



CYBER SECURITY AND RESILIENCE SYMPOSIUM

TOWARDS A RESILIENT AVIATION CYBERSPACE

AMMAN, JORDAN | 15-17 OCTOBER 2019

Challenges of real world advanced cyber security threat

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Challenges of cyber security threat in the airports operation management

1

Regulations

2

IT Strategy is not aligned with enterprise/airport Strategy

3

Monitor Activity and map airport data flow

4

Resources/People

- Lack of expertise
- Lack of budget

5

Emerging Technologies

- Cloud
- IoT

6

Legacy Technology



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*“The importance of cybersecurity is well recognized and airlines and airports are investing in building a solid security foundation. However, the number of cyber threats continues to grow exponentially every year, as does the sophistication of those threats. Given the complexity and integrated nature of the air transport industry, we need to move far quicker in establishing **proactive defenses** to ensure we stay ahead of the game.”*

Barbara Dalibard, CEO of SITA



60% say that that careless or unaware employees and outdated information security controls are the vulnerability that have most increased organisations risk exposure over the past 12 months. At the same time many organisations have proper cybersecurity programs in place that addresses the different vulnerabilities.

Top 10 biggest cyber threats to organisations

- 20% - Cyber attacks (to steal financial information)
- 20% - Phishing
- 18% - Malware
- 14% - Fraud
- 11% - Cyber attacks (to disrupt)
- 6% - Internal attacks
- 5% - Cyber attacks (to steal IP)
- 4% - Spam
- 2% - Natural disasters
- 1% - Espionage



17%

Of organizations report a list of breaches in their information security reports



7%

Of organizations report the financial impact of every significant breach



79%

Would increased their cybersecurity budget after a serious breach



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*Trust
Assessment*



Digital Security Framework

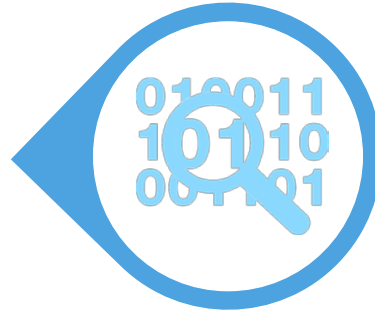


Identify the Attack Surface



*Protect Against
Known Threats*

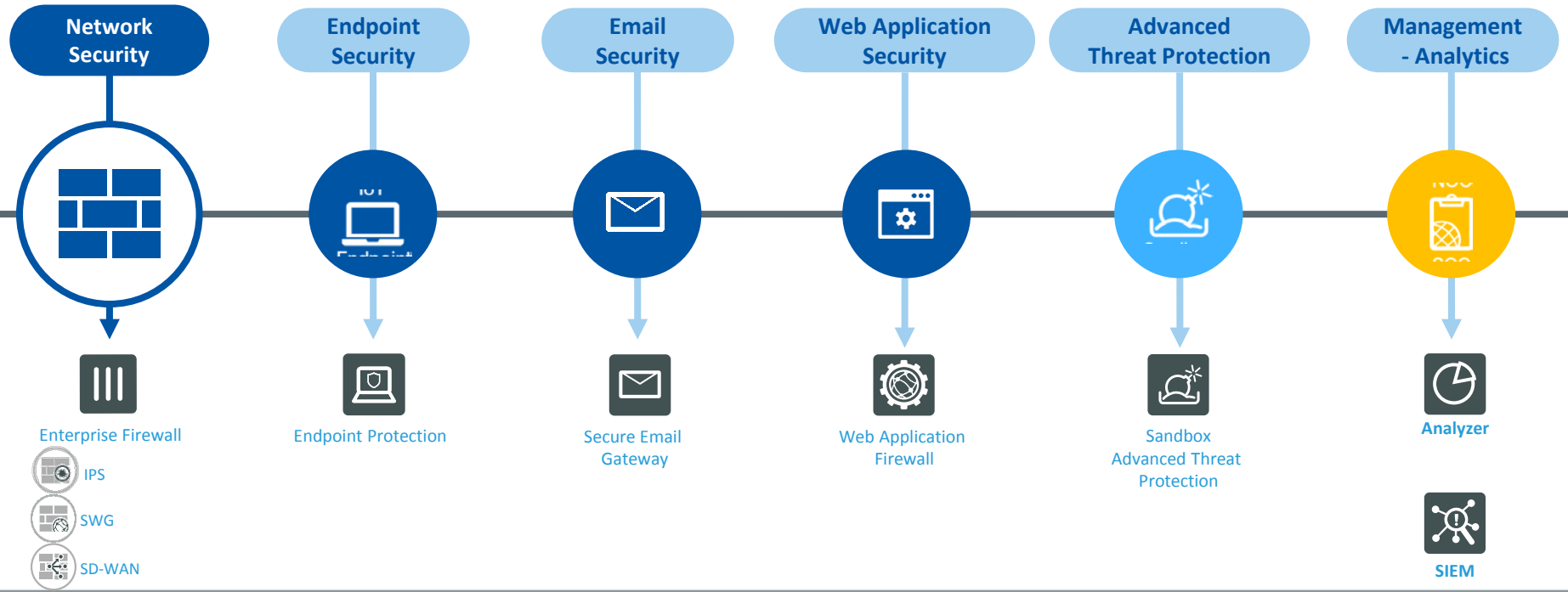
*Rapid
Response*



*Detect Unknown
Threats*



We implement a security architecture during 2018 as base line for information security defense



