

From Policy to Practice

Mastering Data Security Compliance

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COMPLIANCE

Meet Compliance

Mega trends: where is Data Security required?



Data Security is more than compliance

Along with benefits, new technologies come with security challenges & needs

Key use cases driving business needs



How can I protect my data and ensure compliance across **multiple clouds**?



How can I get the most value from my data source logs to **understand our risk**?



We have a **data inventory** problem. Where is my sensitive data? How do I get visibility?



How can I get an actionable view of my **monitored data**?



I have both data **compliance & security needs**; how can I simplify solving for both?

Evolving technologies driving new use cases



Artificial Intelligence & Machine Learning



Microservices



3rd Party Cloud Data



DBaaS & IaaS Providers



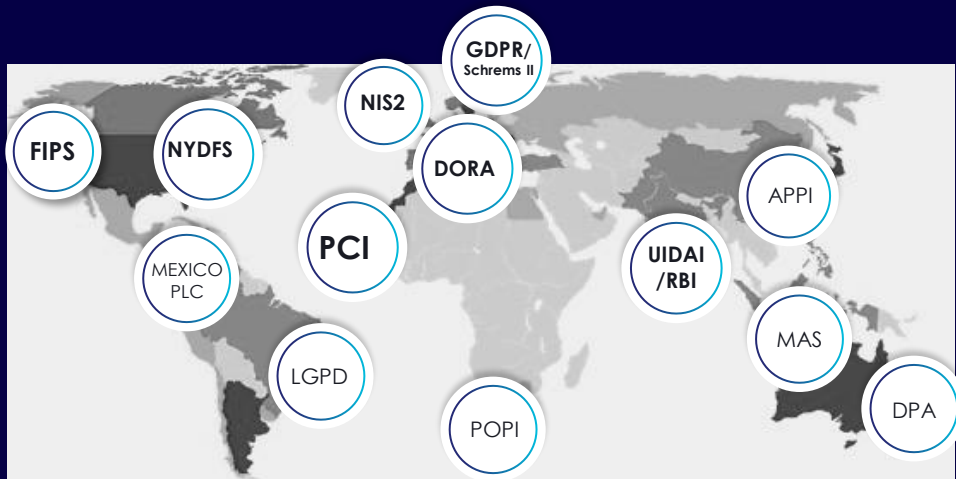
Cloud File and Object Storage



Public APIs

Reduce risk and complexity

Accelerate time to compliance
with centralized data and identity
security governance



Discover and classify data across hybrid IT according to sensitivity to specific legislation requirements.

Automate data protection with centralized policy-based enforcement with 360 degree visibility on a single pane of glass.

Apply data privacy and sovereignty rules through granular data and access security controls with MFA authentication.



Cybersecurity

VS

Cyber Resilience

We
need
to
have
both!



Focuses on preventing attacks



Protects systems and data



Defensive in nature



Prepares for, responds to, and recovers from attacks



Ensures operational continuity



Proactive and adaptive



SIEM, SOC, SOAR - Overwhelmed by Events

- Log Collection
- Log Analysis
- Event Correlation
- Log Forensics
- IT Compliance
- Application Monitoring
- Object Access Auditing
- Real Time Alerting
- User Activity Monitoring
- Dashboards
- Reporting
- File Integrity Monitoring
- System and Device Log Monitoring
- Log Retention

Moving from Monitoring to Observability

And you can use Artificial Intelligence - AI

DRA: AI Powered Threat Detection

Correlates different events across multiple targets

Security Events > Incidents

Critical 95 Excessive Multiple Database Access
☆ | Event Time: May 4, 2015 12:00:00 PM | Status: Open | ID: 1203
EXPORT INCIDENT CLOSE INCIDENT CREATE WHITELIST RULE

Interactive (non-application) user 'john.heidorn' attempted to access an abnormally high number of different databases (29 databases) over a short period of time (2 hours and 45 minutes).

