

# THE THREAT OF GEOPOLITICAL ISSUES ON NEW ZEALAND CYBERSECURITY



BY ALEX TEH, CHILLISOFT CEO



# ALEX TEH

CHILLISOFT CEO

- 25 Years in cybersecurity UK / ANZ
- NZ largest cybersecurity distributor
- Independent 100% kiwi owned
- Represent Gartner leading vendors in every class







A GRIM PICTURE

THE FUTURE IS NOW.  
CYBER-WARFARE IS PART OF  
MODERN WARFARE.

## ESET Researchers timeline of attacks: Russian invasion of Ukraine



## STATE SPONSORED ATTACKS

### How the Russian attack unfolded

- 1 hour before invasion
  - Viasat US satellite company compromised.
- Ukranian military used Viasat
- “Wiper” malware called Acidrain (modems & router)
- **Largest war time hack in history!**
- Cross fire also hit 5800 German wind turbines



# STATE SPONSORED CYBER WARFARE

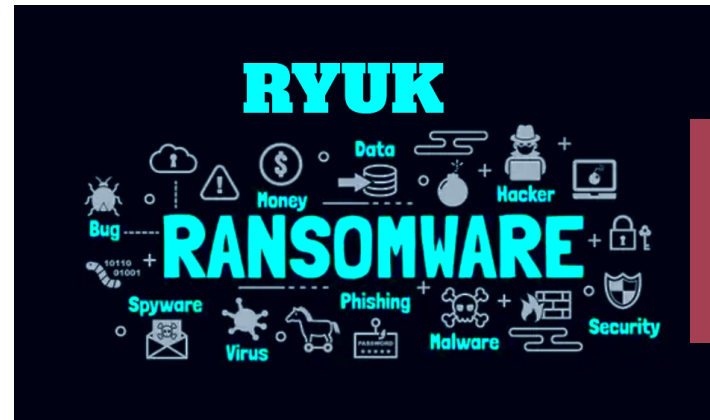


**CONTI**

**ANONYMOUS**

**CONTI (Russia) VS Anonymous (West)**

# STATE SPONSORED CYBER WARFARE



CONTI GROUP

## Who is Conti Group:

- Inventors of RYUK ransomware
- First successful attack on a Ukrainian power station (2015)
- Conti group have an annual payroll of \$6mil USD
  - \*100+ hackers!



\_the situation

- Russian & Ukrainian division splinter
- Internal chat posted on dark web
- Location of a crypto wallet worth \$700mil USD of BTC posted
- Total net worth of the “CONTI GROUP” ransomware gang is \$2.7BILLION

- UNLIMITED RESOURCES

# STATE SPONSORED CYBER WARFARE

## RUSSIAN CONTI GROUP

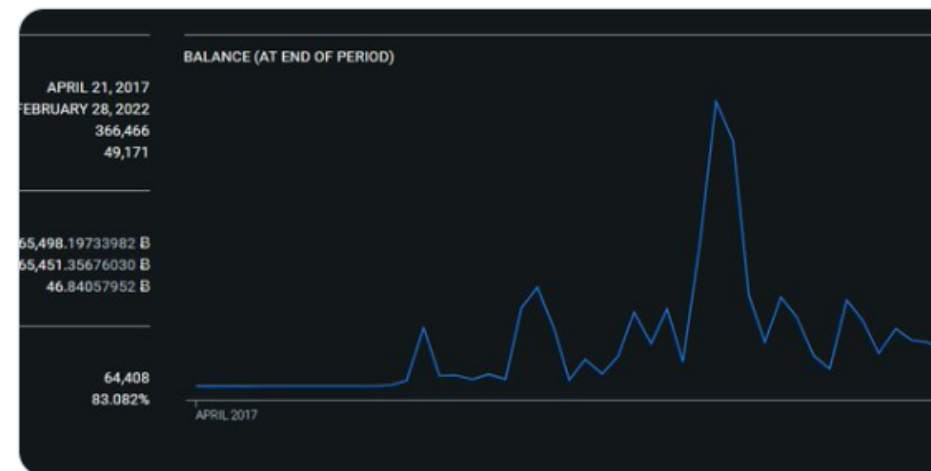
The leaked data contains 339 JSON files, with each file consisting of a full day's log.

