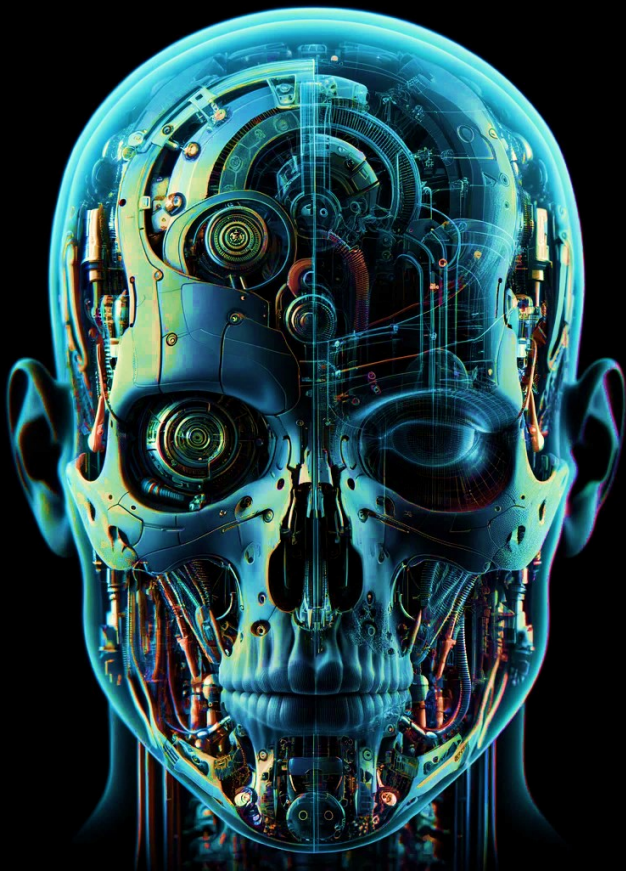




# Data Security in the Future-Proofed Practice



**SUREN GOVENDER**

Chief Operating Officer

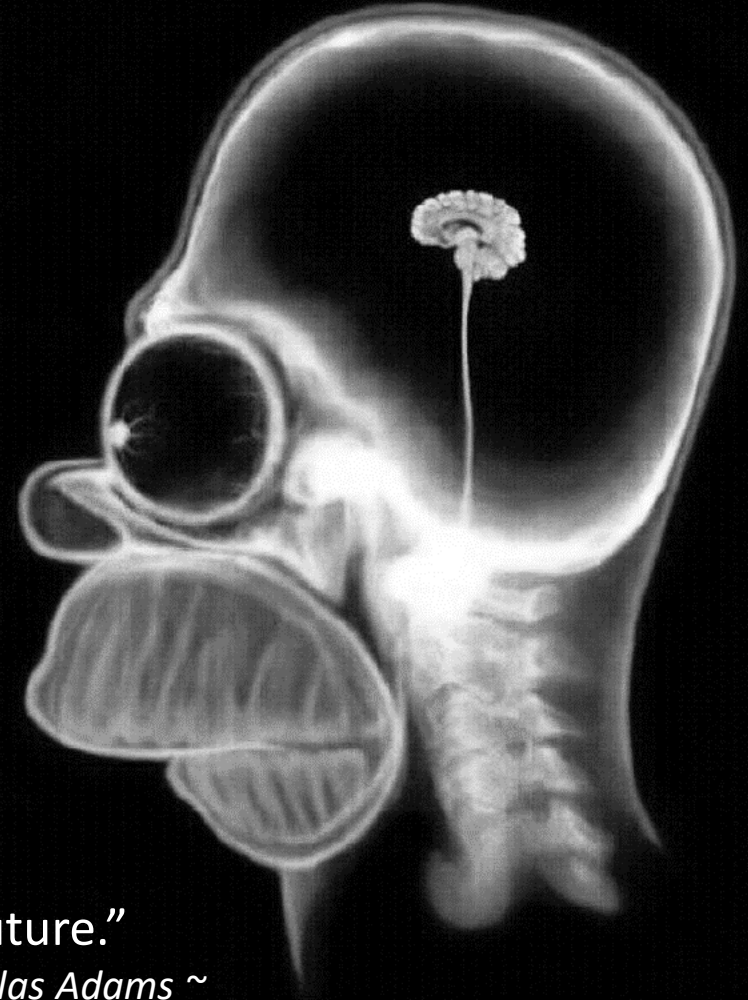


suren@iguardsa.net -- 083 626 2229

# FILE FOR TECHNICAL BANKRUPTCY

“Let the past hold on to itself and let the present move forward into the future.”

