

How cybercriminals are breaking the internet (and, well, everything) and what you can do about it

C I R A P R E S E N T A T I O N



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Introduction

Welcome!

My name is Andrew Fraser

I'm the Director of Sales for CIRA Cybersecurity Services

I like:

- Music
- Riding my bike
- Sailing



Introduction

Welcome!

My name is Mudit Mogla

I'm a Product Manager at CIRA

I like:

- Shopping for new houses
- Hiking
- Kayaking



Introduction

The Canadian Internet Registration Authority

Building a trusted internet for Canadians

WWW.CIRA.CA

.CA domains

- Over 3 million .CA domains under management

Registry Services

- Robust top-level domain products and services.

Cybersecurity Services

- Canadian Shield
- DNS Firewall
- Anycast DNS
- Cybersecurity Awareness Training

CIRA Gives Back

- +\$9 million to Canadian internet projects
- Support domestic peering
- Global engagement: ICANN, others.



Introduction

CIRA Cybersecurity

As part of CIRA's goal to promote a trusted internet, we develop tools that Canadians and public institutions can use to protect themselves and their data online.

Provide cybersecurity and DNS services

Protect over 6 million users

Service 1,000 public and private orgs

Develop innovative partnerships

CANARIE, CCCS, Cybera, MRNet, SRNet

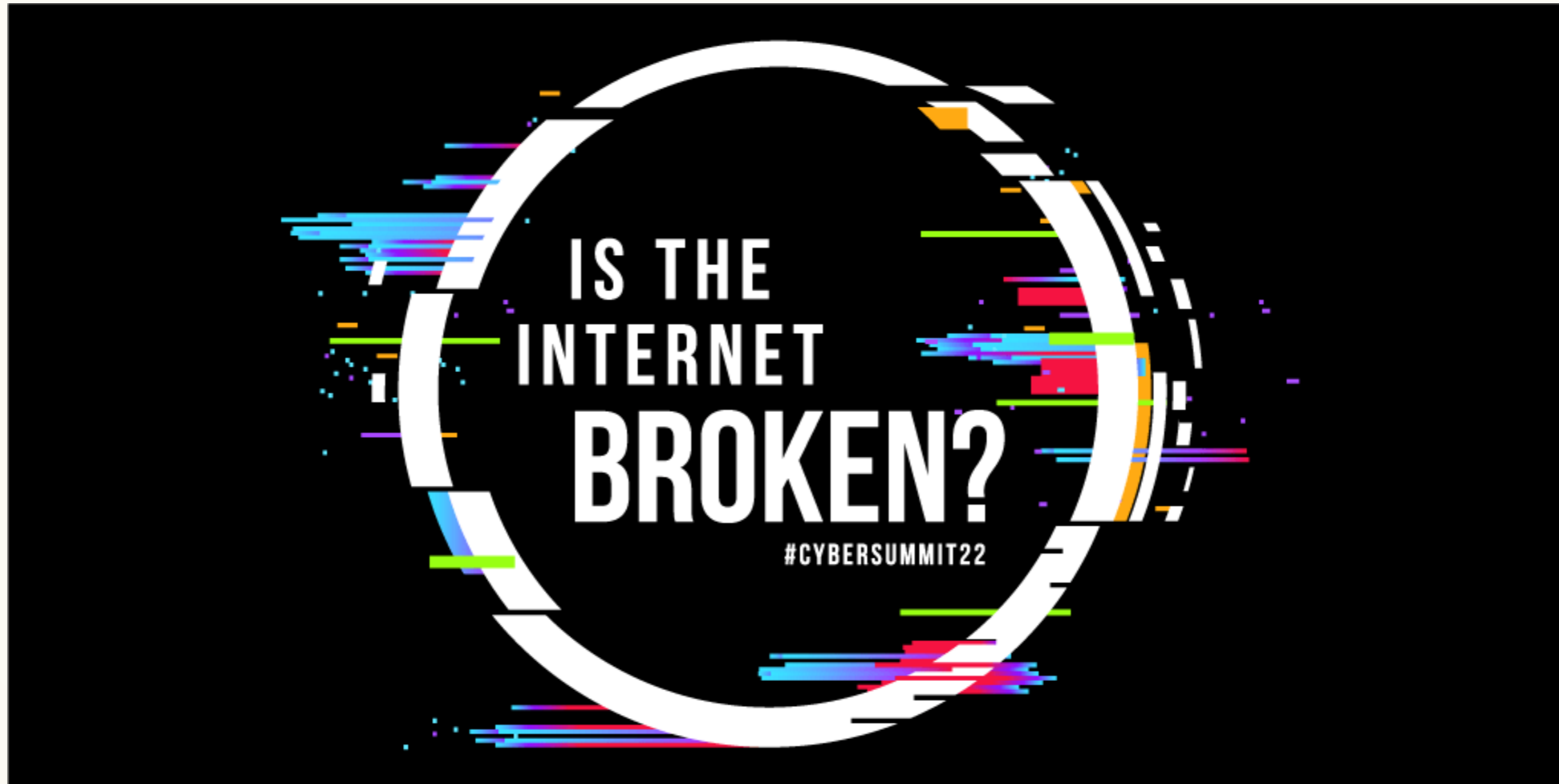
Introduction

Overview of today's session



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- **Part one:** What are we up against
- **Part two:** What you can do about it



“breaking the internet”



Barack Obama 
 @BarackObama Following

Four more years.
pic.twitter.com/bAJE6Vom
 Reply Retweeted Favorited



667,950 RETWEETS 227,545 FAVORITES 

8:16 PM - 6 Nov 12 · Embed this Tweet Flag media

Ellen DeGeneres 
 @TheEllenShow ...

