



Hack different.

 **SYNDIS**
Creative[in]Security

 **Adversary**

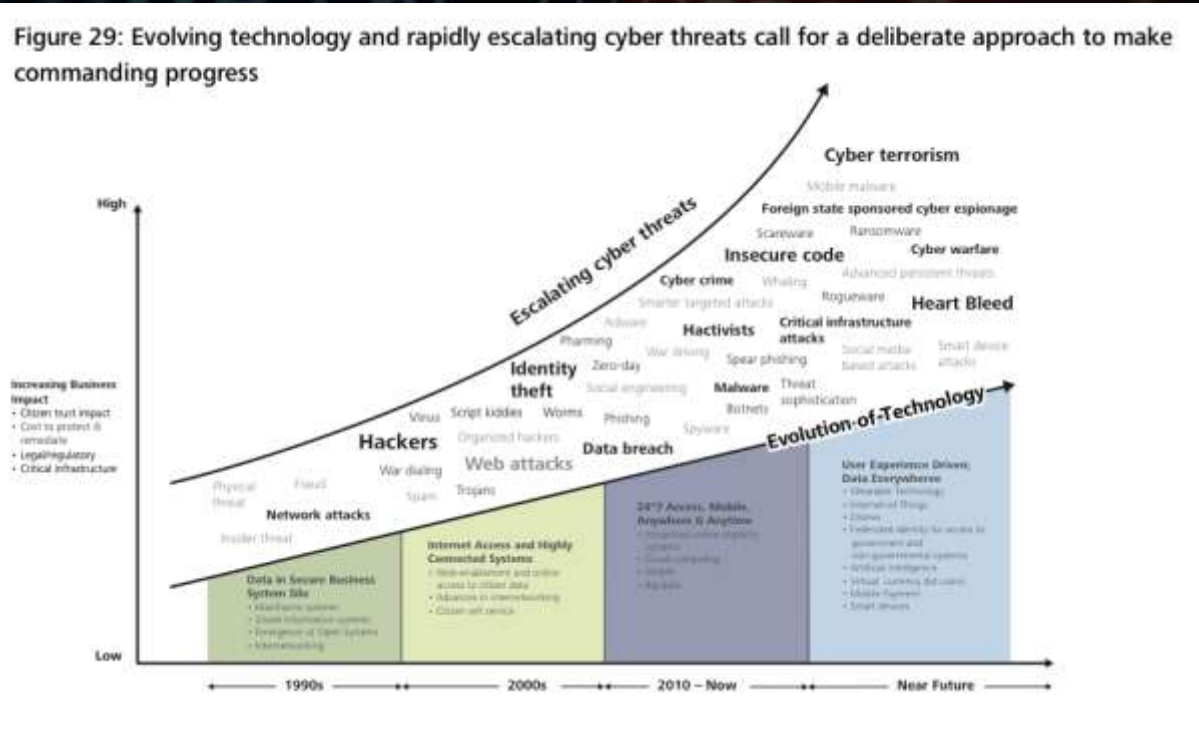
Inngangur

- Stafrænn vígvöllur
- “Núlldagsveikleiki” í Apple MacOS stýrikerfinu
- Lokaorð



Stafrænn og síbreytilegur vígvöllur

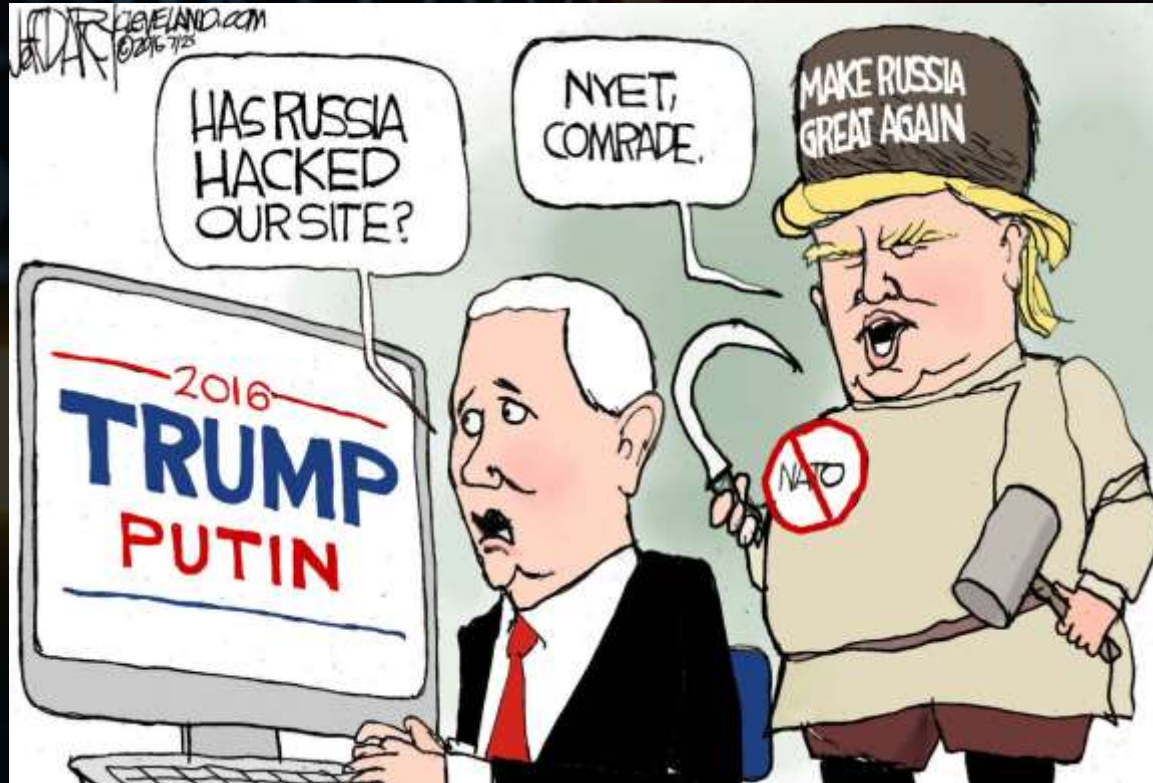
