



# Roglit 25

## Celovita zaščita M365 storitev - Check Point Email & Collaboration Security

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Zaveznitvo za močnejši IT ekosistem – Building a Stronger IT Ecosystem



# Agenda

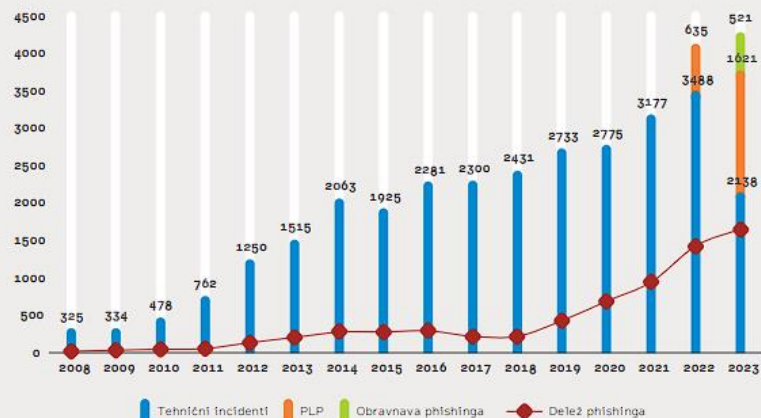


- Vrste napadov
- Možne rešitve
- Check Point Harmony Email & Collaboration
- Onboarding (POC)
- Primeri v praksi



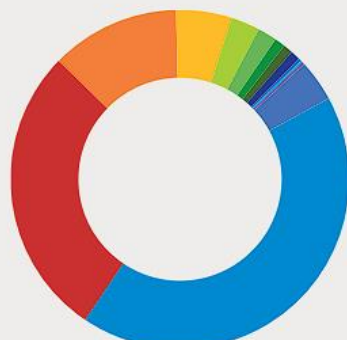
# Incidenti skozi leta

## INCIDENTI SKOZI LETA



## PRIJAVITELJI PO SEKTORJIH

<b>924</b> (12%) fizična oseba	<b>40</b> (2%) operater elektronskih komunikacij	<b>5</b> (0%) digitalna infrastruktura
<b>606</b> (12%) druge pravne osebe	<b>22</b> (1%) zdravstvo	<b>2</b> (0%) pitna voda
<b>269</b> (12%) bančništvo	<b>20</b> (1%) energija	<b>2</b> (0%) oblačno računalništvo
<b>116</b> (5%) raziskovanje in izobraževanje	<b>20</b> (1%) promet	<b>1</b> (0%) finančni trg
<b>60</b> (3%) državni organ	<b>6</b> (0%) digitalni trg	<b>86</b> (4%) drugo

