# Q12024 Briefing

U.S. Election Assistance Commission (EAC)



Google Cloud
Security

**TLP: GREEN** 



## AGENDA

- Introduction
- Intelligence Methodology
- ☐ The Threat Landscape
- Observed Activity
- Strategic Outlook
- Discussion

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## Introduction

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### **Executive Summary**

Cyber-enabled threat actors across a wide spectrum of intrinsic motivations and geographical origin continue to target U.S. elections infrastructure with malicious operations designed to influence, manipulate, monitor, or disrupt elections, or enable intelligence collection efforts.



## Intelligence Methodology

### Information Sourcing & Fidelity

#### **Information Sources:**

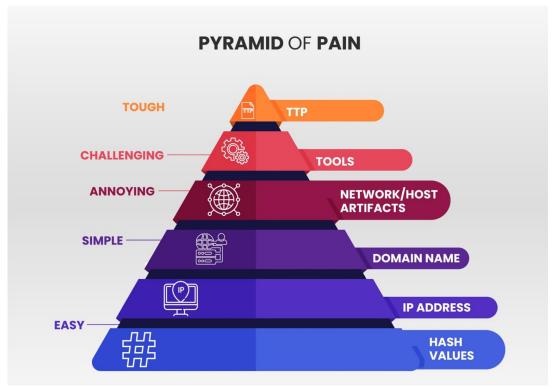
- Mandiant Engagements
- Information Sharing Partnerships
- Open-Source Reporting
- Advanced Research Methods

#### Indicators of Compromise (IoCs):

- Static observables, e.g. files, network artifacts, and command strings
- Inverse relationship between ease of acquisition and ongoing usefulness

#### **Behavioral Indicators:**

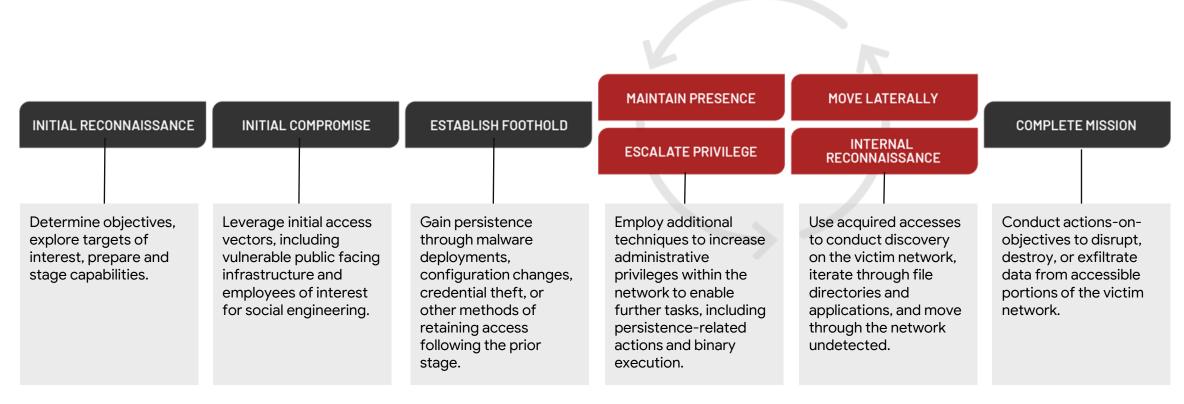
- Attack patterns providing buckets to standardize the way we communicate adversarial actions
- Alone provide limited information, but in combination can give critical context
- Much more difficult to identify, analyse, and act on in comparison to static indicators



Source: https://www.linkedin.com/pulse/pyramid-pain-how-make-attackers-life-harder-murray-pearce/



### Attack Lifecycle



MITRE ATT&CK: Reconnaissance, Resource Development, Initial Access, Execution, Persistence, Privilege Escalation, Defense Evasion, Credential Access, Discovery, Lateral Movement, Collection, Command and Control, Exfiltration, Impact