Conversations from **January 29, 2021**, to today, **February 27, 2022**, have been leaked and can

The Conti ransomware leaks have unveiled Conti's primary Bitcoin address.

From April 21st, 2017 - February 28th, 2022 Conti has received 65,498.197 BTC

That is 2,707,466,220.29 USD.



8:27 AM · Mar 1, 2022 · Twitter Web App

Image: Line Record

“We promise it is very interesting,” the leaker wrote in the email sent earlier today.

# STATE SPONSORED CYBER WARFARE

## HACKIVIST GROUP ANONYMOUS – TOP HACKS:

- **George Floyd Murder**
  - US police force websites take down
- **Arab Spring**
  - GOV of Tunisia, Egypt, Syria all disrupted
- **DDOS attacks on VISA & Mastercard**
  - Payback campaign
- **Free Korea**
  - Demands incl. free speech, democracy + removal of Kim Jong-un

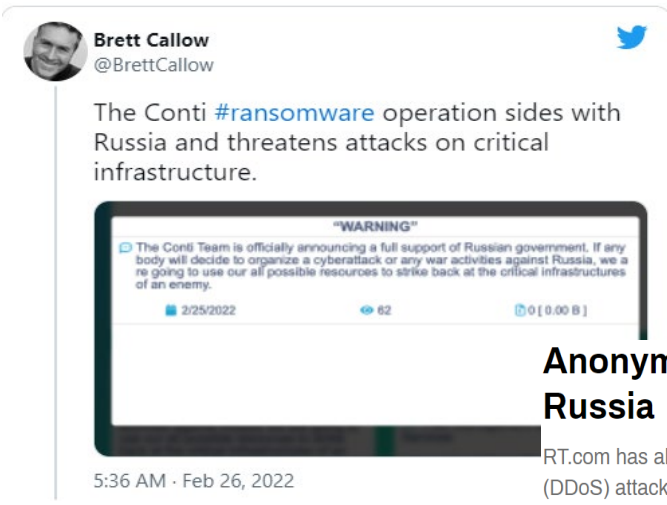


ANONYMOUS



```
body>
<div id="app">
  <todo-application>
    #shadow-root (open)
      <link rel="stylesheet" type="text/css" href="//
maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/
bootstrap.min.css">
      <style>...</style>
      <nav class="navbar navbar-expand-md navbar-dark bg-
      <main class="container">
        <todo-form>
          <style>...</style>
          <div class="card todo-form">...</div>
        </todo-form>
        <hr>
        <todo-list ref="list">
          <style>...</style>
          <h2>Tasks:</h2>
          <ul ref="todos" class="list-group">
            <todo-task ref="task-1517176192142" id="ta
            ...</todo-task> == $0
            <todo-task ref="task-1517176320397" id="t
            ...</todo-task>
            <todo-task ref="task-1517176329096" id="t
            ...</todo-task>
            <todo-task ref="task-1517176329096" id="t
            ...</todo-task>
          </ul>
        </todo-list>
      </main>
    </todo-application>
```

# STATE SPONSORED CYBER WARFARE



Conti Group threatens western critical infrastructure

Anonymous declare 'cyber war' against Russia

RT.com has also been targeted in what appears to be a widespread denial-of-service (DDoS) attack

Anonymous DDOS attacks on Russian Television



Hacker collective 'Anonymous' has declared a "cyber war" against Russia, claiming to have disabled several Russian government websites and that of RT.