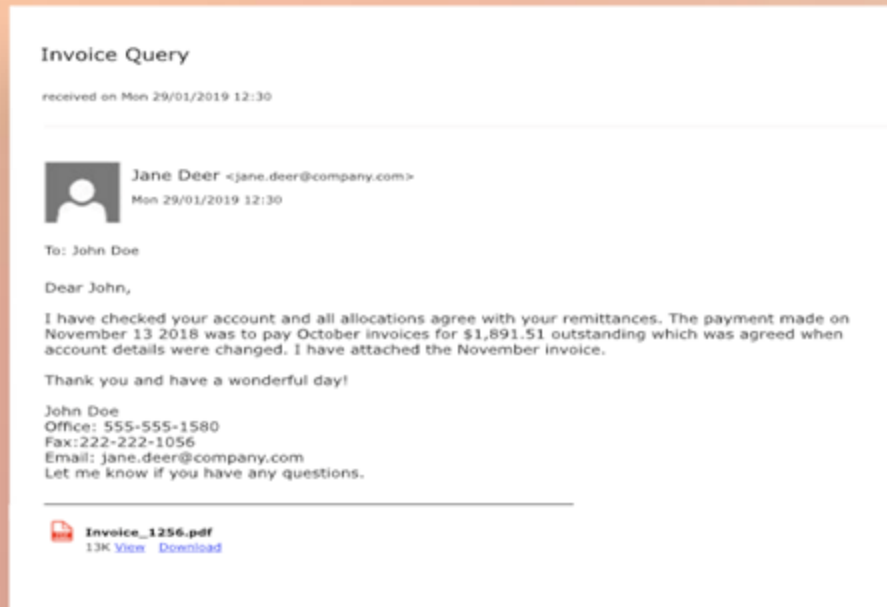


## KLJUČNE BESEDE V OBRAVNAVANIH INCIDENTIH

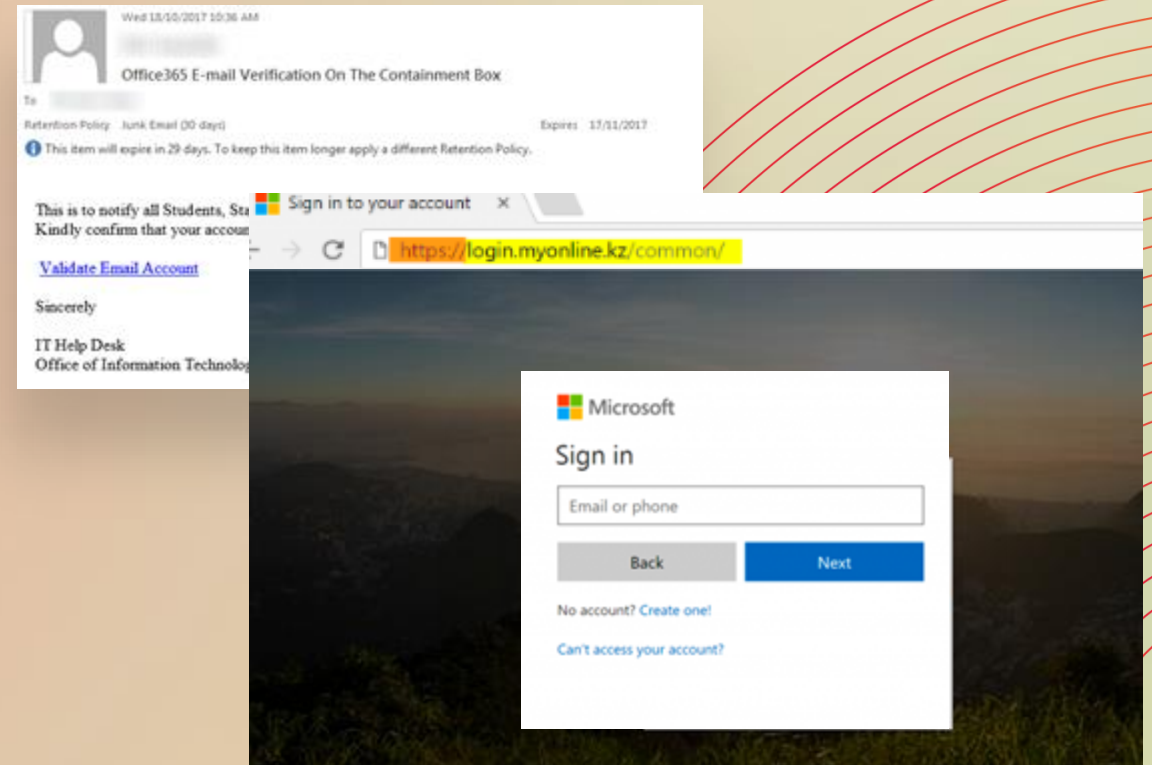


# Vrste napadov

- **Malware Phishing**  
(lažno predstavljanje zlonamerne opreme)



- **Credential Harvesting**  
(zbiranje poverilnic)



# Vrste napadov

- **Extortion Emails**  
(izsiljevalska sporočila)

Hello

So I'm a hacker who cracked your email address and device a couple of weeks back.

You entered your pwd on one of the web-sites you visited, and I intercepted this.

Here is the security password from jacob.lain@severalservices.com upon time of compromise: Evergreen1

Clearly one can can change it, or even already changed it.

I think \$900 is an acceptable cost regarding this!

Pay with Bitcoin.

My BTC wallet address: 1AGEaKw2kKd453kAfrw9hva3usKgWuE6om

In case you do not know how to do this - submit in to Google 'how to send money to the bitcoin wallet'. It is easy.


Immediately after getting the specified amount, all your information will be straight

- **BEC (Business Email Compromise)**  
(lažno predstavljanje)

Urgent Request

received on Mon 29/01/2019 12:30

---

 Jim Morrison <jim.morrison12@gmail.com>  
Mon 29/01/2019 12:30

To: John Doe

Hi John,

Got a moment? Give me your personal cell number. I need you to complete a task for me.

Jim Morrison  
Chief Executive Officer at BigBusiness Inc.

Sent from my iPhone.