Figure 29: Evolving technology and rapidly escalating cyber threats call for a deliberate approach to make commanding progress



Skipulögð glæpastarfsemi hefur haslað sér völl



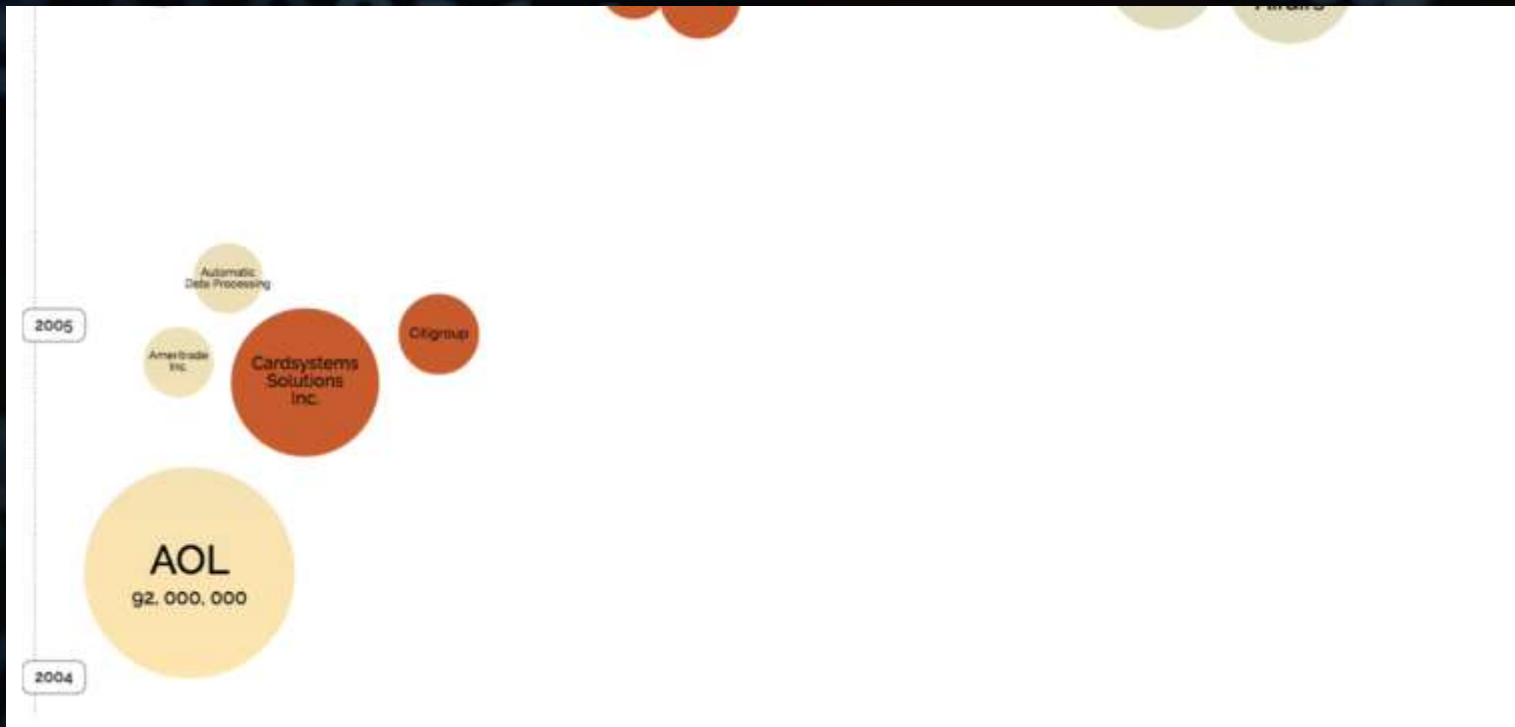
Stafræn árásar-teymi breyta gangi sögunnar



