CHEWY Company

# Cloud Security Services Project

# AGENDA

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# Our Team


01 André Graça

02 Rodrigo Brasil

03 Ricardo Graça

04 Tiago Godinho

# André Graça

Age: 40
- Place of birth: Lisbon
- Married with 3 children

- Member of the Portuguese Navy since November 2001

- Specialized in Computer Technician and network administration in 2013 by the Navy.

-Specialized in cybersecurity in the area of offensive operations in 2023 by the EMGFA (General Staff of the Armed Forces) in partnership with the Polytechnic Institute of Beja.

# Rodrigo Brasil

Age: 24

Place of birth: Angra do Heroísmo

IT Technician

Studied IT - Systems for 3 years, after graduation started working as an intern at a local secondary school for a year and half, while working there started to find interest in offensive cybersecurity, a few months passed finished the internship, tried my luck with code_for_all and now here i am.

https://www.linkedin.com/in/rbrasil72/

# Ricardo Graça

Age: 32

Place of birth: Lisbon

Dental Technician

Cyber Security Student

# Tiago Godinho

Age:

Place of birth:

(Talk a little bit about yourself here)

# Problem Domain - Client Requirements

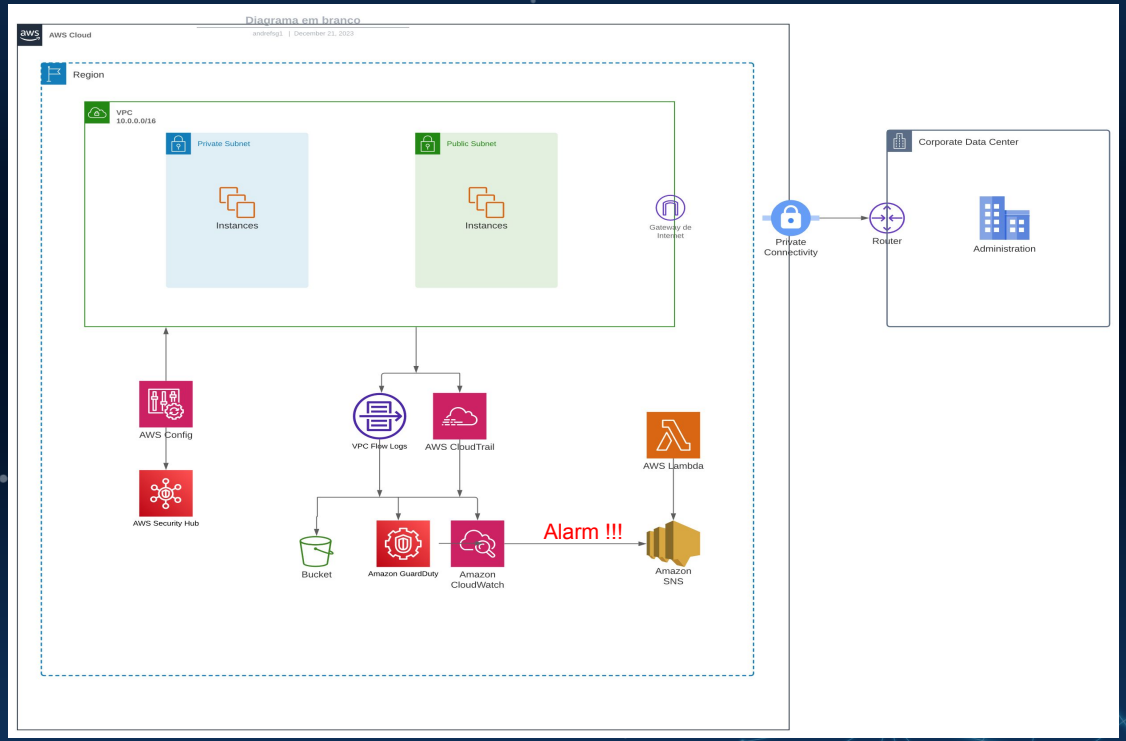
- The Chewy company with the expansion of customers to the international market is having problems with GDPR (consumer privacy regulations.
- However it has to implement some systems and processes to remain GDPR compliant so that customers know that the company takes PII/PCI data privacy seriously.
- Chewy wants to use AWS as ACP

