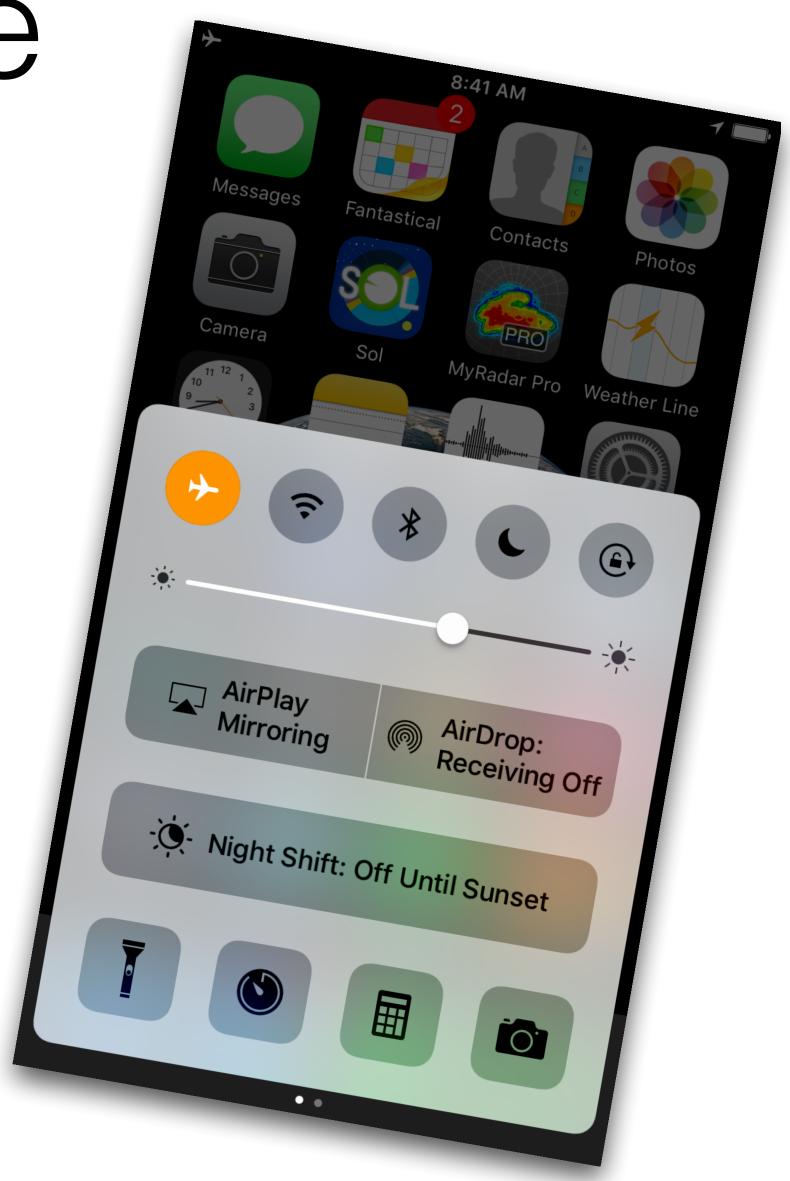


#### 2017 YTD



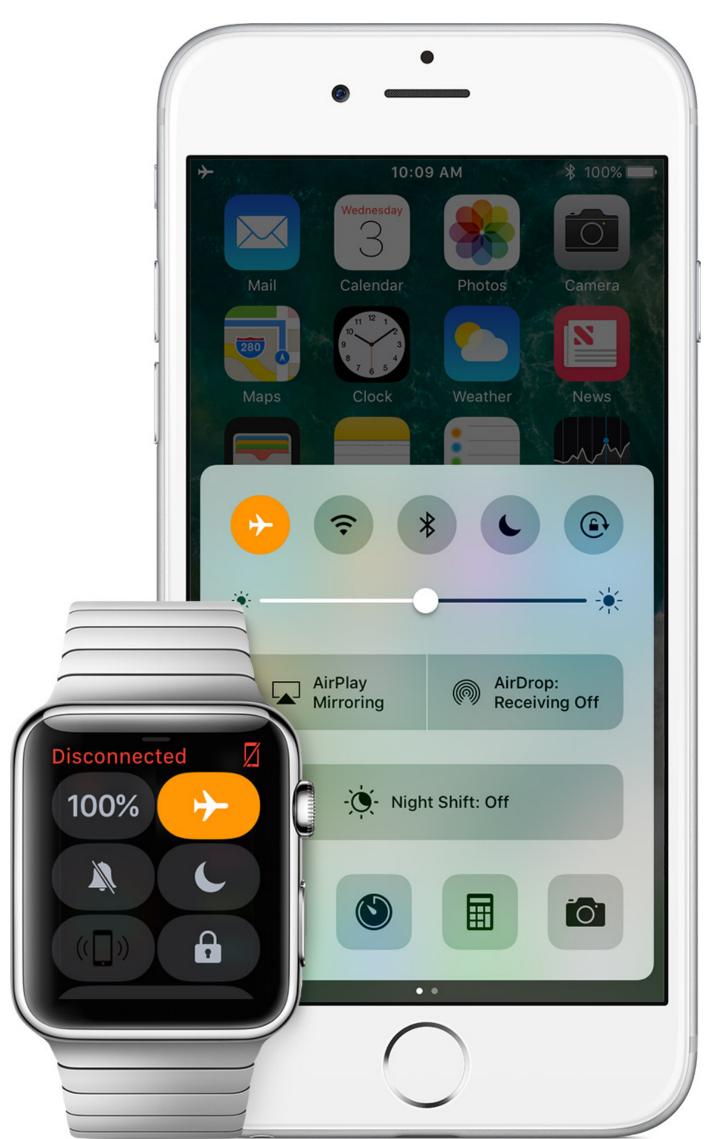
Airplane Mode

- It's that thing you hear about just before takeoff on every flight
- Most of us know how to turn it on and off
- ...but what's really going on underneath?
- ...and why else might we want to use it, other than when in a commercial aircraft?



## What does Airplane Mode do?

- Well?
- Airplane Mode turns OFF all the radio transceivers on your device
- **Why** do we want to do that when we're about to fling ourselves into the sky in a tiny, fragile aluminum tube?



#### How many transceivers are we talkin' about?

- Cellular radios (iPhone & iPad with 4G LTE)
- Wi-Fi radios
- Bluetooth
- NFC (ApplePay)

#### **Cellular and Wireless** Model A1660\* / Model A1661\* FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 27, 28, 29, 30) TD-LTE (Bands 38, 39, 40, 41) TD-SCDMA 1900 (F), 2000 (A) CDMA EV-DO Rev. A (800, 1900, 2100 MHz) UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz) GSM/EDGE (850, 900, 1800, 1900 MHz) Model A1778\* / Model A1784\* FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 27, 28, 29, 30) TD-LTE (Bands 38, 39, 40, 41) UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz) GSM/EDGE (850, 900, 1800, 1900 MHz) Models A1778 and A1784 do not support CDMA networks, such as those used by Verizon and Sprint. All models 802.11a/b/g/n/ac Wi-Fi with MIMO Bluetooth 4.2 wireless technology NFC

#### How many transceivers are we talkin' about?

#### **Cellular and Wireless**

Model A1660\* / Model A1661\*

TD-LTE (Bands 38, 39, 40, 41)

TD-SCDMA 1900 (F), 2000 (A)

CDMA EV-DO Rev. A (800, 1900, 2100 MHz)

UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)

GSM/EDGE (850, 900, 1800, 1900 MHz)

Model A1778\* / Model A1784\*

TD-LTE (Bands 38, 39, 40, 41)

GSM/EDGE (850, 900, 1800, 1900 MHz)

Models A1778 and A1784 do not support CDMA networks, such as tage web les of which

All models

802.11a/b/g/n/ac Wi-Fi with MIMO

Bluetooth 4.2 wireless technology

NFC

Your iPhone may have as many

FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 2a, \$2. \$1 \ 30, ellular radios onboard,

to support all the various cellular

standards worldwide!

All told, your iPhone has at least

FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 2), E9, different radio

transceivers onboard,

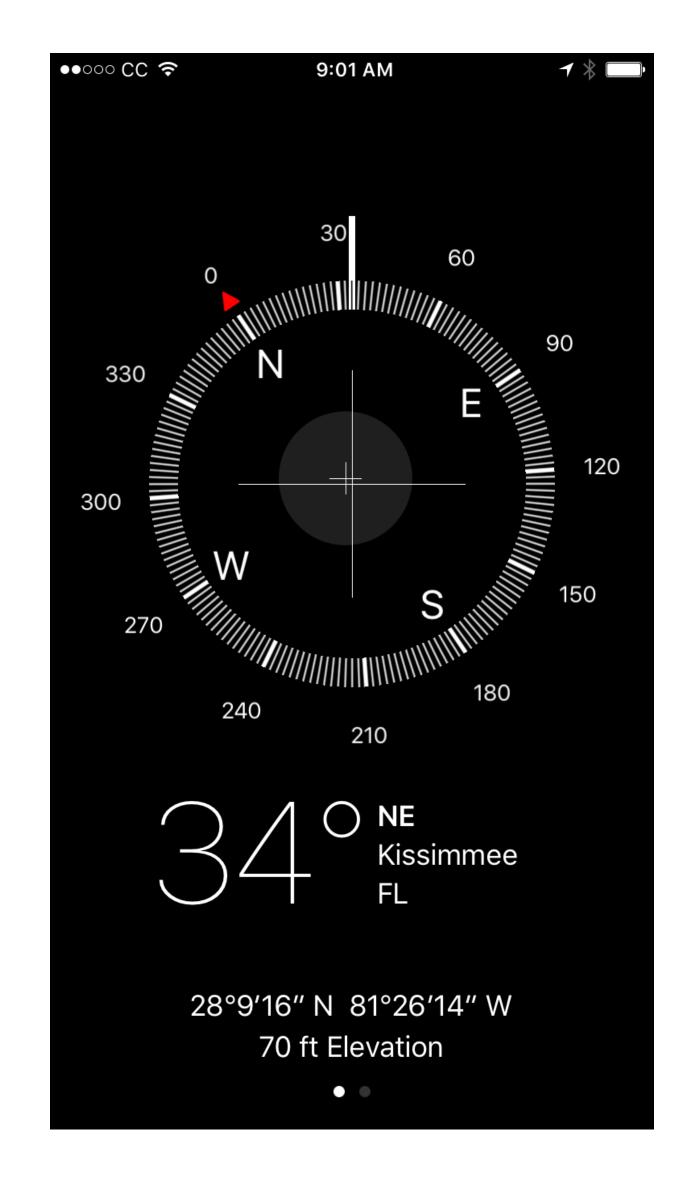
UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz) operating on as many as **42** 

are powered down in Airplane

Mode

## Airplane Mode

- Airplane Mode shuts down all the radio transceivers on your device
- ...but are there any **other** radios on your iPhone?
- Yes!
- There's the GPS / Glossnas receiver, which remains powered up in Airplane Mode
- There is no safety concern in receiving radio signals, even when flying, since you can't avoid the signals anyway, so you might as well listen in



#### Fun Fact!

- Next time you're in a window seat, pop open the Compass app and watch it work:
  - Align long edge of iPhone with long axis of the aircraft
  - Try to level it out when in level cruise mode
  - Then watch for heading and elevation changes, along with changes in lat/long and the pitch attitude of the aircraft



## Super-quick Compass Demo!



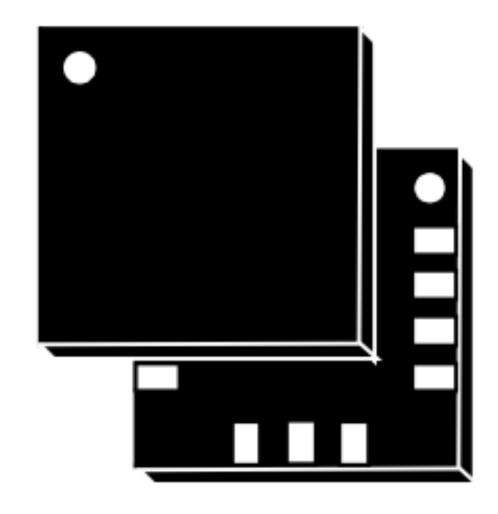
#### How do it do it???

