



APPLE ICLOUD LEAK 2014

BY BASTIEN AND THEO

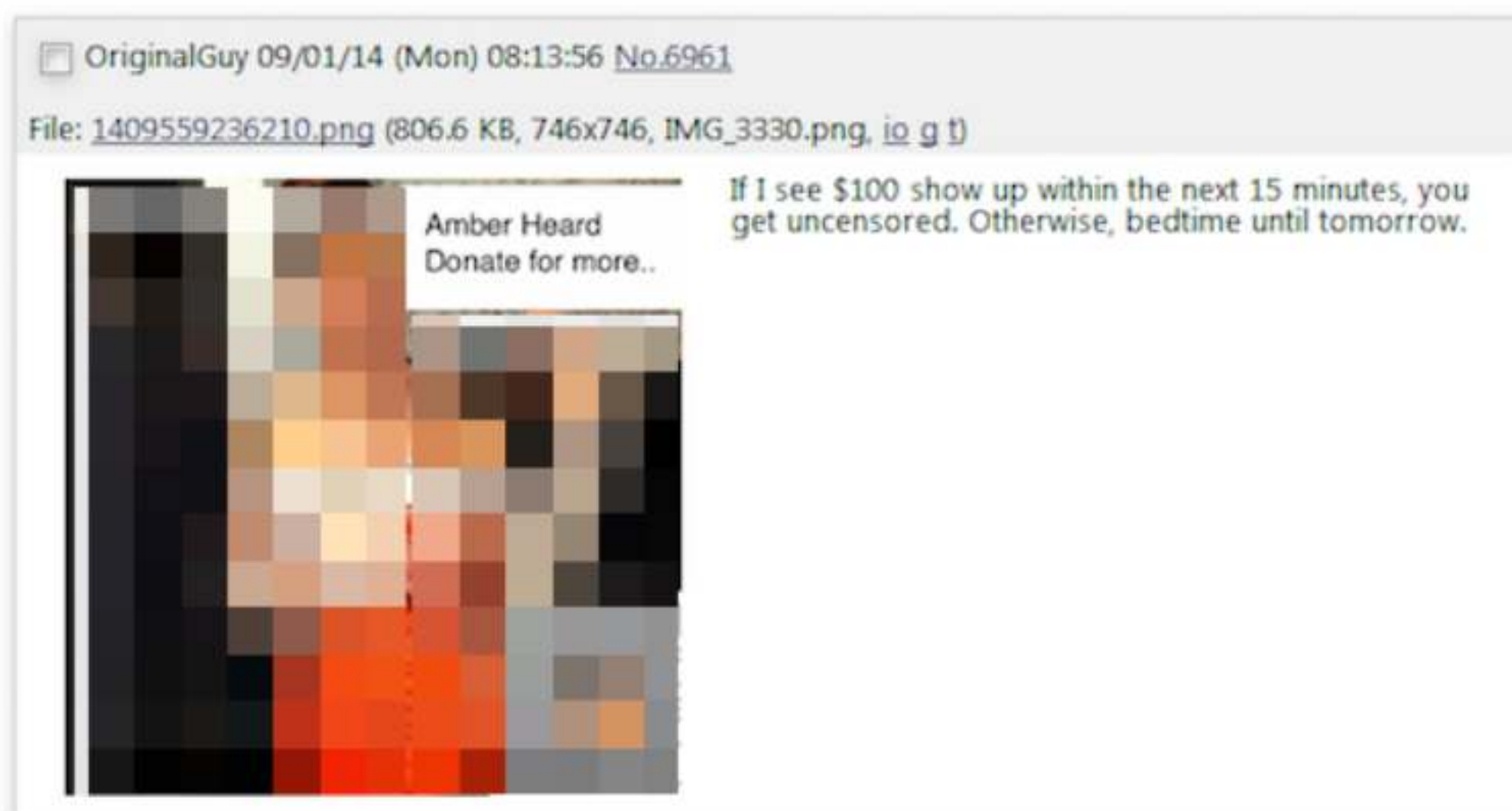


WHAT HAPPENED?