# Kaj narediti?

## Nenehno izobraževanje zaposlenih ter opozarjanje o najnovejših varnostnih grožnjah

Izbrati ustrežno rešitev, ki:

- Se uči iz zgodovine mailov (User behaviour)
- Analizira vsebino maila, priponk, povezav..
- Prepozna, da se je nekdo „vrnil“ ali preusmeril komunikacijo (BEC)
- Zazna istočasno prijavo iz različnih lokacij
- Deluje na širokem spektru (mail, endpoint, mobilne naprave...)
- Zazna in prepreči napad, ki v sisteme namestijo program, ki zašifrira vse dokumente

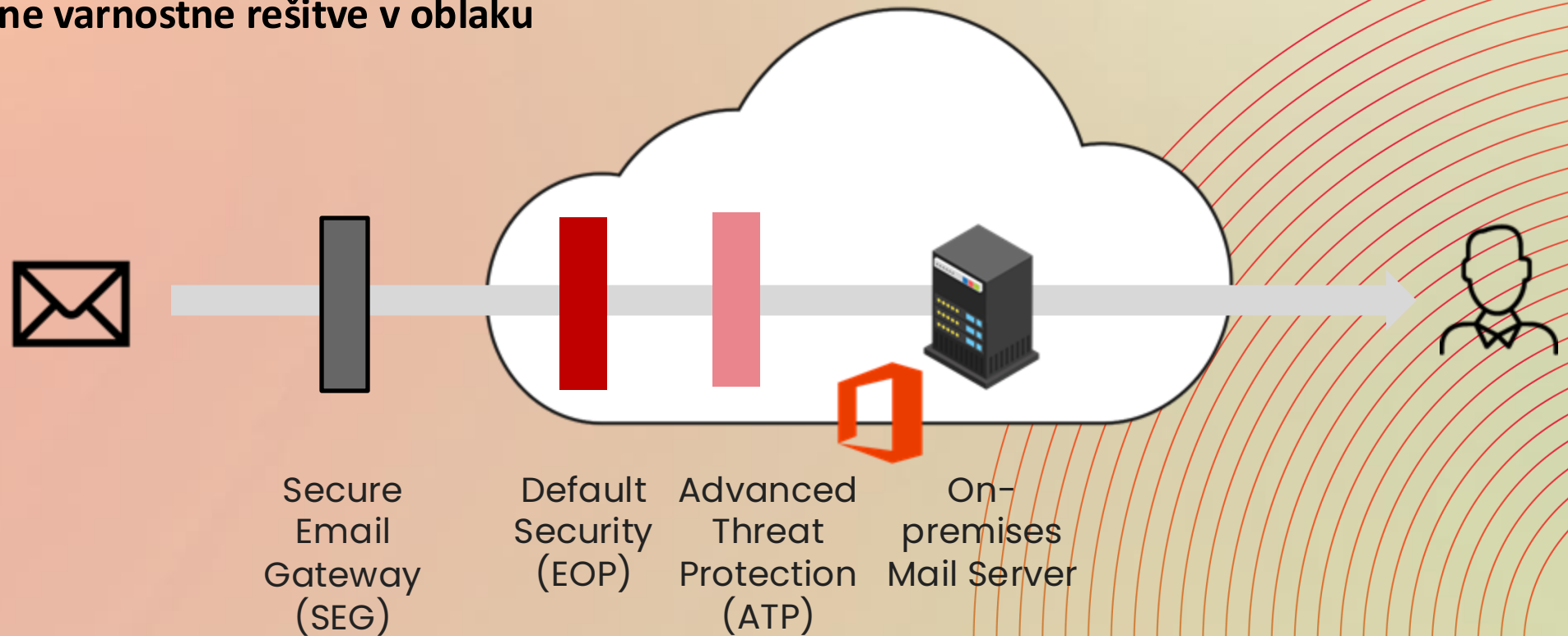
# Avtomatizirana varnost



# Možne rešitve

## On-premise Email Gateway

- Potreba po lastni infrastrukturi
- Onemogočene varnostne rešitve v oblaku





# Možne rešitve

## Varnost na osnovi API

- Vgrajen v O365
- Kopija maila v pregled
- Okuženi maili se naknadno brišejo

### Step 1

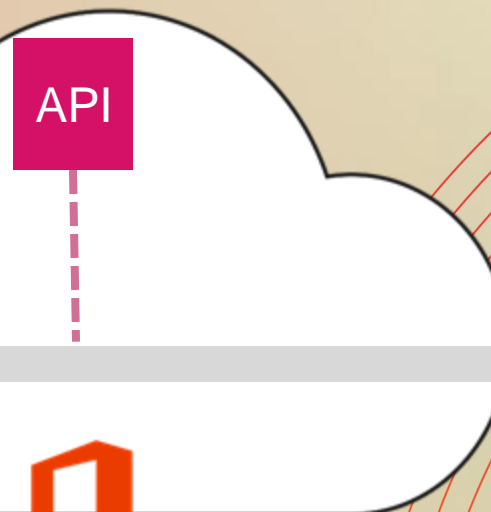


Malicious email sent

Secure  
Email  
Gateway  
(SEG)

