

### Defending Our Digital Density.











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### What is the NJCCIC?

The State's clearinghouse for information sharing, threat intelligence, best practices, and incident response

- Consists of OIT, NJSP, OHSP and Federal Partners
- Multi-disciplinary, holistic approach to cybersecurity
- Promote statewide awareness of cyber threats
- Facilitate widespread adoption of best practices
- Collaborate with public and private sectors with the goal of making NJ more resilient to cyber attacks



### General Threat Trends

- External threat environment increasing
- Credential compromise is the key to the kingdom
  - Phishing email is the #1 attack vector for credential compromise
    - 91% of all phishing emails attributed to organized crime groups
    - Purpose of phishing is to gain a foothold and compromise credentials
    - CEO/CFO whaling losses increased exponentially
  - Vulnerability exploitation
    - Avg. 30 days before a known vulnerability is exploited
    - Most attacks focus on old unpatched vulnerabilities
- Distributed Denial of Service Attacks
- Crimeware/Ransomware is rising as payments are made ransomware will continue to increase in frequency and business impact.
- Cyber Hygiene



## "Think Like a Criminal" Framework



**Attacker** 

Means

Motive

**Opportunity** 



### The Who And The Why

#### POSSIBLE ACTORS



Nation-State Actors



Criminals





Financial Gain



Retribution for Perceived Grievances



Black Hat Hackers



Insiders



Fame and Reputation



Sow Social Division



**Terrorists** 



Politically Motivated Groups



Foment Chaos / Anarchy



Subvert Political Opposition



Foreign Policy / National Interests



Undermine Trust in Democracy

### Indictments of Iranian Nationals for SamSam Ransomware Attacks



### CYBER ALERT | January 22, 2018

#### Threat Alert

### Ransomware Campaign Impacts Hospitals, a Municipality, and an ICS Company

#### TLP: WHITE

NJCCIC Members,

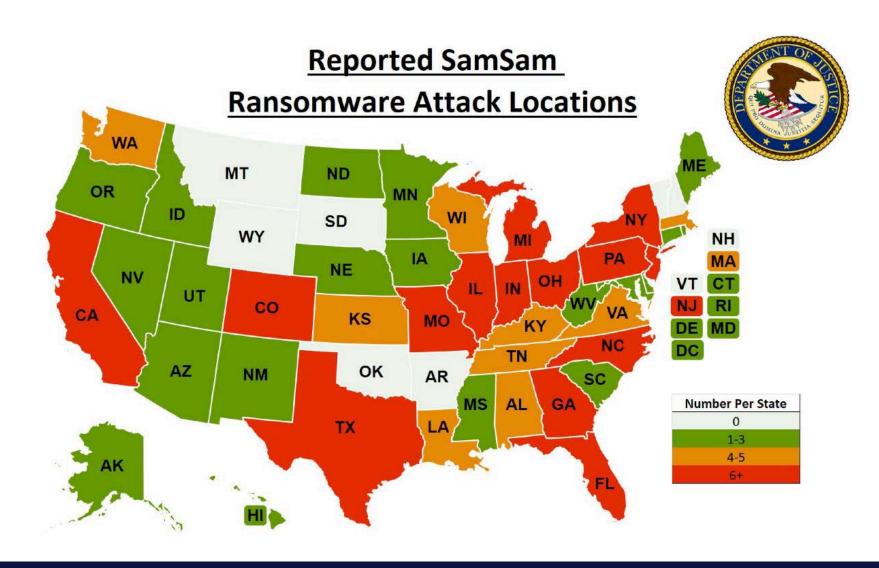
In the furtherance of public-private partnerships, this NJCCIC Cyber Alert is being provided in order to assist our members in guarding against the persistent malicious actions of cyber criminals.