If only Bradley's arm was longer. Best photo ever.
 #oscars



10:06 PM · Mar 2, 2014 · Twitter for Android

What are we up against

Part one

Part one: What are we up against

Understanding the cybersecurity market

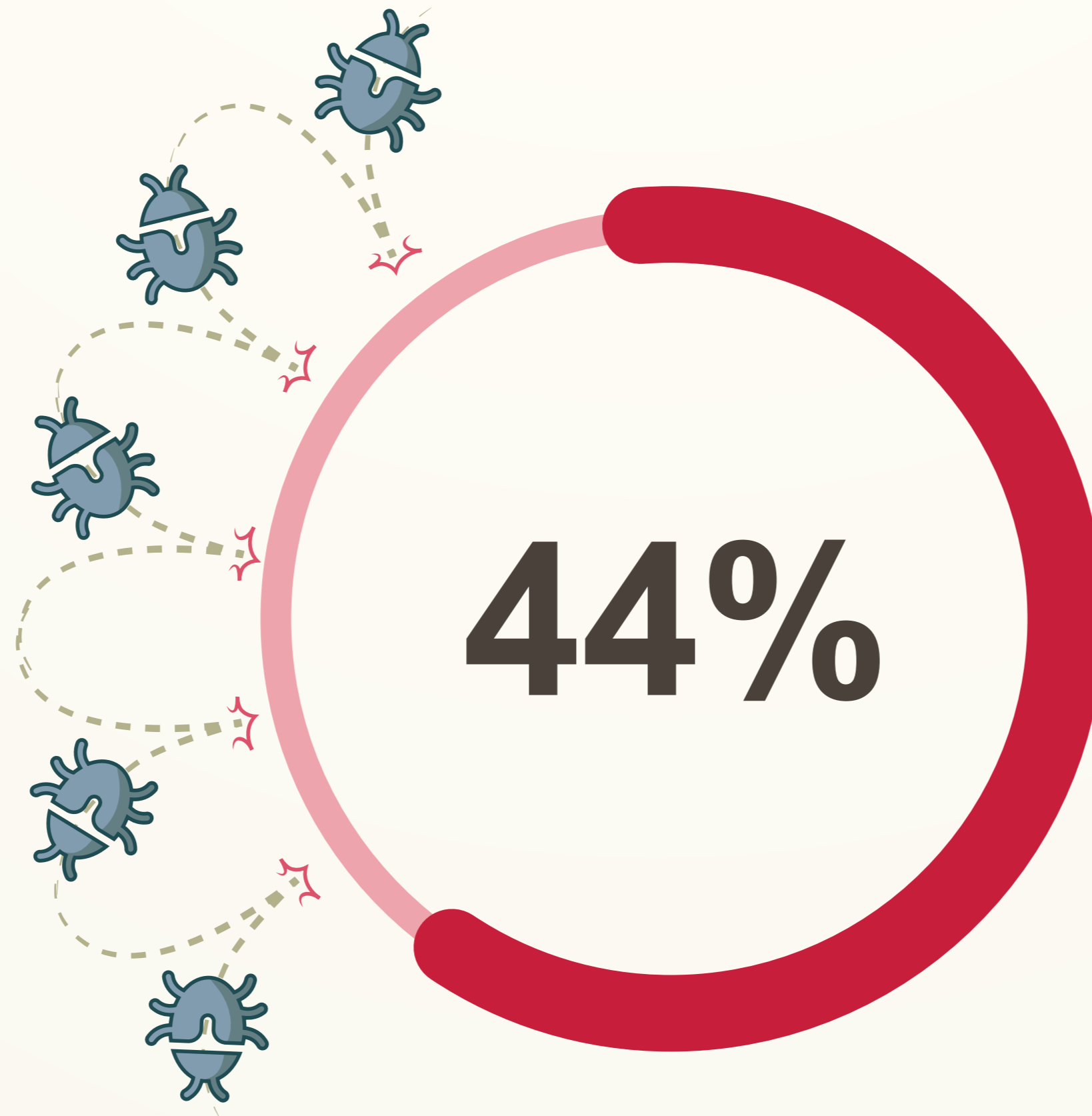


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Part one: What are we up against

How pervasive are cyberattacks?



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Part one: What you're up against

How pervasive are cyberattacks?



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Part one: What you're up against

What are we seeing in AB, SK & MB?

Sector	Number of blocks	% of blocks
Higher Ed	24,739,090	98%
Enterprise	1,327	-
K-12	209,330	1%
Municipality	5,646	-
Grand Total	24,955, 353	

Part one: What are we up against

The attack service is growing



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Part one: What are we up against

But the implications are bigger than just “the internet”

SECURITY

York University cyber attack looks like ransomware, says security expert

ALEX COOP MAY 6, 2020

Hackers Breached Colonial Pipeline Using Compromised Password

- Investigators suspect hackers got password from dark web leak
- Colonial CEO hopes U.S. goes after criminal hackers abroad

CANADA

Canada on ‘high alert’ for cyberattacks from Russia, others: minister

 By **Amanda Connolly** · Global News
Posted June 9, 2022 3:58 pm

Saskatchewan

Cyberattack against Regina Public Schools likely ransomware



'I think it's a serious breach. There's no doubt about it,' says expert

British Columbia

SFU warns cyberattack exposed personal information of about 200,000 students, staff and alumni



SFU staff found there had been a cyberattack on one of the university's servers on Feb. 5

