



Information Security Best Practices and GDPR

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Objective

How do we use standard best practices in security to manage GDPR data securely and meet the compliance requirements?



What is Security?

What Security isn't

- Compliance
- A Piece of Technology
- Risk Elimination

What Security is

- A Culture
- Risk Mitigation
- The Management of the People, Processes and Technology you have in a secure manner
- The Management of CIA



CIA – The Security Triad

Confidentiality - Preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information.

Integrity - Guarding against improper information modification or destruction, and includes ensuring information non-repudiation and authenticity.

Availability - Ensuring timely and reliable access to and use of information



What is GDPR?

The objective of the General Data Protection Regulation (GDPR) is to protect all European Union (EU) citizens from privacy and data breaches in an increasingly data-driven world that is vastly different from the time in which its predecessor the 1995 Data Protection Directive 95/46/EC was established.



Key date and terms?

Approved: April 2016
Effective date: May 25th 2018

Personal Data: Any information related to a natural person or ‘Data Subject’, that can be used to directly or indirectly identify the person

Data Controller: entity that determines the purposes, conditions and means of the processing of personal data

Data Processor: entity that processes data on behalf of the Data Controller



Who is affected?

GDPR applies to all companies processing the Personal Data of subjects residing in the EU, regardless of the company's location and regardless of whether the processing takes place in the EU. These rules apply to both Data Controllers and Data Processors of Personal Data; meaning cloud providers will not be exempt from GDPR enforcement.



Who should be involved?

Success with GDPR will be a joint project between Executives, Information Security, Information Technology and **Legal**. As with all security, compliance and privacy initiatives it is always better to build and maintain a proper security and privacy program rather than trying to chase compliance or laws - privacy and compliance are by-products of good security.



GDPR Requirement – Security of Processing and Privacy By Design

**This is the implementation of
Security Best Practices**



Least Access\Least Privilege



Data Classification



Common Data Classification Labels

- Part of ISMS
 - ISO 2700X
 - NIST 800-53
 - NIST CSF
- Availability Requirements
- Encryption requirements
 - Data minimization
- Isolation and Storage
- Destruction requirements
- Movement
- Access controls
- Lifecycle
- Data subject rights
- Tools available



GDPR Requirement – Breach Notification

**Security Best Practice = Breach
Prevention - Breach Detection -
Incident Response**



GDPR Requirement – Vendor Management

Security Best Practice = Third Party Management



GDPR Requirement – Data Impact Assessments

Security Best Practice = Risk Management



**GDPR Requirement – Right to
Access – Data Portability - Right
to be Forgotten**

**Security Best Practice = Data
Classification and Management
of CIA**

Sirius Security and IBM

Security



Providing consulting and integration services to help you establish and execute a security plan that fits your business

Infrastructure

- Next-Generation Firewall
- Intrusion Detection & Prevention
- Micro-Segmentation
- Network Access Control
- IOT Security
- DDoS Protection
- Architecture & Design
- Remote Access

Data & Application

- Web Application Firewall
- Data Loss Prevention
- Secure Web Gateway
- Encryption
- Database
- Email
- Code Review/
- Application Scanning
- Data Classification

Intelligence & Analytics

- Security Information & Event Management
- User & Entity Behavior Analytics
- Network Analytics
- Sandboxing/Malware Analysis
- Threat Intelligence
- Digital Forensics/ Incident Response
- Automation & Orchestration

Threat & Vulnerability Management

- Endpoint Prevention, Detection & Response
- Vulnerability Management
- Patch & Configuration Management
- Penetration Testing
- Compromise Assessments
- Deception
- Security & Risk Monitoring

Identity & Access Management

- Core IAM Platform
- Multi-Factor, Risk-Based Authentication
- Single Sign-On
- Federation/Directory Integration
- Privileged Access Management
- Access Governance

Program Strategy & Operations

- Program Strategy & Development
- Governance, Risk & Compliance
- Third-Party/Risk Management
- PCI QSA Services
- vCISO
- Security Awareness Training

Cloud

- Architecture & Design
- DDoS Protection
- Container
- Virtual Workload

- Encryption
- Code Review/
- Application Scanning

- Threat Intelligence
- Automation & Orchestration

- Vulnerability Management
- Patch & Configuration Management
- Penetration Testing