Social media accounts claiming to represent the group announced on Thursday evening that they were "officially in cyber war against the Russian government," and had taken down dozens of websites in response to the country's military action in Ukraine.

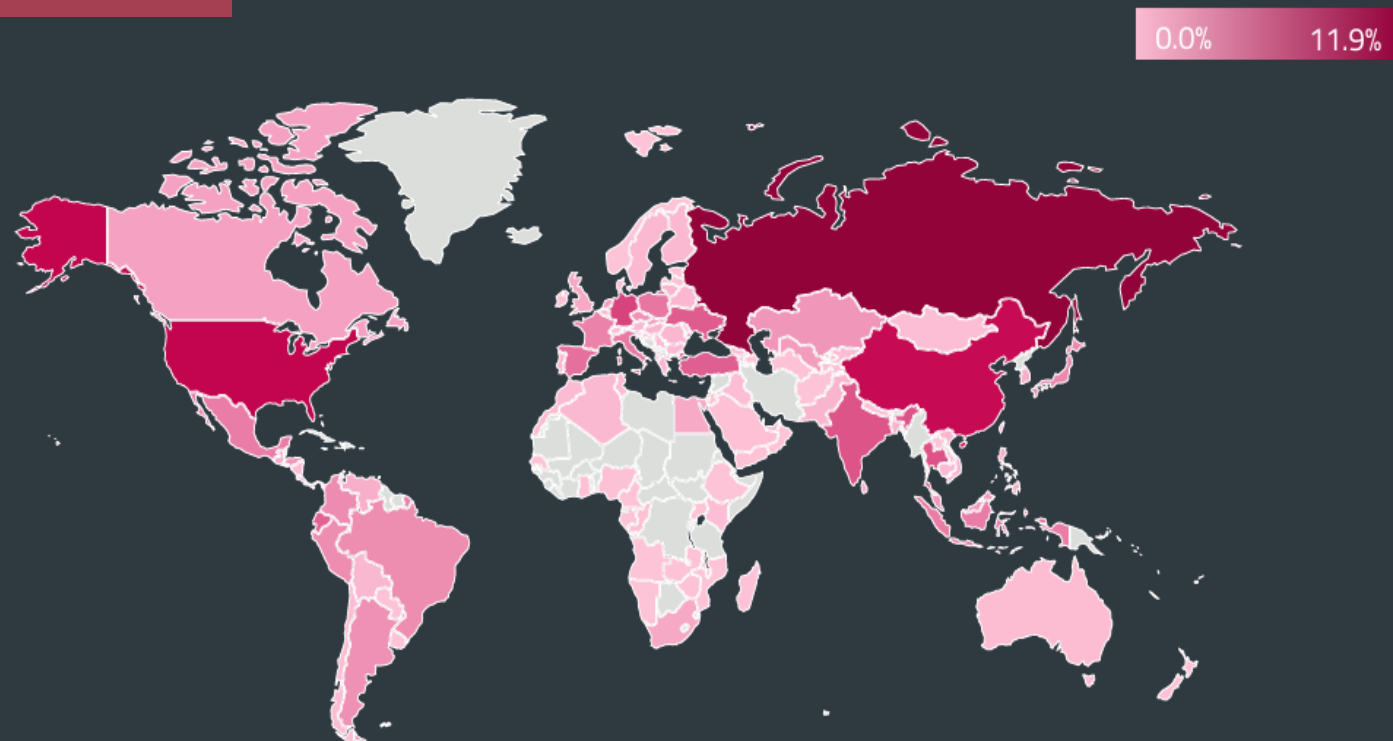
The websites of the Russian government, the Kremlin, the Duma, the Ministry of Defence, and RT were all affected by the apparent cyberattack, with some of the websites slowing down and others being taken offline for extended periods throughout the day.

20+ DIFFERENT HACKING GROUPS IN THE WAR ON BOTH SIDES!

A lot quieter in the west...

For now.