Default  
Security  
(EOP)

Advanced  
Threat  
Protection  
(ATP)



### Step 3

A copy of the  
email is scanned

### Step 4

Email is removed  
from  
mailbox post-  
delivery

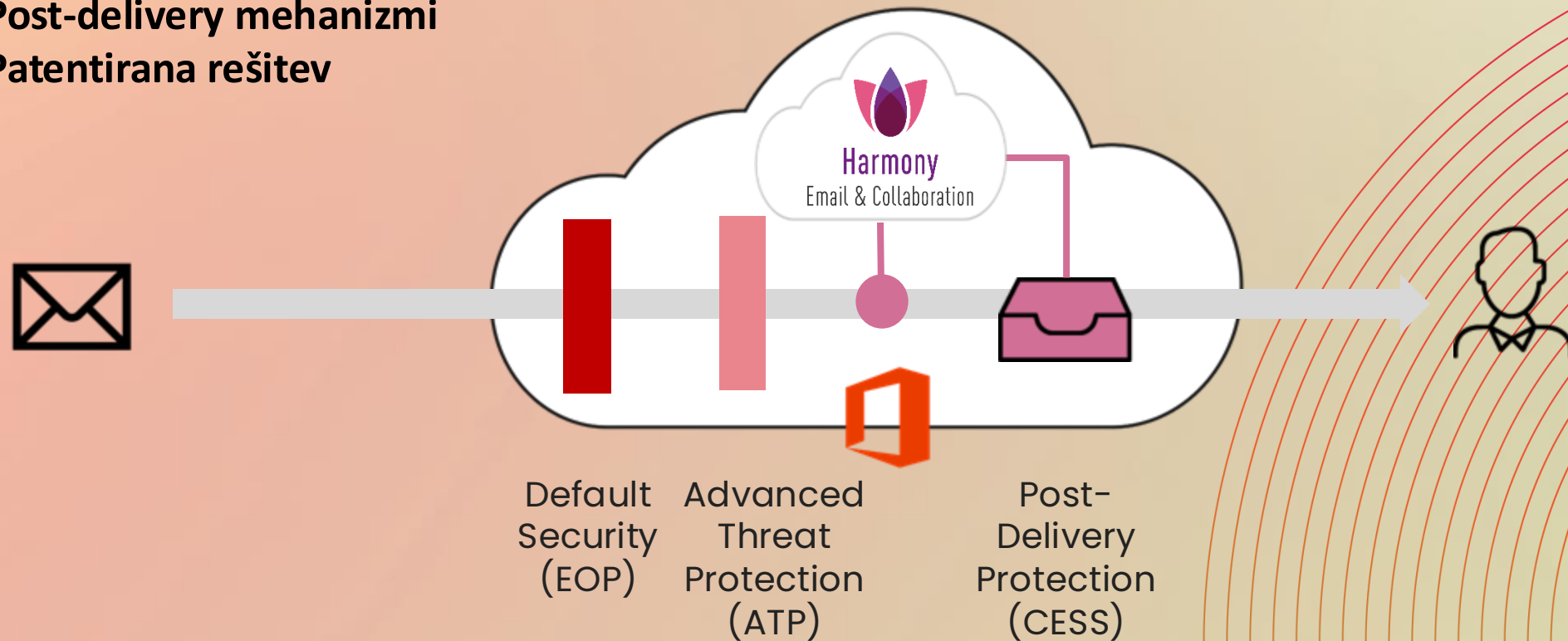
### Step 2

Malicious email  
delivered to end user

# Možne rešitve

## Harmony Email & Collaboration

- Vgrajen v O365 "inline" način
- Okužen mail ne prispe do uporabnika
- Post-delivery mehanizmi
- Patentirana rešitev



# Harmony Email & Collaboration



- Zaznava Phishing z uporabo ThreatCloud AI, analizira prek 300 indikatorjev
  - IP Reputation
  - URL Reputation ✓
  - Subject Content
  - HTML Inspection
  - Natural Language Processing ✓
  - Domain Reputation ✓
  - Lookalike Icon
  - Brand Impersonation ✓
  - URL Emulation
  - File Emulation
  - ...