31th August 2014

500+ celebrity nude
photos leaked

AnonIB and then 4chan



Multiple hackers

*// the result of several months of
long and hard work*

Different sources, not only iCloud

Released a week before iPhone 6 and iWatch



WHY "ICLOUD" LEAK?



Picture Roll backups are enabled by default

iPhone is a popular platform



BUT, HOW?



BUT, HOW?

Security breach in iCloud!



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iCloud API brute-force!



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Targeted phishing attacks



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Targeted phishing attacks



Good old phishing attack...



Good old phishing attack...





Dear *****,

Apple ID: *****
Birthday: *****|

There is an external threat trying to gain entry into your account. Please take the action below to validate yourself as the owner of this Apple ID.

Please reply to this e-mail with at least two answers to the following three security questions you established when you created your Apple ID.

- What was the first car you owned?
- Where was your least favorite job?
- What was the first concert you attended?

If no action is taken we will be forced to lock your account pending further inquiry.

We apologize for any inconvenience the interruption in service may have cost you.

Thanks,
Apple iCloud Support

ATTACK VECTOR



Dear Customer,

Your Apple ID has been used to open a session iCloud from an unauthorized computer.

Your iTunes account is now locked, please access your account to check your information.

[Check Now](#)

appleprivacysecurity@gmail.com

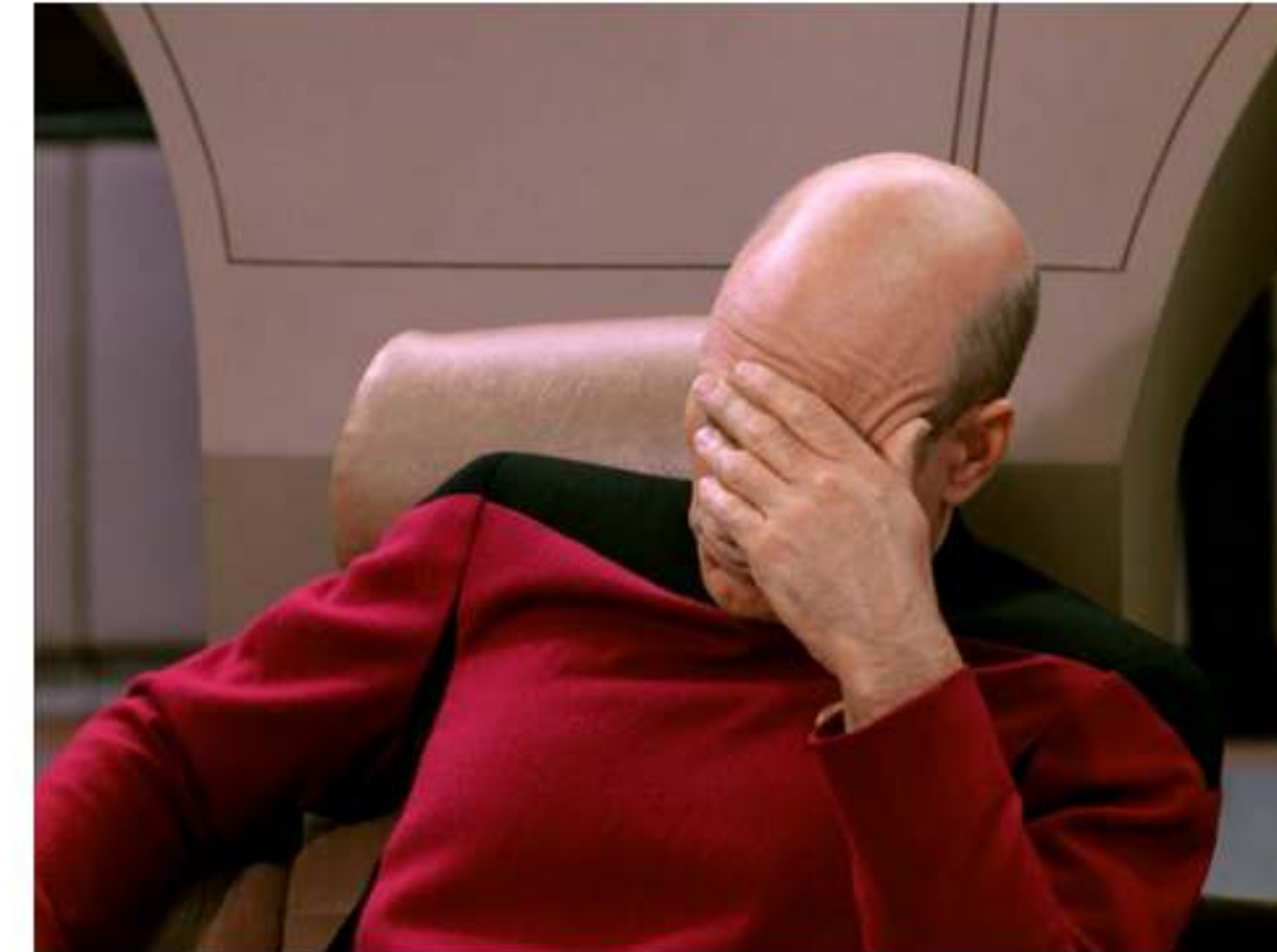


WEAKNESSES?

Apple ID must:

- Be a valid email address
- Be available
- Not use a domain owned by Apple

ress as your Apple ID. This will be used as th
ur account.



Please verify your birth date to continue.

Month ▾

Day ▾

Year ▾

Please answer your security questions.

Who was your favorite teacher?

Where were you on January 1, 2000?



Find My iPhone

••••• Билайн 12:30



Найти iPhone

Apple ID example@icloud.com

Пароль обязательно

Забыли Apple ID или пароль?
NO COUNTERS
NO LOCKERS
NO NOTIFICATION

Инструкции по настройке

Версия 3.0 (2A58)

WHAT ELSE?