- Motion sensing in iPhone 5-onward is performed by Apple's proprietary M-series motion processor chips (M8, M10)
- Inside the M10 chip in iPhone 7:
  - 3-axis gyroscope
  - Accelerometer
  - Barometer
  - GPS / Glossnas receiver
- Motion sensing is done by a special type of chip called a MEMS - MicroElectroMechanical systems chip



# MEMS Chips

- Microelectromechanical systems: a microscopic chip containing hundreds of nanosized MOVING PARTS along with nano-sized electromechanical sensors to detect motion
- These are true miracles of engineering and extreme miniaturization, and are everywhere: in our phones, cars, laptops, GPS units, gaming controllers, headsets, anything that monitors pressure or temperature, health monitors & sensors, digital cameras (for optical image stabilization), etc.



ST Microelectronics LIS2DHTR

3-Axis MEMS digital output motion sensor

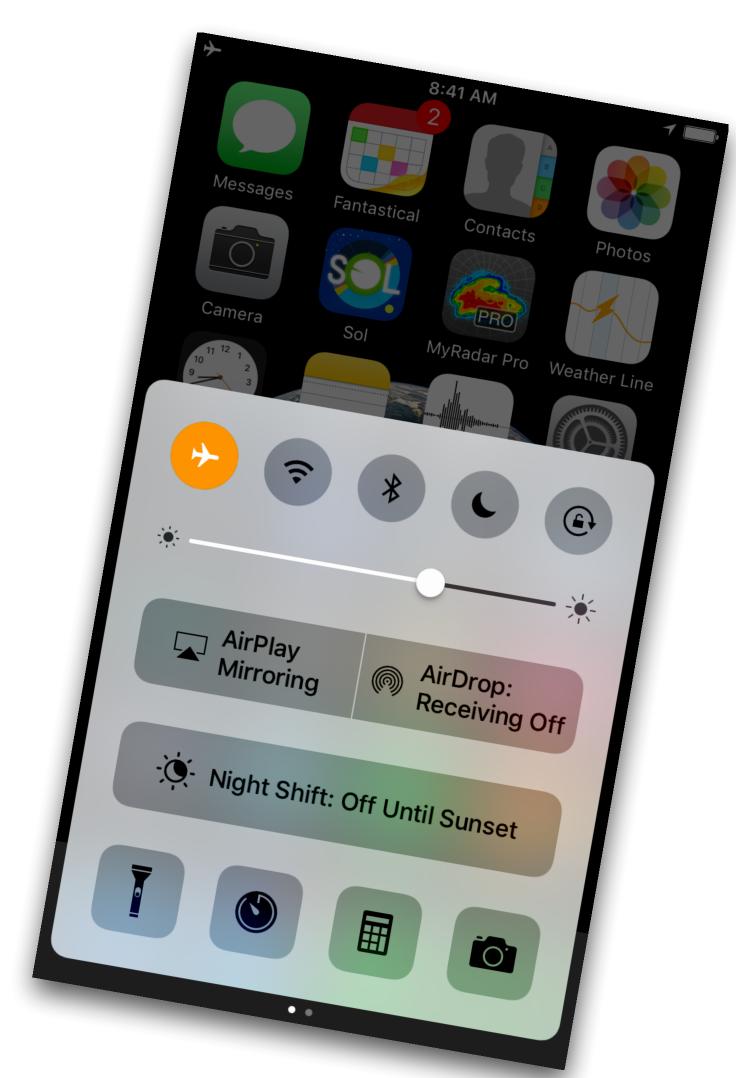
2mm x 2mm x 1mm

\$0.73/each qty. 10,000 \$1.59 qty. 1

source: octopart.com

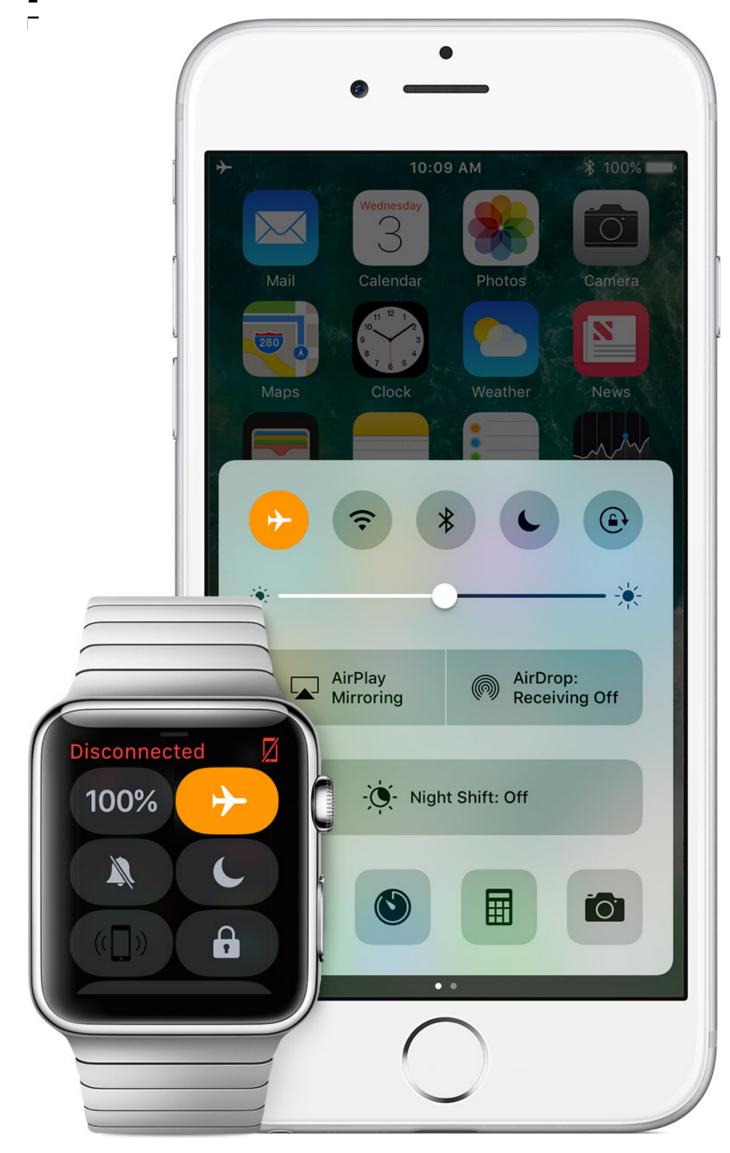
## WHEN to use Airplane Mode

- Airplane Mode ON when instructed by flight crew
  - Shuts off all transceivers, which could (theoretically) interfere with aircraft systems



Any other times?

- Whenever you are sure you are out of cellular range and there
  is no Wi-Fi you want to use at the time
- At the movie theater!
- At sea on a cruise or long ferry crossing
- In a remote area without cell coverage
- Underground or deep inside big buildings where there is no cell coverage
  - In subways
  - Inside some trailer-homes in the Cove!

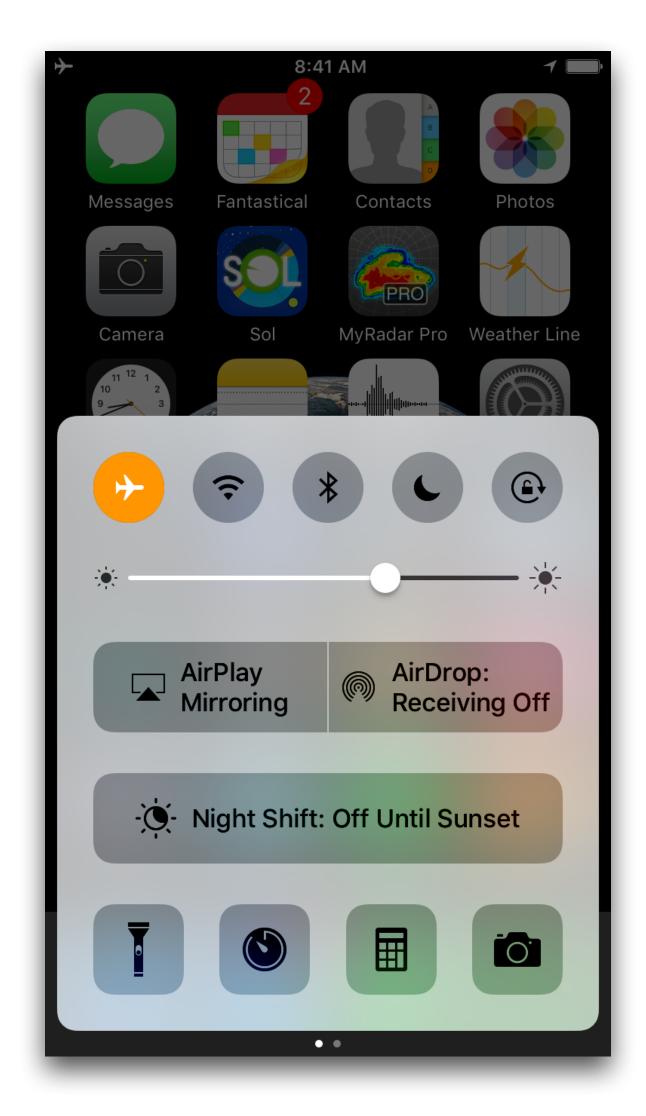


# Airplane Mode With Mods

- Airplane Mode ON, Wi-Fi ON:
  - Bluetooth, NFC and cellular radios are OFF
  - Use when driving using Waze or other mapping / guidance apps
  - On a ship when using shipboard Wi-Fi
  - On a flight, when using airborne Wi-Fi
  - When abroad, and not using cellular, but wanting to use Wi-Fi & Location Services



