RSAConference2022

San Francisco & Digital | June 6 – 9

TRANSFORM

SESSION ID: **HTA-W09**

State of the Hack: NSA's Perspectives

Rob Joyce, NSA Cybersecurity Director

@NSA_CSDirector


RUSSIA-UKRAINE

Timeline of Russian Malicious Cyber Activity

JANUARY

13-14 | Ukrainian Websites Defaced

15 | Microsoft reveals discovery of malware in Ukrainian Websites

16 | Ukraine blames Russia for attack on Ukrainian websites

18 | Data wiped at Ukrainian government agencies

FEBRUARY

15 | Ukraine's defense ministry hit by DDoS attack

23 | New form of destructive malware discovered in Ukrainian networks

Ukrainian banking and government websites hit by DDoS attack

24 | Viasat cyberattack impacts broadband service in Ukraine and across Europe


PEOPLE'S REPUBLIC
OF CHINA

EXPOSING THE THREAT

CPO MAGAZINE

HOME NEWS INSIGHTS RESOURCES

CYBER SECURITY NEWS · 5 MIN READ

NSA Publishes List of 25 Top Vulnerabilities Exploited by Chinese Hackers; Beijing Calls Us an "Empire of Hacking" in Response

ALICIA HOPE · OCTOBER 29, 2020

Dmitri Alperovitch @DAlperovitch · Oct 21

This is great work by @NSACyber and exactly the type of actionable value and detail that Cybersecurity Directorate is uniquely qualified to provide to the public. Knowing which vulnerabilities are most critical to patch due to use by adversaries is invaluable!

> **NSA Cyber** @NSACyber · Oct 20
>
> Chinese state-sponsored malicious cyber actors are exploiting publicly known #vulnerabilities. Network defenders should take action to protect against this activity.
>
> For a full list of CVEs & related mitigations review our latest #cybersecurity advisory: nsa.gov/News-Features/...

NSA Cyber @NSACyber

We collaborated with @CISAgov & @FBI on our #cybersecurity advisory, detailing Chinese state-sponsored actor #TTPs used against U.S. and allied networks. For a thorough understanding of this cyberthreat, read our overview, observed TTPs & mitigations. nsa.gov/news-features/...

7:36 AM · Jul 19, 2021 · Twitter Web App

DARKReading | The Edge | DR Tech | Sections | Events

Threat Intelligence | 2 MIN READ | ARTICLE

NSA Reveals the Top 25 Vulnerabilities Exploited by Chinese Nation-State Hackers

Officials urge organizations to patch the vulnerabilities most commonly scanned for, and exploited by, Chinese attackers.

Dark Reading Staff
Dark Reading

October 21, 2020

The US National Security Agency (NSA) today published a list of the top 25 publicly known vulnerabilities most often scanned for and targeted by state-sponsored attackers out of China.

CYBERSCOOP

GOVERNMENT

US agencies circulate warning about 'aggressive' Chinese hacking effort to steal secrets from a range of targets

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US, NATO to 'expose' China for 'malicious cyber activities'

It's the first time NATO has condemned Chinese "cyber activities."

By Justin Gomez
July 19, 2021, 2:47 PM

Share

PRC State-Sponsored Cyber Actors Exploit Network Providers and Devices

CYBERSECURITY ADVISORY


RANSOMWARE


OUR ADVERSARIES
ARE IN THE CLOUD

LET'S LOOK AT SOME STAGGERING STATS

The public cloud service market is expected to reach **$623.3 Billion** by 2023 worldwide

94% of enterprises already use a cloud service. And the other 6% don't know they're using cloud.

Organizations leverage almost **5 different cloud platforms** on average.

30% of all IT budgets are allocated to cloud computing.

66% of enterprises already have a central cloud team or a cloud center of excellence.

50% of enterprises spend more than **$1.2 million** on cloud services annually.