*~ Douglas Adams ~*



# PATIENTS COME SECOND?

“Employees come first. If you take care of your employees, they will take care of the clients.”

*~ Richard Branson ~*



# DIGITAL TRANSFORMATION IS NOT <sup>ONLY</sup> ABOUT TECHNOLOGY



“Data that is loved tends to survive.”

~ Kurt Bollacker ~

“Design is not just what it looks like and how it feels. Design is how it works.”

*~ Steve Jobs ~*

**DESIGN = CARE**





“Truly successful decision-making relies on a balance  
between deliberate and instinctive thinking.”

~ Malcolm Gladwell ~

# BE DELIBERATE WITH CHANGE





ALL YOUR **IMPORTANT FILES** ARE **STOLEN AND ENCRYPTED!**

All your files stolen and encrypted  
for more information see  
**RESTORE-MY-FILES.TXT**  
that is located in every encrypted folder.

Would you like to earn millions of dollars?

Our company acquire access to networks of various companies, as well as insider information that can help you steal the most valuable data of any company.

You can provide us accounting data for the access to any company, for example, login and password to RDP, VPN, corporate email, etc.

Open our letter at your email. Launch the provided virus on any computer in your company.

Companies pay us the foreclosure for the decryption of files and prevention of data leak.

You can communicate with us through the Tox messenger

<https://tox.chat/download.html>

Using Tox messenger, we will never know your real name, it means your privacy is guaranteed.