# Airplane Mode demo!



#### Tap's Latest Trick



# Tap's Latest Trick

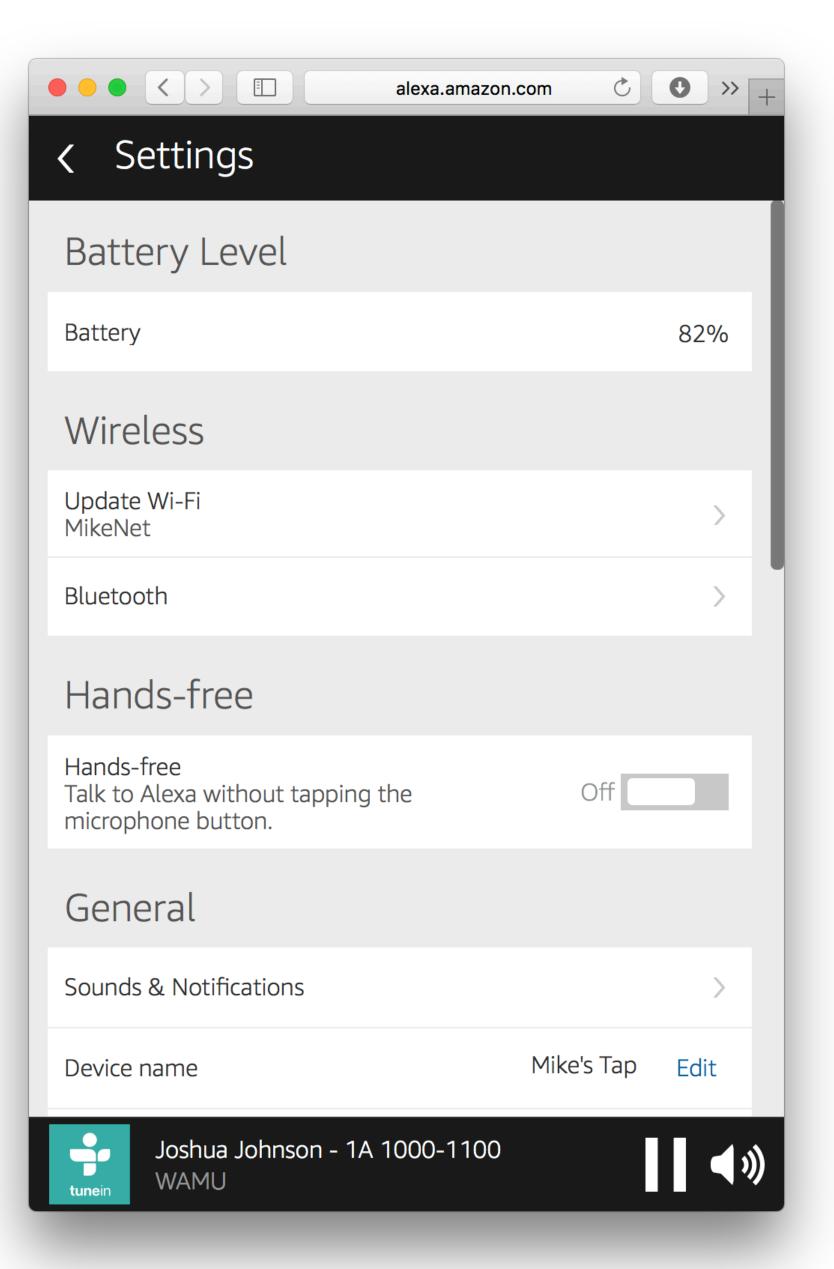


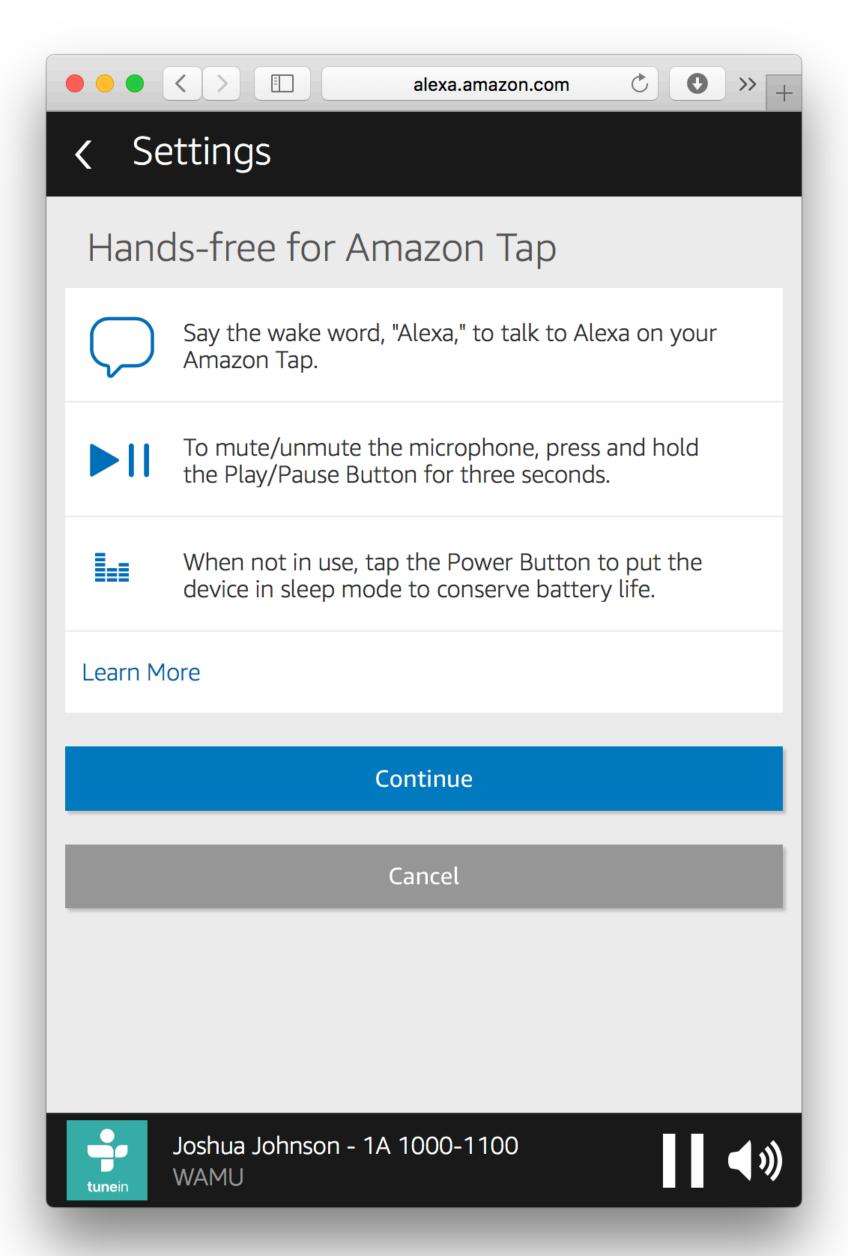
- To refresh: Tap is the middle sibling in Amazon's current Alexa-enabled intelligent assistant speaker line
- Differs from Echo and Echo Dot
  - It's battery-powered and portable at just 1lb.
  - You must press the Microphone button to get Tap to "listen" to your commands — it is not "always listening"
- Because it's portable and not "always listening," battery life is great — days on standby, and 9 hours+ in use

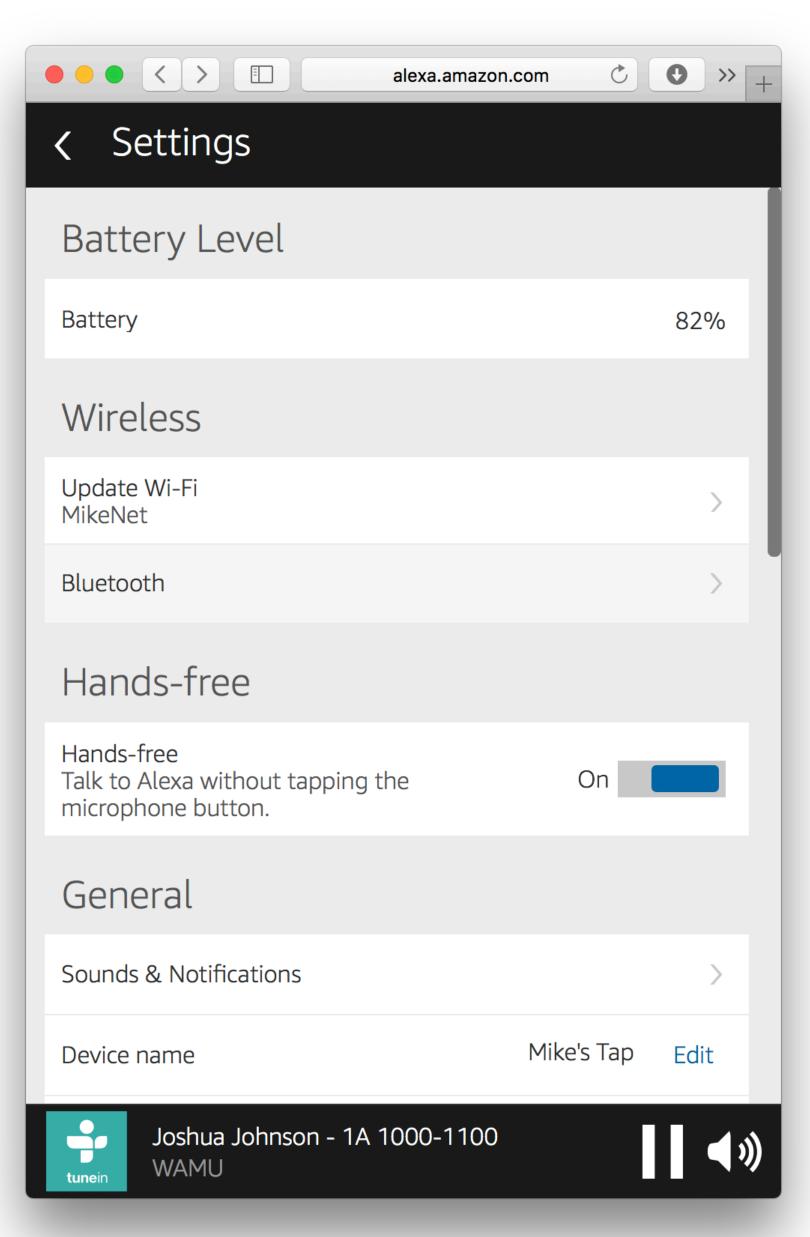
#### ...that was last week. Now:

- Guess what? Amazon just enabled "Hands-Free" mode on Tap; i.e., "Always Listening" mode
- OFF by default, can be enabled in Settings on Alexa app or at <u>alexa.amazon.com</u>