[Learn how to investigate this type of incident](#)

Comment

What influenced the severity of this incident

Client Details

john.heidorn
Information Technology Contractor

Host: win7x-john.h-desk [User Endpoint](#)
IP Address: 10.10.32.41
Source Application: microsoft sql server ... [Interactive Tool](#)

Server Details

Multiple IPs [i](#)
MsSql Servers

DB User: john.heidorn [Personal Account](#)
DB Name: master

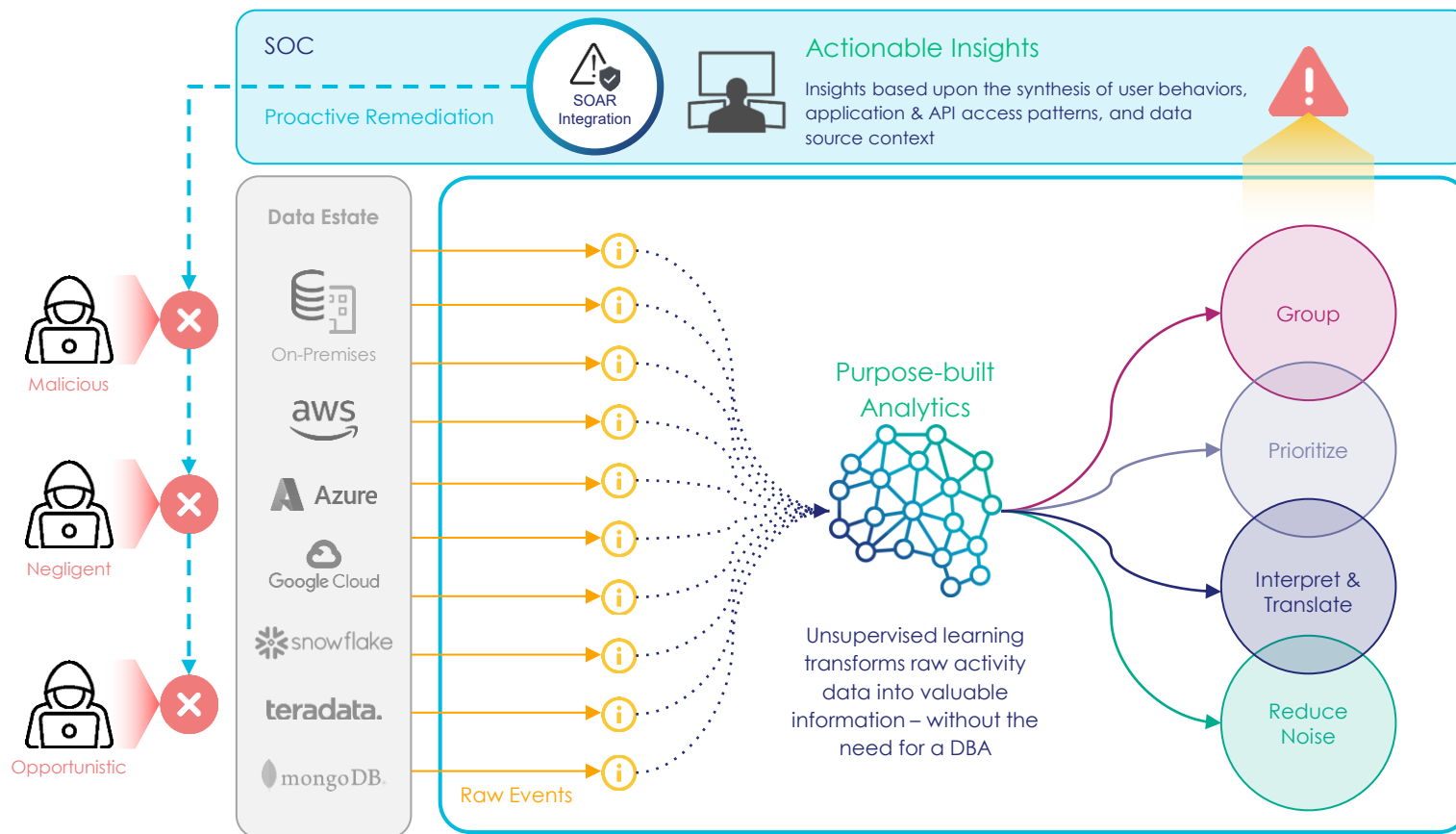
Incident Details
Typical Behavior

29 Different databases (10.51.45.118, 10.51.45.116, 10.51.45.120...) attempted access

- The user attempted to access 29 different DBs over a short period of time.
- Prioritize what matters the most.
- Interpret security incident in plain language.

Data Risk Analytics elevates the security capabilities of IT

DRA can be the home page for data security in your SOC



DSF Coverage:

- **File servers:** Windows file shares, NFS (Network file system) NAS (Network attached storage), SharePoint
- **AWS:** Amazon Elastic File System (EFS), Amazon Elastic Block Store (EBS), Amazon FSx for Lustre, Amazon FSx for NetApp ONTAP, Amazon Storage Gateway, Amazon FSx for Windows File Server
- **Azure:** Azure Disk Storage, Azure Files, Azure NetApp Files, Azure Elastic SAN
- **GCP:** Google Filestore, Google Persistent Disk
- **Microsoft:** SharePoint online, Microsoft 365, OneDrive



Why Protect Data with Encryption?

There are no perfect data security measures and security solutions!

However

When all your peripheral precautionary infrastructure defence mechanisms fail – data encryption renders the potentially exfiltrated data useless to the cybercriminals



