

# Office 365 E-Mail Security Webinar

## 18. & 23. März 2021

xorlab

**Your employees are your early warning system – use it.**

Avantec webinar series on O365 email security | March 2021

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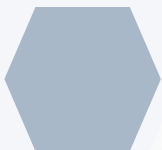
Spinoff 



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### Quick introduction



#### About me

- Adrian Kyburz
- MSc. ETH Computer Science
- Joined xorlab in 2017 as Head of Sales

#### About xorlab

- Founded 2015 as ETH spin-off
- First product: hard-to-evade sandbox
- Now: machine-intelligent communication defense



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### Reality check: attackers bypass defenses and people click

1) Results from a recent attack simulation on O365 with Advanced Threat Protection (ATP 2)

	Simulated cases	Delivered to user mailbox	Delivered to Junk
Phishing	84	47	37
Malware	27	13	14
BEC & Fraud	6	2	4
Extortion	1	1	0
<b>Total</b>	<b>118</b>	<b>63</b>	<b>55</b>

Source: xorlab, simulating attackers with a budget of 50 USD per month

2) Findings from a not yet published ETH study

- Phishing works! 32% of the recipients of phishing clicked at least once and 25% completed the malicious action (submitted credentials, downloaded malware, ...)
- There's hope! 30% of malicious messages get reported within 30' of delivery.

Source: ETH Zürich, large-scale phishing study

What if your users could warn each other?



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### xorlab ActiveGuard: Automated User Incident Response

The image shows three overlapping screenshots of the ActiveGuard interface. The top screenshot shows a 'Report Message' dialog with a 'Report as phishing' button and a 'Report' button. The middle screenshot shows a simulated phishing email from 'SBB Cybersiem' with a red 'ALERT' banner and a 'Phishing attempt detected' message. The bottom screenshot shows a legitimate email from 'DIE POST' with a purple header and text about a package delivery.

#### Benefits

Lower risk of compromise

Medium-sized bank reduced incident resolution time from 27 hours to 2 minutes.

Lower cost of operations

1 existing customer with 5'000 employees saved 1.5 FTE through automation and reduced analysis effort for high-risk incidents.

True employee engagement

Users get fast response to their report and by that are motivated to stay engaged.



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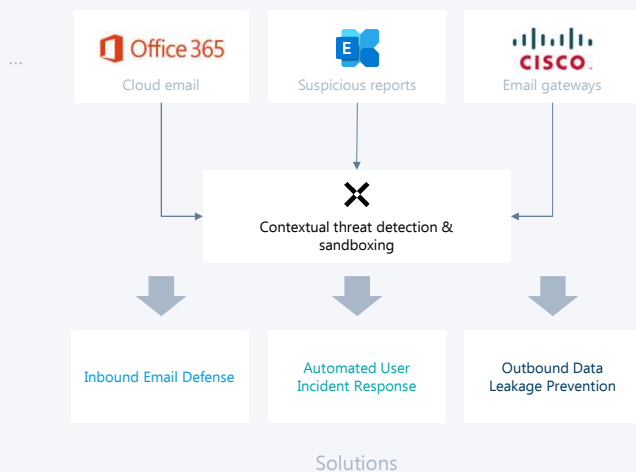
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### The ActiveGuard platform

xorlab matches the risk profile of every email against the behavioral norms of your organization in real-time to detect attacks at first sight.



xorlab ActiveGuard is a proactive communications defense platform that continuously measures the risk of emails and other messages that flow in and out of your organizations using machine-intelligence and advanced payload analysis.

#### Applications

- Automated mailbox incident analysis, orchestration and response
- Low-maintenance inbound email threat filtering
- Outbound data leakage prevention



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Reported / All Cases / Detail

VERDICT	THREAT	STATUS	REPORTED	REPORTED BY
Phishing	HIGH	RESOLVED	17.02.2021 14:45:32	dana.miller@futuretek-inc.com

SUBJECT: Swisscom voucher (ID:684C6)  
 FROM: Swisscom <noreply@swisscom.com>  
 TO: dana.miller@futuretek-inc.com  
 CC: n/a  
 BCC: n/a  
 RECEIVED: 17.02.2021 14:45:36  
 REPLY TO: n/a  
 ENVELOPE FROM: n/a  
 ENVELOPE RCPT: n/a  
 EHLO: atk4.cybermonks.io  
 EHLO IP: 116.203.133.188  
 REVERSE DNS: n/a

TAGS: phishing, spam, forged, nonreplyable, nonreputation, newdomain

PREVIEW 1

SUBJECT: Swisscom voucher (ID:684C6)  
 FROM: Swisscom <noreply@swisscom.com>  
 TO: dana.miller@futuretek-inc.com  
 FILES: img.png

You received a Swisscom voucher. Please find the voucher here:  
 Voucher:  
 Regards Swisscom  
 swisscom