WE need

- Proper implementation of IAM Best Practices
- CIS-Compliant Data Server Containing PII/PCI Data
- SIEM/Log Aggregation System
- Cloud Monitoring via Flow Logs/Lambda
- Data Loss Prevention (DLP) Detection and Response

# Project Overview

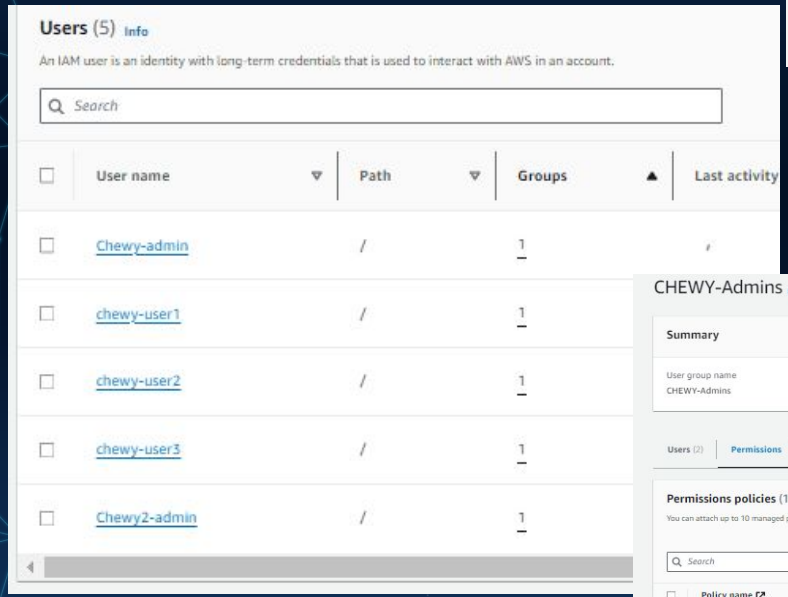
# Network Topology AWS

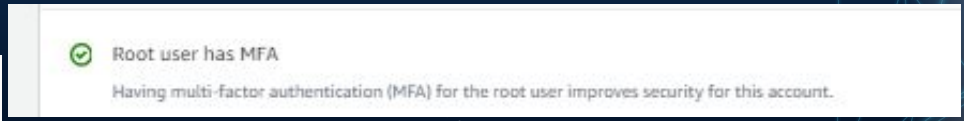


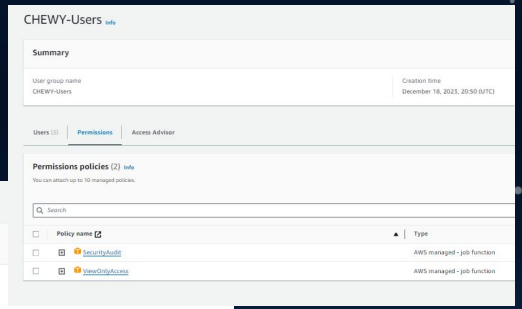
# Process - IAM (AWS identity and Access Management)

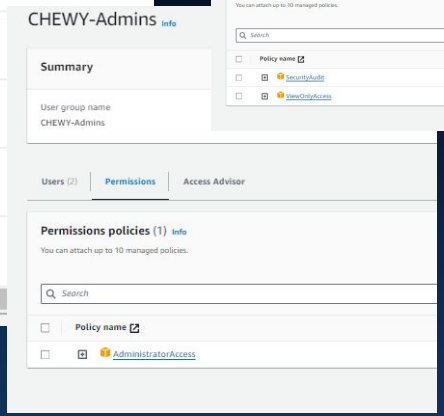
- Create Group for AWS Admins With ‘Administrator Access Permission
- Create an User for all Tree AWS Admin and Allocate to AWS Admins Group
- Avoid Usage of Root Account
- Enable MFA for Root Account and All highly privileged users