1. Ransomware attacks dropped for the first time in years (-4%)
2. Same time, Russia received 11.9% increase
3. Reduced fear in retribution from Russia



Global distribution of Ransomware detections in T1 2022

#### STATISTICS & TRENDS

Category	T3 2021/T1 2022	Key points in T1 2022
Overall threat detections	+20.1% ↑	Emotet campaigns raise overall threat activity
Infostealers	+12.0% ↑	JS/SpyBanker aka Magecart grows more prevalent
Ransomware	-4.3% ↓	Russia increasingly targeted by ransomware
Downloaders	+121.5% ↑	Emotet launches mass-scale spam campaigns
Cryptocurrency threats	-29.3% ↓	Overall decline in cryptocurrency threat activity
Web threats	-1.8% →	Number of phishing URLs shoots up in March
Email threats	+36.8% ↑	Emotet floods inboxes with malicious documents
Android threats	+8.0% ↑	Android spyware grows more prevalent
macOS threats	-14.9% ↓	Decline in all monitored threat categories
RDP attacks	-40.8% ↓	RDP attacks see first decline since 2020



# A THREAT ENGINE TO SMART CITIES – SERIOUS ORGANIZED CRIME (SOC)



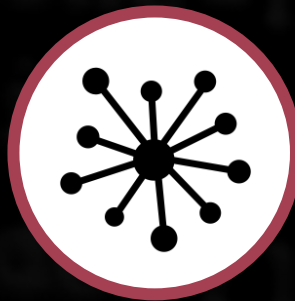
Crime as a Service



Cryptoware



Malware & I.D. Theft



DDOS and Network Attack



Payment Card / Order Fraud

# SERIOUS ORGANIZED CRIME

## ‘PRODUCTIZATION’ (DARK WEB)

\_post war

Highly motivated hacking groups **will** sell their new tools and bots on the dark web.

The screenshot shows the 'Sheep' marketplace interface. It features a navigation bar with links for Account, Orders, Messages, Gallery, Forum, and Help. A sidebar on the left lists categories like Drugs, Services, Data, Weapons, and more. The main area displays a grid of product listings, including 'Stop Lock Security Key', '112g GREEN FOOD \*FAT BUO\*', 'Deca Durabolin', 'Self Defense Nerve Centers', 'High-quality LSD on colorful blotter', 'Custom order for CS', '2 gr Methylene / m1', and 'US ONLY\* 250x 140mg PURE (94%) MDMA Capsules'. Each listing includes a price and a 'Detail' button.

**FAKEID®**

Main Services Samples faq Order Contacts

**Pricing**

Country	Price for Passport	Price for Passport + Driving license	Price for Passport + ID card	Price for Passport + Driving license + ID card
Australia	600 Euro	700 Euro	700 Euro	800 Euro
Belgium	500 Euro	600 Euro	600 Euro	700 Euro
Brazil	400 Euro	-	-	-
Canada	600 Euro	700 Euro	700 Euro	800 Euro
Ireland	500 Euro	600 Euro	600 Euro	700 Euro
Italia	550 Euro	650 Euro	650 Euro	750 Euro
Finland	500 Euro	600 Euro	600 Euro	700 Euro
France	600 Euro	700 Euro	700 Euro	800 Euro
Germany	600 Euro	700 Euro	700 Euro	800 Euro
Malaysia	450 Euro	550 Euro	550 Euro	650 Euro
Netherlands	600 Euro	700 Euro	700 Euro	800 Euro
Norway	650 Euro	750 Euro	750 Euro	850 Euro
Poland	500 Euro	600 Euro	600 Euro	700 Euro
Portugal	500 Euro	600 Euro	600 Euro	700 Euro
Spain	550 Euro	650 Euro	650 Euro	800 Euro
Switzerland	650 Euro	750 Euro	750 Euro	850 Euro
Sweden	550 Euro	650 Euro	650 Euro	750 Euro
United Kingdom	650 Euro	750 Euro	-	-
USA	700 Euro	800 Euro	800 Euro	900 Euro



