

# GDPR and Beyond.....



**Manoj Bhati**

Pre-Sales Consultant

# Agenda

- ✧ GDPR Text
- ✧ Gemalto's Six Step by Step Approach
- ✧ Gemalto Vision
- ✧ Authentication
- ✧ Key Management
- ✧ Crypto/Data Protection
- ✧ Questions

GDPR – EXPLAINED

# GDPR Text

# GDPR Text

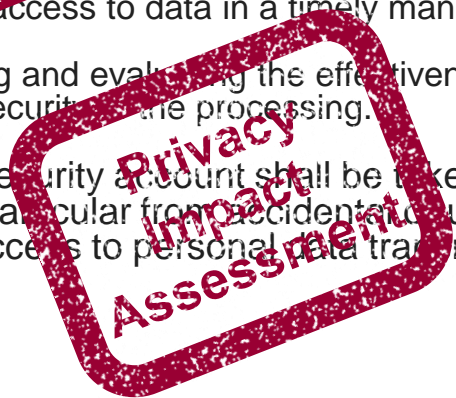
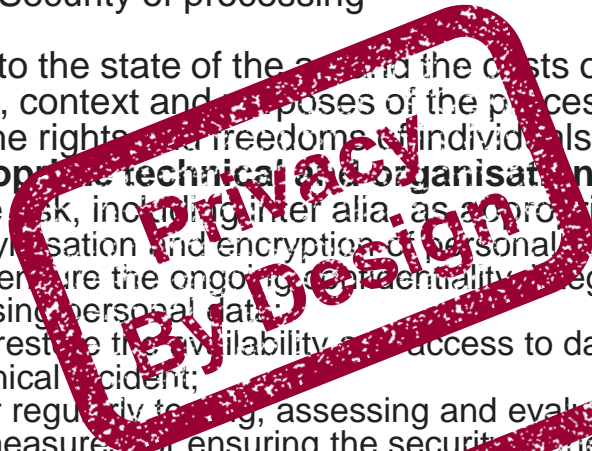
## ✕ SECTION 2: DATA SECURITY

### ✕ ARTICLE 30: Security of processing

1. Having regard to the state of the art and the costs of implementation and taking into account the nature, scope, context and purposes of the processing as well as the risk of varying likelihood and severity for the rights and freedoms of individuals, the controller and the processor shall **implement appropriate technical and organisational measures**, to ensure a level of security appropriate to the risk, including inter alia, as appropriate:

- (a) the pseudonymisation and encryption of personal data;
- (b) the ability to ensure the ongoing confidentiality, integrity, availability and resilience of systems and services processing personal data;
- (c) the ability to restore the availability and access to data in a timely manner in the event of a physical or technical incident;
- (d) a process for regularly testing, assessing and evaluating the effectiveness of technical and organisational measures for ensuring the security of the processing.

1a. In **assessing** the appropriate level of security account shall be taken in particular of the risks that are presented by data processing, in particular from accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to personal data transmitted, stored or otherwise processed.



# GDPR Text

2a. Adherence to an approved code of conduct pursuant to Article 38 or an approved certification mechanism pursuant to Article 42 may be used as an element to demonstrate compliance with the requirements set out in paragraph 1.

2b. The **controller and processor** shall take steps to ensure that any person acting under the authority of the controller or the processor who has access to personal data shall not process them except on instructions from the controller, unless he or she is required to do so by Union or Member State law.

## ✧ ARTICLE 31: Notification of a personal data breach to the supervisory authority

1. In the case of a personal data breach, the controller shall without undue delay and, where feasible, **not later than 72 hours** after having become aware of it, **notify the personal data breach** to the supervisory authority competent in accordance with Article 51, unless the personal data breach is unlikely to result in a risk to the rights and freedoms of individuals. The notification to the supervisory authority shall be accompanied by a reasoned justification in cases where it is not made within 72 hours.

GDPR EXPLAINED

# Step by step

# Overview

- ✧ 1. Legal framework / Understand GDPR
- ✧ 2. Create roadbook / Data register
- ✧ 3. Data classification
- ✧ 4. Start with top priorities
  - ✧ 4a. Procedures & Policies
  - ✧ 4b. Data protection
- ✧ 5. Assess & document other risks
- ✧ 6. Revise & repeat

GDPR EXPLAINED

# Gemalto vision



# Different types of attacks

## ✧ Low skill and Low Focus

- ✧ Go for low hanging tools. They normally look for whatever data is available easily.