# Process AWS VPC

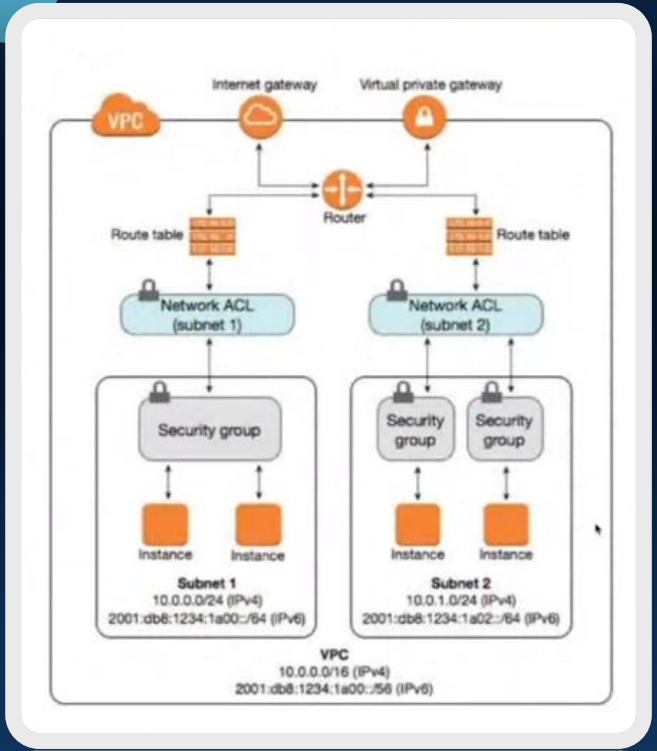


# Process - VPC




## Public Security group Inbound:

| IP version | Type | Protocol | Port range | source |
|---|---|---|---|---|
| **IPv4** | **ssh** | **TCP** | **22** | **0.0.0.0/0** |
| **IPv4** | **All ICMP-IPv6** | **IPv6 ICMP** | **All** | **0.0.0.0/0** |
| **IPv4** | **All ICMP-IPv6** | **ICMP** | **All** | **0.0.0.0/0** |

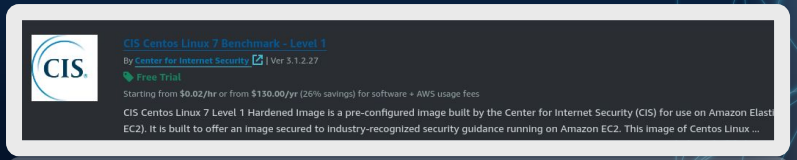
## Private Security group Inbound:

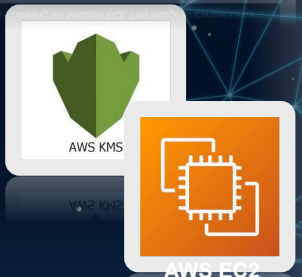
| IP version | Type | Protocol | Port range | source |
|---|---|---|---|---|
| **Ipv4** | **ssh** | **TCP** | **22** | **10.0.0.0/16** |

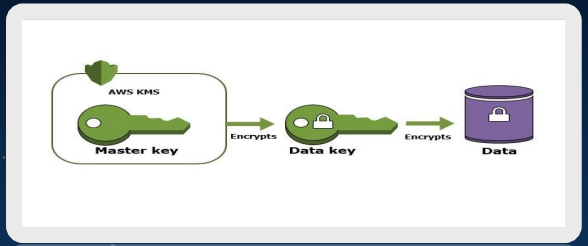
- **VPC/Subnets – Offer Network Segregation**
- **Security Groups – EC2 Virtual Firewall**
- **NACL – VPC Level Firewall**

# Process - EC2 and KMS

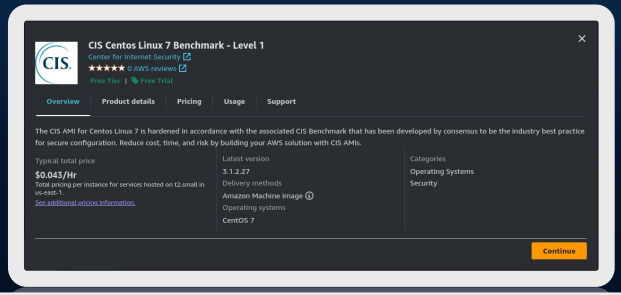
- Instances Hardened With CIS Benchmark AMI
- Security Groups Attached
- AWS EBS encryption uses AWS KMS keys when creating encrypted volumes.
- Different RSA Key Pair Attached to Each Machine