> Encryption and key management to protect Unauthorised

- ▶ Hackers
- ▶ Malware / Ransomware
- ▶ Application vulnerabilities
- ▶ Regulations & Compliance (DORA, NIS 2, PCI DSS, GDPR)

> Monitoring to secure the Authorised access

- ▶ DBAs
- ▶ Internal contractors
- ▶ Customers
- ▶ APIs
- ▶ Regulations & Compliance (DORA, PCI DSS, NIC 2, GDPR)

Lets talk about Data Encryption...

- **Secures files and folders at the OS level** —no app or architecture changes required.
- **Granular Access Control** — Enforces fine-grained user access and separation of duties to block unauthorized and insider access.
- **Integrated Key Management** — Centralizes key lifecycle and auditing with CipherTrust Manager to support regulatory compliance.



Encrypting Sensitive Data Wherever it Resides

Where

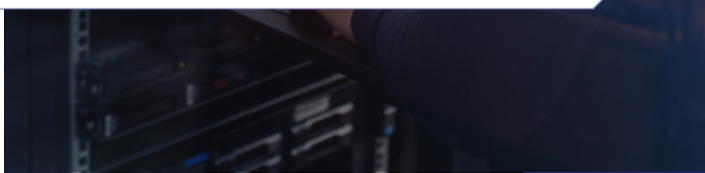
How

Why

Protection Layer	Risk Mitigated	
In Use	Confidential computing with controlled attestation	Data protection against attack on hosting infrastructure
Application	Field level encryption or tokenisation	PCI DSS scope reduction SQL Injection
Database	Native Database encryption with external KMS	OS level data breach Rough OS Admin
File System	Dedicated Transparent File level encryption	OS level data breach Rough Admin/Root Ransomware / Malware
Storage	Native storage / server / backup encryption Store keys in external KMS	Protect against physical theft



Pick the solutions in the layer of the technology stack to match your security requirements and infrastructure.