By 2025, the data stored in cloud data centers will **exceed 100 Zettabytes.**

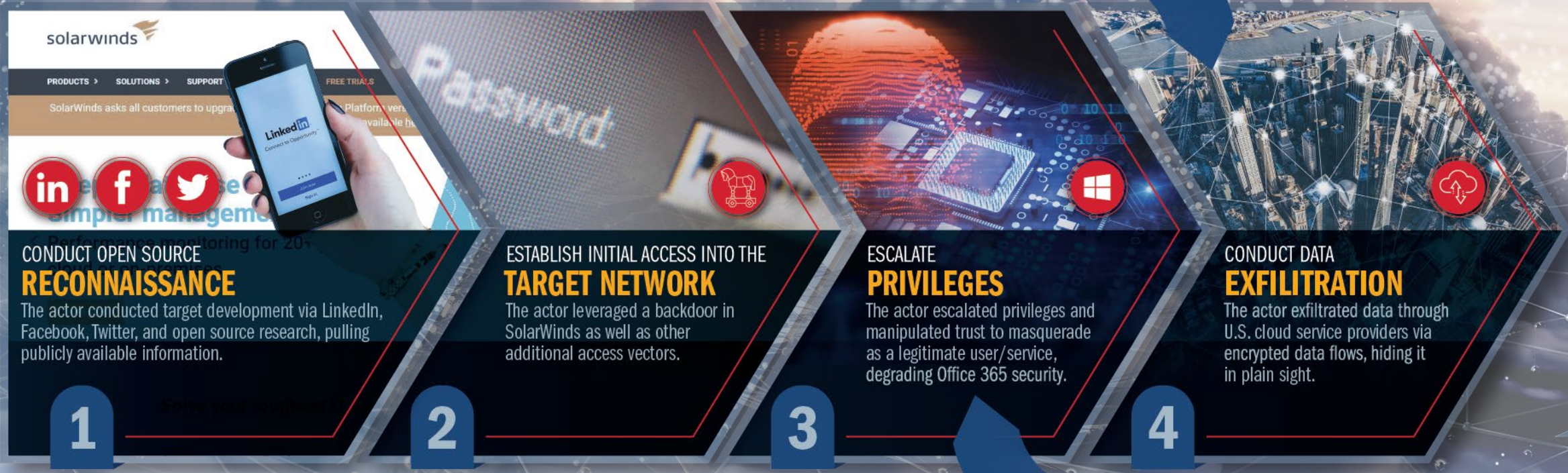
WE ALL USE IT

PRIVATE INDUSTRY

CRITICAL INFRASTRUCTURE

GOVERNMENT & IC

SOLARWINDS



CONDUCT OPEN SOURCE
RECONNAISSANCE
The actor conducted target development via LinkedIn, Facebook, Twitter, and open source research, pulling publicly available information.

1

ESTABLISH INITIAL ACCESS INTO THE
TARGET NETWORK
The actor leveraged a backdoor in SolarWinds as well as other additional access vectors.

2

ESCALATE
PRIVILEGES
The actor escalated privileges and manipulated trust to masquerade as a legitimate user/service, degrading Office 365 security.