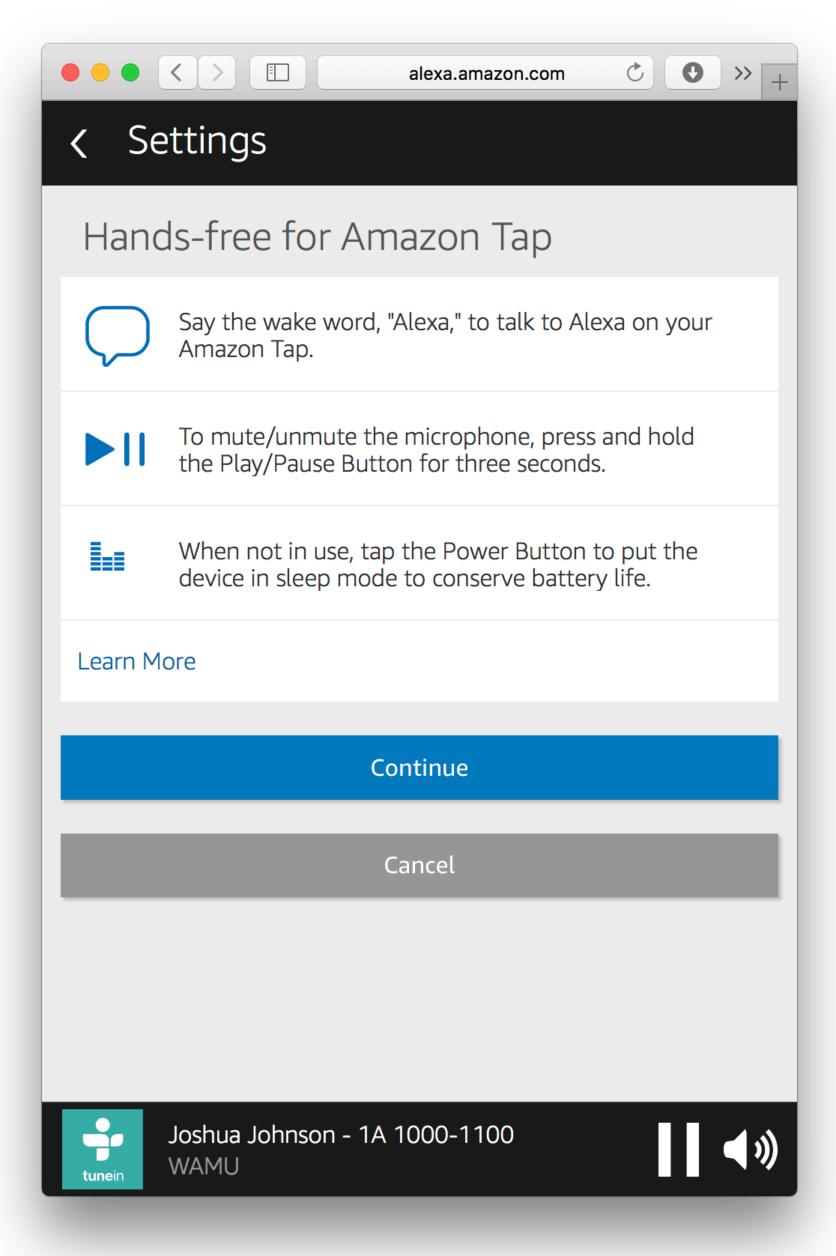








#### Demo!

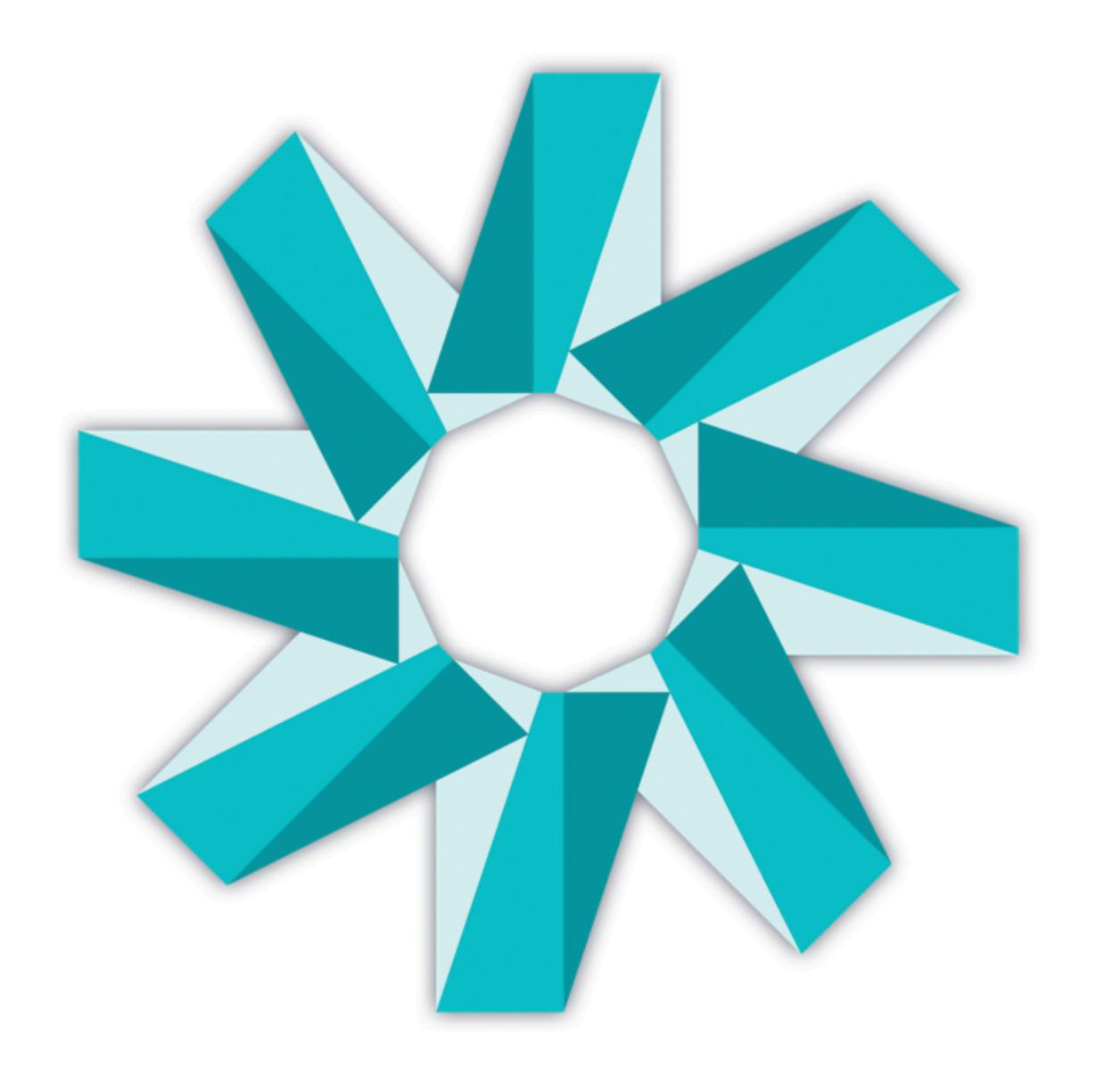


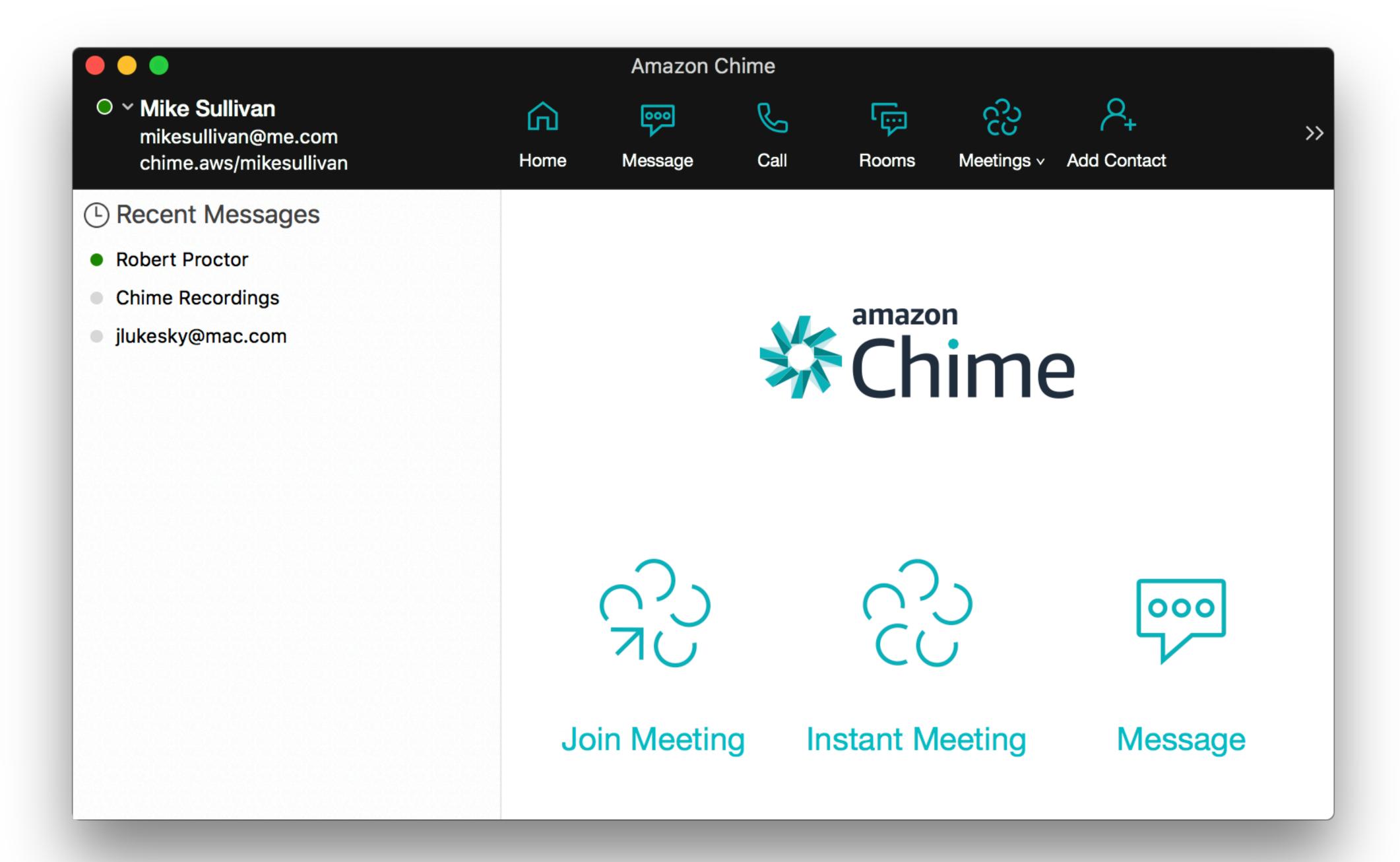
What's Next for Tap / Echo / Echo Dot?