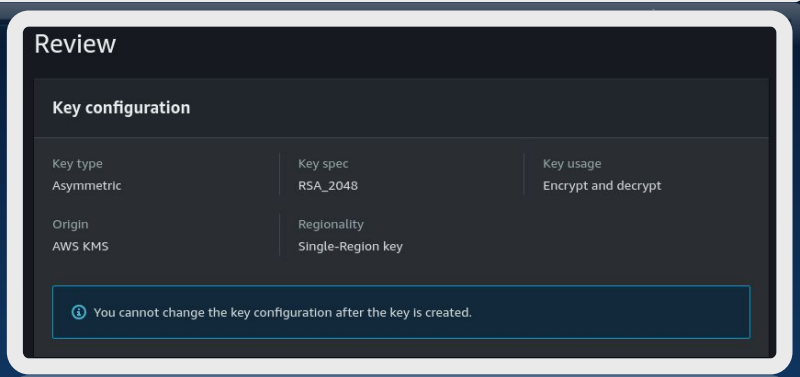



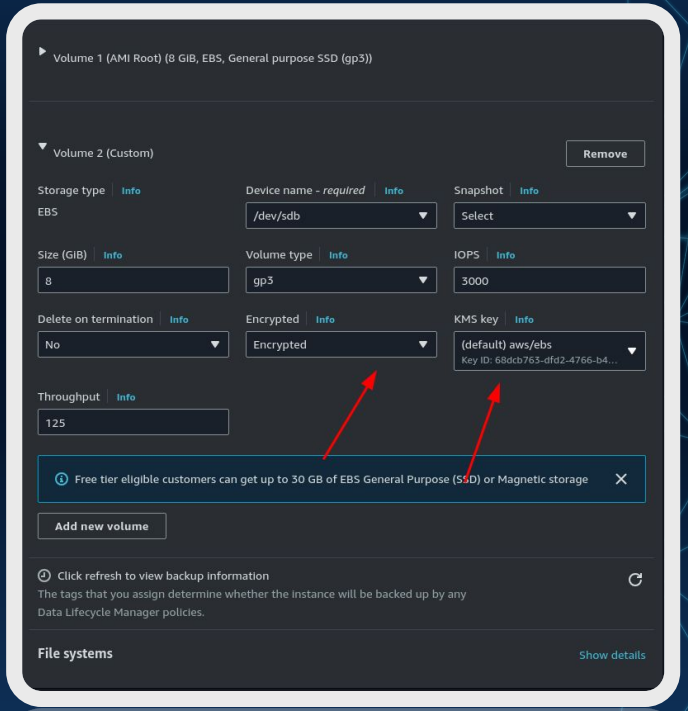



# Process - EC2 and KMS

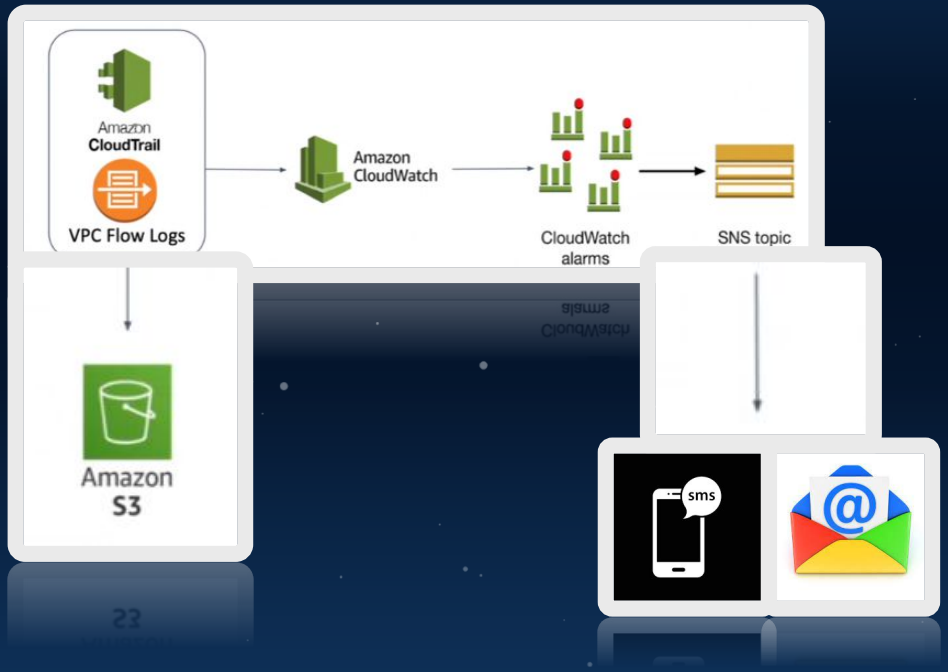






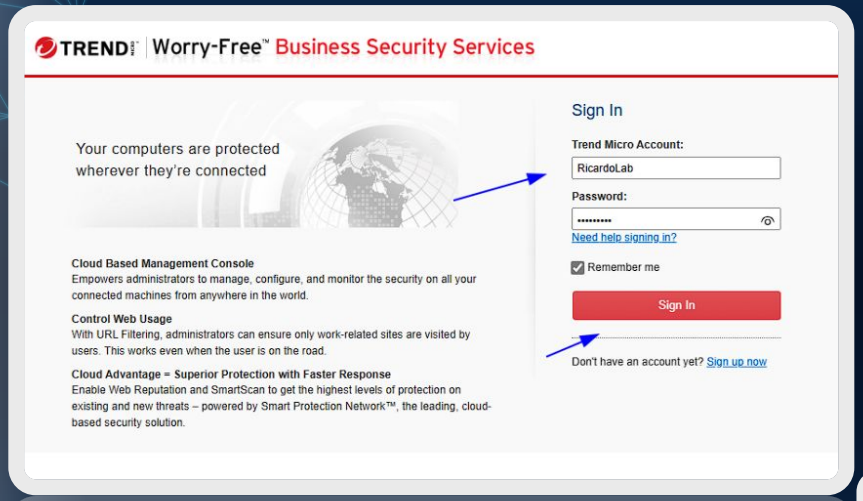
# Process - Monitoring and Alert