Fyrirtæki þurfa að aðlagast stafrænu samfélagi



Ansi áhugaverð próun á gagnaleikum.



Hugarvelta - gögnum breytt eða stolin?

Uber Hid 2016 Breach, Paying Hackers to Delete Stolen Data



Uber's headquarters in San Francisco. The ride-hailing company said information on driver and rider names, emails and telephone numbers had been compromised in a data breach.

Ryan Young for The New York Times



Öryggi Apple stýrikerfisins (*MacOS X*)



IDEA OF THE DAY

IDEA OF THE DAY.COM

**Why Macs
Are More
Secure**

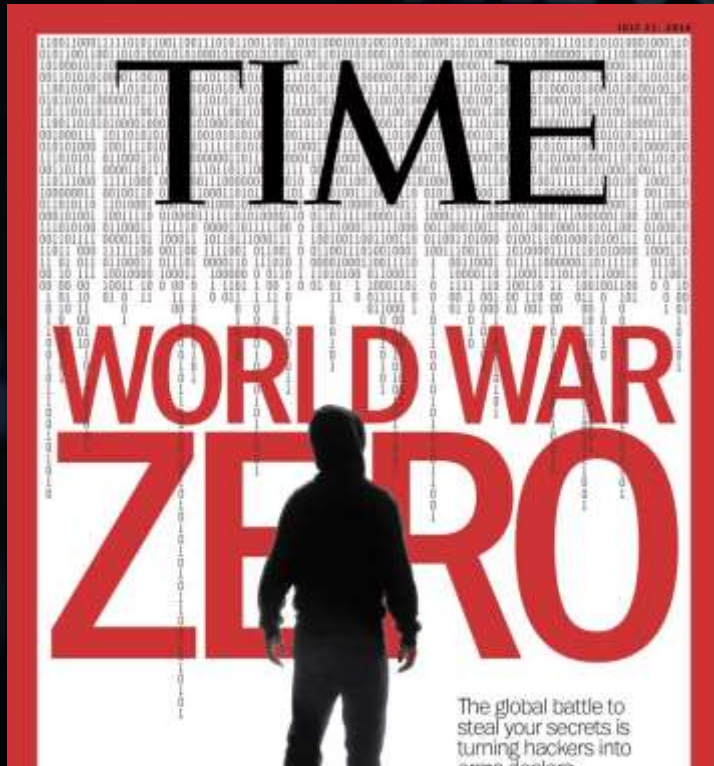
Here's Why...