Nfld. & Labrador

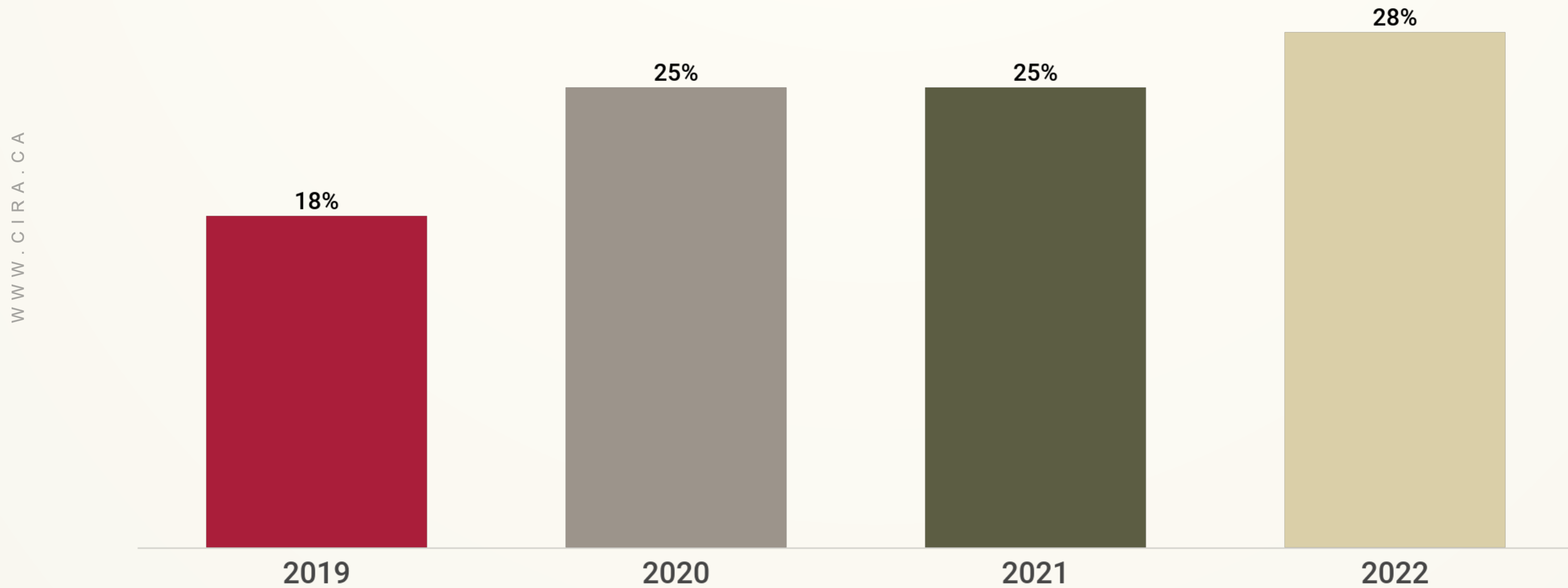
37,800 people sent privacy breach notifications linked to N.L. cyberattack



Affected individuals include patients plus current and former employees

Part One: What are we up against

Cybercriminals are breaching audience data



What you can do about it

Part two

Part two: What you can do about it

Strategy for combatting cyberthreats



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Part two: What you can do about it

Technology...