Use Cases for Data Security Best Practices



DEEP VISIBILITY



Discovery and classification

Automatically discover all unstructured, structured and sensitive data stores



Data activity monitoring

Complete visibility with continuous monitoring, auditing and analyzing of data



RISK IDENTIFICATION



Data Risk Prioritization

Combines key data risk indicators into an actionable view



PROTECT



Encryption, Tokenization, & Data masking

Secure, anonymize, and encrypt data at rest and in motion



CONTROL



Enterprise & Multicloud Key and Secrets Management

Centrally manage and store cryptographic keys and secrets



Policy Management

Centrally define and enforce data protection policies

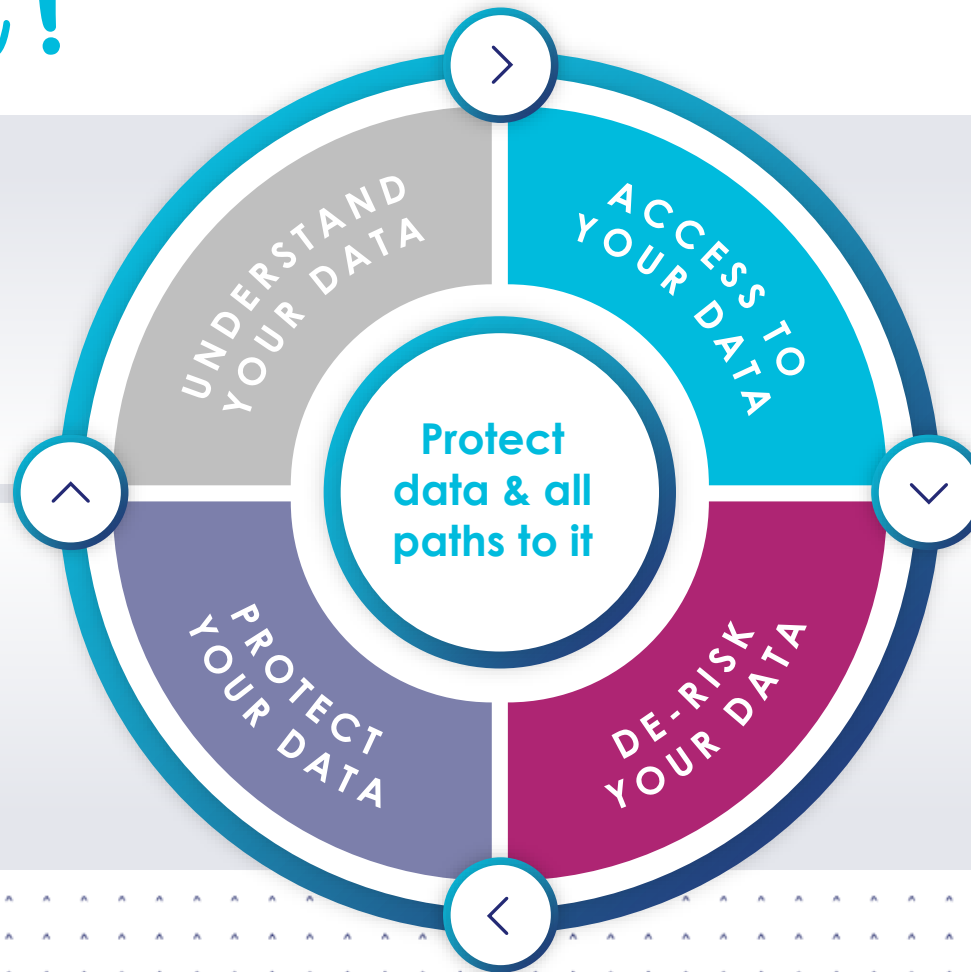
Thales gives visibility, control, and security for your most sensitive data

Thank you !

THALES
Building a future we can all trust

Data Discovery | Classification
| Compliance Monitoring

Encryption | Tokenization |
Masking | Key Management |
Secrets Management |
Hardware Security Modules



Workforce Authentication | Customer
Identity & Access Management |
MFA | User Access Policies

Data Activity Monitoring | Threat
Detection | API Security | Web
Application Firewall | Advanced Bot
Protection | DDoS Protection



Thank you

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