# Harmony Email & Collaboration



## Release Password-Protected Attachments

Type in the password for every attachment below and click Submit All

Invoice01.zip

Invoice02.zip

Invoice03.zip

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

Uporabnik vnese gesla priponk

Izvorni mail s priponkami je dostavljen po zaključeni emulaciji datotek



## Original Attachments on their Way

The password-protected attachments are now scanned for viruses.

Depending on the scan results, orinal recipiennts will get the original email with all the attachments

# Onboarding



CHECK POINT™

MY ACCOUNT

*Email*

Region: US - EU ▾

[Don't have an account? Register here](#)

[Trouble logging in? Click here](#) ⓘ

**NEXT**

INFINITY PORTAL

Unified security – delivered as a service

[Help](#) [Terms](#)

# Onboarding



**CHECK POINT**  
Harmony Email & Collaboration

RECENT (2)   Email & Collaboration   Connect

**INFINITY**  
Security Operations and AI

- Events
- Playblocks
- External Risk Management **New**
- XDR/XPR
- MDR/MPR

**QUANTUM**  
Secure the Network

- Security Management & Smart-1 Cloud
- Spark Management
- IoT Protect
- SD-WAN

**CLOUDGUARD**  
Secure the Cloud

- Cloud Network Security
- Cloud Native Application Protection (CNAPP)
- Code Security
- WAF - Web Application & API Security

**HARMONY**  
Secure the Workspace

- SASE - Internet & Private Access **New**
- Connect
- Endpoint
- Mobile
- Email & Collaboration
- Browse
- SaaS **New**

CHECK POINT LABS





# Onboarding



**CHECK POINT**  
Harmony Email & Collaboration

## SaaS Selection

In this screen you need to select the cloud-service. You will be required to authorize access to Check Point using a SAML admin-level authentication to your SAAS. To chose - click on "Start" below the SAAS icon, and follow the authentication instructions. Please note - without proper admin-level authentication Check Point will not be able to secure that service. You can choose multiple SAAS products to have Check Point secure all of them and you can change this selection later on.

	<b>Office 365 Mail</b> Top-of-the-line set of productivity tools	<a href="#">Start</a>
	<b>Gmail</b> Gmail is built on the idea that email can be more efficient and useful	<a href="#">Start</a>
	<b>Office 365 OneDrive</b> Designed for business — access, share, and collaborate on all your files from anywhere	<a href="#">Start</a>
	<b>Office 365 SharePoint</b> SharePoint empowers teamwork with dynamic and productive team sites for every project team, department, and division	<a href="#">Start</a>
	<b>Microsoft Teams</b> Microsoft Teams is a hub for teamwork in Office 365	<a href="#">Start</a>
	<b>Google Drive</b> Get access to files anywhere through secure cloud storage	<a href="#">Start</a>
	<b>Dropbox</b> Safe, simple way to access your files on any device	<a href="#">Start</a>
	<b>Box</b> Quickly and easily work securely with anyone	<a href="#">Start</a>
	<b>Slack</b> Messaging app for business that connects people to the information they need	<a href="#">Start</a>
	<b>Citrix ShareFile</b> Industrial-strength file sharing	<a href="#">Start</a>

# Onboarding

- **Potrditev pravic za posamezno aplikacijo**



## Permissions requested

Review for your organization

Check Point Cloud Security Platform V2

[checkpointcloudsec.com](https://checkpointcloudsec.com)

**This application is not published by Microsoft or your organization.**

This app would like to:

- ✓ Manage all access reviews
- ✓ Read and write all applications
- ✓ Read and write contacts in all mailboxes
- ✓ Read and write directory data
- ✓ Read and write domains
- ✓ Read and write files in all site collections
- ✓ Read and write all groups
- ✓ Read all published labels and label policies for an organization.
- ✓ Read and write mail in all mailboxes
- ✓ Send mail as any user
- ✓ Read and write all user mailbox settings
- ✓ Read all usage reports
- ✓ Read and update your organization's security events
- ✓ Read and write items in all site collections
- ✓ Read and write all users' full profiles
- ✓ Sign in and read user profile

If you accept, this app will get access to the specified resources for all users in your organization. No one else will be prompted to review these permissions.