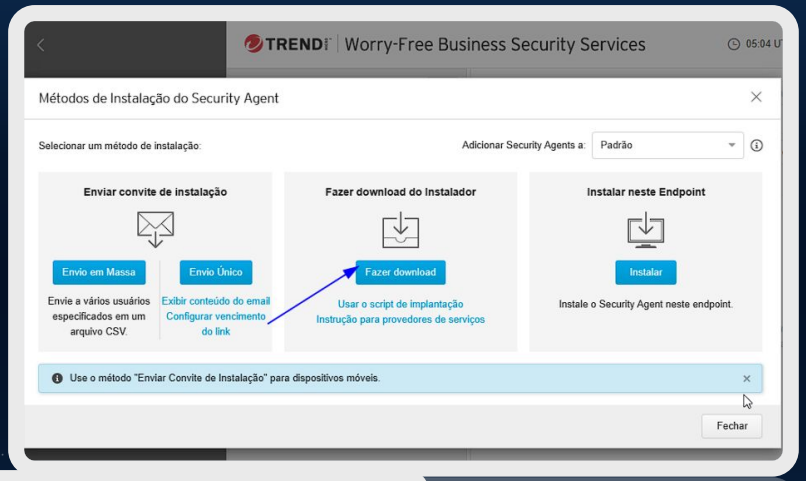


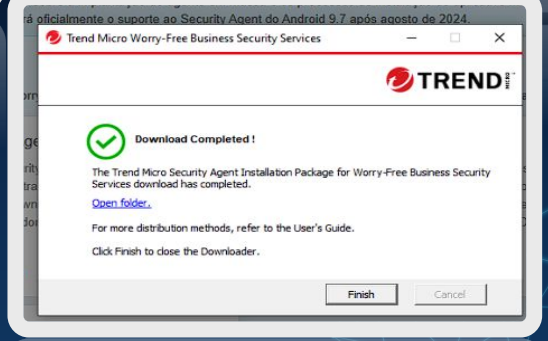
# Process - DLP Controls

- Install a Trend Micro endpoint security agent software
- Baseline Evaluation
- Implementation of the DLP policy and Current Evaluation