# amazon

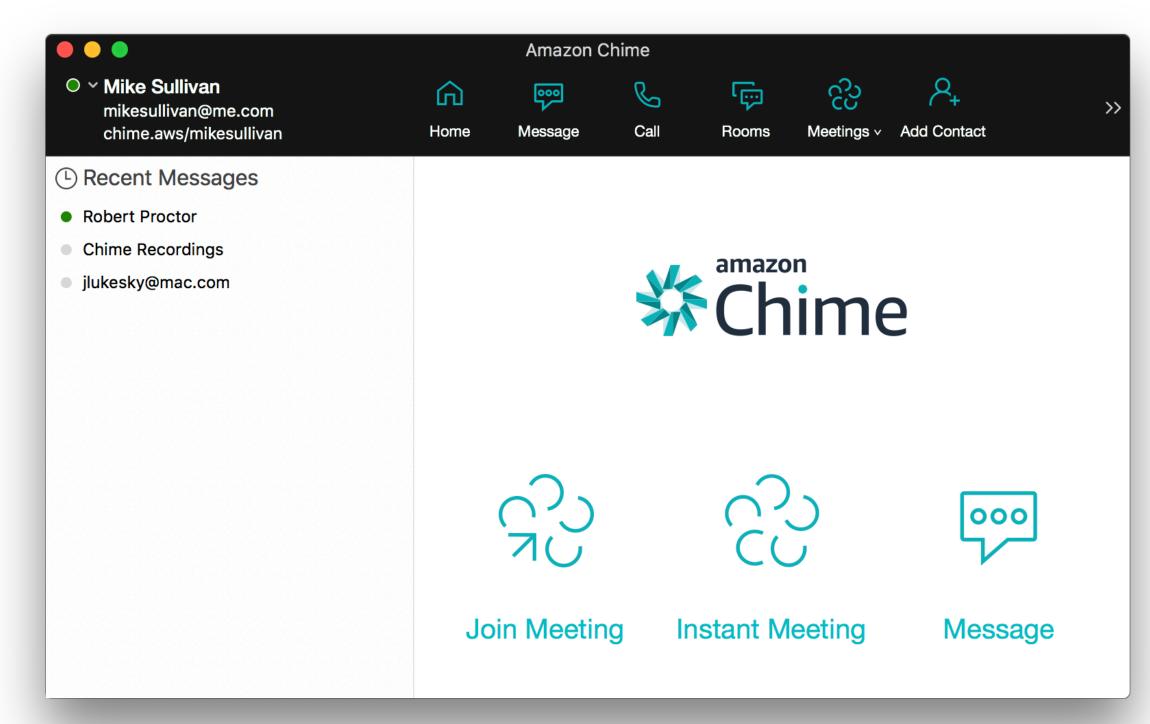
# Chime

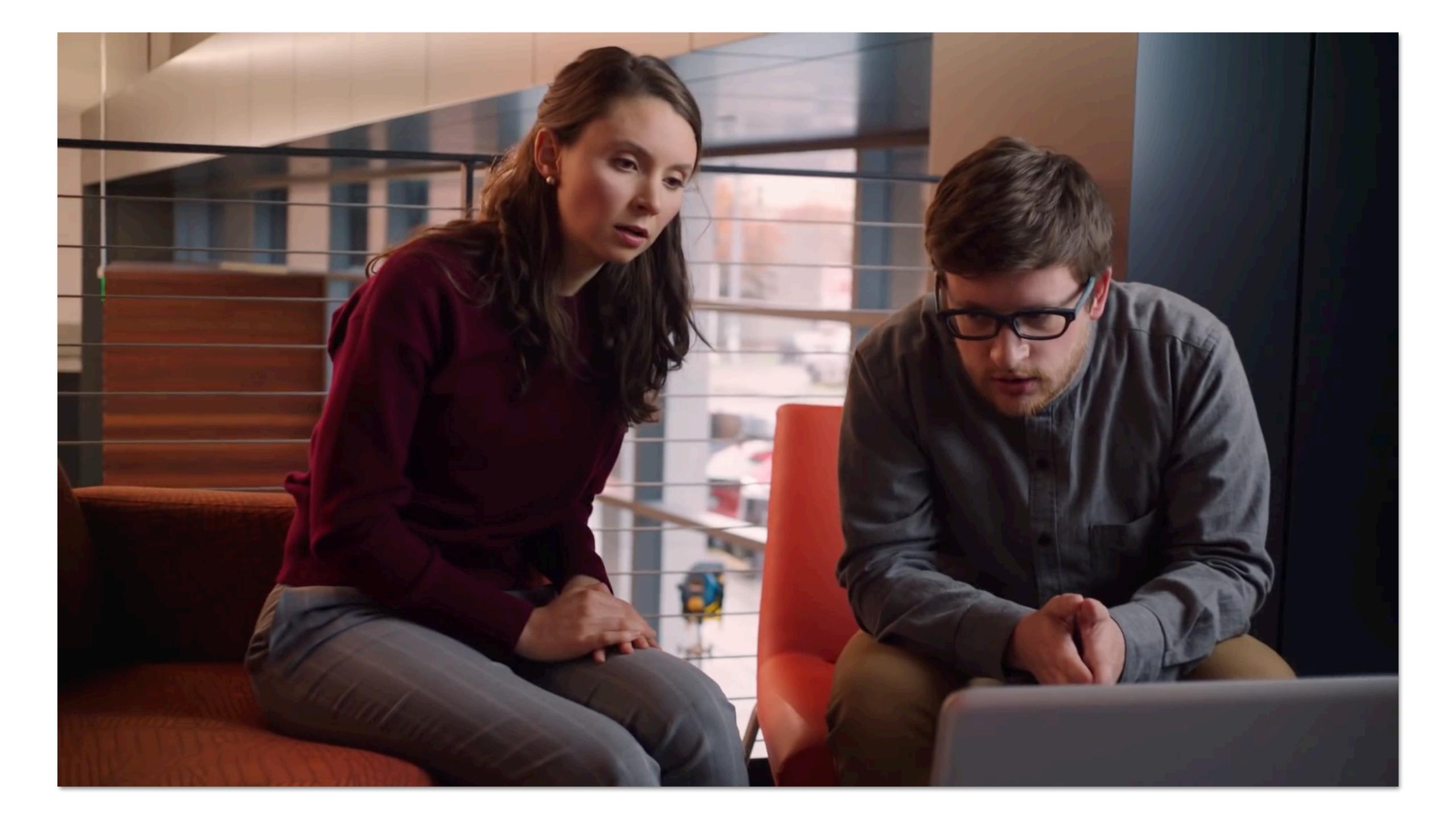




#### Amazon Chime

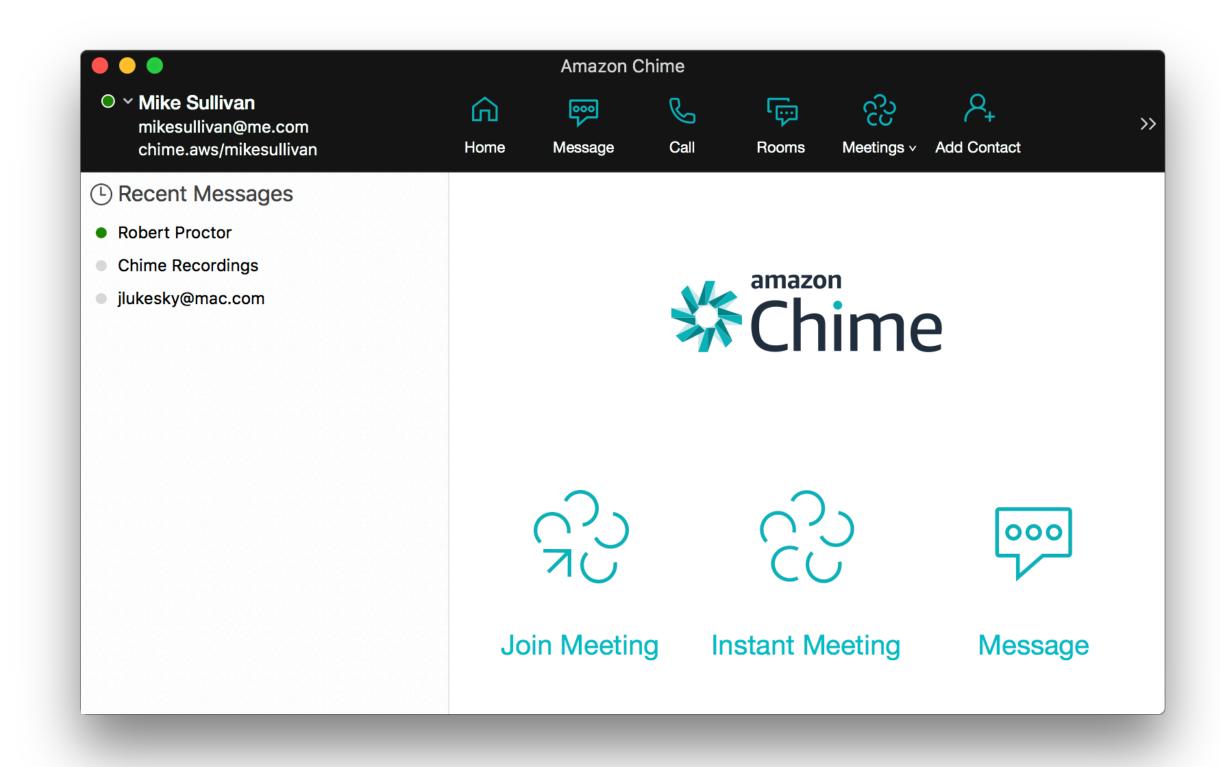
- Enterprise-grade instant meeting / conference calling / video conferencing / screen sharing app
- Built atop the massive, global AWS infrastructure platform
- Disruptive pricing vs. GoToMeeting,
   Skype, Cisco, etc. about 1/3 the cost
- ...and Amazon is famous for continually dropping the price of AWS services over time; see: Moore's Law





#### Amazon Chime

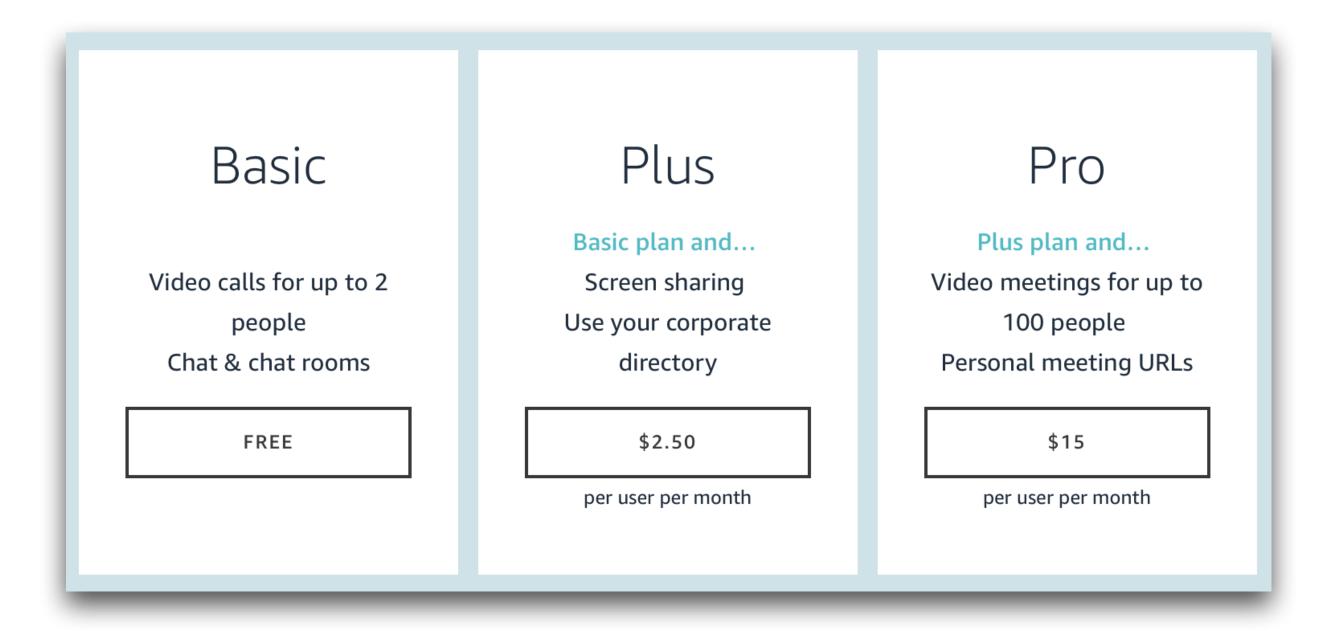
- Amazon Chime Pro is free to try for 30 days, with no credit card required.
- After 30 days, you can continue to use Amazon Chime Basic for free, for as long as you'd like, or you can purchase an Amazon Chime subscription.