Accepting these permissions means that you allow this app to use your data as specified in their [terms of service](#) and [privacy statement](#). You can change these permissions at <https://myapps.microsoft.com>. [Show details](#)

Does this app look suspicious? [Report it here](#)

Cancel

Accept



# Onboarding - Dashboard



CHECK POINT  
Harmony Email & Collaboration

12 days left

## Security Overview

Last 30 days

Include Microsoft Quarantine

### Phishing

67 Total, 66 Pending

### BEC

No prevention

0 Compromised, 0 Risky partners, 0 Critical risk

### Malware

3 Total, 3 Pending

### DLP

100% Clean

### User Interaction

0 Open Restore requests, 1 Open Phishing reports

### Security Events

01/24/2025 5:58 AM	Phishing	Phishing detected in
01/24/2025 3:57 AM	Phishing	Phishing detected in
01/24/2025 3:50 AM	Phishing	Phishing detected in
01/24/2025 3:42 AM	Phishing	Phishing detected in
01/23/2025 5:30 PM	Phishing	Phishing detected in
01/23/2025 8:52 AM	Phishing	Phishing detected in
01/23/2025 6:58 AM	Phishing	Phishing detected in

### Login events - Last 7 days

Last updated: 01/24/2025 12:16 AM

### Office 365 Mail

Active Users 1,102, Total Emails 167K

### Office 365 OneDrive

Active Users 2,474, Total Files 159K

### Office 365 SharePoint

Active Users 2,271, Total Files 331K

### Microsoft Scann

Scanning



# Onboarding - Policy



Policy [Create New Policy Rule](#)

**Office 365 Mail** Total 1 Rule / 1 Running ^

Status	Mode	Rule Name	Scope	Remediation Workflow	Order
Running	Detect	<a href="#">Office365 Emails Threat Protection (Default)</a>	All Users and Groups		⋮

[Create New Policy Rule](#)

**Office 365 OneDrive** Total 1 Rule / 1 Running ^

Status	Mode	Rule Name	Scope	Remediation Workflow	Order
Running	Detect	<a href="#">O365 Onedrive Threat Protection (Default)</a>	All Users and Groups		⋮

[Create New Policy Rule](#)

# Primer 1 – AI Assistant

- **Nastavitev filtrov za iskanje v naravnem jeziku**

Mail Explorer Infinity AI Copilot Show all emails from Hans Gruber in the past week. ×

Filters Advanced searches (Custom Queries)

Date Received Last 1 Hour Detection Check Point (None) | Microsoft (None)

Direction Direction (All) Server IP

Subject Contains

Sender Email Contains

Sender Domain Ends with

24 matching emails detected ↻

<input type="checkbox"/>	Receive Time	Direction	Quarantined (Quarantined by)	Subject	Recipients	Sender
<input type="checkbox"/>	08/04/2024 7:00 AM	Incoming	Yes (Check Point)	Your Office 365 Password is about to expire	steven.kovacs@acmemx.com	Hans Gruber hans.gruber@bombatomic.com
<input type="checkbox"/>	08/04/2024 7:00 AM	Incoming	Yes (Check Point)	Your Office 365 Password is about to expire	robin.harris@acmemx.com	Hans Gruber hans.gruber@bombatomic.com
<input type="checkbox"/>	08/04/2024 7:00 AM	Incoming	Yes (Check Point)	Your Office 365 Password is about to expire	maurice.moss@acmemx.com	Hans Gruber hans.gruber@bombatomic.com
<input type="checkbox"/>	08/04/2024 7:00 AM	Incoming	Yes (Check Point)	Your Office 365 Password is about to expire	jen.barber@acmemx.com	Hans Gruber hans.gruber@bombatomic.com
<input type="checkbox"/>	08/04/2024 7:00 AM	Incoming	Yes (Check Point)	Your Office 365 Password is about to expire	garth.algar@tyrellcybernetics.com	Hans Gruber hans.gruber@bombatomic.com

# Primer 2 – Partner Risk Assessment



Partner Risk Assessment [Settings](#)

**Partners**

1

Medium Risk

0

High Risk

0

Highest Risk

**Risk Indicators**

- Partner impersonation emails sent to other organizations 1 100%

**Filters**  Risk Score Partner ▼ Communication Volume Internal Contacts ▼ Partner Contacts ▼ Risk Indicators Last Risk Date ▼ Clear Export to CSV