nik cubrilovic

@nikcub

Follow

posting an email address as JSON to
appleid.apple.com /account/validation
/appleid returns if it is a valid account or not.
no rate limit.

11:03 AM - 2 Sep 2014

hackappcom / ibrute

Watch

172

★ Star

1,129

Fork

430

Apple Media Advisory

CRISIS MANAGEMENT

Update to Celebrity Photo Investigation

We wanted to provide an update to our investigation into the theft of photos of certain celebrities. When we learned of the theft, we were outraged and immediately mobilized Apple's engineers to discover the source. Our customers' privacy and security are of utmost importance to us. After more than 40 hours of investigation, we have discovered that certain celebrity accounts were compromised by a very targeted attack on user names, passwords and security questions, a practice that has become all too common on the Internet. None of the cases we have investigated has resulted from any breach in any of Apple's systems including iCloud® or Find my iPhone. We are continuing to work with law enforcement to help identify the criminals involved.

To protect against this type of attack, we advise all users to always use a strong password and enable two-step verification. Both of these are addressed on our website at <http://support.apple.com/kb/ht4232>.

Quick response

Working directly
with celebrities

Find my iPhone
patched in 36h



ACTIONS TAKEN

- Use a strong password for your Apple ID
- Make the answers to your security questions hard to guess
- Protect your account with two-factor authentication
- Check for encryption and SSL
- Employee privacy and security policies

<https://support.apple.com/en-gb/HT201303>

Avoid phishing emails, fake 'virus' alerts,
phony support calls, and other scams

<https://support.apple.com/en-gb/HT204759>



TECHNOLOGICAL MEASURES



Password strength: **strong**

Password must:

- Have at least one letter
- Have at least one capital letter
- Have at least one number
- Not contain multiple identical consecutive characters
- Not be the same as the account name
- Be at least 8 characters
- Not be a common password
- Not be used in past year

Dear Eric Slivka,

Your Apple ID [REDACTED] was used to sign in to iCloud via a web browser.