source: chime.aws

# What did Amazon just do?

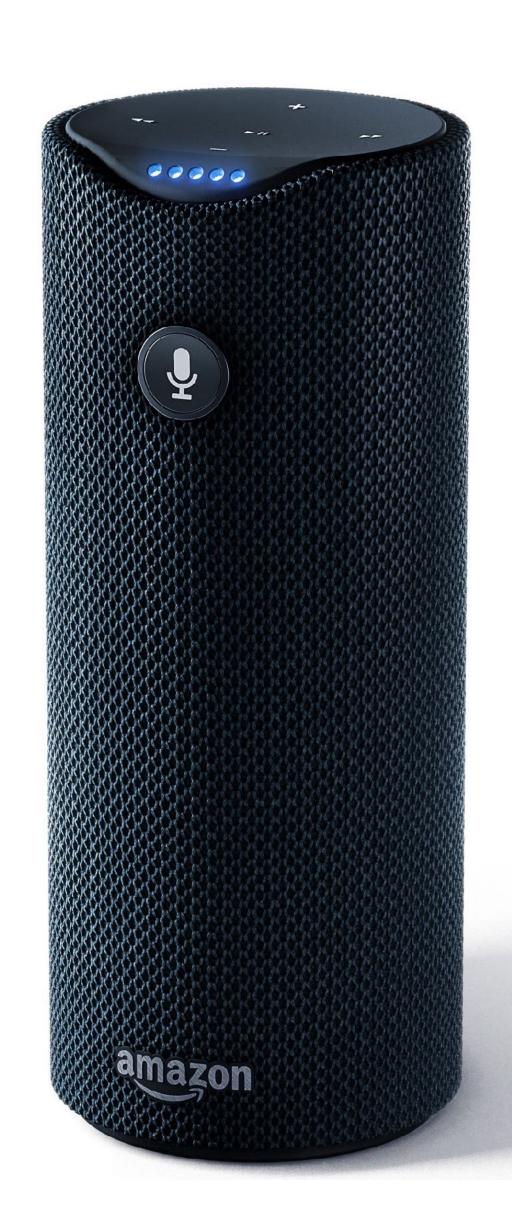
- They released a global, distributed, highly available, highly secure realtime voice, data and video messaging platform for desktop and mobile
- Pricing as low as \$2.50/month/user for video + voice + screen sharing
- And Chime calls YOU when it's time to start a meeting
- Does that sound anything like a telephone network?



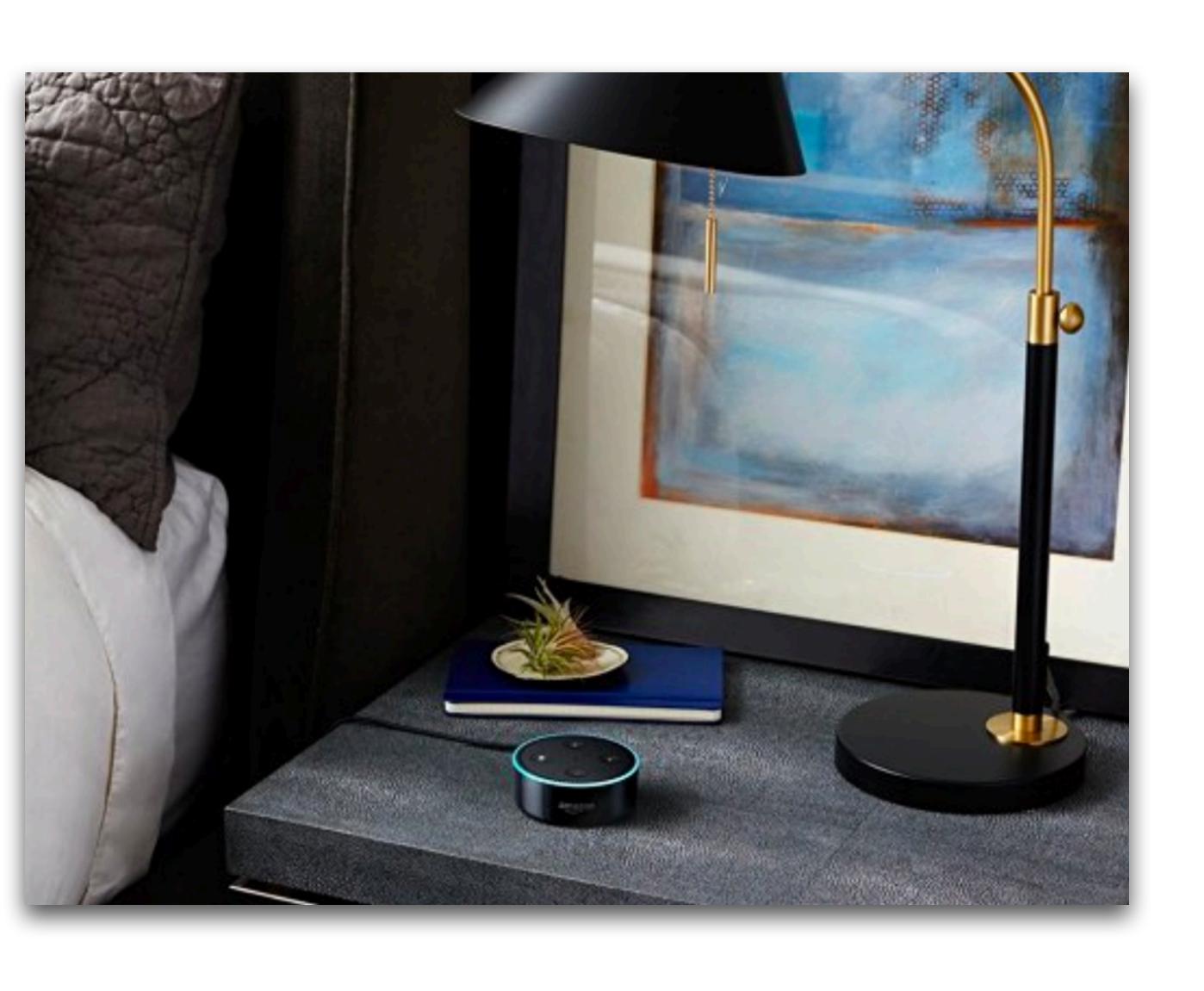
source: chime.aws

# A Trojan Horse?

- What are the minimum viable hardware requirements to make a Chime-capable telephone?
  - ✓A speaker
  - ✓ A microphone
  - ✓A processor
  - ✓An internet connection (Wi-Fi)
- That sounds a lot like what's in an Echo, Echo Dot or Tap!
- Amazon has already sold over 10 million of them...
- ...and they have shown that they can remotely and silently add significant new features to the devices through the Amazon Cloud
- Hmmmm...



# Coming soon?



- Note that it's called "Amazon Chime" kinda like "New York Bell," "Indiana Bell," "Pacific Bell"
- ...and "Amazon Chime" sure does rhyme with "Amazon Prime"
- "Upload your phonebook to Amazon Chime, and we'll add Amazon Chime telephone to your Prime account benefits"
- All your Echo & Tap devices are now telephones
- Criminy Pete.

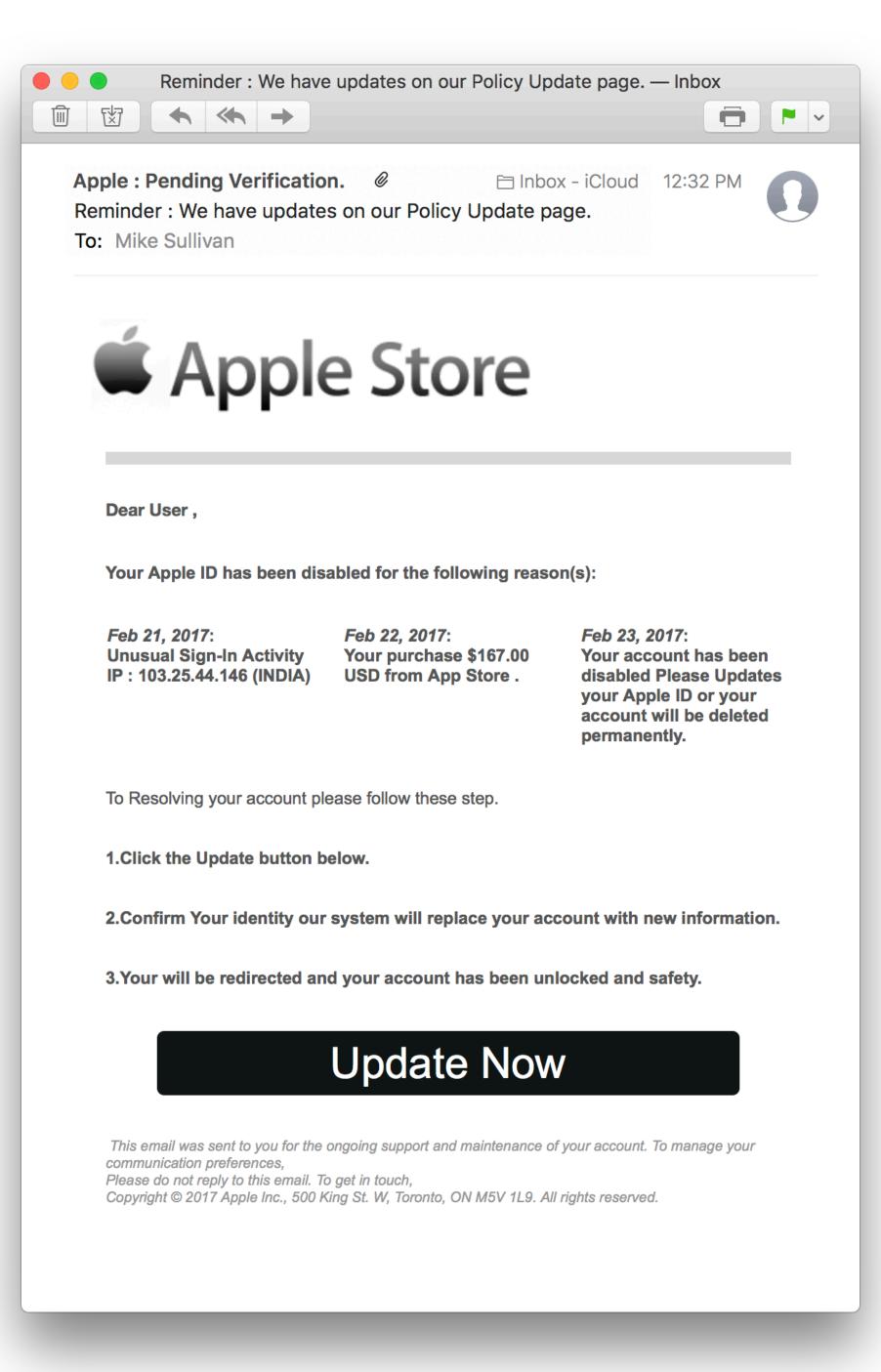
# By the way...