# Process - DLP Controls



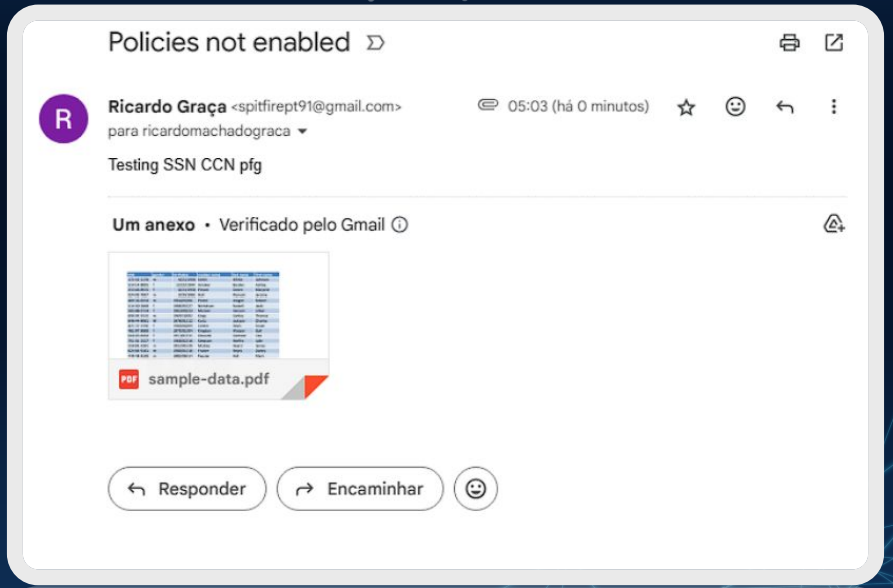



# Process - DLP Controls

| SSN | gender | birthdate | maiden name | last name | first name |
|---|---|---|---|---|---|
| 172-32-1176 | m | 4/21/1958 | Smith | White | Johnson |
| 514-14-8905 | f | 12/22/1944 | Amaker | Borden | Ashley |
| 213-46-8915 | f | 4/21/1958 | Pinson | Green | Marjorie |
| 524-02-7657 | m | 3/25/1962 | Hall | Munsch | Jerome |
| 489-36-8350 | m | 1964/09/06 | Porter | Aragon | Robert |
| 514-30-2668 | f | 1986/05/27 | Nicholson | Russell | Jacki |
| 505-88-5714 | f | 1963/09/23 | Mcclain | Venson | Lillian |
| 690-05-5315 | m | 1969/10/02 | Kings | Conley | Thomas |
| 646-44-9061 | M | 1978/01/12 | Kurtz | Jackson | Charles |
| 421-37-1396 | f | 1980/04/09 | Linden | Davis | Susan |

| address | city | state | zip | phone |
|---|---|---|---|---|
| 10932 Bigge Rd | Menlo Park | CA | 94025 | 408 496-7223 |
| 4469 Sherman Street | Goff | KS | 66428 | 785-939-6046 |
| 309 63rd St. #411 | Oakland | CA | 94618 | 415 986-7020 |
| 2183 Roy Alley | Centennial | CO | 80112 | 303-901-6123 |
| 3181 White Oak Drive | Kansas City | MO | 66215 | 816-645-6936 |
| 3097 Better Street | Kansas City | MO | 66215 | 913-227-6106 |
| 539 Kyle Street | Wood River | NE | 68883 | 308-583-8759 |
| 570 Nancy Street | Morrisville | NC | 27560 | 919-656-6779 |
| 1074 Small Street | New York | NY | 10011 | 212-847-4915 |
| 4222 Bedford Street | Jasper | AL | 35501 | 205-221-9156 |
| 3414 Gore Street | Houston | TX | 77002 | 713-547-3414 |
| 515 Hillside Drive | Lake Charles | LA | 70629 | 337-965-2982 |
| 4032 Arron Smith Drive | Kaunakakai | HI | 96748 | 808-560-1638 |