- Cloud Access Security Broker
- Single Sign-On
- Identity as a Service

- Program Strategy & Development
- Governance, Risk & Compliance
- Third-Party Risk Management

AppScan
Guardium

Qadar, i2
Resilient

MaaS360
BigFix

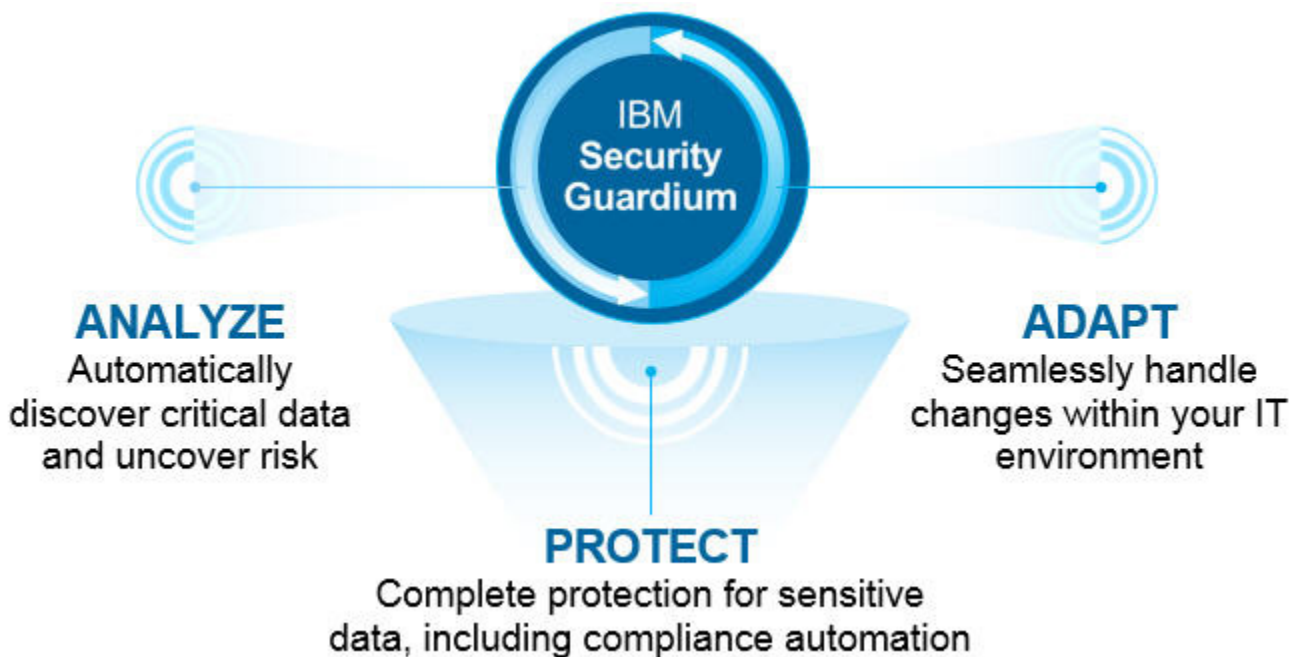
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IBM Guardium



IBM Resilient



- AUTOMATED ESCALATION**
- SIEMs
 - EMAIL
 - ENTRY WIZARD
 - WEB FORM
 - TROUBLE TICKETING

EASY COLLABORATION

RESILIENT IRP MODULES

- SECURITY**
- ACTION**
- PRIVACY**

- INFRASTRUCTURE INTEGRATION**
- Directory
 - Endpoint forensics
 - Threat intelligence
 - Endpoint controls
 - Network controls

- SECURITY MODULE**
- Industry standard workflows (NIST, SANS)
 - Threat intelligence feeds
 - Organisational SOPs
 - Community best practices

- ACTION MODULE**
- Automate processes
 - Enrich incident details
 - Gather forensics
 - Enact mitigation

- PRIVACY MODULE**
- Global breach regulations
 - Contractual obligations
 - 3rd party requirements
 - Organisational SOPs
 - Privacy best practices




References

- UK Information Commissioners Office (ICO)
- Center for Internet Security
- SANS
- NIST Special Publications
- Siriuscom.com
- IBM Guardium
- IBM Resilient



Questions?



**Protect your data
like your livelihood
depends on it -
because it does.**

Thank You