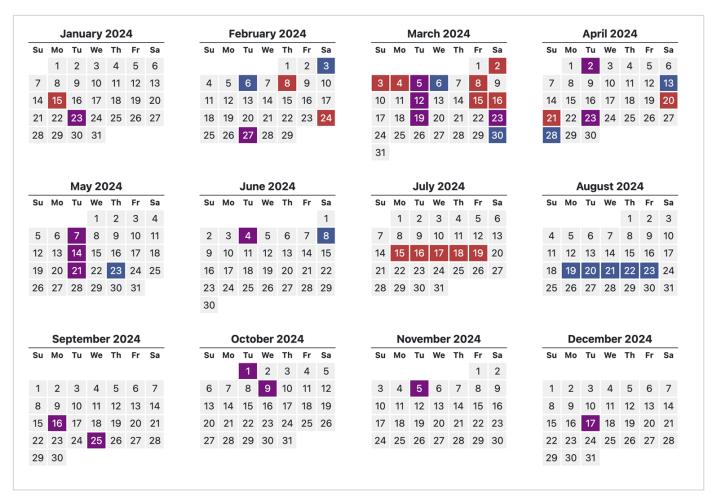




## The Threat Landscape

### 2024 U.S. Presidential Elections Calendar

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March 05: Super Tuesday

June 04: Final Primaries Held

July 15 - 18: Republican National Convention

August 19 - 22: Democratic National Convention

September 16: First Presidential Debate

September 25: Vice Presidential Debate

October 1: Second Presidential Debate

October 09: Final Presidential Debate

November 05: General Election Day

December 17: Electors Cast Votes

This election calendar includes dates for presidential primary and caucus events, party conventions and presidential debates. Purple indicates both parties are holding an event on that date.

Source: 270towin



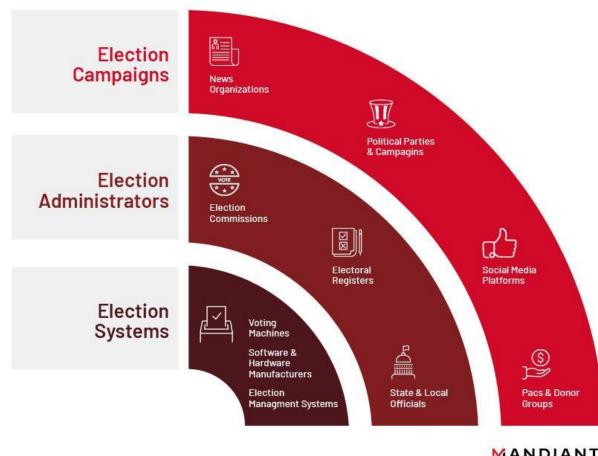
### Identifying Adversary Objectives

- An adversary's primary underlying motivations inform targeting as well as the manner and speed they conduct operations
- Three primary motivations:
  - O Direct Election Interference
  - Intelligence Gathering / Monitoring
  - Information Operations (IO)
- Individual objectives are often multidimensional and can reflect amorphous, evolving, and/or overlapping adversary motivations



### Distinguishing Targets within the Elections Ecosystem

- Campaigns
  - News Organizations
  - Political Parties & Campaigns
  - Social Media Platforms
  - PACs & Donor Groups
- Administration
  - **Election Commissions**
  - **Electoral Registres**
  - State & Local Officials
- Systems
  - **Voting Machines**
  - Software & Hardware Manufacturers
  - **Election Management Systems**







### Distinguishing Targets within the Elections Ecosystem (cont.)

#### ELECTION CAMPAIGNS AND VOTERS

#### **Observed Activity**

- Compromises of political parties, campaigns, media organizations
- Propaganda distribution and amplification through social media, leak sites, and direct communication









#### ELECTION ADMINISTRATORS

#### **Observed Activity**

- Targeted election commission website
- Theft of data from electronic voter databases and polibooks







### **ELECTION** SYSTEMS

#### **Observed Activity**

- No observed successful compromises of voting machines
- Limited indications of targeting of election systems manufacturers













### A Dynamic Threat Landscape



#### Underlying Motivations Drive Decision Making

- Malicious activity represents humans at a keyboard
- Activity may be highly tailored toward particular sectors or individual organizations
- Underlying motivations range from destruction and disruption to information theft, among others