## ✧ High skill and Low Focus

- ✧ These are the attacks that we normally hear about in news

## ✧ High Skill and High Focus (single focus attacks)

- ✧ These are single focused attacks with a very specific reasons.

# A new mindset

## SECURE<sup>THE</sup>BREACH

1

### Accept the Breach

Perimeter security alone is no longer enough.

2

### Protect What Matters, Where It Matters

Data is the new perimeter.

3

### Secure the Breach

Attach security to the data and applications. Insider threat is greater than ever.

**Gemalto Research: [www.breachlevelindex.com](http://www.breachlevelindex.com)**

# Three Pillars



GDPR EXPLAINED

# Authentication

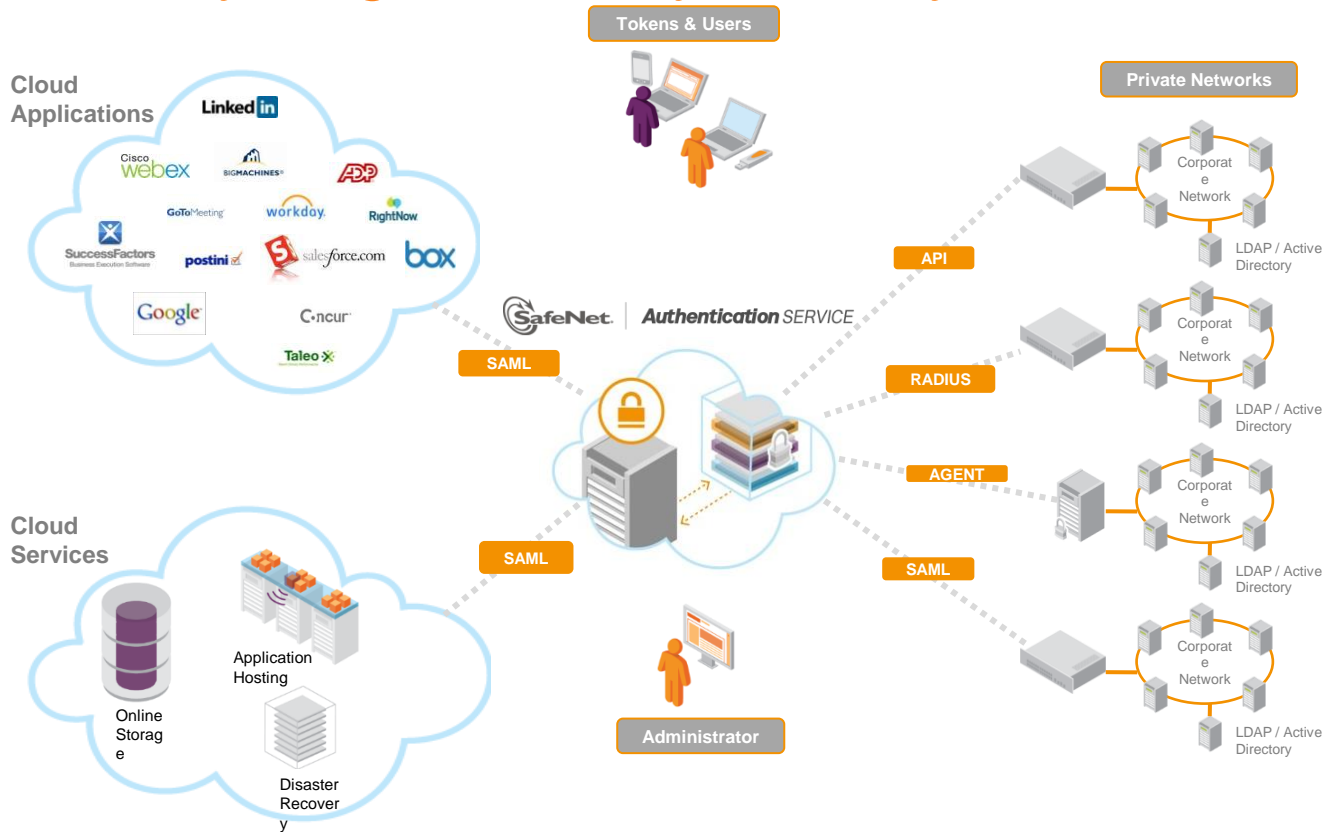
# Why two-factor authentication?