Date and Time: September 8, 2014, 7:02 AM PDT

If you recently signed in to iCloud.com, you can disregard this email.

If you have not signed in to iCloud.com recently and believe someone may have accessed your account, you should reset your password at [My Apple ID](#).

Apple Support

User alerting

Hardening

CAPTCHA

[Mac](#)[iPad](#)[iPhone](#)[Watch](#)[TV](#)[Music](#)[Support](#)

Apple ID

[Sign In](#)[Create Your Apple ID](#)[FAQ](#)

Apple ID

Two-Factor Authentication



A message with a verification code has been sent to your devices. Enter the code to continue.

[Didn't get a verification code?](#)





Kirsten Dunst ✓

@kirstendunst

Follow

Thank you iCloud 🍕💩

2:26 PM - 1 Sep 2014

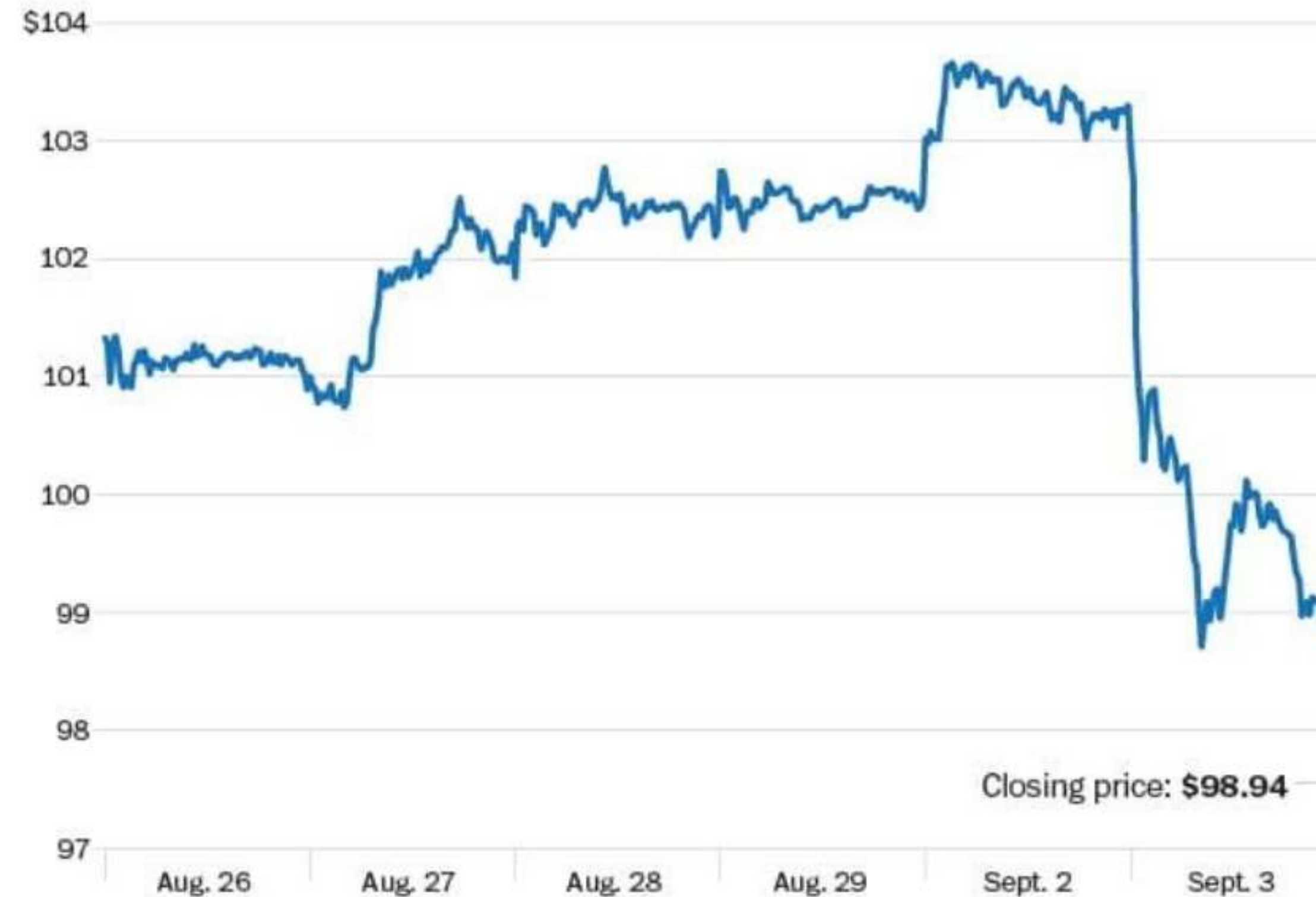
14,672 Retweets 14,860 Likes



1.4K 15K 15K

Apple's stock price drops

Intraday trading in five-minute intervals



Source: Bloomberg. Graphic: Tobey - The Washington Post

REPUTATION COSTS

Remember, one week before iPhone 6 and iWatch

Trust issue



SO MUCH MORE...

Here's what iCloud Backup includes

- App data
- [Apple Watch backups](#)
- Call history
- Device settings
- HomeKit configuration
- Home screen and app organization
- iMessage, text (SMS), and MMS messages
- Photos and videos on your iPhone, iPad, and iPod touch¹
- Purchase history from Apple services, like your music, movies, TV shows, apps, and books²
- Ringtones
- Visual Voicemail password (requires the SIM card that was in use during backup)

<https://support.apple.com/en-gb/HT207428>

Your iPhone, iPad, and iPod touch backup only include information and settings stored on your device. It doesn't include the information already stored in iCloud, like Contacts, Calendars, Bookmarks, Mail, Notes, [shared photos](#), [iCloud Photo Library](#), My Photo Stream, Health data, and files you store in [iCloud Drive](#).