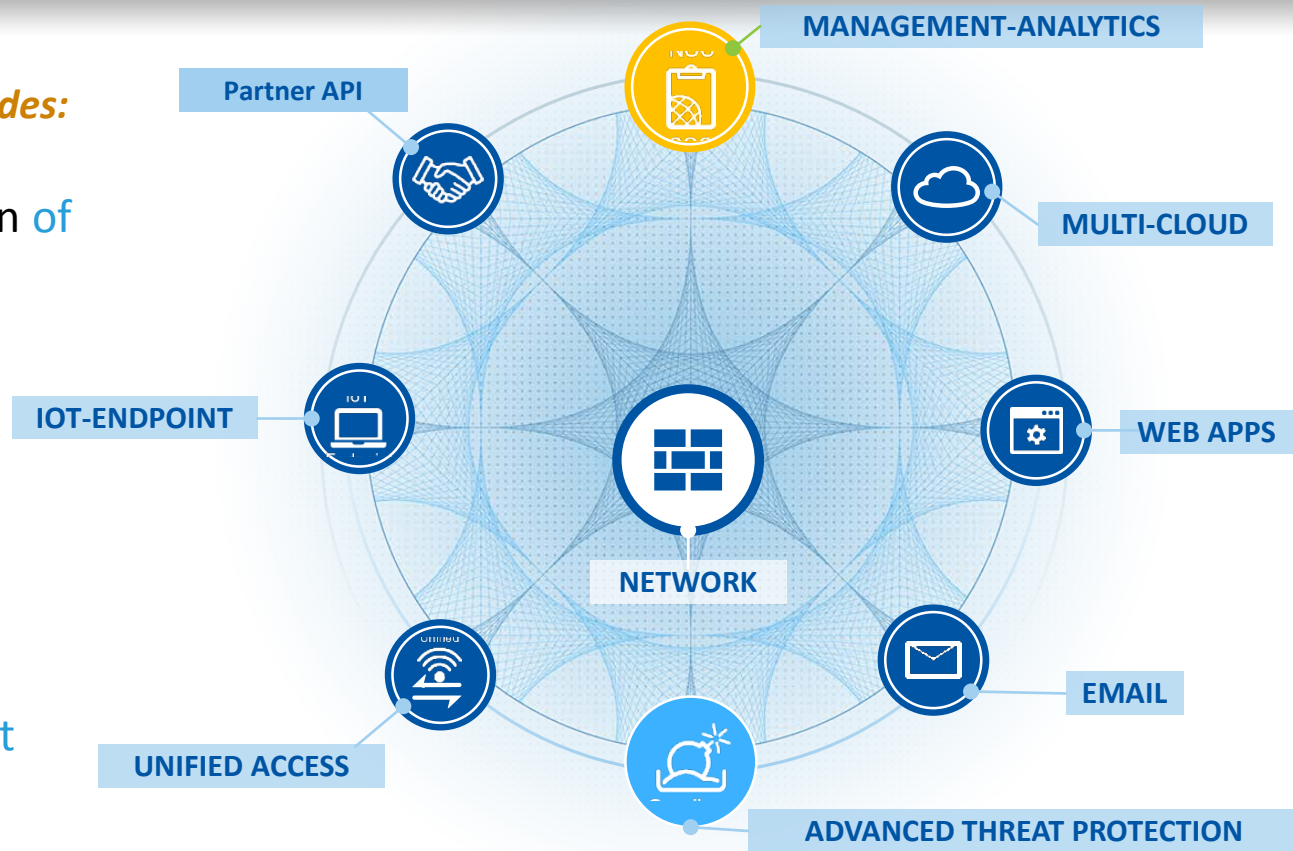


Security Architecture that provides:

BROAD Visibility & Protection of the Digital Attack Surface

INTEGRATED Detection of Advanced Threats

AUTOMATED Response & Continuous Trust Assessment





User entity behavior analysis (UEBA)

Mobile Device Management

Deception Tool

Data Leakage Protection solution

Network Access Control (NAC)

Threat Intelligence Tool

Network Security

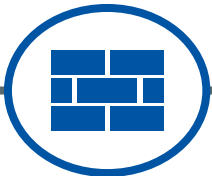
Endpoint Security

Email Security

Web Application Security

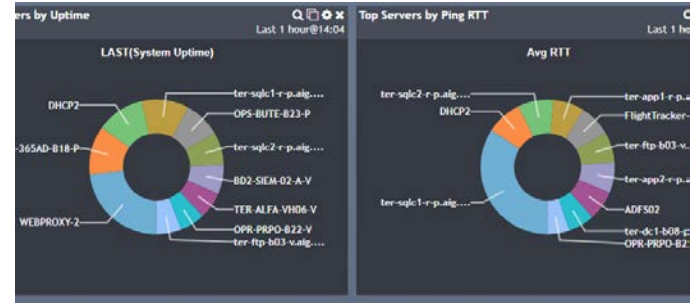
Advanced Threat Protection

Management - Analytics





Sample of SOC dashboard and monitoring tools





Trust Assessments

In-house
Vulnerability
Assessment

External
Penetration
Testing

Data Traffic
Analysis

Regular System/
Application/
Configuration
review

IT Quality review

IT External Audit

Benefit of trust assessments

Reveal vulnerabilities

Show real risks

Test your
cyber-defense
capability

Ensure
business
continuity

A third party
expert opinion

Maintain trust



International Standards & Best Practices:

- ISO 27001
- ISO 22301
- COBIT
- Training Program





```
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True
...
mirror_ob.select = 1
...
mirror_ob.select = 1
```

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Thank You