- ✧ Audit trail for GDPR compliancy
  - ✧ **who accessed**
  - ✧ **at what time**
  - ✧ which information
- ✧ Reduce risk for stolen credentials
  - ✧ Breach prevention

# SafeNet Authentication Service by the Numbers

- ✧ **Over 4.000.000 users of Cloud Edition**
- ✧ **30 minutes to set up**
- ✧ **400+ fully-tested integrations**
- ✧ **60% lower TCO than other solutions**
- ✧ **99.999% Availability SLA**

# Protect Everything and Everyone, Anywhere



GDPR EXPLAINED

# Key Management



# Why Key Management?

- ✧ GDPR States to encrypt data
- ✧ However when encrypting data:
  - ✧ Data is no longer important
  - ✧ But Key Management is!

## GDPR Text

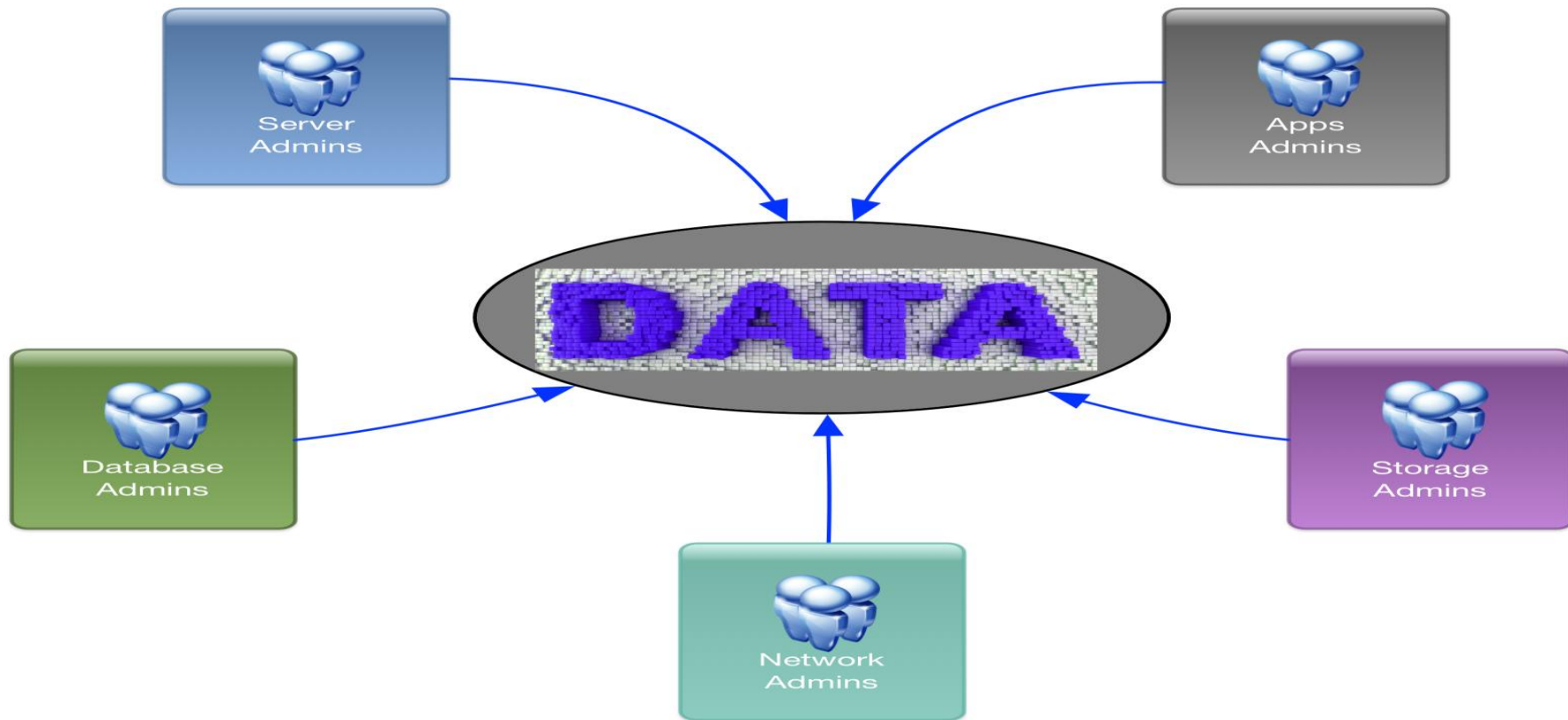
- ✧ SECTION 2: DATA SECURITY
- ✧ ARTICLE 30: Security of processing