“Núlldags” (Zeroday) veikleikar í verkefni



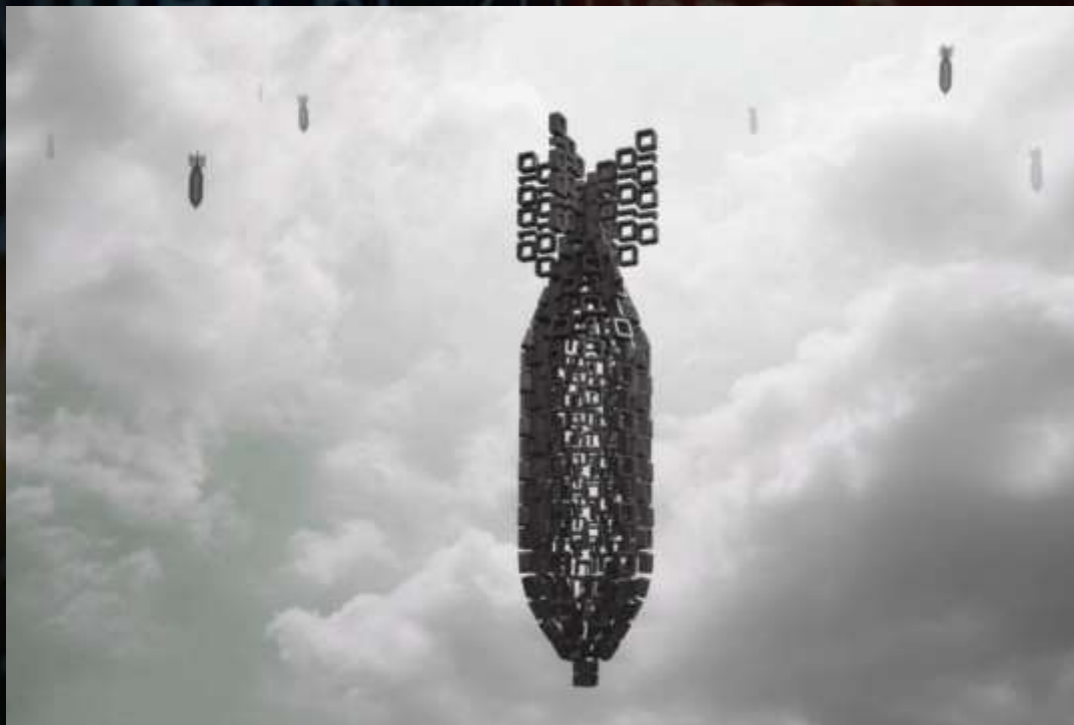
Hvað er þetta “Núlldags” orðiltæki eiginlega?



“A zero-day (also known as 0-day) vulnerability is a computer-software vulnerability that is unknown to those who would be interested in mitigating the vulnerability (including the vendor of the target software). Until the vulnerability is mitigated, hackers can exploit it to adversely affect computer programs, data, additional computers or a network. An exploit directed at a zero-day is called a zero-day exploit, or zero-day attack.”



Stafrænt vopn?



Hvað með varnir, eru þær ekki öflugar?



Öflugar varnir í flestum nútíma stýrikerfum

HOW GATEKEEPER WORKS

an overview



quarantine attribute added



iff quarantine attribute is set!



1

//attributes

```
$ xattr -l ~/Downloads/malware.app  
com.apple.quarantine:0001;534e3038;  
Safari; B8E3DA59-32F6-4580-8AB3...
```

quarantine attributes

Allow apps downloaded from:

- Mac App Store
- Mac App Store and identified developers
- Anywhere

2

gatekeeper settings

3



"malware.app" can't be opened because it is from an unidentified developer.

Your security preferences allow installation of only apps from the Mac App Store.

gatekeeper in action



<https://support.apple.com/en-us/HT208692>

CoreTypes

Available for: OS X El Capitan 10.11.6, macOS Sierra 10.12.6

Impact: Processing a maliciously crafted webpage may result in the mounting of a disk image

Description: A logic issue was addressed with improved restrictions.

CVE-2017-13890: Apple, Theodor Ragnar Gislason of Syndis

Disk Images

Available for: OS X El Capitan 10.11.6, macOS Sierra 10.12.6, macOS High Sierra 10.13.3

Impact: Mounting a malicious disk image may result in the launching of an application

Description: A logic issue was addressed with improved validation.

CVE-2018-4176: Theodor Ragnar Gislason of Syndis

LaunchServices

Available for: OS X El Capitan 10.11.6, macOS Sierra 10.12.6, macOS High Sierra 10.13.3

Impact: A maliciously crafted application may be able to bypass code signing enforcement

Description: A logic issue was addressed with improved validation.