#### Professionalism, Structure, and Resourcing

- Attackers may flexibly calibrate their capabilities depending on the target
- Threats may linger carefully for months or even years within a network
- Attackers may pivot their tactics based on findings from within a victim network



### Persistence in Pursuit of Set Objectives

- Resolute objectives motivate threats to continuously pursue targets over the long term
- Greater familiarity with a given network means a threat is more likely to identify and leverage additional access vectors
- Persistence mechanisms mean partial eviction may not result in complete remediation





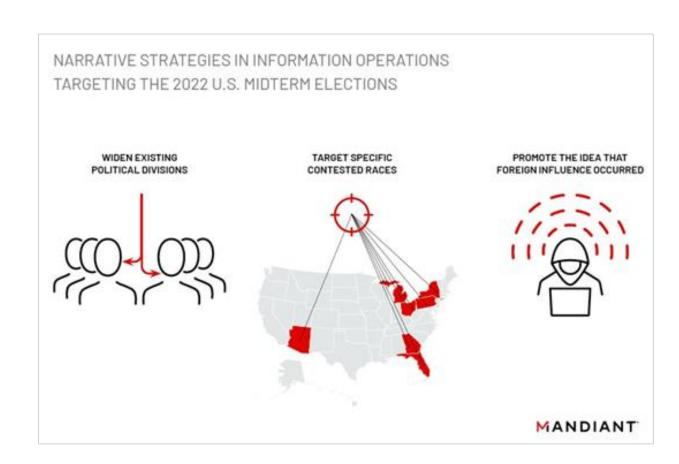
### The Spectrum of Contemporary IO Activity

### Primary IO Objectives Observed During 2022 Midterm Elections:

- Widen existing political divisions
- Target specific contested races
- Promote speculation of foreign interference

#### **IO Strategies:**

- Coordinated inauthentic activity
- Hack-and-leak operations
- Production and publication of disinformation
- Claims of disruptive activity targeting election infrastructure
- Claims of activity targeting the confidentiality of election data





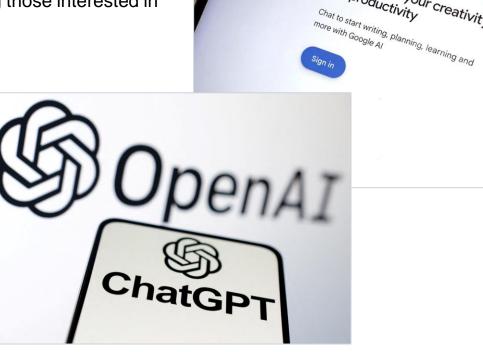
### Defining the Current State of Al-Enabled TTPs

#### **Background:**

- Current research and open-source reporting indicates that Al—in the form of LLM platforms—has assisted a number of threat actors to better inform their operations, craft lure content and malware payloads, interact with victims, and generate misleading photo and video content to mislead audiences.
  - TL;DR: All has become a substantial force multiplier, but not game-changing capability, for contemporary cyber threat groups, including those interested in gathering intelligence from or influencing U.S. elections.

#### **Example Definitions of Initially Observed Tactics:**

- LLM-informed reconnaissance
- LLM-enhanced scripting techniques
- LLM-aided development
- LLM-supported social engineering
- LLM-assisted vulnerability research
- LLM-optimized payload crafting
- LLM-enhanced anomaly detection evasion
- LLM-directed security feature bypass
- LLM-advised resource development







## **Observed Activity**

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### Key Takeaways:

- Mandiant continues to anticipate espionage-based intelligence collection and enablement efforts targeting election-related entities in 2024:
  - O The time-sensitive nature of any such operation, the fleeting intelligence value of most collected information, and difficulties taking action on most such information may hold many threat actors from conducting election-specific operations; however:
    - Presidential campaigns, auxiliary party members and leadership, and other electionrelated entities pose highly valuable targets for intelligence collection activities looking to glean information on future U.S. policy, foreign and domestic.
    - Controversies surrounding current presidential candidates—including health, personal and professional relationships, and business dealings—highlight the amplified risks of personal data leaks and the incentives threat actors have to pursue them.
- Threat actors from around the world continue to conduct Information Operations (IO) to foment discontent, mislead Western audiences, and otherwise share and amplify information in ways meant to influence and degrade the conduct and outcomes of U.S. and foreign elections.
  - Russia, Iran, and PRC-aligned IO campaigns continue to constitute the greatest volume of such activity, leveraging social media networks, hacktivist fronts, and other means to share and amplify information to Western audiences.
- Hacktivist fronts and ransomware threat actors continue to pose a serious disruptive threat to elections, whether explicitly designed to or not.
  - O Hacktivist fronts carry out frequent denial-of-service attacks alongside nationalistic, anti-West rhetoric, and have demonstrated prior activity parallel to elections.
  - Ransomware attacks against government infrastructure timed (whether purposefully or not) to coincide with elections may paralyze their conduct and force substantial delays.



### IO Campaigns, Impacts, and FUD

#### **Background:**

 Foreign states continue to deploy information operations (IO) to attempt to influence the conduct and outcome of elections globally.

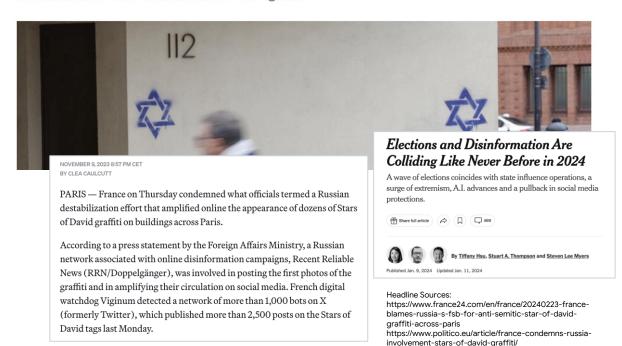
#### **Observations:**

- Not all IO campaigns are created equally, and most fall short
  - Obvious script-following/bot use, poor language skills, lack of cultural awareness
- Successful campaigns often leverage current events by calling into question official narratives or providing alternative facts that are not easily verifiable or that provide an easy, malicious explanation for an otherwise nuanced, sensitive topic.
  - Campaigns may make varied and creative use of various vehicles for information transfer, including potential physical operations (See Figures).
  - Audiences presented with multiple narratives may become fatigued by choice and trust none, gravitate toward those most sensational, or trust the first source they encounter rather than the most reputable.

## France blames Russia's FSB for anti-Semitic Star of David graffiti campaign

France believes that Russia's security service FSB was behind a campaign in which Star of David graffiti were daubed on buildings in and around Paris last autumn, a French source said Friday.

Issued on: 23/02/2024 - 18:03 Modified: 23/02/2024 - 18:05 (3) 2 min



ction-disinformation-2024.html

https://www.nytimes.com/2024/01/09/business/media/ele

### Russia-Aligned Campaigns

Mandiant has recently highlighted continued observations surrounding threat activity we attribute to "Newsroom for American and European Based Citizens" (NAEBC), a pro-Russia influence campaign allegedly run by individuals associated with Russia's Internet Research Agency (IRA). Activity attributed to NAEBC, which has periodically fluctuated between key events such as U.S. elections, has markedly persisted despite repeated public exposure and has continued to target specifically right-leaning U.S. audiences on a range of issues.

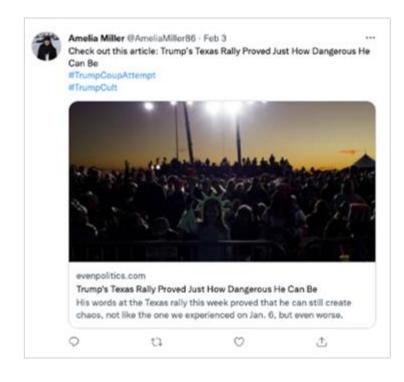
Additionally, we note that covert assets within the pro-Russia propaganda and disinformation ecosystem, including those that have been attributed to Russian intelligence services, continue to amplify pro-Russia messaging targeting U.S. audiences in the run-up to the 2024 U.S. presidential election. For example, we continue to observe well-known disinformation sites such as "NewsFront" and "Southfront" increasingly incorporate specific messaging surrounding these upcoming elections; content published to these sites is often further amplified by both inauthentic and genuine sources, the latter of which increases the ability of these campaigns to breakout and reach larger audiences.