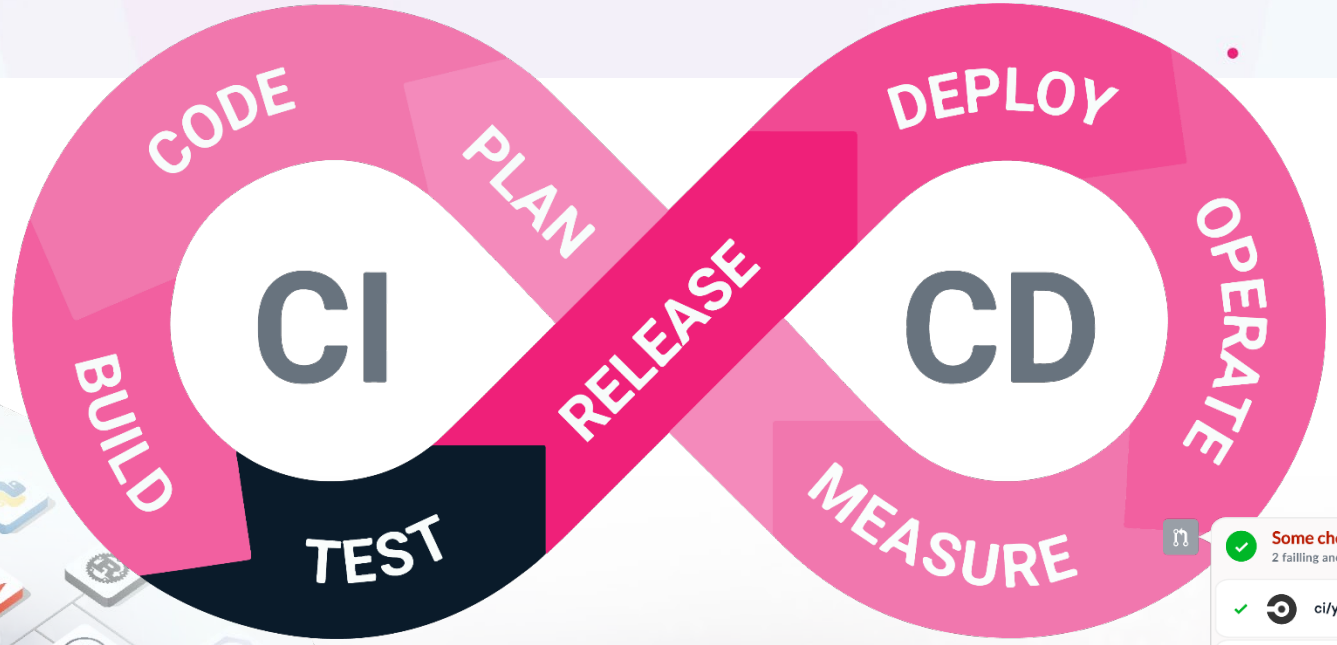
3

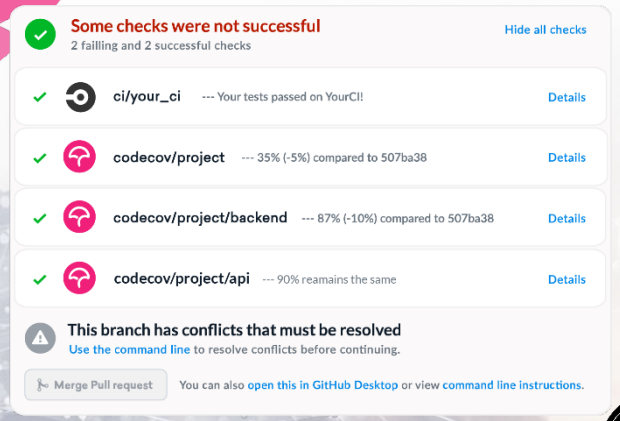
CONDUCT DATA
EXFILITRATION
The actor exfiltrated data through U.S. cloud service providers via encrypted data flows, hiding it in plain sight.

4


NOBELIUM

Codecov


CODE
PLAN
BUILD
CI
TEST
RELEASE
DEPLOY
OPERATE
CD
MEASURE


Some checks were not successful
2 failing and 2 successful checks
Hide all checks
ci/your_ci --- Your tests passed on YourCI!
Details
codecov/project --- 35% (-5%) compared to 507ba38
Details
codecov/project/backend --- 87% (-10%) compared to 507ba38
Details
codecov/project/api --- 90% reamains the same
Details
This branch has conflicts that must be resolved
Use the command line to resolve conflicts before continuing.
Merge Pull request
You can also open this in GitHub Desktop or view command line instructions.


STRATEGIC
COMPETITION

NSA PRODUCTS

ESF CLOUD PAPERS

KUBERNETES HARDENING GUIDANCE


LET'S TEAM UP TO
SECURE THE CLOUD


3 THINGS TO DO
TOMORROW
3 THINGS TO DO
THIS YEAR

RSAConference2022

Thank you

nsa.gov/cybersecurity

Follow @NSAcyber and @NSA_CSDirector