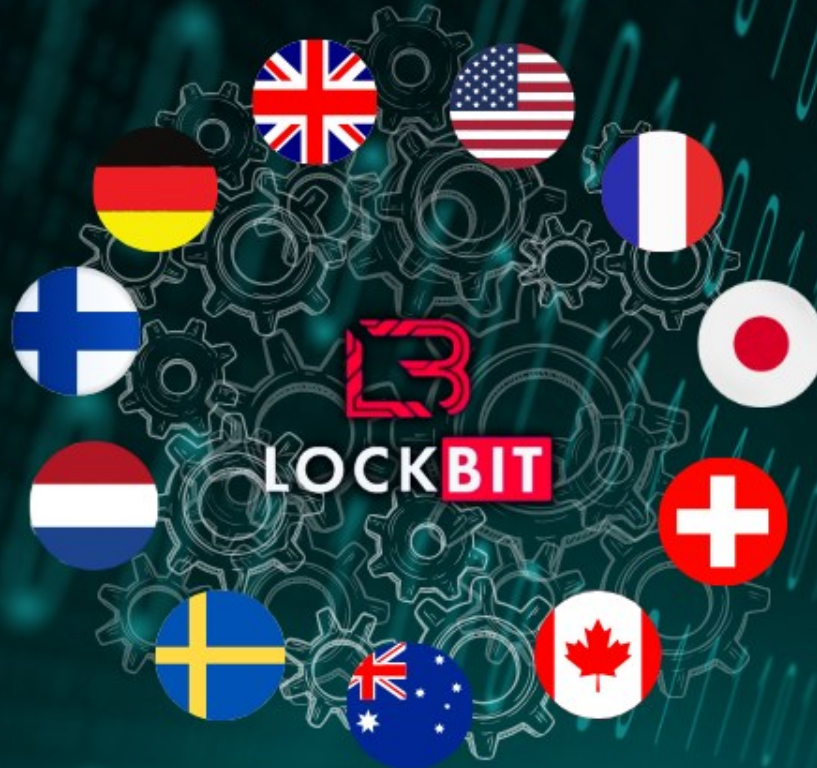
If you want to contact us, use ToxID:

~~~~~  
If this contact is expired, and we do not respond you, look for the relevant contact data on our website via Tor or Brave Browser



# THIS HIDDEN SITE HAS BEEN SEIZED

This server has been seized by The National Crime Agency (UK) working in close cooperation with the FBI and international law enforcement partners under 'Operation Cronos.'







# 86%

of South African companies  
have experienced more than  
one cyberattack in 2023



# 84%

of businesses cannot find  
skilled security employees



# 78%

of SA organisations  
experienced ransomware  
attacks in 2023 (2022 = 51%)



# 93%

of employees update social  
media when they get a new job



# 13%

of organisations  
pay the ransom  
after a cyberattack



# 77%

of employees  
reuse passwords  
across multiple  
services



# 80

The number of SaaS  
applications an average  
organization uses

# R14mil

The average cost of ransomware  
remediation in SA

UnitedHealth could take months to fully recover from hack

Health industry struggles to recover from cyberattack on a unit of UnitedHealth

MARCH 5, 2024

FROM KFF Health News

# BREAKING NEWS

21 February 2024 – UnitedHealth (ALPHV Ransomware)

- 50% of medical claims in the U.S.
- 15 billion transactions a year
- 33,000 pharmacies
- 1 in 3 U.S. patients
- 600 laboratories
- 900,000 doctors
- 5,500 hospitals
- \$22m ransom



UnitedHealth Group®

The Register

White House and lawmakers increase pressure on UnitedHealth to ease providers' pain

US senator calls cyber attack 'inexcusable,' calls for mandatory security rules

WSJ PRO CYBERSECURITY

UnitedHealth Aims to Restore Change Healthcare Systems Within Two Weeks

Testing of medical claims systems will begin on March 18, parent company says

USA TODAY

A medical tech company that handles billions of records was hacked. What you should know.

# THE JOURNEY TO RECOVERY

## Cyber Incident Response

- Contain threat
- Data inventory
- Patient Zero ID
- Inventory of Affected Systems



1 ASSESS



RECOVER 2

## Incident Response & Recovery

- Implement Emergency SOC (24 hrs)
- Rebuild Servers
  - Full Scan
  - Install AV and Patch
  - Test
  - Install Apps
- Audit of Security Controls (CSPA)

## Security Hardening & Remediation

- Historic Vulnerabilities
  - Learn from past events
  - Remnants of previous attacks
  - Vulnerability reports
  - Maintain “cleaned” status
- Real-Time Vulnerabilities
  - Current and forward looking
  - Predictive analytics to identify threats
  - Highlight trends as they take shape
  - Enable quick response from SOC
- Establish Security Controls BASELINE

4 HARDEN



RESILIENCE 3



## Business Restoration & Business Continuity

- Restore all services
- Build for resilience
- Implement 24x7 Managed Services
- Continuous Monitoring and Response





IOL



< IOL | BUSINESS REPORT COMPANIES ECONOMY ENERGY MARKETS ENTREPRENEURS

BUSINESS REPORT COMPANIES

## Life Healthcare hit by cyber attack



### LIFE HEALTHCARE GROUP HACKED AMID COVID-19 FIGHT

In a statement, the healthcare organisation said it was still investigating the extent to which sensitive data has been compromised.

TimesLIVE

### Hackers strike at Life Healthcare, extent of data breach yet to be assessed

09 June 2020 - 08:07



### Life Healthcare Group hit by cyber attack amid COVID-19

DAILY MAVERICK

NEWSDECK

### Life Healthcare Group hit by cyber-criminals



the doj & cd

Department:  
Justice and Constitutional Development  
REPUBLIC OF SOUTH AFRICA



LAW SOCIETY  
OF SOUTH AFRICA



defence

Department:  
Defence  
REPUBLIC OF SOUTH AFRICA

DBSA