SUMMARY ATTACHMENTS DOMAINS & URLS RELATIONSHIPS SIMILAR HEADERS MATCHED RULES CONTEXT VARIABLES

1 out of 26 selected BLOCK RESOLVE ISOLATE

TYPE	RECEIVED	SUBJECT	DISPLAY NAME	REP	FROM	TO	THREAT	VERDICT
IN	17.02.2021 15:59:43	Swisscom voucher (L...)	Swisscom	NO AUTH	noreply@swisscom.com	dana.miller@futuretek-inc.com	HIGH	PHISHING
IN	18.05.2020 14:29:30	Swisscom voucher (L...)	Swisscom	NO AUTH	noreply@swisscom.com	anthony.kovacs@futuretek-inc.com	HIGH	MALICIOUS



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### Summary

	xorlab ActiveGuard Email Defense Platform	Microsoft Office 365 Security & Compliance Center
User incident submissions	✓ Through plugin	✓ Through Microsoft plugin
End-user feedback	✓ Instant, always	✗ Not available
Customizable feedback templates	✓ Yes	✗ Not available
Workflow automation	✓ Yes	✗ Not available
Intuitive and efficient user interface	✓ Yes	✗ Cumbersome



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**Machine-intelligent email defense for  
modern organizations**

Spinoff ETH zürich



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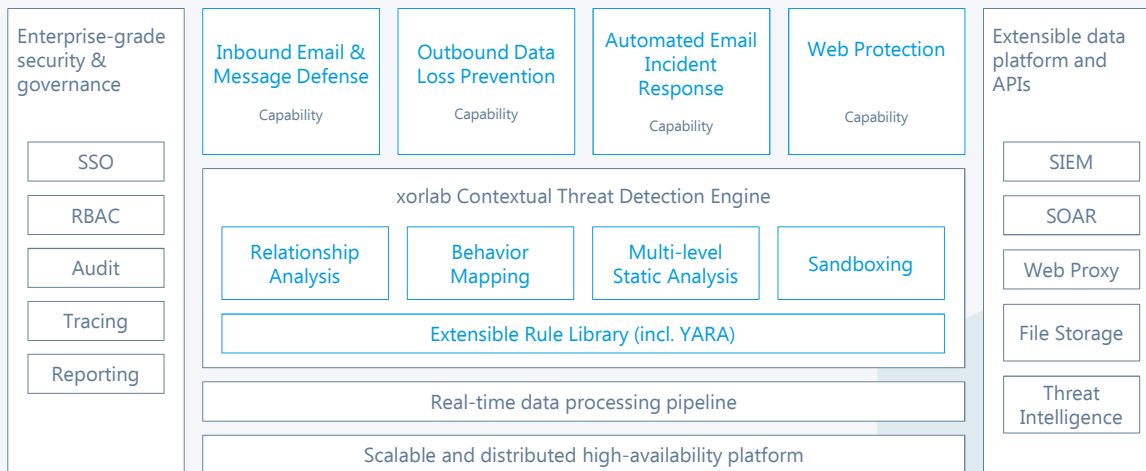
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**AVANTEC**  
Competence. Security. Trust.

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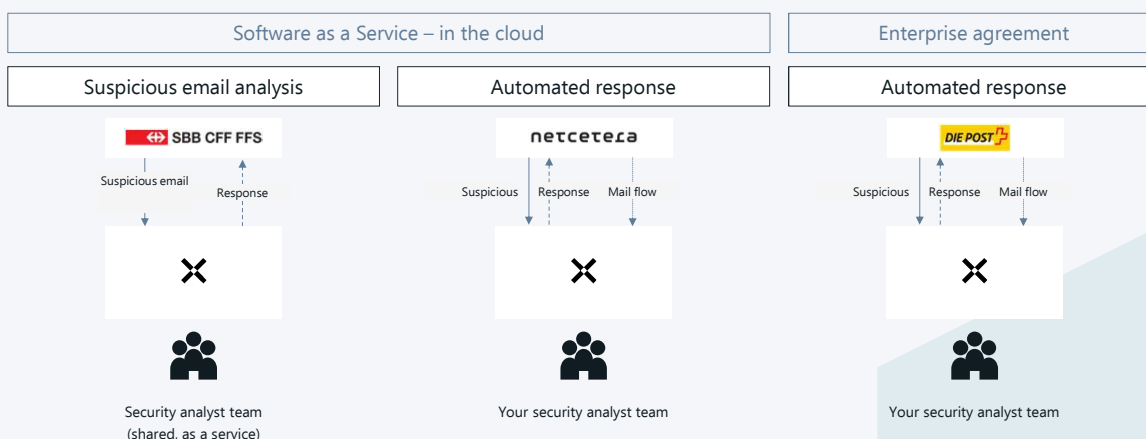
### ActiveGuard Defense Platform



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### Deployment options



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### Automated incident analysis, orchestration and response