57 Partners matched

Risk Score	Partner	Communication Volume	Internal Contacts	Partner Contacts	Risk Indicators	Last Risk Date
<div style="width: 50%; background-color: #ffc107;"></div>	dhl.com	Medium	+4 more	anja.skof@dhl.com +1 more	Partner impersonation emails sent to other organizations	01/23/2025 8:35 AM
<div style="width: 25%; background-color: #6c757d;"></div>	actual-it.si	High	+4 more	no-reply@actual-it.si +2 more		
<div style="width: 10%; background-color: #6c757d;"></div>	marjeticakoper.si	Low	+4 more	Marina.Gostimirovic@marjeticako... +1 more		
<div style="width: 10%; background-color: #6c757d;"></div>	summit-leasing.si	Low	+4 more	info@Summit-leasing.si		

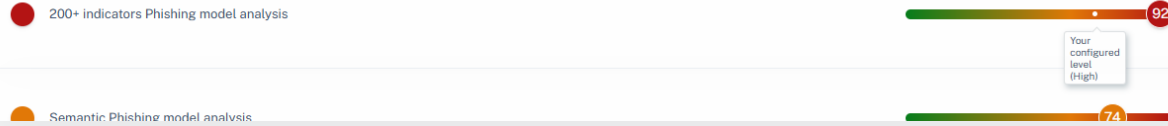


# Primer 3 – Phishing



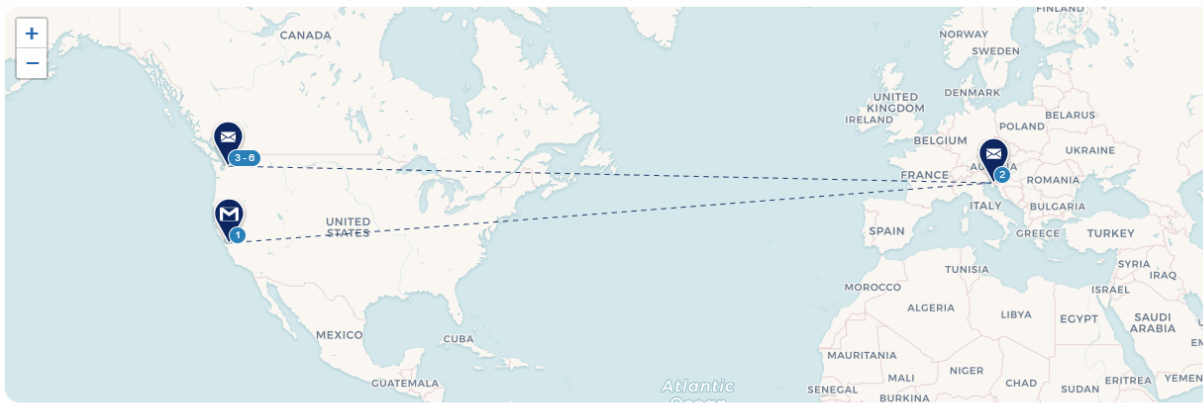
## AI Models overview

Here is what the AI models said about this email



## Email transport chain

The SMTP servers between the sender and the recipient

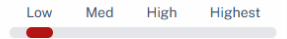


## Relationship Strength

This analyzes the strength of the relationship between the parties in this email exchange by analyzing historical email volume between the parties.

### User to User

From: nicodplooy@gmail.com  
To: [redacted]

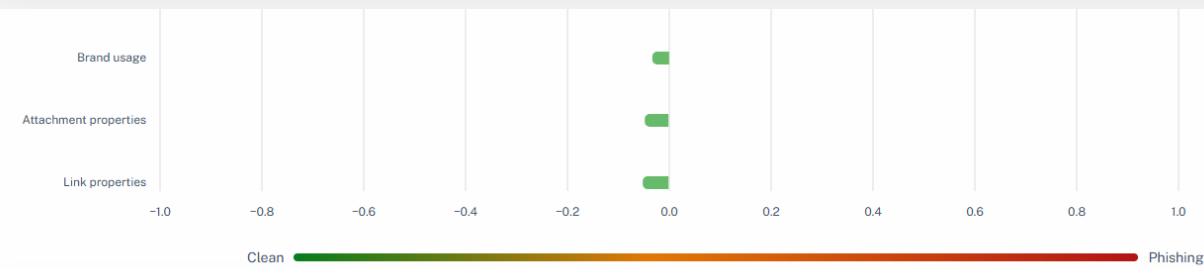


## All Emails With Sender

martyna.lepieszka@atrans-containers.com Emails traffic history

Show Emails From (3) Show Emails To/Cc (0)