- AMZN stock has risen 52% in the past year
- It's risen 125% in the past two years
- It's risen 2,000% in the past decade
- ...and get this:
- AMZN stock has risen an average of 1% every 11 days for the past 20 years

source: NASDAQ, schwab.com

#### A Quick Reminder





Dear User,

Your Apple ID has been disabled for the following reason(s):

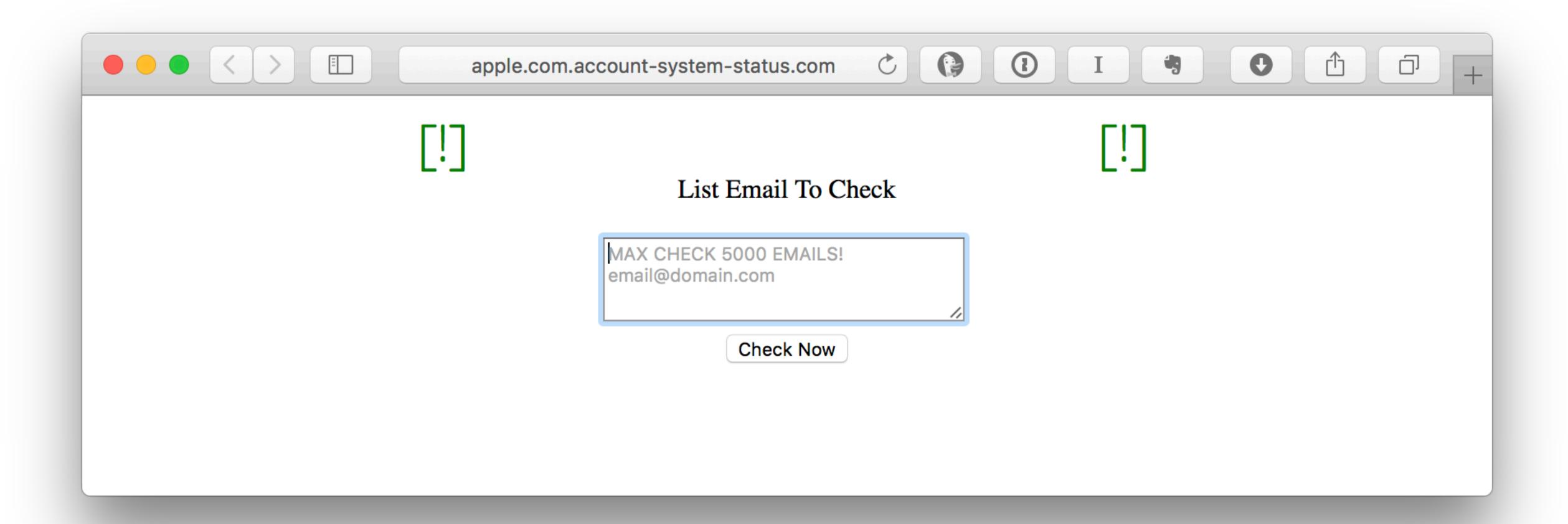
Feb 21, 2017: Unusual Sign-In Activity IP: 103.25.44.146 (INDIA) Feb 22, 2017: Your purchase \$167.00 USD from App Store.

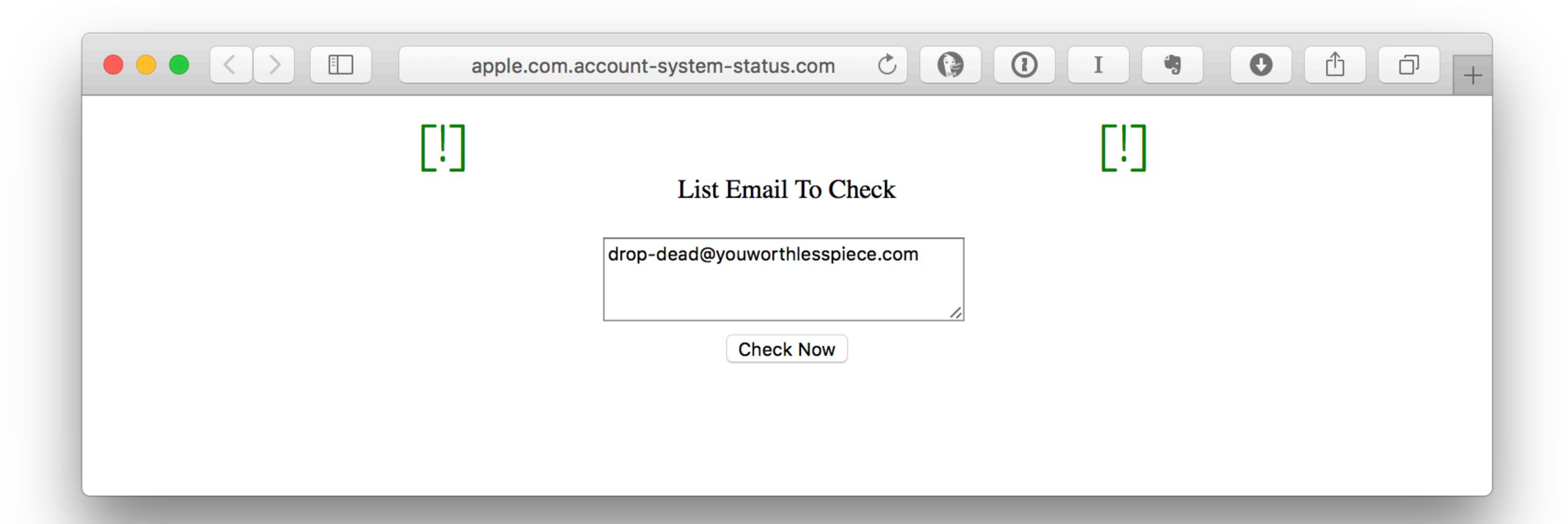
Feb 23, 2017:
Your account has been disabled Please Updates your Apple ID or your account will be deleted permanently.

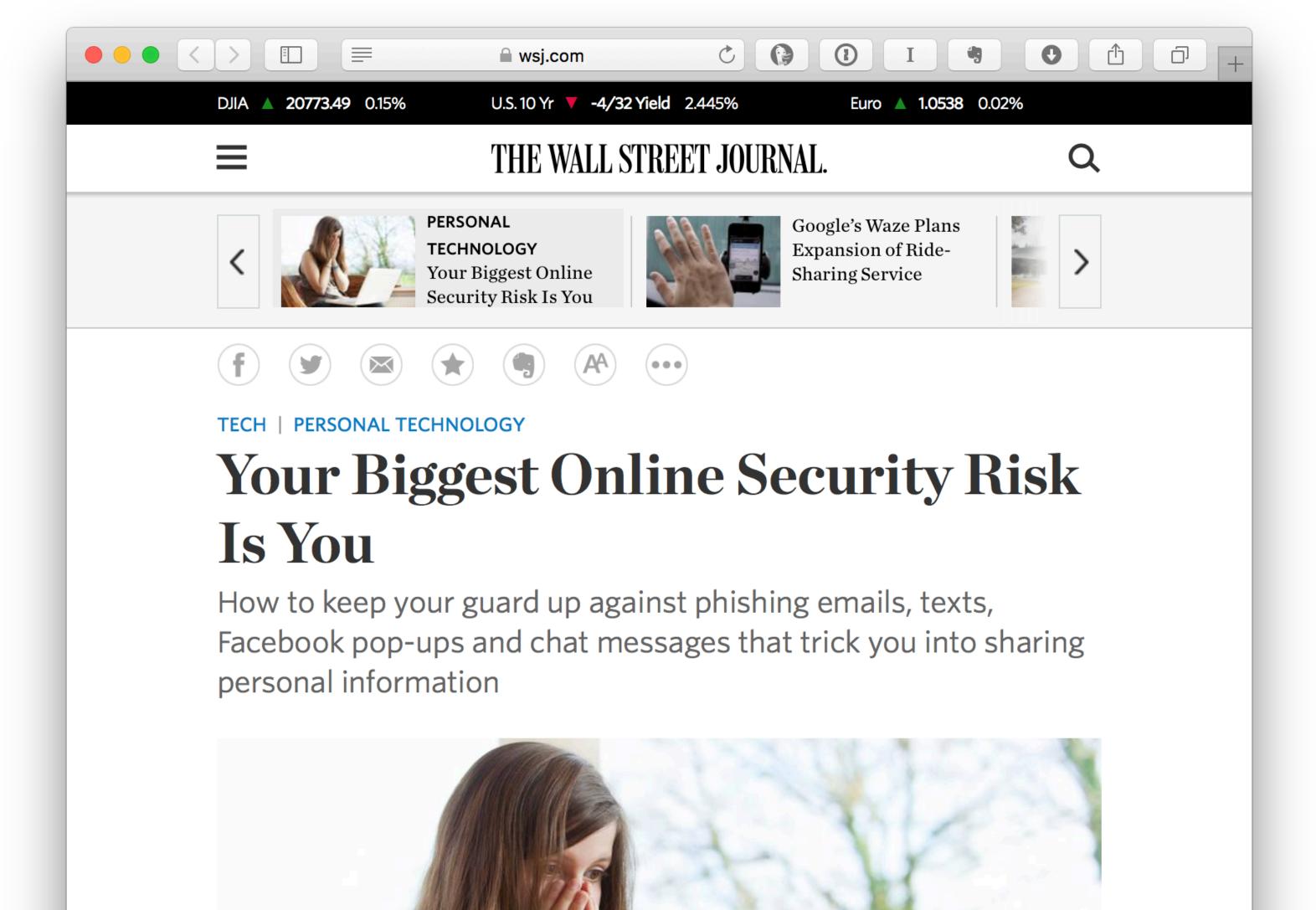
To Resolving your account please follow these step.