Tshwane University  
of Technology



Companies and Intellectual  
Property Commission

# WHAT'S BELOW THE SURFACE OF THE INTERNET?



## Surface Web

- 5% of total internet content
- Sites indexed by search engines
- .com, .net, .org, .co.za

## Deep Web

- 90% of total internet content
- Not indexed by traditional search engines
- Requires sign-in (e.g. online services, Gmail)

## Dark Web

- 5% of total internet content
- Only accessible through Tor, I2P, or Freenet
- Hidden pages, unregulated, used for illegal activities

“Anonymity breeds a sense of invincibility.”

~ Jamie Bartlett ~





# INSIDE THE MIND OF A HACKER

“power at your fingertips”

“the hard part isn’t getting in”

“harmless exploration”

“serious lack of security”

“could have escaped detection”

“tech voyeurism”

“strictly for financial profit”

~ anonymous ~



# THE ART OF HUMAN MANIPULATION

laziness  
**attitude**  
*ego*  
carelessness  
**desire**  
ignorance  
**haste**  
**fear**  
greed  
**sympathy**  
trust  
ability  
sympathy



A “friend” sends you  
a strange message



Emotions are  
heightened



Request is urgent



Offer is too good  
to be true



Receive help you  
didn't ask for

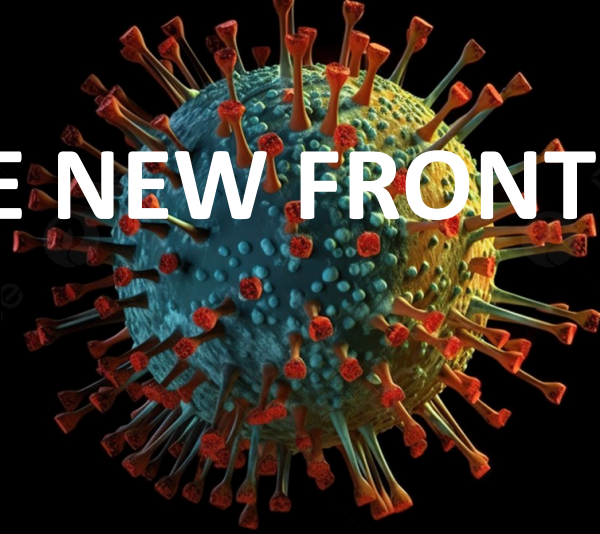


Sender can't prove  
their identity

“Social engineering bypasses all technologies”

~ Kevin Mitnick ~

# CYBER HYGIENE: THE NEW FRONTIER IN HEALTHCARE



## HEALTHCARE

Regular health check-ups to detect anomalies

Immune system identifies and isolates pathogens

Medical treatment to remove pathogens, healing the body

**EARLY  
DETECTION**

**CONTAINMENT**

**TREATMENT &  
RECOVERY**

## CYBER SECURITY

Regular checks for abnormal behaviour and vulnerabilities

Identify and isolate threats to prevent spread of attack

Removing threats, patching vulnerabilities, restoring data

# Cyber Security is EVERYONE's problem

## Problem Statement



Lack of security visibility across silos



Lack of monitoring on environments for compromise



Lack of vulnerability management



Lack of security tools within environments



Limited security skills, knowledge and capacity

ACTIONABLE INSIGHTS  
weekly, monthly & ad-hoc reporting

### Overview of Incidents:

Incidents for December 2023 - 3 BU's

Incidents detected and resolved:

**120** Incidents from **1249** Offenses investigated  
↓ Decreased from 197 to 120

**OFFENSES INVESTIGATED**

|                                     |     |
|-------------------------------------|-----|
| 919 : Potential Botnet Activity     | 73% |
| 198 : Firewall Denies               | 15% |
| 77 : User Behavior Analysis + Other | 8%  |
| 55 : Malware code execution         | 4%  |

**Service Desk Error Rate:**  
An increase from 11% in November to 18% in December.

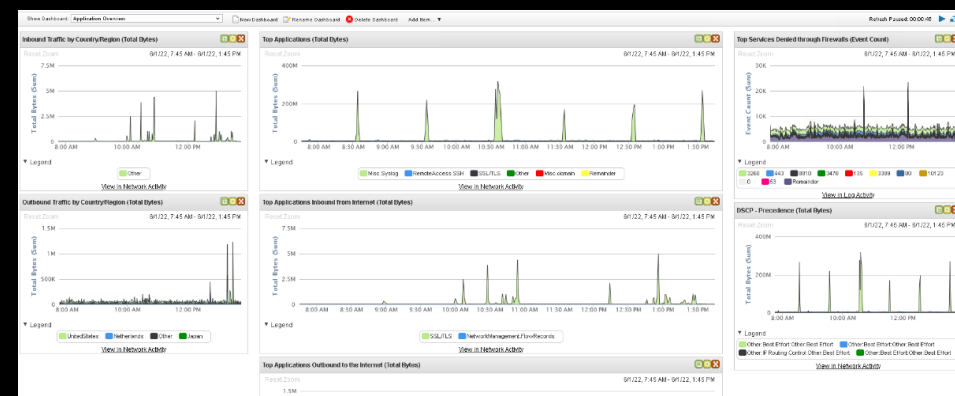
| Incident Priority | Incident Detection Time (MTTD) | December ACTUAL MTTD | Incident Resolution Time (MTTR) | December ACTUAL MTTR |
|-------------------|--------------------------------|----------------------|---------------------------------|----------------------|
| Critical          | P1                             | 15 Min               | 4 Hrs                           | -                    |
| High              | P2                             | 30 Min               | 2 sec                           | 8 Hrs                |
| Medium            | P3                             | 3 Hrs                | -                               | 12 Hrs               |
| Low               | P4                             | 6 Hrs                | 8 min                           | 72 Hrs               |

|  | C | H | M | L   | Σ   |
|--|---|---|---|-----|-----|
|  | - | 2 | - | 103 | 105 |