Similar to observed threat activity targeting the U.S. 2022 midterm elections, we expect both pre-existing and possibly newly emerged hacktivist personas to engage in potentially wideranging threat activity targeting the U.S. 2024 elections, including both disruptive and conventional information operations.





### Iran-Aligned Campaigns



We note an established precedent for Iranaligned information operations activity targeting U.S. audiences; notable campaigns have leveraged suspected inauthentic news sites, impersonated U.S.-based individuals, and in some cases, U.S. political candidates.

### PRC-Aligned Campaigns



Throughout 2023, pro-PRC IO activity exhibited a pattern of aggressiveness manifested primarily in attempts to target elections in the U.S., as well as elections in Taiwan, and Hong Kong, including with activity flagrantly attempting to engage with voters and influence their electoral choices.

We continue to observe concerted, and in some cases ongoing, efforts attributed to the pro-PRC campaigns "DRAGONBRIDGE" and "HaiEnergy" to target U.S. domestic political discourse.

Observations surrounding threat activity attributed to these groups include past concerted efforts targeting the U.S. 2022 midterm elections as well as recent activity focused on the U.S. 2024 election cycle.

### 10 Surrounding Taiwan's Presidential Elections

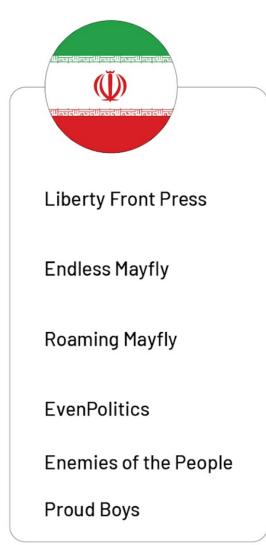
Mandiant assesses with high confidence that social media accounts we judge to comprise part of the pro-People's Republic of China (PRC) DRAGONBRIDGE information operations campaign promoted content pertaining to the 2024 Taiwan presidential election on multiple platforms, including content attempting to discourage Taiwanese from voting for the ruling Democratic Progressive Party (DPP).

- Narratives promoted by this activity set negatively portrayed the DPP and its presidential candidate Lai Ching-te, describing the DPP and its members as voteseeking, ineffective, corrupt, and unfit for leadership.
- The promoted narratives also aimed to portray Taiwan and its people as experiencing economic woes under DPP's leadership. These narratives suggested that if Lai and the DPP were to be elected, the situation would worsen for Taiwan and its citizens.



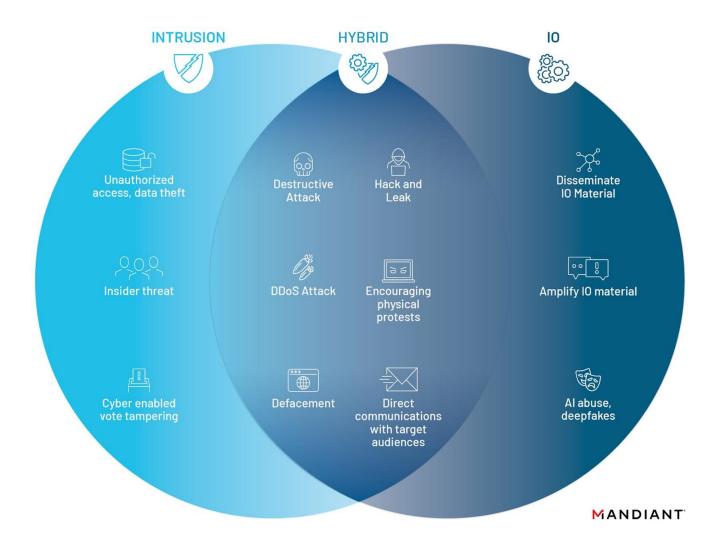
## Notable Russia-, Iran-, and PRC-Aligned Campaigns Targeting U.S. Audiences