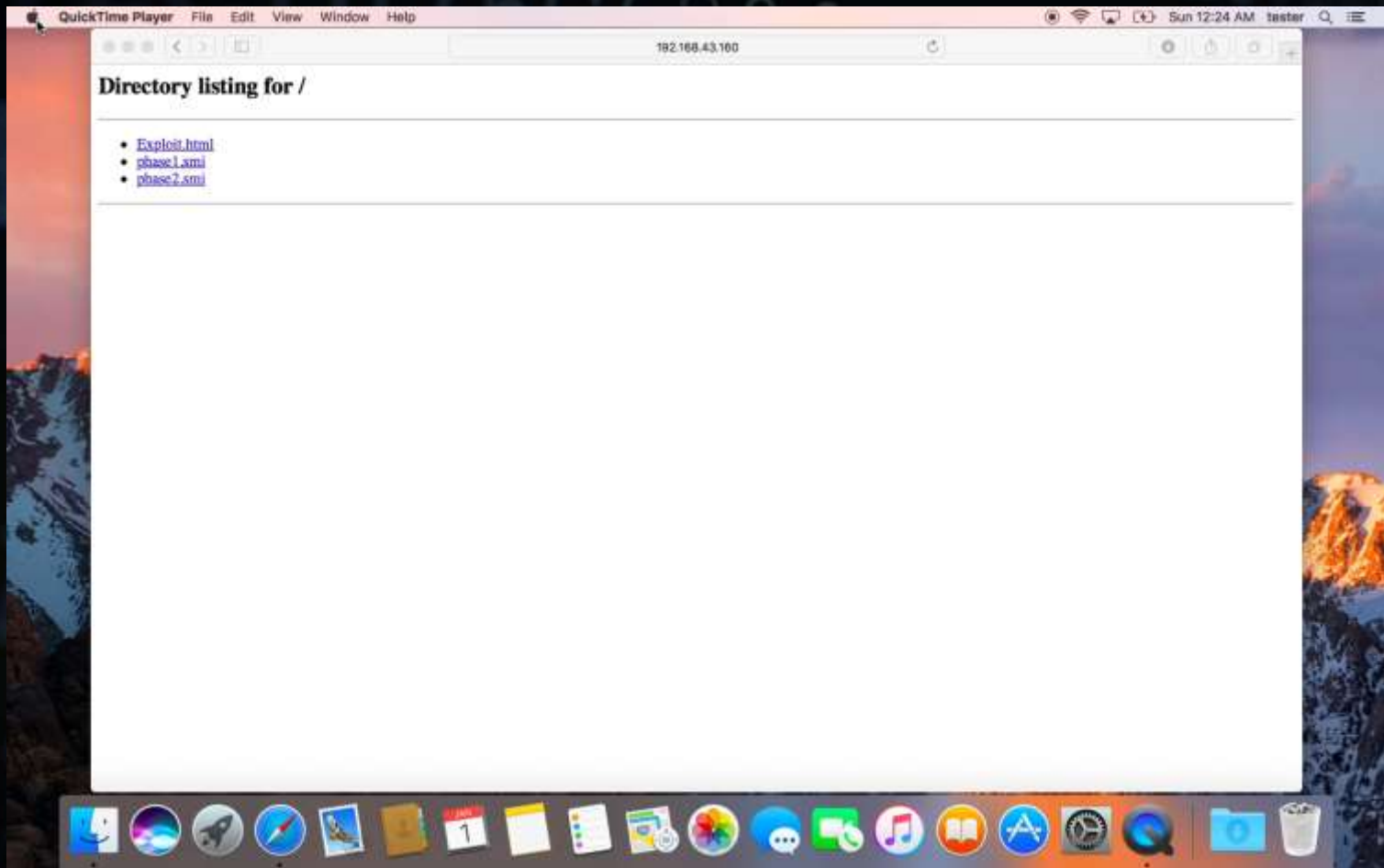
CVE-2018-4175: Theodor Ragnar Gislason of Syndis

