## X-Force Threat Intelligence Index Report Findings and What's on The Horizon



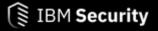
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## Today's topics

- Introduction
- Impact of Ukraine Crisis
- Recommendations
- Threat landscape key findings
- Questions



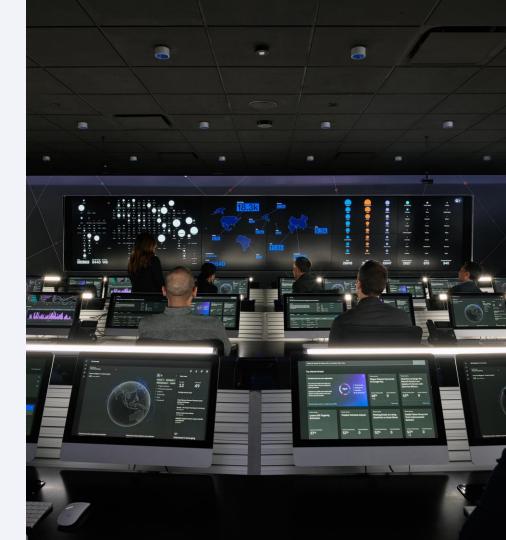
## Impact of Ukraine Crisis

### IBM Security X-Force Research Advisory: New Destructive Malware Used In Cyber Attacks on Ukraine:

https://securityintelligence.com/posts/new-destructive-malware-cyber-attacks-ukraine/

## X-Force Exchange Collection: Ukraine/Russia Conflict:

https://exchange.xforce.ibmcloud.com/collection/56ed5d53e7aeca5d1624be2d181f7d0a



## IBM Security recommendations

- (1) Develop a response plan for ransomware.
- 2 Implement multifactor authentication on every remote access point into a network.
- Adopt a layered approach to combat phishing.
- Refine and mature your vulnerability management system.
- Adopt zero trust principles to help decrease risk of top attacks.
- Use security automation to enhance incident response.
- 7 Use extended detection and response capabilities for an advantage over attackers.



## Ransomware was the top attack type

21%

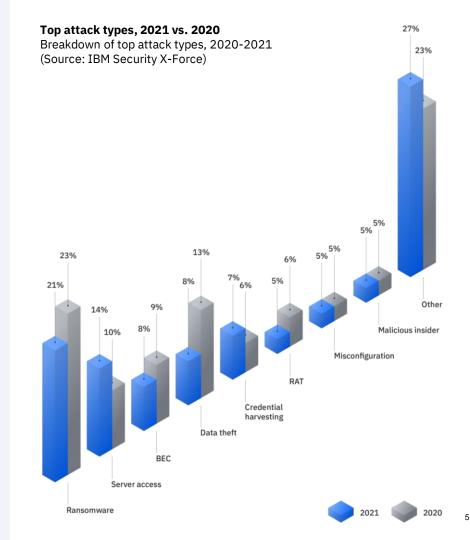
Ransomware's share of attacks

37%

Share of attacks by the top ransomware group REvil

#### 17 months

Average lifespan of a ransomware gang



Phishing and vulnerability exploitation the top initial infection vectors

41%

Phishing's share of attacks

33%

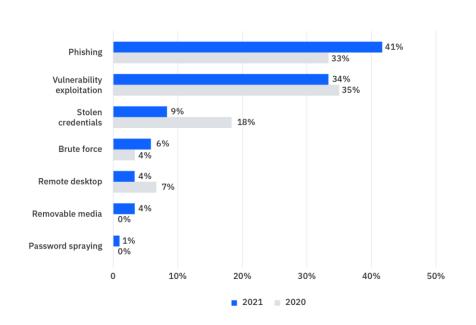
Increase in vulnerability exploitation attacks

Log4j

Second on the list of top 10 vulnerabilities

#### Top infection vectors, 2021 vs. 2020

Breakdown of infection vectors observed by X-Force Incident Response, 2020-2021 (Source: IBM Security X-Force)



# Threats to supply chain, manufacturing, OT and IoT

61%

Manufacturing's share of compromises at OT-connected organizations

2,204%

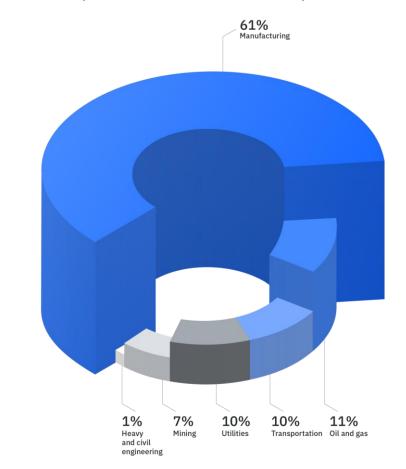
Increase in reconnaissance against SCADA Modbus devices open on the Internet