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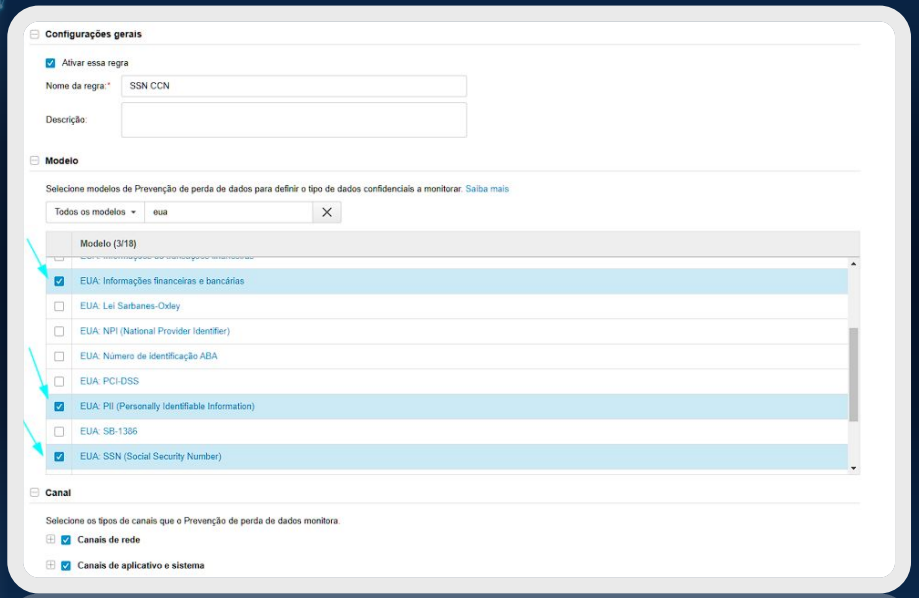
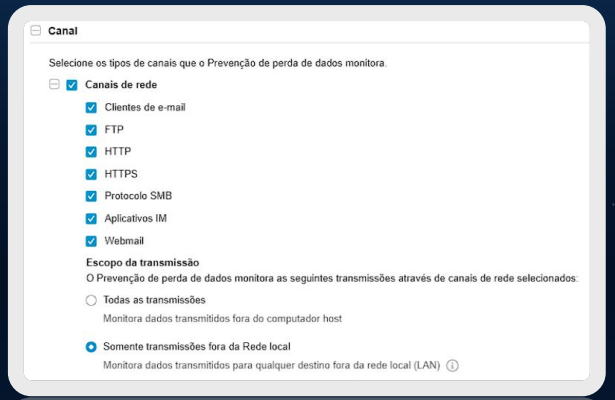
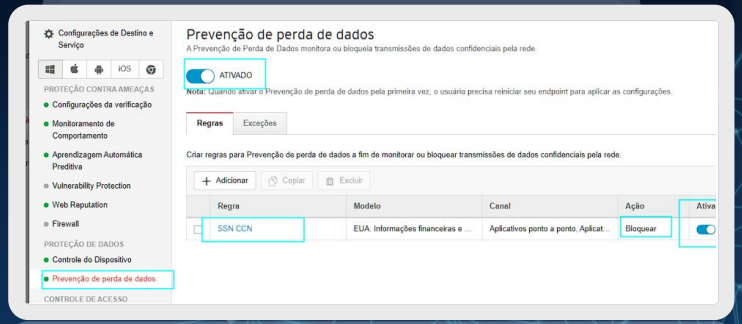
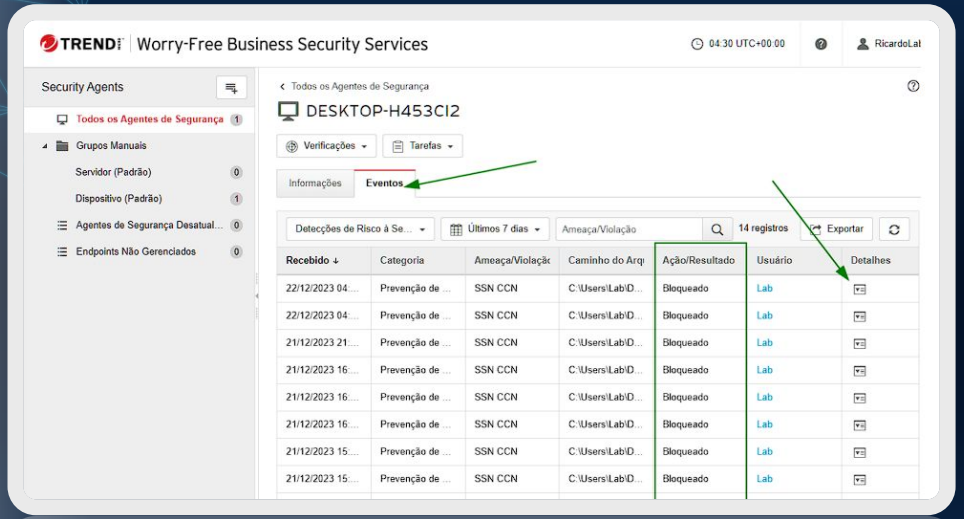
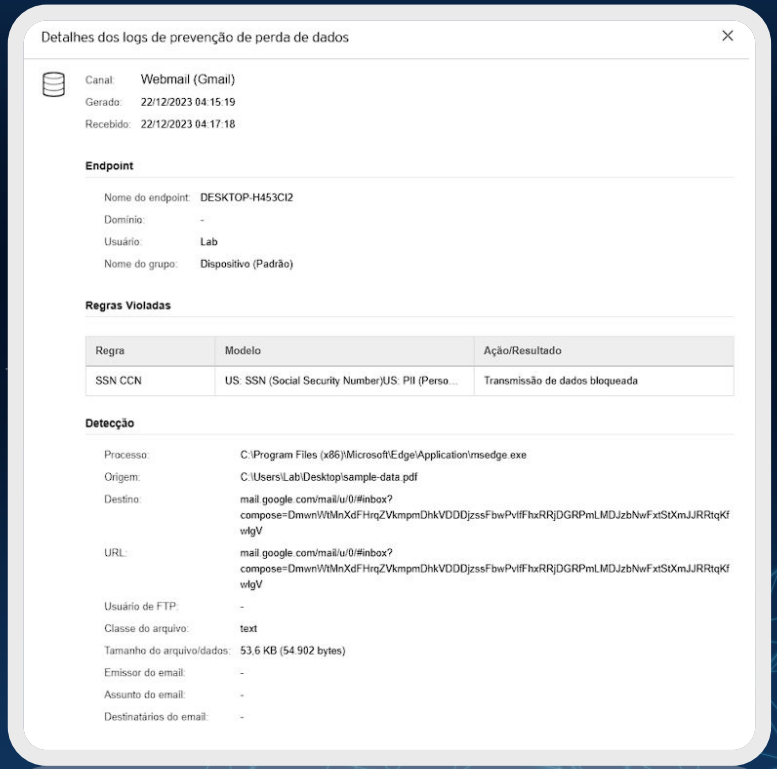