|  | - | - | - | 9   | 9   |
|  | - | - | - | 6   | 6   |

#### Breakdown per incident type:

| Incident types:         | Count of Incident Types |
|-------------------------|-------------------------|
| Customer Request        | 42                      |
| QRadar Offense          | 23                      |
| Malware                 | 14                      |
| eMail                   | 9                       |
| Change Control          | 8                       |
| Phishing                | 6                       |
| RealTime Offense        | 4                       |
| Firewall                | 4                       |
| Vulnerabilities         | 3                       |
| Customer Request-Access | 2                       |
| Technology Install      | 1                       |
| Service Unavailable     | 1                       |
| Handover                | 1                       |
| Endpoint Protection     | 1                       |
| Not Protected Endpoints | 1                       |

\*Reporting period: 1-31 December 2023





# PRACTICAL STEPS TOWARDS A SECURE FUTURE

Good

**A good password will be:**

- ♦ Long: at least 15 characters
- ♦ Complex: a mix of upper- & lowercase letters, numbers, symbols
- ♦ Unique: not used for any other accounts
- ♦ Unfamiliar: not containing personal info, e.g. birthdate, pet name

**Pick a word:**

Friendship

**Modify it:**

!Fr13nds\_\$h1P!?



Create **three** copies of your data



...on at least **two** different storage solutions



...and store **one** of them in a remote location.

Better

An even better password will be longer, yet easier to remember.

**Pick a phrase:**

There's no place like home.

**Modify it:**

Th3re's\_n0-Pl@ce\_L!k3-ho^3.



Best



Use a password manager that can generate long, complex, random passwords and store them, making remembering all of those phrases unnecessary. You just have to remember a single master password.

**Zero Trust:**  
Trust no one, verify everyone.



# TRUST YOUR GUT

“Intuition does not come to an unprepared mind.”

~ Albert Einstein ~

“If you can't afford security, you can't afford a breach.”  
~ Suren Govender ~

# WHAT ARE YOU LOOKING AT?





# Cyber Security is JENNY's problem

How much of your data is out there already?

## We're deeply sorry Jenny Alison Richards\*, 38

Dear Jenny Alison Richards (F) of **122 Mason Street, Southridge, VIC 3031**, telephone **082 8291 274**, driver's licence no **98465 3422**.

We sincerely regret the recent incident of a cyberattack on our platform which may have impacted your personal data.. We know this is devastating and that we'll need to work hard to regain your trust **Happy birthday for yesterday by the way**. Thirty-eight eh?

We are working closely with authorities to understand how this attack on your privacy - including your Medical Aid number **4512 4932 05521** - occurred. We know how stressful this is, especially given your ongoing battle with **haemorrhoids**.

We know there's a lot of misinformation out there. Rest assured, we're doing everything we can to ensure that your personal details, such as your **password (JennyHatesBen\$!\*@!!)** are not made public. Thanks for your understanding and all the best for the divorce settlement from your husband **Benjamin Richards** next week . By the way, your suspicions are correct – he has been cheating on you – go Girl Power!

\*Names have been changed to protect the innocent ☺



exclusive offer to **gexpo**

**CLAIM YOUR FREE  
CYBER SECURITY ASSESSMENT**

[suren@iguardsa.net](mailto:suren@iguardsa.net)

083 626 2229

[info@iguardsa.net](mailto:info@iguardsa.net)  
**GPEXPO OFFER**