### Dark Web Prices

	Social Security \$1		DDoS as a service -\$7 per hour
	Medical record \$50 and up		Credit card data \$0.25 to \$60
	Bank account info \$1,000 and up depending on the account type and balance		Mobile malware \$150
	Spam \$50 for ~500,000 emails		Exploits \$1,000-\$300,000
	Maleware development \$2,500 (Commercial malware)		Facebook account \$1 for an account with 15 friends

SOURCE: RSA

CNBC



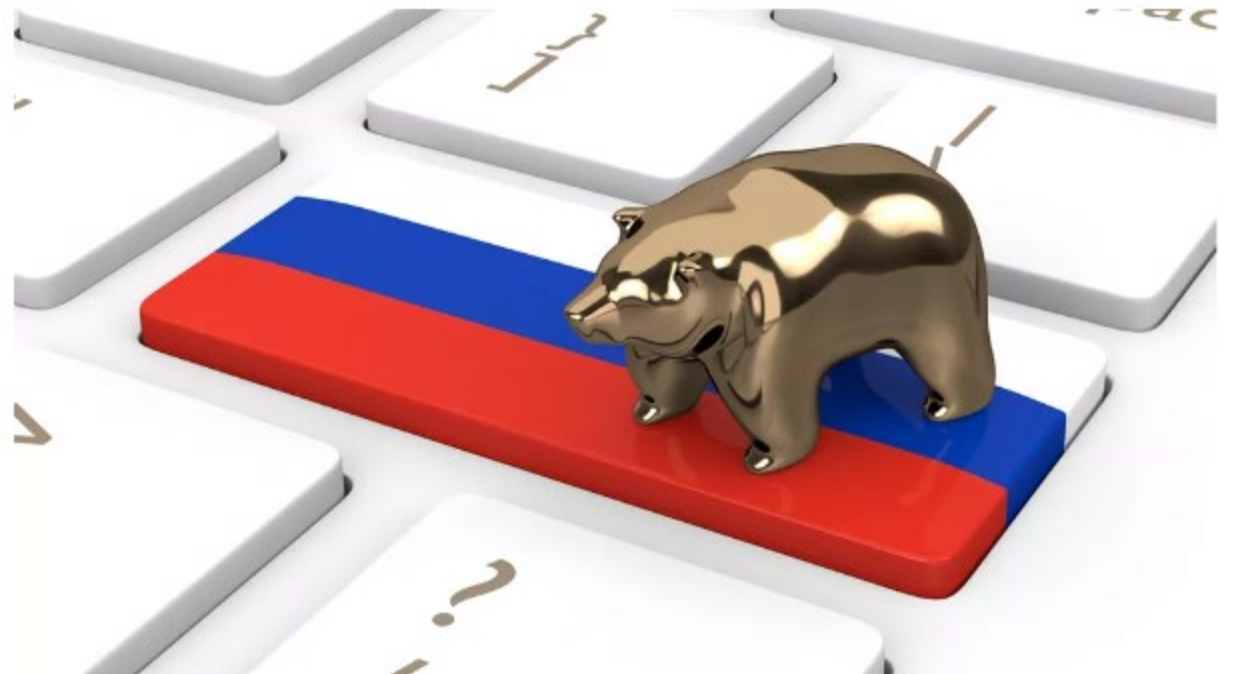
## MORE DDOS BOT NETWORKS CREATED

1. US agency CISA discovered and worked with Watchguard to remediate the problem.
2. Russian group Sandworm developed Cyclops Blink to conduct cyber espionage
3. FBI took down large scale Sandworm botnet network
4. Remember... 2.7 Billion of Bitcoin in one wallet! **Unlimited resources.**