# Process - DLP Controls

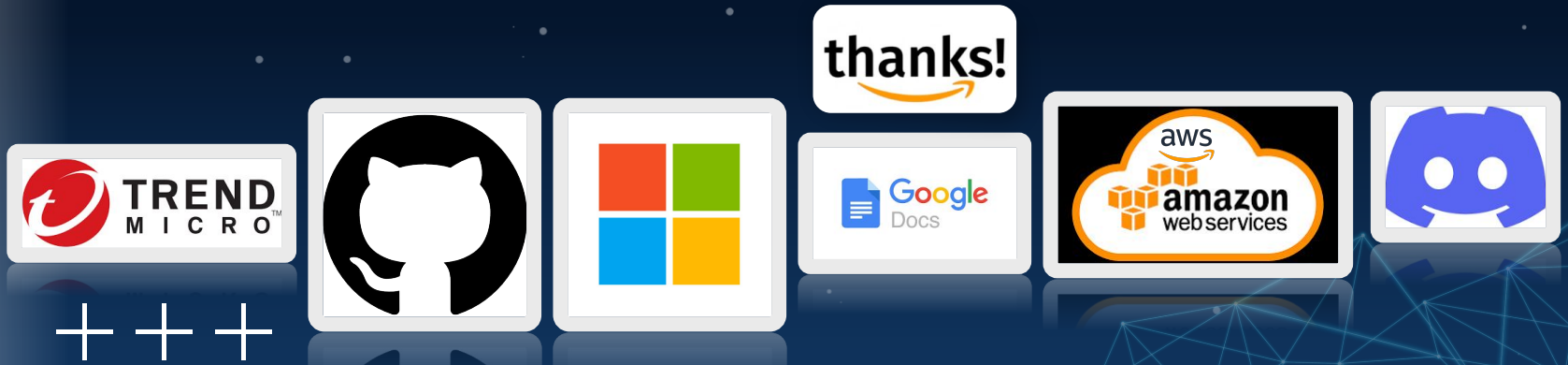


# Resources & Thanks

- Github Organization: https://github.com/Cloud-Security-Services
- Google docs :https://drive.google.com/drive/folders/1ebJZDQex0466gEpAmkxGuLJ7v2rArOFB?usp=drive_link
- Amazon web Services: https://aws.amazon.com/console/

**Shout out and thank you to those that have helped contributed to the process of this project**

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Questions?