### **Understanding Hybrid Operations**





### Espionage Targeting European Political Groups in Q1

In late February 2024, a Russia-nexus cluster of activity that has previously targeted diplomacy-related entities conducted a phishing campaign likely centered around German political parties and their affiliates:

- Phishing emails were sent to victims using an invite to a dinner reception bearing a logo from the Christian Democratic Union (CDU), a political party in Germany.
- The campaign represented a departure from the group's typical remit of targeting foreign embassies around the world, demonstrating the evolving nature of geopolitically motivated intelligence collection requirements.
- The German-language lure document contains a link directing the victims to a ZIP file containing a custom dropper hosted on an actorcontrolled compromised website.
- The dropper delivered a second-stage CDU-themed lure document and a custom next-stage payload retrieved from the same compromised domain.



Wir freuen uns, Sie zu einem Abendessen des regionalen repräsentativen Amtes der Partei einzuladen, das am 1. März um 19 Uhr helfen wird

Um an der Veranstaltung teilzunehmen, füllen Sie bitte einen <u>Fragebogen</u> aus und senden Sie ihn in den nächsten Tagen per E -Mail. Einladungen werden in die ordnungsgemäße Zeit gesendet.

Sie finden alle erforderlichen Informationen über die Veranstaltung sowie das Formular für <u>die Teilnahme auf</u> unserer Website.



## Interrelations between Chinese Capabilities, Posturing, and Election-Specific Targeting

#### **Observed Activity:**

- Phishing campaigns leveraging Taiwanese presidential election-themed lures to deliver malware.
- Targeting of the energy, telecommunications, and government sectors with tools that are shared to a limited degree among China-linked threat actors to include POISONPLUG and SOGU malware.
- Commercially available tools including Cobalt Strike BEACON have been used to target Taiwanese entities in phishing campaigns.
- Tangential impact has also been observed in 2023 and into 2024 as threat actors leverage zero days that targeted edge devices and security appliances.

#### **Analysis:**

- Ongoing intelligence interest in the candidates, support organizations, and other interested parties surrounding elections in areas of interest
  - O Especially amplified by the perceived closeness of an election as contentious as that of January 13
- Various capabilities—including initial access techniques, enablement preparations, tooling, and obfuscation efforts are interoperable and fungible across a range of core statenexus objectives.

Google Cloud's cyber threat intelligence firm Mandiant warned Tuesday of a "substantial volume of espionage operations" by China against Taiwan's government, technology and critical infrastructure, according to a statement from Ben Read, the company's head of cyber espionage analysis. "While this type of targeting has occurred for years, the volume over the past few months has been notable."

POLITICO

郭台銘選擇賴佩霞為總統副手

#### 郭台銘選擇賴佩霞為總統副手 深層考量

郭台銘的決策通常建基於他的長遠眼光和對於台灣未來的願景。 在選擇賴佩霞為其競選副手時,這個選擇背後隱含的原因不僅僅 是看中她的學術和專業背景,更多的是她所代表的價值觀和對於 社會的深度貢獻。他肯定綜合考慮了以下幾點:

突破傳統政治框架:近年來,全球政治氛圍越來越偏向打破傳統, 選民期望看到新面孔和新想法。選擇賴佩霞,一位非傳統政治背景 的副手,正是回應這樣的期望。

強調女性權益: 在這個時代, 女性權益的提倡和推動對於一個國家 的進步至關重要。賴佩霞不僅是女性運動的提倡者, 她更深入地推 動著每個人內在的身心和平, 突破了傳統的框架, 展現出真正的和 平意識。賴佩霞不僅代表女性, 更是女性權益的堅定支持者。這樣 的選擇突顯了郭台銘對於性別平等的重視, 且有助於吸引女性選 民。

學術與專業背景:賴佩霞的學術背景相當豐富。她是暨南大學的法 學博士,且在哈佛大學甘酒迪政府學院研究政治和政治人物,這使 得她對於政治領域有著深入的了解,這對於國際政策制定和外交 策略將是一大資產。