Benefits compared to alternative solutions

	Customized processes and tools (e.g. ticketing, shared mailboxes)	Phishing Simulation and Triage Tools	xorlab ActiveGuard Email Defense Platform	CISO benefit
Time to detect / time to respond	Very slow – Incident prioritization and threat analysis are manual.	Slow – Incident prioritization & analysis use <u>reactive</u> threat intel.	Fast – <u>Proactive</u> threat analysis enables accurate prioritization and fast response.	Significant reduction of risk of compromise
Analyst efficiency and automation	Inefficient – Threat analysis is manual, and nothing can be automated.	Medium – Lack of local context hinders analysis and limits automation potential.	High – Local context information speeds up analysis and unlocks full automation potential.	Cost savings through automation and faster analysis of high-risk incidents
Security engagement	Inexistent – Feedback delays make people stop reporting incidents.	Low – Lack of local context leads to generic feedbacks. People stop reporting incidents.	High – Automatic, timely, contextual feedback effectively engages people in the long run.	CISO organization is perceived as a responsive enabler

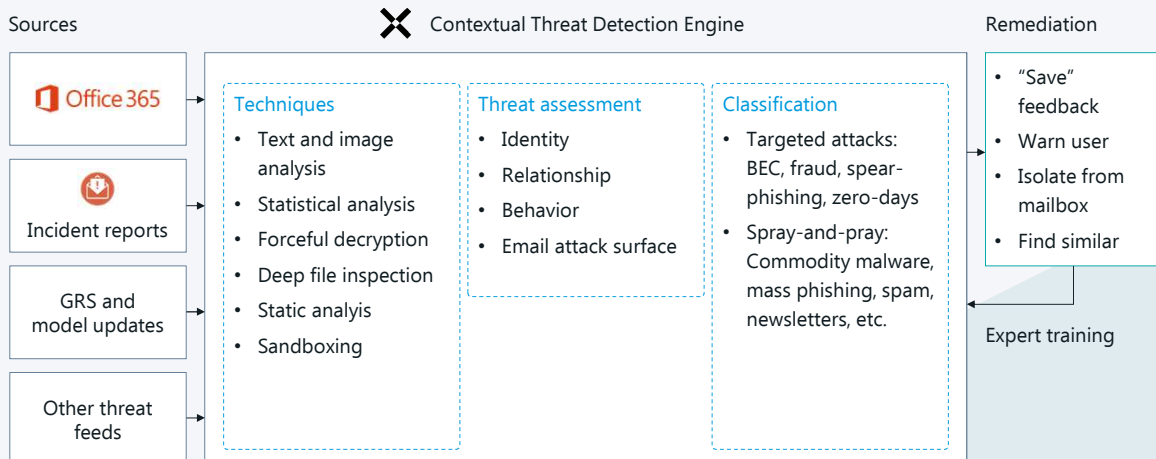


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### Automated incident analysis, orchestration and response

Solution description



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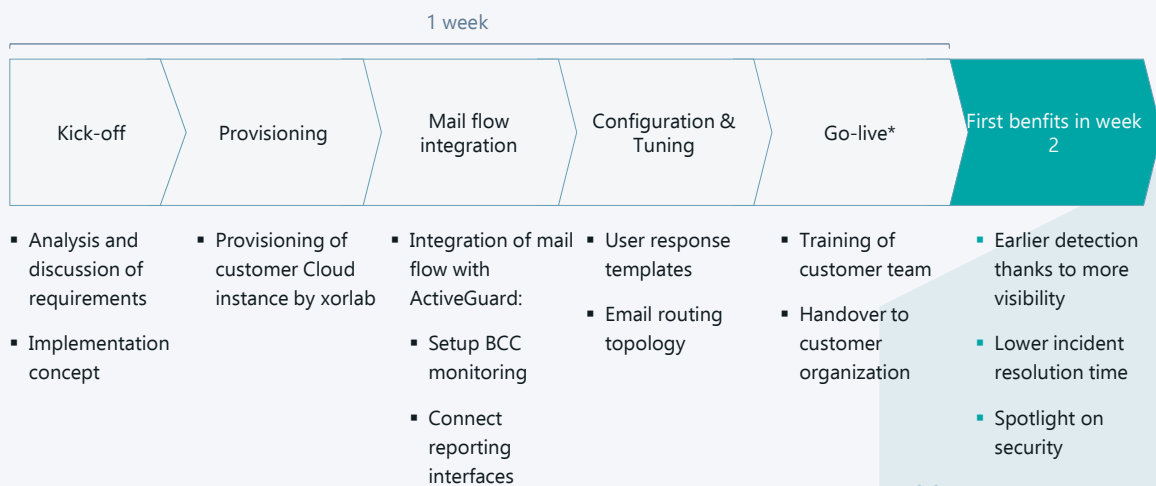
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### First benefits in week 2

Our battle-tested, 1 week rollout plan to automate the collection, analysis and response to user reported suspicious email



\* We recommend to run an internal promotion campaign prior to going live



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### Activities required on the customer side

#### Integration

- Relay copies of incoming and outgoing emails to xorlab
  - xorlab recommends to install a BCC copy rule on the outermost gateway
- Report button integration

Effort: max. 4h incl. testing

#### Configuration & tuning

- Mail routing topology
- VIP configuration
- Protected domain setup
- Response templates

Effort: max 1d

#### Analyst training

- How to resolve cases?
- How to track campaigns?
- How to automate?

Effort: 2h



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