#### Overview

The NJCCIC is aware of a ransomware campaign that has already impacted two hospitals, one municipality, and an ICS company within the US. According to multiple open-source reports, the perpetrator(s) behind this campaign are targeting victims with a new version of <a href="MSIL/Samas.A/Samsam">MSIL/Samas.A/Samsam</a> ransomware (hereafter referred to as SamSam). This version of



# Security Ecosystem: Indictments of Iranian Nationals for SamSam Ransomware Attacks





# Indictments of Iranian Nationals for SamSam Ransomware Attacks

"To execute the SamSam ransomware attack, cyber actors exploit computer network vulnerabilities to gain access and copy the SamSam ransomware into the network. Once in the network, these cyber actors use the SamSam ransomware to gain administrator rights that allow them to take control of a victim's servers and files, without the victim's authorization."

US DOJ

- Hollywood Presbyterian Hospital
- City of Atlanta
- Colorado Department of Transportation
- City of Newark, NJ
- Port of San Diego

This presentation was prepared by the New Jerse. Cyberrement yield Communication. Integration of all (NJCCIC) pursuant to its authority under Executive Order No. 178 of 20 May 2015.

Information contained in first document is TLP WHITE and may be distributed without restriction.



### Willie Sutton Rule

#### **Supply Chain Security**



You're Only As Secure As Your Supply Chain

Organizations can do all the right things in securing their environments but attacks against their IT supply chain can torpedo all their efforts. Vendor management, third-party management, supply chain management – whatever the term used – needs to be a staple of your organization's cybersecurity program. In most cases that means conducting due diligence reviews – taking reasonable steps to ensure the hardware, software, and services that you procure from vendors does not introduce unacceptable cyber risks into your organization. The reasonable steps may include, but are not limited to, direct observation (e.g. onsite visits) of the third party, reviews of the third-party's information security policies and standards, reviews of independent audit reports of the third party, relevant certifications, open source searches, and reference checks. Continue Reading...



### Credential Compromise

- Credentials are the keys to the kingdom
- Less than 35% of users have unique passwords across sites
- 28% of organizations provide multi-factor authentication (MFA)
- 78% of users within organizations that provide MFA hate it
- Privileged access: "Do as I say, not as I do"

## Beyond Account Takeover



Secretary of State's Office spokesman Matt Roberts said they will re-examine the state's systems to

confirm nothing was breached. Nate Kelly/azcentral.com Wochit

In-N-Out seeks restraining

order against prankster

March 26, 2018, 7:31 p.m.

#### THE WEEKLY BULLETIN

**November 15, 2018** 

#### TLP: WHITE

#### **Garden State Cyber Threat Highlight**

Providing our members with a weekly insight into the threats and malicious activity directly targeting New Jersey networks.

#### **Emotet Campaigns Persist, Utilize Updated Tactics and Techniques**





# Supply Chain Security

#### TLP: WHITE



# NJCCIC

NJ CYBERSECURITY AND COMMUNICATIONS INTEGRATION CELL

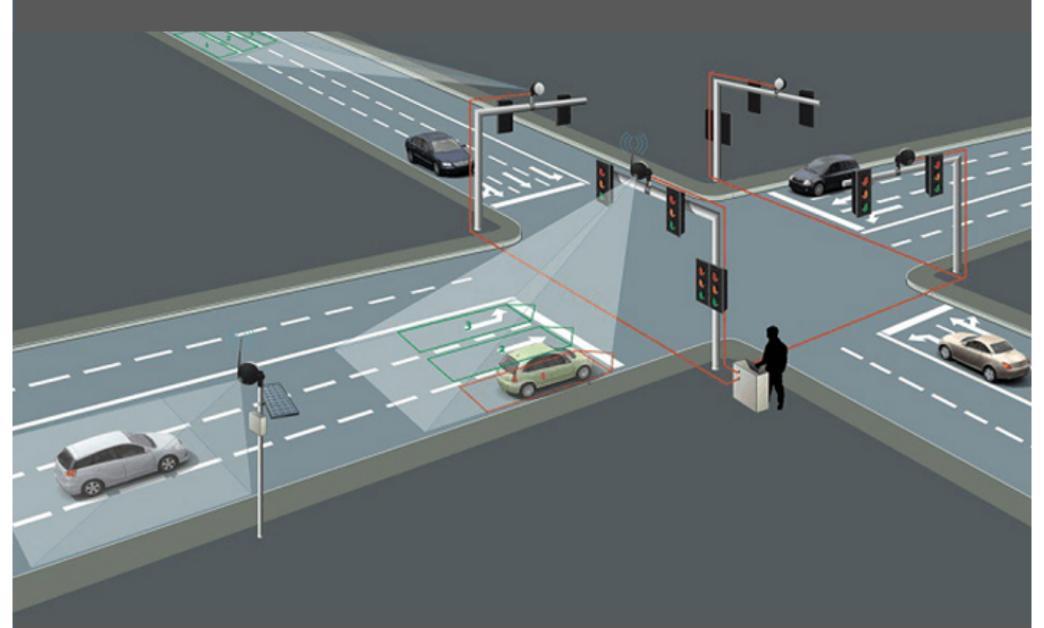
### Supply Chain: Compromise of Third-Parties Poses Increasing Risk