## WatchGuard firewalls exploited by Russian hackers, CISA warns

By Sead Fadilpašić last updated April 15, 2022

Federal civilian agencies urged to apply the patch



## NZX Attacks in 2020

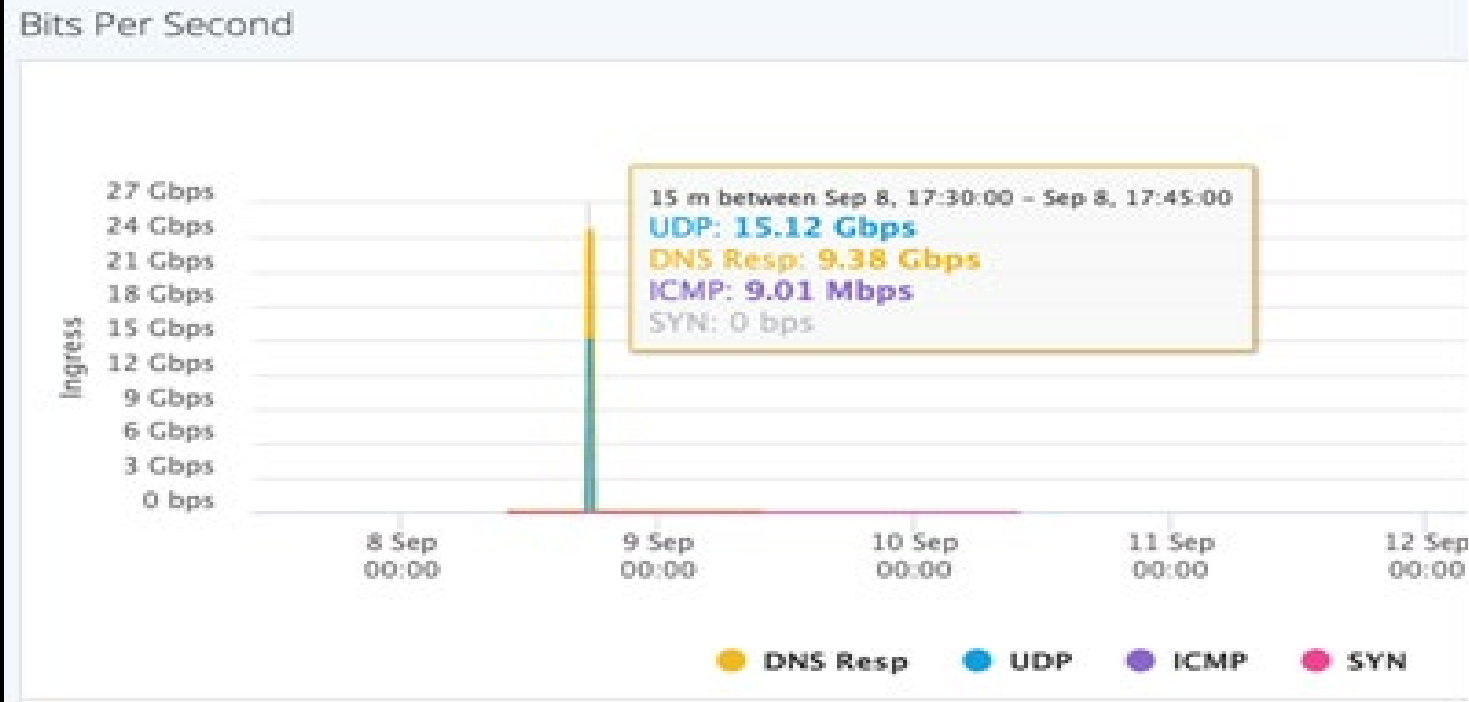
1. DDOS attacks came from Ukraine
2. Hacking group – Fancy Bear
  - Started with Web app attacks
  - Moved to Network DDOS attacks
  - NZ Stock exchange down for weeks





## DDOS Attacks in 2021

1. DDOS attacks focused on DNS servers creating issues with customer portals
2. Attacks from Europe and Asia
3. Varied attack protocol vectors
  - DDOS can't 'just' be blocked in NZ
  - Blocking must be done using global DDOS scrubbing centers
  - Attacks on our banks were 6x greater than the attack on NZX
  - **Imperva and Radware** identified and **successfully** blocked similar style attacks on their customers.



