

# **Oregon State Legislature**

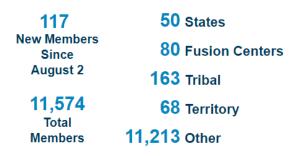
Joint Committee On Information Management and Technology

Randy Rose Senior Director of Intelligence September 22, 2021

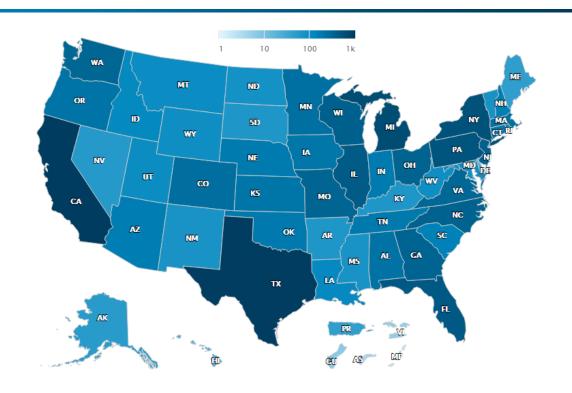


## MS-ISAC\* Who We Serve

### MS-ISAC Membership









## **Security Operations Center**

24 x 7 x 365



**Support** 



**Analysis & Monitoring** 



Reporting

**Network Monitoring** Services Research and **Analysis** 

Threats, **Vulnerabilities Attacks** 

**Cyber Alerts & Advisories Web Defacements** Account **Compromises** 



To report an incident or request assistance:

Phone: 1-866-787-4722

Email: soc@cisecurity.org



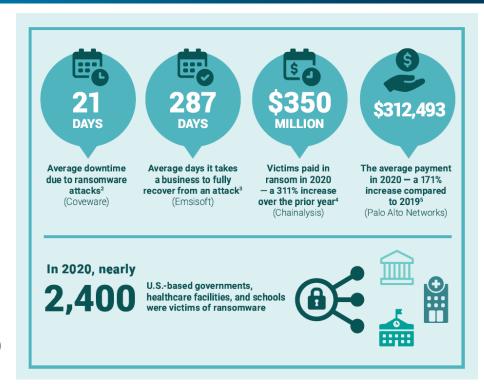
# The Scope of the Threat to SLTTs



### MS-ISAC® Ransomware

**Highest Impact Threat for SLTTs** 

- Malware typically encrypts data and attacker holds the key for ransom
- Evolution from commodity ransomware to big game hunting or post-compromise ransomware
- Increased use of double extortion
- Nearly half of all victims experienced data corruption
- Ransoms for SI TTs have increased into the 6 figure range
- Largest ransom ever paid (\$40M) in 2021



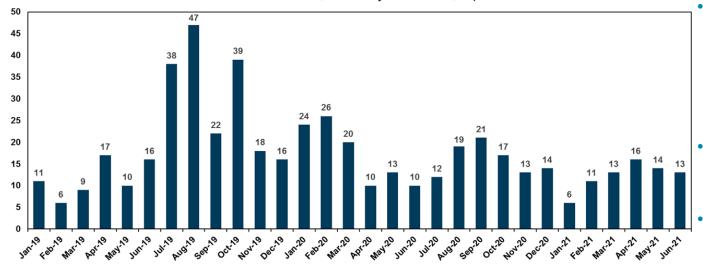


## Ransomware Reporting Trends 2019 to Present

Across all MS-ISAC Membership

#### SLTT Ransomware Incidents Reported to MS-ISAC January 2019 - June 2021

Source: Victim Disclosure, 3rd Party Disclosure, Open Source



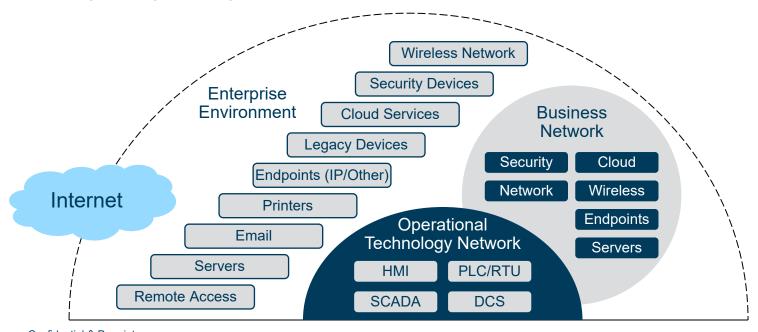
- 153% increase of reported SLTT ransomware attacks from 2018 to 2019
- Increase attributed to:
  - Relationship with dropper malware
  - Attacks on MSPs
  - Sophisticated Ransomwareas-a-Service (RaaS) model
- Threat remained elevated in 2020, although 20% decrease in reporting
- Not depicted in the graph:
  - Ransom demand increase
  - Double extortion increase
  - Intrusion vectors