人際溝通的專家:政治不只是政策制定,更多的是人際間的溝通和 協調,賴佩霞過去在協助家庭和企業解決衝突上的經歷.顯示她員 有此方面的專業能力。賴佩霞運用其獨特的溝通投內,成功地協助 多家家庭和企業消彌彼此之間的衝突,建立了健康和諧的關係。這 樣的能力在政治領域中尤為珍貴,可以助於搭建橋梁,達成共識。

### Super Tuesday

#### **Background:**

- On 05 March, over a dozen states held primaries or caucuses to choose their respective party candidates.
- Mandiant observed at least one event parallel to, but not necessarily related to, the day of elections:
  - O Throughout the day, a technical issue at Meta led to a social media outage preventing users from accessing their Facebook and Instagram accounts.
  - The hacktivist front Anonymous Sudan—which supports pro-Russia narratives, amplifies storylines opposing the West in general, and often claims DDoS attacks against Western entities—quickly claimed responsibility alongside affiliated threat actors Skynet and Godzilla.

#### Takeaways:

- Even disruptive events with no substantive relation to (or that are demonstrably unrelated to) the conduct of an election can have the narrative hijacked by opportunistic threat actors.
  - O Threat actors seeking to disrupt real-world events do not always need to even deploy capabilities to do so.
  - O Hacktivist fronts (as well as extortionary cybercriminals) continue to benefit the most from the rapid publicity malicious claims often receive.



**Above**: Speculation regarding the source of Super Tuesday's social media outage, as well as commentary on public reactions.

**Below**: Prior claims by Anonymous Sudan targeting Western media outlets in stated support for Gaza, reflecting their ongoing conduct of activity directly parallel to U.S. domestic as well as global political issues.





## Strategic Outlook

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#### **Threat Commonalities**

#### "Traditional" Cyber Threats

- Generic phishing and spear-phishing continue to provide indispensable initial access vectors for threat actors
- A "campaign" still requires a mix of skills and capabilities.
- Non-election specific issues such as ransomware can quickly play a role in public confidence, integrity, and availability
  - O Activity doesn't have to directly target elections to impact them, either immediately or down the line
- Supply chains are the new front line ("edge" devices are emerging as critical)



#### **Cognitive Domain Effects**

- Perception of the attack and its consequences
- There is no nuance in the media
- The future isn't now, but some may think it is (AI, deepfakes, etc.)

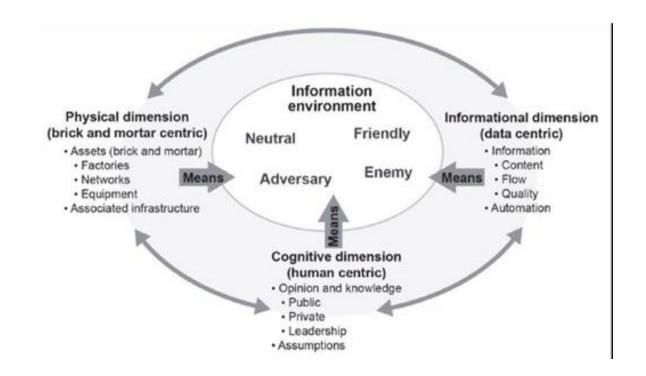


### Identification of Key Terrain

Placing Resources Where They Do the Most Good

#### **Domains to Address:**

- Traditional Network Defenses
- Leadership Education
- Private Sector Partnerships
- Data Resilience and Redundancy
  - O COOP Planning
- Adversarial Intelligence
  - Prioritized requirements



### Hardening and Resilience Considerations

#### Cyber:

- → Hunting
- → Exercises
- → Threat intel for the masses

#### **Cyber-Cognitive:**

- → "Two-person" integrity
- → Wargaming decisions

#### **Cyber-Physical:**

→ Where does the IT work happen?





### Discussion & Questions

**EAC Contact Form:** 

https://www.eac.gov/contactuseac

EAC Contact Email: clearinghouse@eac.gov



## Thank you