# DDOS Attacks in 2021

1. Volumetric DDOS attacks are more frequent.

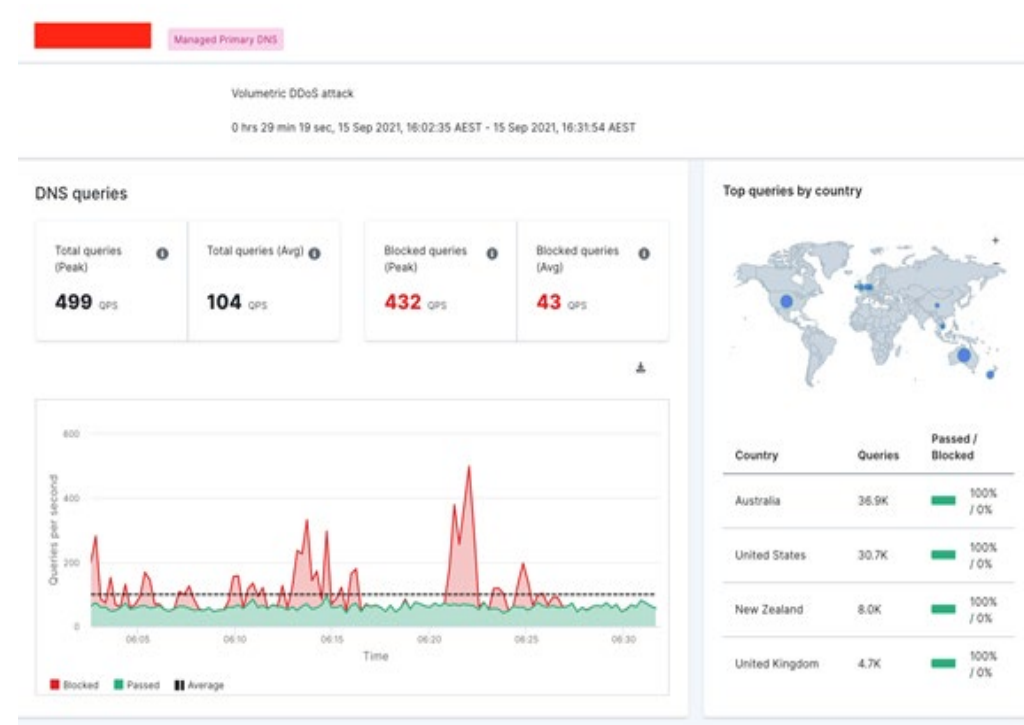
- 42 on one customer which is why you see internal issues!

2. Peaking close to 500 incidents within the hour!

3. DNS attacks show more than 500 queries per minute

4. Many DNS serves have inadequate protection, are outsourced to cloud solutions that do not have appropriate DDOS protection.

5. BOTS are coming from traditional Alliance countries (US, AU, UK)





## Ransomware on the rise!

1. An NZ DHB became the highest profile attack
2. Five hospitals effected for months
3. 4000+ patient data leaked onto dark web
4. Ministry of Health spending \$75mil+ on cyber defenses

NEW ZEALAND

### **DHB cyber attack: Hospital bosses fearful of copycat attacks and tipping hackers off**

3 Mar, 2022 02:30 pm





## NZ Threat Landscape – Lets not forget!

10% work from home to 100% in lockdown.

New norm with higher percentage continuing working from home post lockdown.