July 20, 2017

TLP: WHITE | The NJCCIC assesses with high confidence that capable threat actors—both politically-motivated state actors and their proxies, as well as profit-driven criminals—will increasingly leverage supply chain compromises to conduct network intrusions and attacks. These incidents could result in the exfiltration, manipulation, or destruction of data and disruption to daily operations and business continuity. Supply chain compromises commonly involve a malicious actor gaining access to a victim's network using stolen remote access credentials belonging to a vendor or business partner. They can also occur through the injection of malicious code into third-party software used by the victim, as was the case in the June 27, 2017 attack that targeted Ukrainian organizations and severely impacted dozens of victims in numerous other countries, including the United States. The attack, referred to as Petya-NotPetya and a variety of other names, was initiated through the compromise of a server that distributed software updates for M.E.Doc, accounting software used by organizations that conduct business in Ukraine. While consensus among cybersecurity firms indicates a state-sponsored Russian hacking group was responsible for the attack, the primary motive and objectives remain unclear; however, analysis from Booz Allen Hamilton suggests the destructive nature of the attack may have been a deliberate act to cover-up network intrusions and data theft conducted in the months prior. The Petya-NotPetya attack demonstrated the unintended consequences and collateral damage that can result from supply chain attacks involving widely-used software.







# **SMART CITY**







### NJCCIC Services

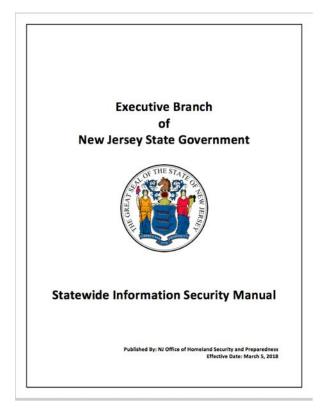
- Threat Intelligence alerts, advisories, bulletins, threat briefings
- Best Practices
- Incident Response Support
- Training
- NJCCIC Affiliate Program (2019)
- US DHS, MS-ISAC



## Best Practices for Managing Risk

### NJCCIC Cybersecurity Program Controls Assessment

- Aligned with Statewide Information Security Manual
- Self-Assessment covering 33 Control Areas
- Allows organization and NJCCIC to identify risks and establish strategies and tactics to manage them





### NJCCIC Cybersecurity Program Controls Assessment

#### 1.0 - INFORMATION SECURITY PROGRAM MANAGEMENT (PM)

The organization establishes and maintains a framework to provide assurance that information security strategies are aligned with and support business objectives, are consistent with applicable laws and regulations through adherence to policies and internal controls, and provide assignment of responsibility, all in an effort to manage risk.

PM	Control Objectives	Implementation				
		Not Implemented (0%)	Minimally Implemented (1-33%)	Partially Implemented (34-66%)	Mostly Implemented (67-99%)	Fully Implemented (100%)
1.1	Roles and Responsibilities: The organization establishes a management structure and responsibility for information security, and appoints an individual assigned with the mission and resources to centrally manage coordinate, develop, implement, and maintain an organization-wide security program.	•	0	0	0	0
1.2	Information Security Policies and Standards: The organization develops, implements, and governs processes and documentation to facilitate the implementation of organization-wide information security policies and associated standards, controls, and procedures.	•	0	0	0	0

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