Þrjár öryggisvillur
til að fara
framhá vörnum
stýrikerfisins

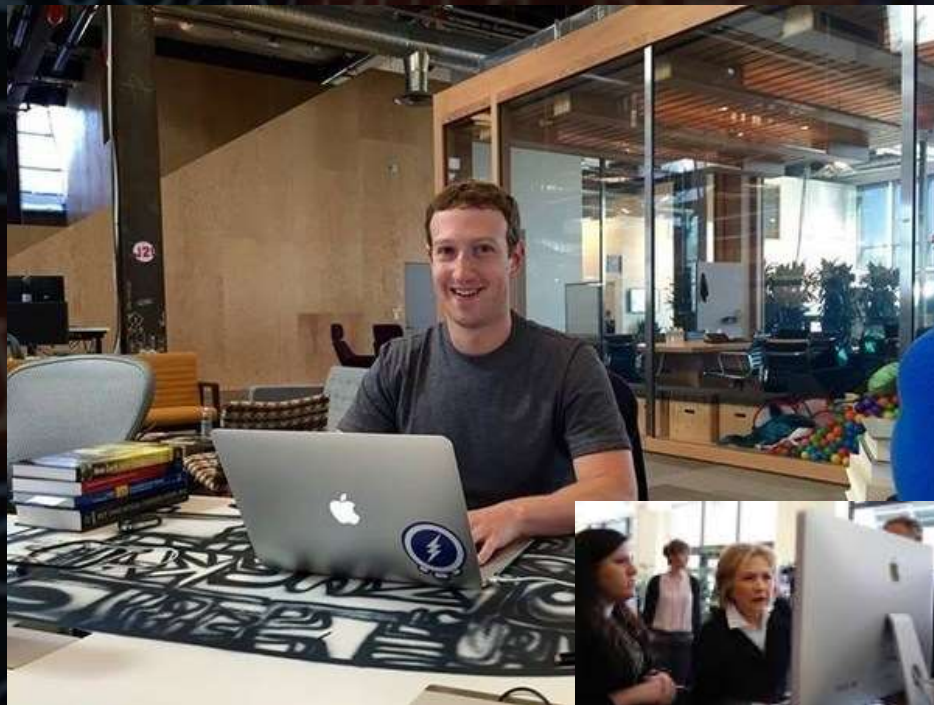
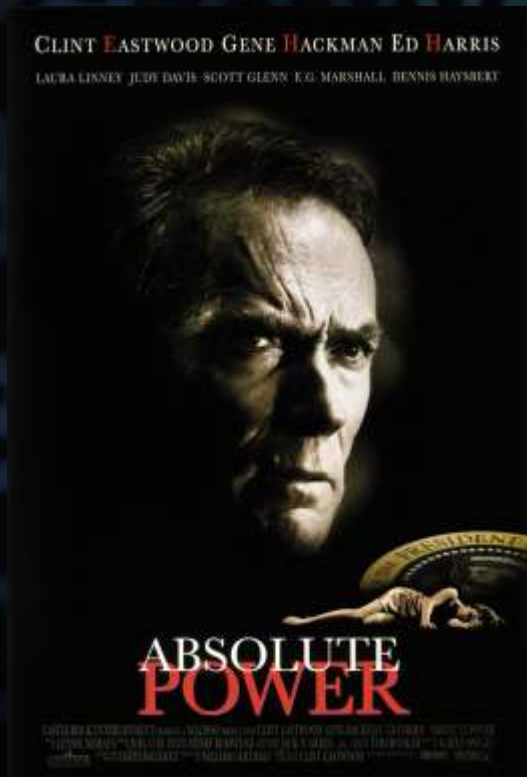


Demo Time!





Með þessu hefðum við geta hakkað alla Makka í heiminum!



Hvers virði var þetta?

Target	Escape Options	Prize	Master of Pwn Points	Eligible for Add-on Prize
Google Chrome	Sandbox Escape	\$60,000	6	Yes
	Windows Kernel Escalation of Privilege	\$70,000	7	Yes
Microsoft Edge	Sandbox Escape	\$60,000	6	Yes
	Windows Kernel Escalation of Privilege	\$70,000	7	Yes
<u>Apple Safari</u>	<u>Sandbox Escape</u>	<u>\$55,000</u>	5	No
	macOS Kernel Escalation of Privilege	\$65,000	6	No
Mozilla Firefox	Sandbox Escape	\$40,000	4	No
	Windows Kernel Escalation of Privilege	\$50,000	5	No

<https://www.zerodayinitiative.com/Pwn2Own2018Rules.html>



Hátæknileg framleiðsla í marga mánuði?



www.china-defense-mashup.com



Nei, þessu var “reddað” í flugi til SFO



Nóg fótapláss



Lokaorō



Ekki spyrja hvort eitthvað sé öruggt.

Ekkert er öruggt.



Betra að mæla öryggi í tíma (kostnaði) sem það tekur að brjóta eitthvað



Hverjum ertu svo að reyna að verjast?



Takk fyrir
@theorg1