Multi layer attacks including:

- Covid19 phishing attacks (38% increase)
- Compromised remote users
- Compromised VPN & RDP via brute force attacks
- Compromised network & domain admin
- Disabled, encrypted and data loss of backups

Double ransomware (\$1.25mil for decryption and additional \$1.25mil for not selling stolen data)

Ransomware attack causing **significant** problems for large brewery.

12 June 2020



NZ Appliance manufacturer falls **victim** to ransomware Scourge.  
11 June 2020



# NZ THREAT LANDSCAPE – IT'S COSTLY.

## BREWERY THREAT FROM RANSOMWARE

Hello, you have 5 days to contact us and pay, otherwise all your financial, personal information your clients and other important confidential documents will be published or put up for auction.

Claims_Database	18/06/2020 2:50 AM	File folder
Claims_DB_Beer	18/06/2020 2:50 AM	File folder
Customer Satisfaction	18/06/2020 2:50 AM	File folder
DSO TEMP	18/06/2020 2:50 AM	File folder
Filter Team	18/06/2020 2:50 AM	File folder
LDD Grocery Reporting	18/06/2020 2:50 AM	File folder
Major Data File	18/06/2020 2:51 AM	File folder
SLA's & ALAs	18/06/2020 2:51 AM	File folder

## SecurityBrief

- Crestmead
- Malanda SQL
- PENPHIST01 DB's



Too quick to click: New Zealanders falling for phishing emails

## Cyber incidents in NZ surged last year

Comes as CERT NZ warns of coronavirus-themed scams doing the round



Leon Spencer (New Zealand Reseller News)

19 March, 2020 14:49



Credit: Dreamstime

The number of cyber security incidents reported to the Computer Emergency Response Team (CERT) NZ by businesses and individuals in 2019 surged by 38 per cent compared to the previous year's total, to 4,740.

FOLLOW

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us

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EVEN

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## Supply chain attacks

- Social engineering caused MFA users to be hacked.
- CITRIX servers & domain controllers compromised through lateral movement.
- 2.75GB of data and 3100 files
- Leaked files uploaded publicly on the web.
- Pinnacle Midlands Health - 3rd party server
  - Up to 500,000 patient records exposed

HACKED!



Cisco Confidential Information Agreement: Individuals  
(Vendors, Contractors, Independent Contractors, Consultants, and  
Partners)

[Find a practice](#) [Information for patients](#)

### Pinnacle cyber incident

12 October 2022

#### On this page:

- [Public message from Pinnacle Incorporated](#)
- [9 October 2022 update](#)
- [4 October 2022 announcement](#)
- [Access support](#)
- [Frequently asked questions](#)



b. Non-Disclosure: Individual will keep in confidence and trust, and will not use or disclose to





# WHAT CAN WE DO?

ENCOURAGE NEXT GENERATION  
TRAINING & INTERN PROGRAMS

SUPPORT LOCAL MSSP'S  
WITH LOCAL TEAMS

WORK WITH GCSB+ NCSC  
USE MALWARE FREE NETWORK

ADOPT MODERN CYBER PRODUCTS  
WITH BUILT IN A.I DRIVEN AUTOMATION

# SUPPORT LOCAL MSSP'S

Chillisoft helped build **six** Security Operation Centers in New Zealand



Cyber CX



Advantage



Inde



## Chillisoft Cybersecurity training Centre

- Certified and accredited courses
- Regional and on prem training
- Hands on technical and sales training
- Enables partners to install, consult, and support all our products
- 1000 SOC analyst trained in last 2 years
- We train EDR and SIEM SOC analysts!



**I WANT YOU**  
**FOR Cyber Security**

NEAREST RECRUITING STATION



“We are Kiwis's, we always punch above our weight, we will **fight** them on the dark web, we will **fight** them at our gateways, we shall **defend** our island, whatever the cost may be and we shall **never** surrender! We will find our way....

## Cyber Tsunami



CHILLISOFT



imperva



LogRhythm



ExtraHop