- 1.Click the Update button below.
- 2.Confirm Your identity our system will replace your account with new information.
- 3. Your will be redirected and your account has been unlocked and safety.

#### Update Now

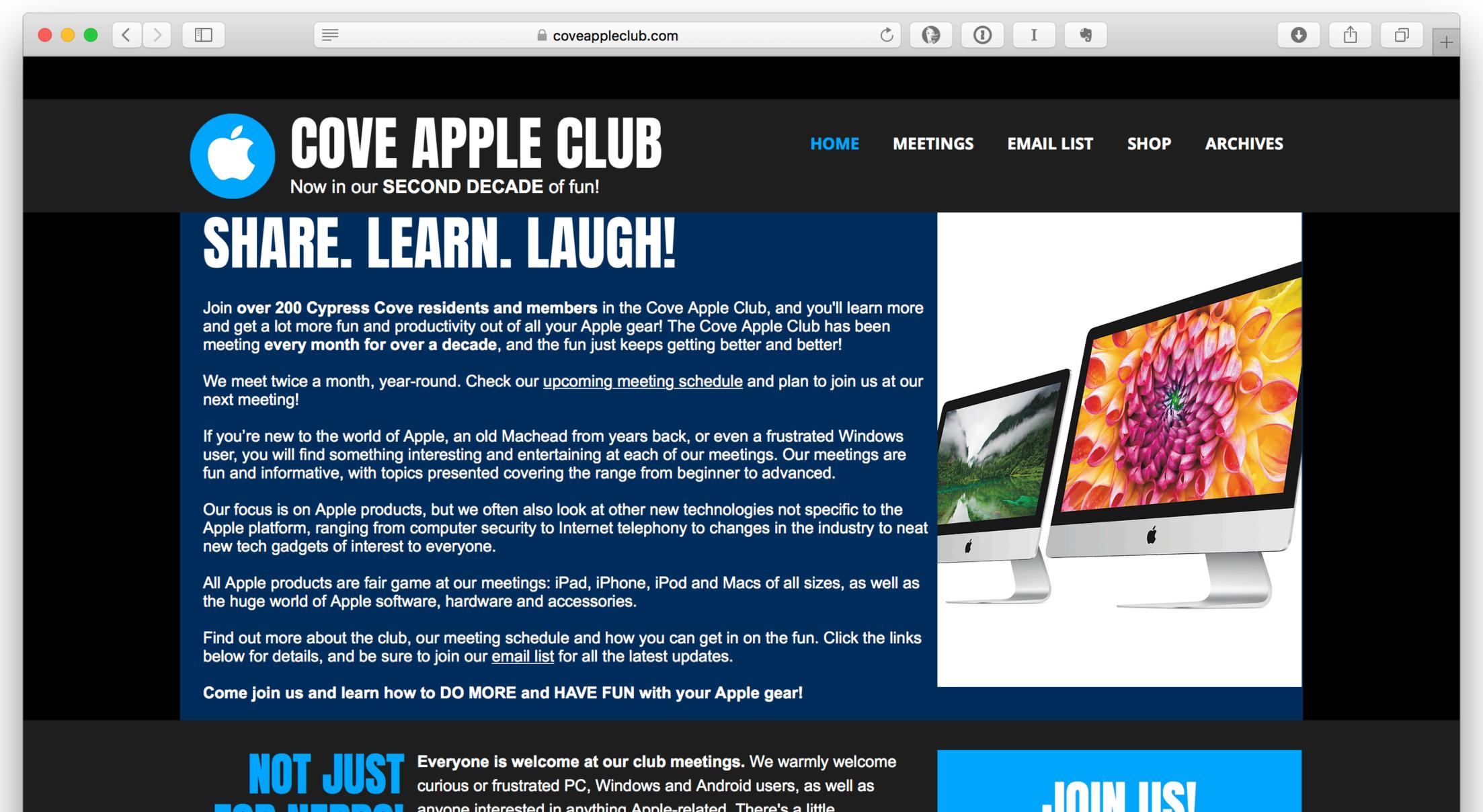






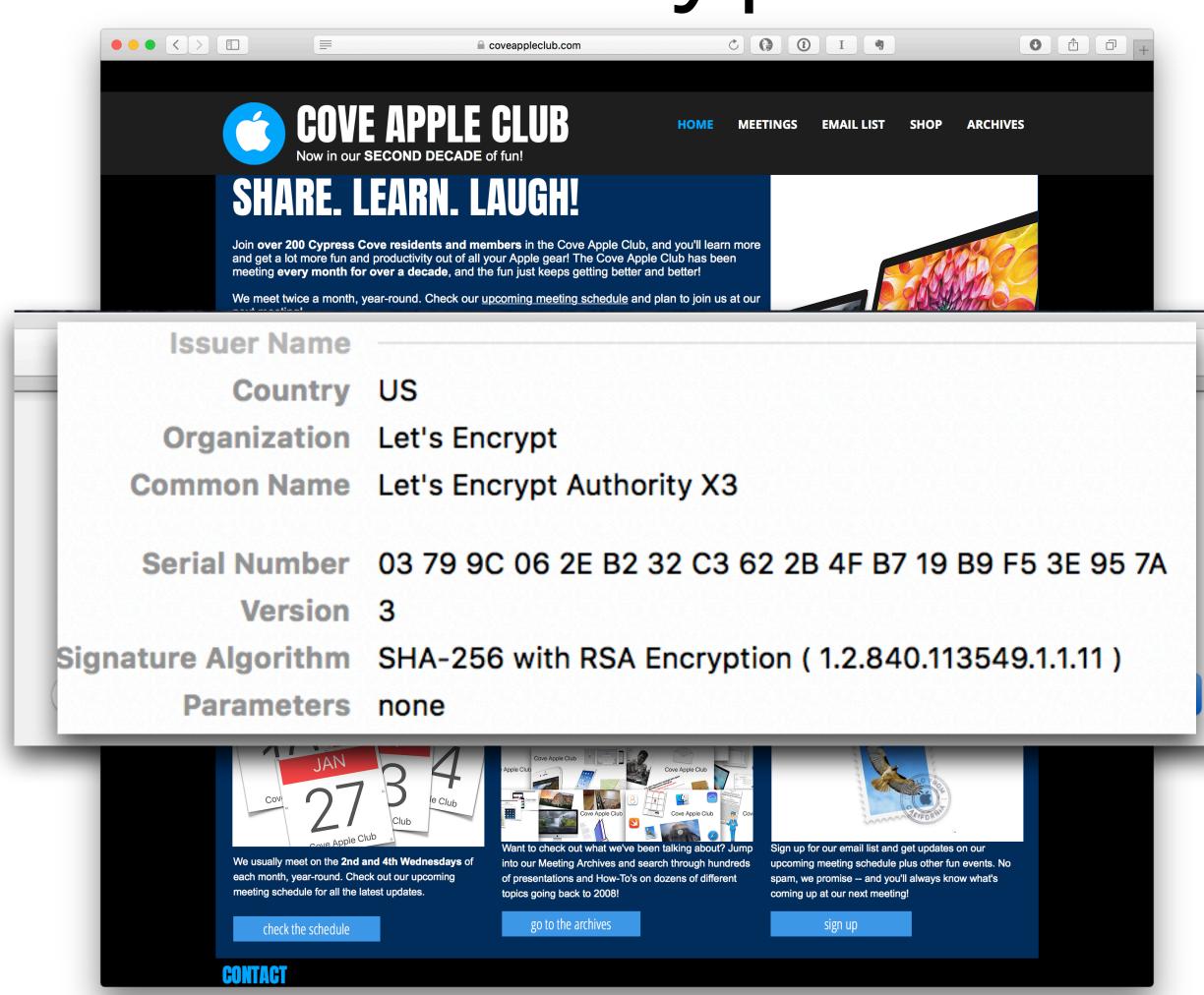
# Read the article free today at: ptech.wsj.com

# coveappleclub.com is Encrypted!



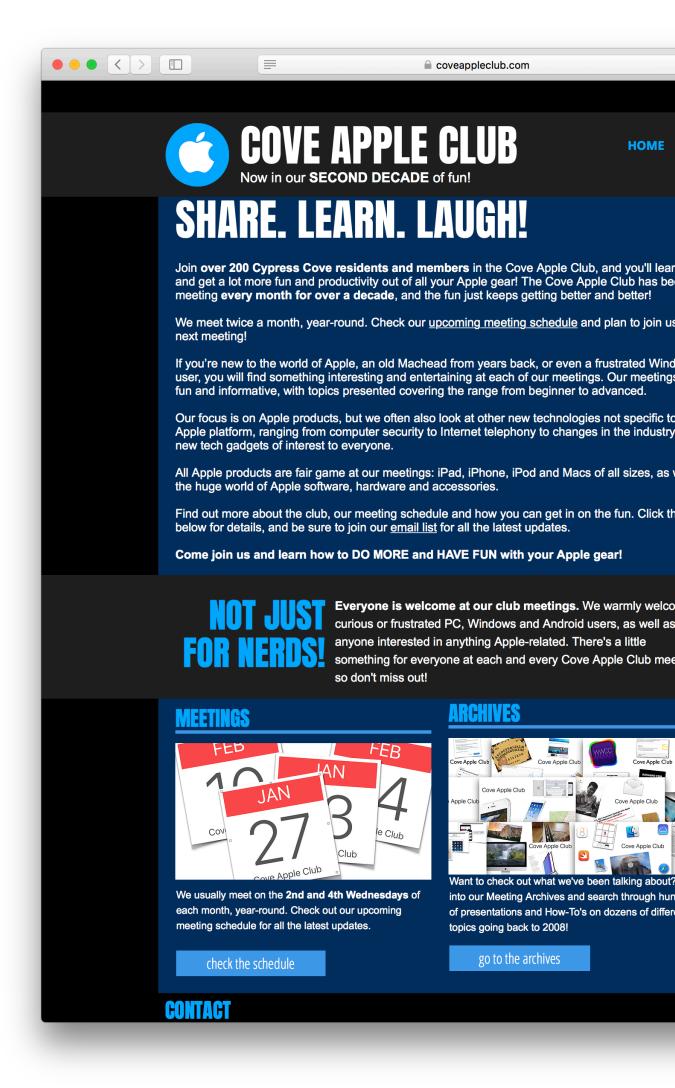
### coveappleclub.com is Encrypted!

- Our web hosting company recently enabled free HTTPS encryption for all sites!
- 256-bit SHA/RSA encryption
- Uses a security certificate from the awesome peeps at Let's Encrypt (letsencrypt.org)
- Yay!



# Why is this a good thing?

- <u>coveappleclub.com</u> is now one more site among tens of millions that protects privacy on the web, contributing to free and open access to information that can't be tampered with by bad actors
- Now you're sure that what you see in your web browser is what we meant you to see, and that you are indeed visiting our site and not a phishing or counterfeit site (as if!)
- It's one more step toward a totally encrypted web, which is better for everyone: citizens, journalists, researchers, students, governments, and government servants



# Our Next Meeting

MAR

Cove Apple Club 7:00 PM - 8:15 PM

#### Topic Presenters Wanted!





Shall we adjourn to Cheeks?