74%

Share of IoT malware from the Mozi botnet

#### OT industries targeted, 2021

Breakdown of attacks against six operational technology industries, as observed by X-Force IR, 2021 (Source: IBM Security X-Force)



## Cloud threats and Linux malware innovation

146%

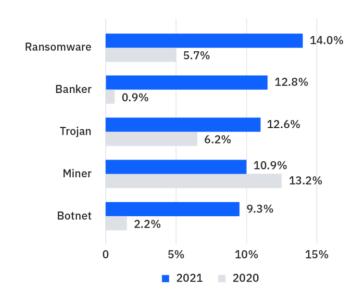
Increase in Linux ransomware with new code

### Docker targeted

Malware more capable across cloud platforms

#### Linux malware with unique code, 2021 vs. 2020

Linux malware with unique (new) code in five categories, 2020-2021 (Source: Intezer)



## Geographic trends

Asia

**Experienced the most attacks** of any region

Europe

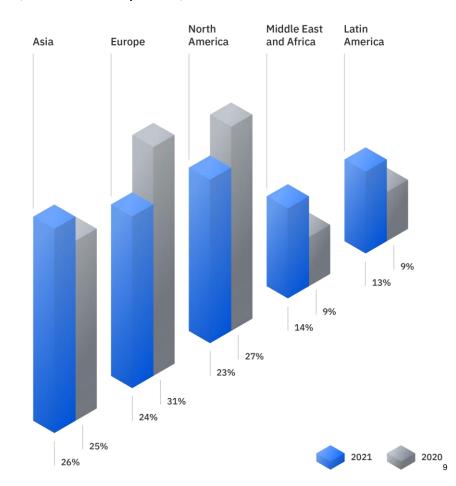
Dropped from first to second in share of attacks

North America

**Third-most attacked region** 

#### Breakdown of attacks by geography, 2021 vs. 2020

(Source: IBM Security X-Force)



## Industry trends

Manufacturing #1

**Experienced the most attacks** of any industry

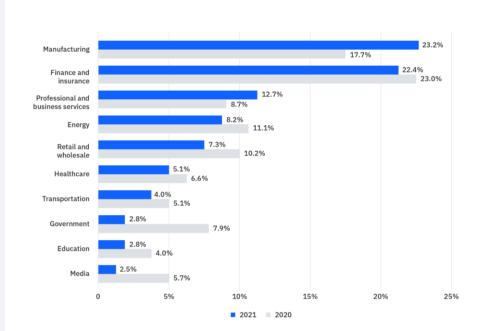
Finance and insurance #2

Doing security right

Wholesale heavily attacked More attacked than retail in the last year

#### Breakdown of attacks on the top 10 industries, 2021 vs. 2020 $\,$

(Source: IBM Security X-Force)



## Key findings

#### Ransomware the top attack type

21%

Percentage of attacks that were ransomware

#### 17 months

Average time before a ransomware gang rebrands or shuts down

### Phishing and vulnerability exploitation the top attack vectors

41%

Percentage of attacks that used phishing for initial access

#### 3X

Click effectiveness for targeted phishing campaigns that add phone calls

33%

Increase in the number of incidents caused by vulnerability exploitation

### Threats to manufacturing, OT and IoT

#1

Manufacturing's rank in top attacked industries

61%

Manufacturing share of compromises in OT-connected organizations

2,204%

Increase in reconnaissance against OT

74%

Share of IoT attacks originating from Mozi botnet

#### Cloud, Linux threats rise

146%

Increase in Linux ransomware with new code

#### Asia becomes top attacked geo

26%

Share of global attacks that targeted Asia

### Resources

- Report webpage: <a href="mailto:ibm.biz/xforcethreatindex">ibm.biz/xforcethreatindex</a>
- Executive summary: <a href="mailto:ibm.biz/ExecSummaryTII">ibm.biz/ExecSummaryTII</a>
- Full report: <u>ibm.biz/FullReportTII</u>
- Schedule a 1:1 X-Force consult: ibm.biz/ConsultTII
- Learn more about X-Force: <u>ibm.biz/X-Force</u>
- If you are experiencing an incident, contact X-Force to help:
  - US hotline 1-888-241-9812
  - Global hotline (+001) 312-212-8034

## Thank you

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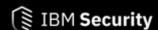
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