A diver in a wetsuit and mask is underwater, holding a long spearfishing spear. The water is clear blue, and the surface is visible above. The text 'WRAP UP' is overlaid on the left side of the image.

WRAP UP

SPEAR-PHISHING!

But Apple did well

A real business behind: Briand Krebs article



REFERENCES

- [Celebrity Photo Leak: Is Poor iCloud Security to Blame?](#)
- [Notes on the Celebrity Data Theft](#)
- [The FBI Is Now Involved in Hunt for the Celebrity Nude Photo Hacker](#)
- [Everything We Know About the Alleged Celeb Nude "Trading Ring" and Leak](#)
- [HackApp, ibruite was not involved statement](#)
- [Celeb hacker 'on the run'](#)
- [Apple stock plunges amid celebrity hacking, ahead of purported iWatch announcement](#)
- [justice.gov](#)







De : [Apple](#) >

À : [REDACTED] >

[Masquer](#)



Rép : [Summary Report] Reminder:
Your password Apple has been
successfully reset. (Case
ID: [REDACTED] - [REDACTED])

aujourd'hui à 21:50

📧 Trouvé(e) dans la boîte Réception de H...



Apple ID

New Summary Order Report

Dear Customer [REDACTED] [@hotmail.fr](#)

For Your Protection your Account is automatically Locked, Our System detected an error on your purchased the following product with Credit Card on iTunes Store :



Product	iTunes Gift Card
Order ID	IGC0182V12942T
Date	February 1, 2018, 10:50 pm
Price	\$55
Shipp To	Alan Emanuel J92 Elmont Road Valley Stream, NY 11580 USA

Please confirm your Apple ID Account to unlock your account and follow all the security procedures by click the

following link:

[VERIFY MY ACCOUNT](#)

Our system will automatically disabled your Apple ID account if we do not receive any information longer than 24 hours.

reportphishing@apple.com