## MS-ISAC\* Public Safety Landscape

Increased Technology Integration Means Increased Attack Vectors

- Modern technology integration into OT networks increasing exponentially
- Air-gapping no longer an effective solution to modern threats

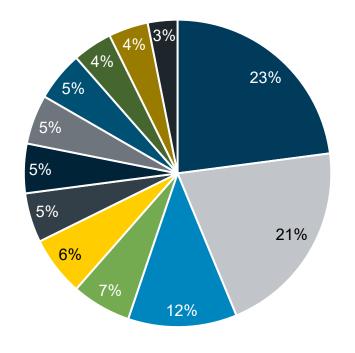


Confidential & Proprietary

TLP:WHITE



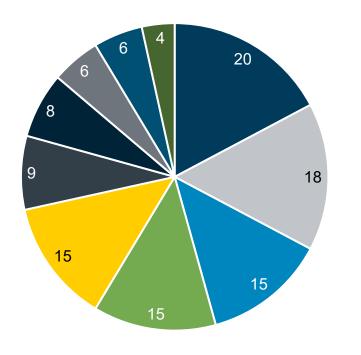
### Top 12 Malware Incidents Last Year



- Trojans (Various)
- DirectsX
- Shlayer
- AmendMiner
- Agent Tesla
- Ursnif
- MooBot
- Gh0st
- Cerber
- Snugy
- Qakbot
- CryptoWall



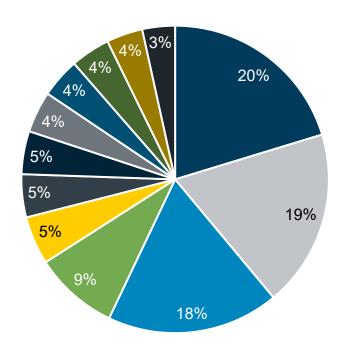
#### Top 10 Malware Incident Categories Last Year



- Rootkit
- Banking Trojan
- Downloader
- Botnet
- RAT
- Ransomware
- Backdoor
- Infostealer
- Cryptocurrency Miner
- Worm



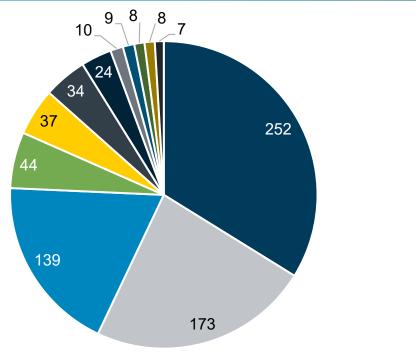
### Top 12 Non-Malware Incidents Last Year



- Suspicious Activity
- MageCart
- JAWS Webserver Exploitation Attempt
  Cisco IOS Command
- **Execution Attempt**
- Suspicious Domain
- Liferay Exploitation Attempt
- Mirai
- Phishing
- ComRAT
- Possible SkyDrive
- ZoomInfo
- Cobalt Strike



### Top 10 Non-Malware Incident Categories Last Year



- Exploit Activity
- Suspicious Domain
- Suspicious Activity
- Policy Violation
- Suspicious SSL Cert
- Suspicious User-Agent
- Phishing
- WebShell
- Scanner
- Pentesting Software
- Vulnerable Software
- P2P



## Recommendations



#### MS-ISAC® Recommendations

Building a Cybersecurity Culture

- Encourage Oregon SLTTs to join the MS-ISAC!
  - Take advantage of our free cybersecurity services for SLTTs
  - Seek our help in applying for the grants under the new infrastructure bill
- Implement the 18 CIS Controls starting with Implementation **Group 1**
- Use Hardened Images and CIS Benchmarks
- Regularly audit critical systems, especially those with direct access to the Internet, such as those found in hospitals, power plants, and water sanitation systems



## **Thank You**