Part two: What you can do about it ...and people

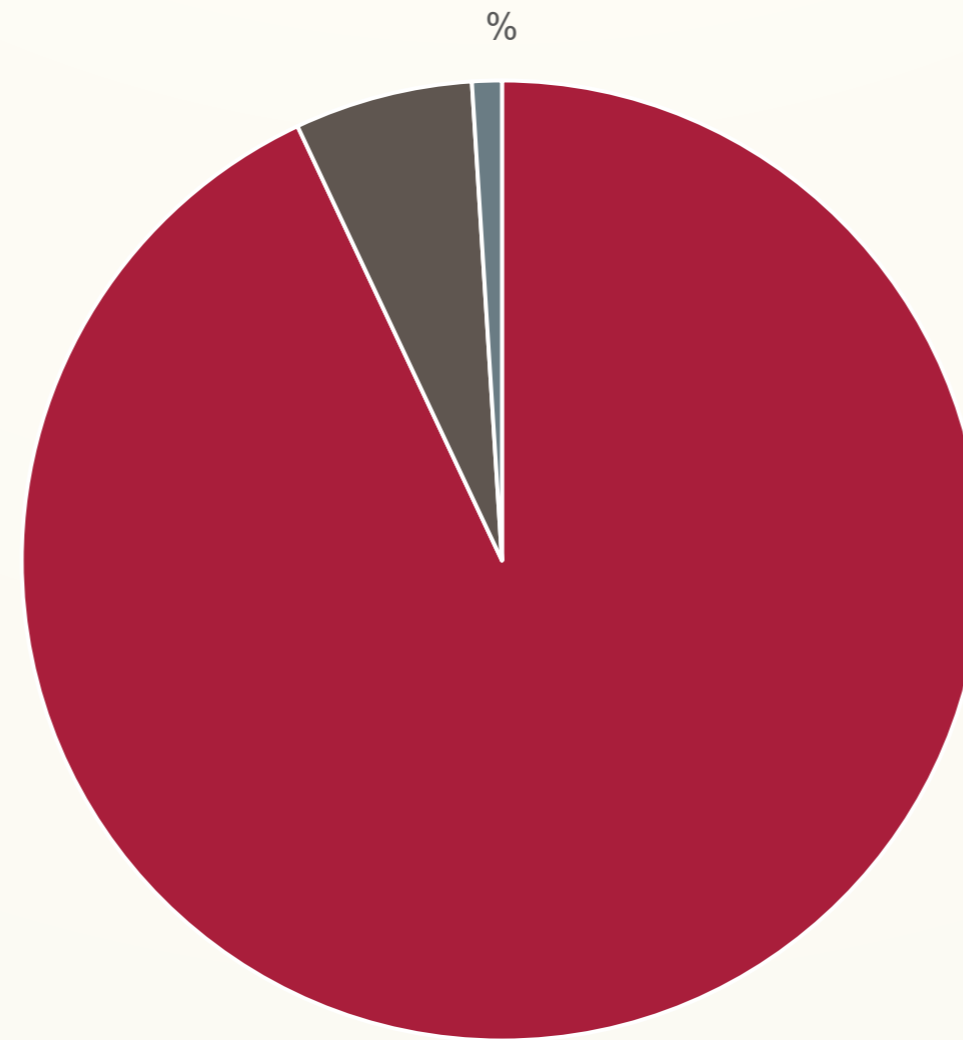


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Part two: What you can do about it

...and people

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■ Total effective ■ Not effective ■ Don't know

About CIRA Cybersecurity Services



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About CIRA Cybersecurity Services

CIRA's solutions: Cybersecurity Awareness Training

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The dashboard is divided into several sections:

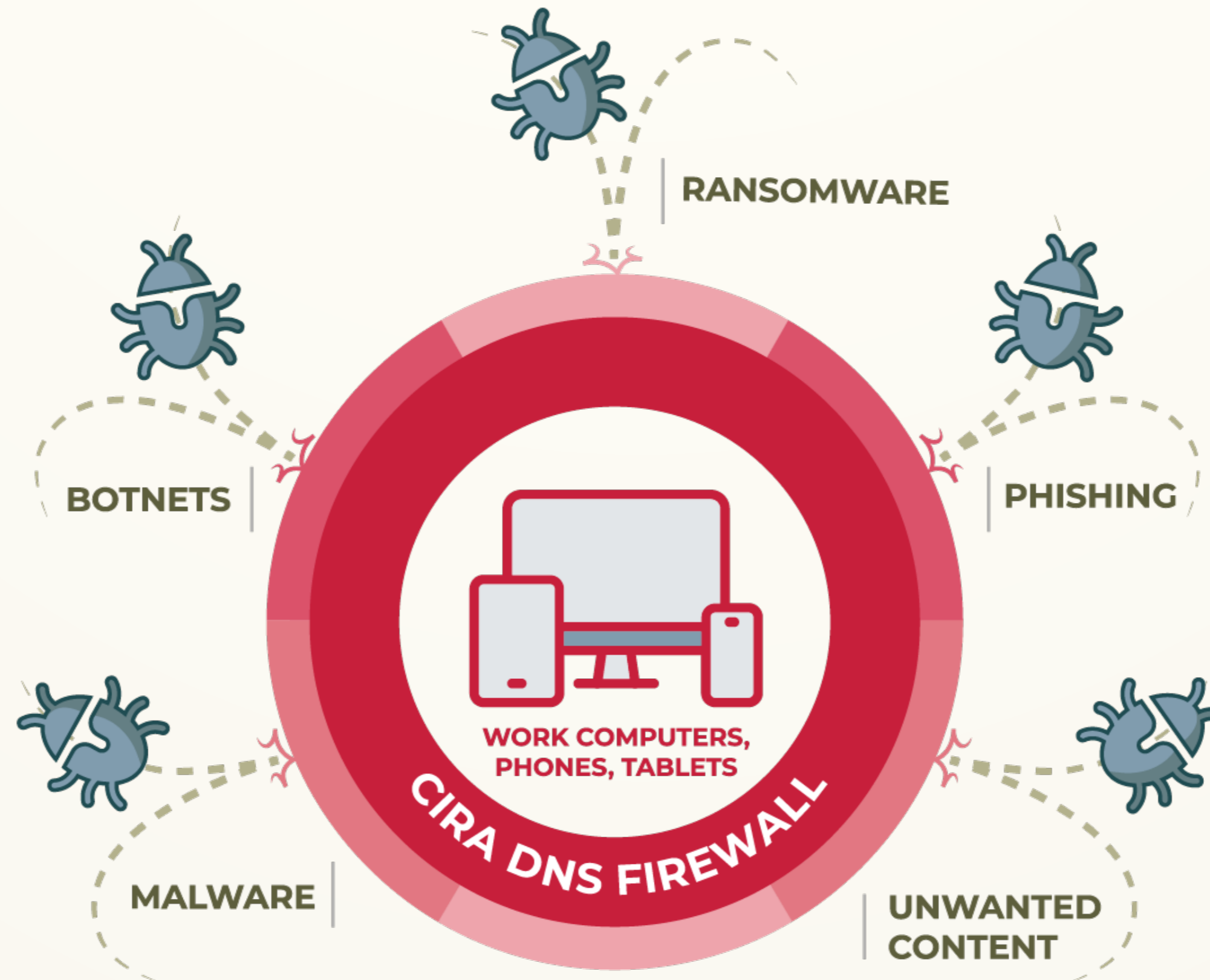
- Outstanding Tasks:** Shows no outstanding tasks. Promotes a course titled "Malware: Supplemental" (5 min) and "Devices, Social Engineering, Supplemental".
- Risk Score:** A gauge chart showing a score of 618. A message states: "This is a Good risk score. This means you are relatively cyber-aware and have scored highly in your surveys and education. Great job!"
- Individual Performance:** Four horizontal bar charts for Awareness, Exposures, Incidents, and Rewards, each ranging from Poor to Excellent.
- Security News:** Features articles like "Phishing Deep Dive: How to Effectively Phish Employees" and "How to Implement Consequences and Rewards in Your Security Awareness Program".
- Phishing Simulations:** A table listing simulation dates and subject lines, with a progress indicator.

Date Sent	Subject Line
2022-10-21	PHISHING
2022-09-23	Confirmation of Shipment Details for Item / Confirmation des détails de l'envoi de l'article :TRACKING 2251309B326016
2022-09-19	PHISHING
2022-09-16	PHISHING
2022-09-12	PHISHING