Received	To	Subject
01/27/2025 11:55 AM	[redacted]	?
01/27/2025 9:19 AM	[redacted]	Re: card
01/27/2025 8:21 AM	[redacted]	Re: card



# Primer 4 – GEO Location analitika

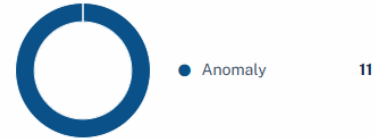


## Events

### Threats by Delivery Status



### Threats by Type



### Filters

Search [ ] Last 30 days State 2 Severity 4 SaaS 4 Threat Type 1 User Action Taken Remediated by Clear

11 Events matched

<input type="checkbox"/>	Date & Time	State	Severity	SaaS	Threat Type	Details	Users
<input type="checkbox"/>	01/24/2025 9:10 AM	Pending	High	Cloud	Anomaly	Unusual geo activity for <a href="#">Starovinc@ukb.si</a> : logged in for the first time from Austria	User: <a href="#">Starovinc@ukb.si</a>
<input type="checkbox"/>	01/22/2025 8:51 PM	Pending	High	Cloud	Anomaly	<a href="#">Jankic@ukb.si</a> was detected sending phishing emails strongly indicating their account is compromised. First email was ac	User: <a href="#">Jankic@ukb.si</a>
<input type="checkbox"/>	01/21/2025 4:48 PM	Pending	High	Cloud	Anomaly	Unusual geo activity for <a href="#">Jankic@ukb.si</a> : logged in for the first time from Croatia	User: <a href="#">Jankic@ukb.si</a>
<input type="checkbox"/>	01/20/2025 8:06 PM	Pending	Medium	Cloud	Anomaly	Detected suspicious login for user <a href="#">Jankic@ukb.si</a> from 102.129.235.209 (United States). Detection reasons: first login from country (United States), first login using this VPN (Private...	User: <a href="#">Jankic@ukb.si</a>
<input type="checkbox"/>	01/15/2025 10:17 PM	Pending	Low	Cloud	Anomaly	<a href="#">Starovinc@ukb.si</a> performed geo-suspicious events: logged in from Italy (212.124.177.57) and after 15 seconds logged in from Slovenia ( <a href="#">IP: 192.168.1.1</a> )	User: <a href="#">Starovinc@ukb.si</a>
<input type="checkbox"/>	01/15/2025 9:03 AM	Pending	Medium	Cloud	Anomaly	Detected suspicious login for user <a href="#">admin@ukb.si</a> from 192.168.1.1 (Slovenia). Detection reasons: logged in from Slovenia ( <a href="#">IP: 192.168.1.1</a> )	User: <a href="#">admin@ukb.si</a>
<input type="checkbox"/>	01/14/2025 6:19 PM	Pending	Low	Cloud	Anomaly	<a href="#">Jankic@ukb.si</a> performed geo-suspicious events: logged in from Italy (212.124.177.57) and after 14 seconds logged in from Slovenia ( <a href="#">IP: 192.168.1.1</a> )	User: <a href="#">Jankic@ukb.si</a>
<input type="checkbox"/>	01/06/2025 2:37 PM	Pending	High	Cloud	Anomaly	<a href="#">Jankic@ukb.si</a> performed geo-suspicious events: logged in from Slovenia ( <a href="#">IP: 192.168.1.1</a> ) and after 1 minute logged in from Germany (2001:ac8:20:c000:20da:7171:455b:c7cb)	User: <a href="#">Jankic@ukb.si</a>
<input type="checkbox"/>	01/05/2025 9:48 AM	Pending	High	Cloud	Anomaly	<a href="#">Jankic@ukb.si</a> performed geo-suspicious events: logged in from Austria (185.222.129.84) and after 48 seconds logged in from Slovenia ( <a href="#">IP: 192.168.1.1</a> )	User: <a href="#">Jankic@ukb.si</a>

# Primer 5 – Sharepoint



SUSPICIOUS ACTIVITIES

EMULATION VIDEOS

Win7 64b, Office 2010, Adobe 11

WinXP, Office 2003/7, Adobe 9

CATEGORY

- Data Loss
- Data Loss
- Evasion
- Evasion
- Evasion
- Evasion
- Evasion
- Evasion
- Evasion
- Evasion
- Evasion

		The program queries information on its own process
	1	The program queries its own PEB

# Vprašanja

Hvala za vašo pozornost!