About CIRA Cybersecurity Services

CIRA's solutions: CIRA DNS Firewall



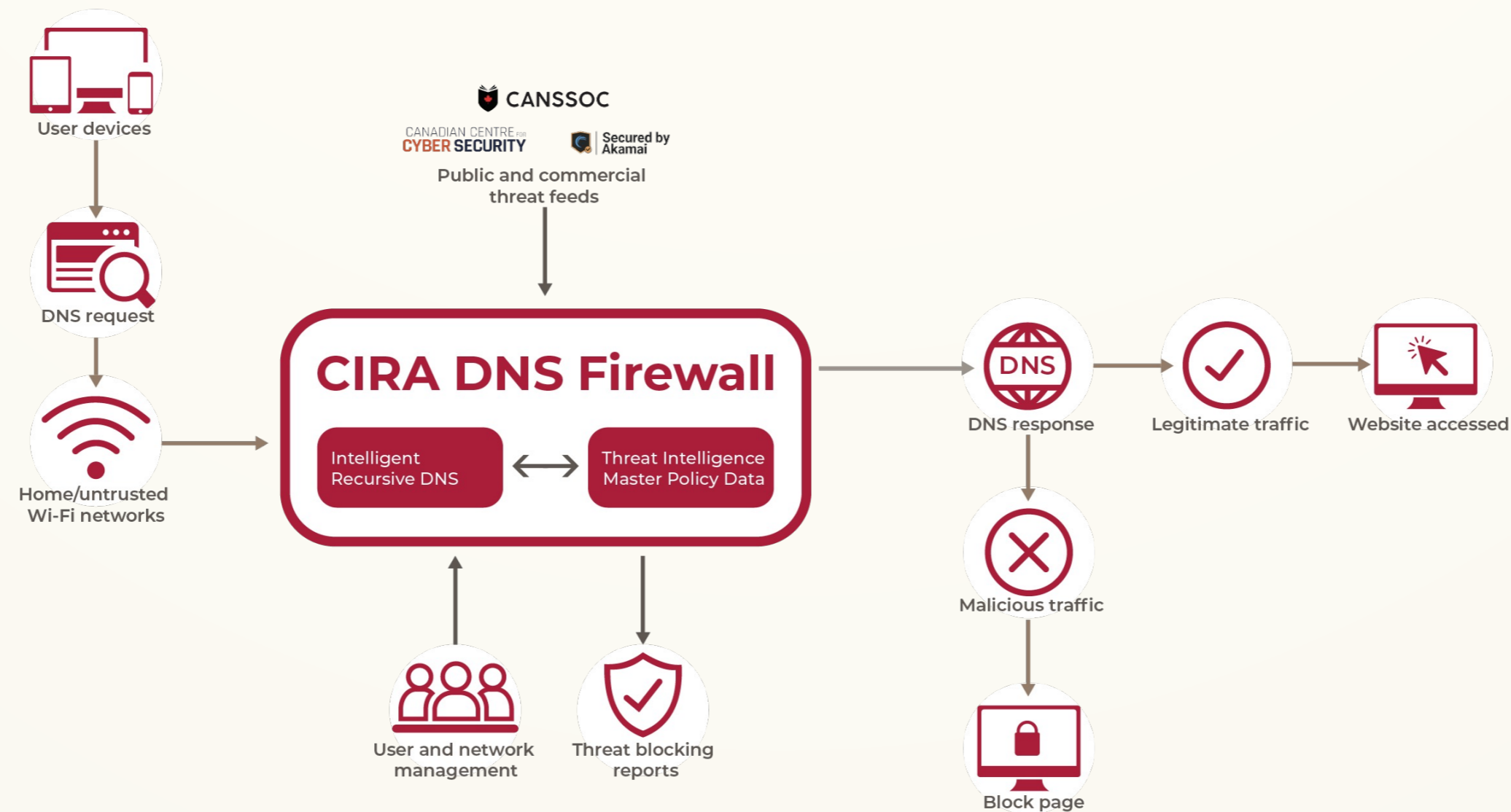
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About CIRA Cybersecurity Services

New CIRA DNS Firewall feature: off-network protection

CIRA DNS Firewall installed on devices



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About CIRA Cybersecurity Services

Reach out to us!

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- **Contact Allie:** Alexandra.Daly@cira.ca
- **Contact Mudit:** Mudit.Mogla@cira.ca