1. Having regard to the state of the art, the costs of implementation and taking into account the nature, scope, context and purposes of the processing as well as the risk of varying likelihood and severity for the rights and freedoms of individuals, the controller and the processor shall **implement appropriate technical and organisational measures**, to ensure a level of security appropriate to the risk, including inter alia, to:

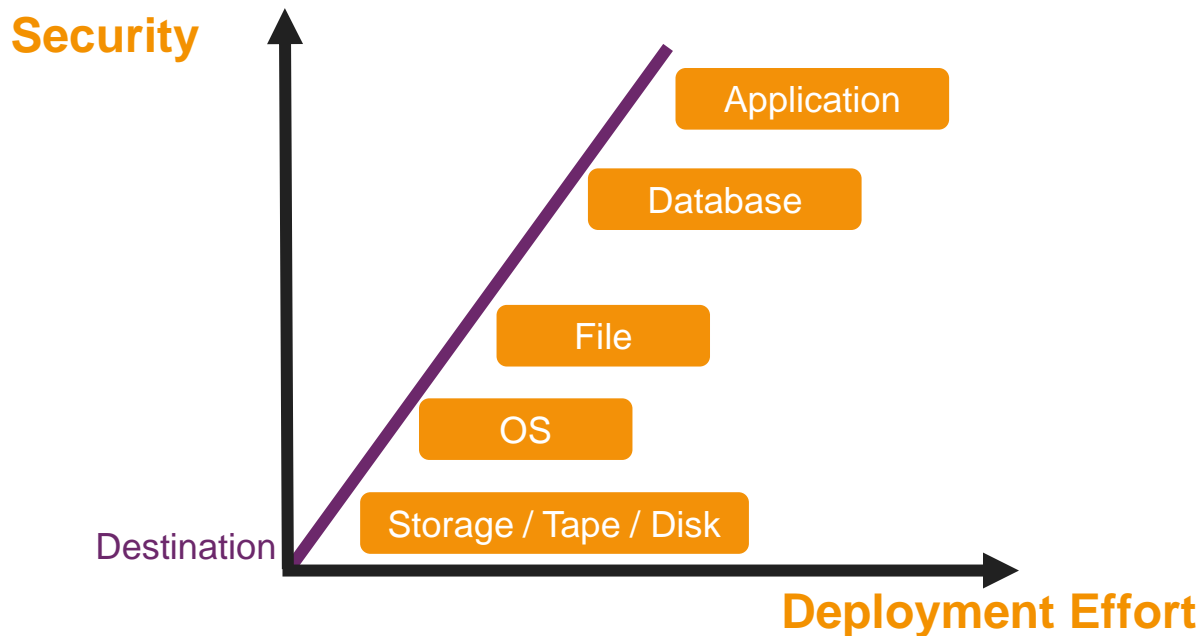
- (a) the pseudonymisation of personal data;
- (b) the ability to ensure the ongoing confidentiality, integrity, availability and resilience of systems and services processing personal data;
- (c) the ability to restore the availability or access to data in a timely manner in the event of a physical or technical incident;
- (d) a process for regularly assessing and evaluating the effectiveness of technical and organisational measures for ensuring the security of the processing.

1a. In **assessing** the appropriate level of security of processing, due regard shall be taken in particular of the risks that are presented by data processing, in particular (i) concerning unlawful destruction, loss, alteration, unauthorised disclosure of, or access to personal data transmitted, stored or otherwise processed.

# Who are you protecting against?



# The Right Kind of Protection

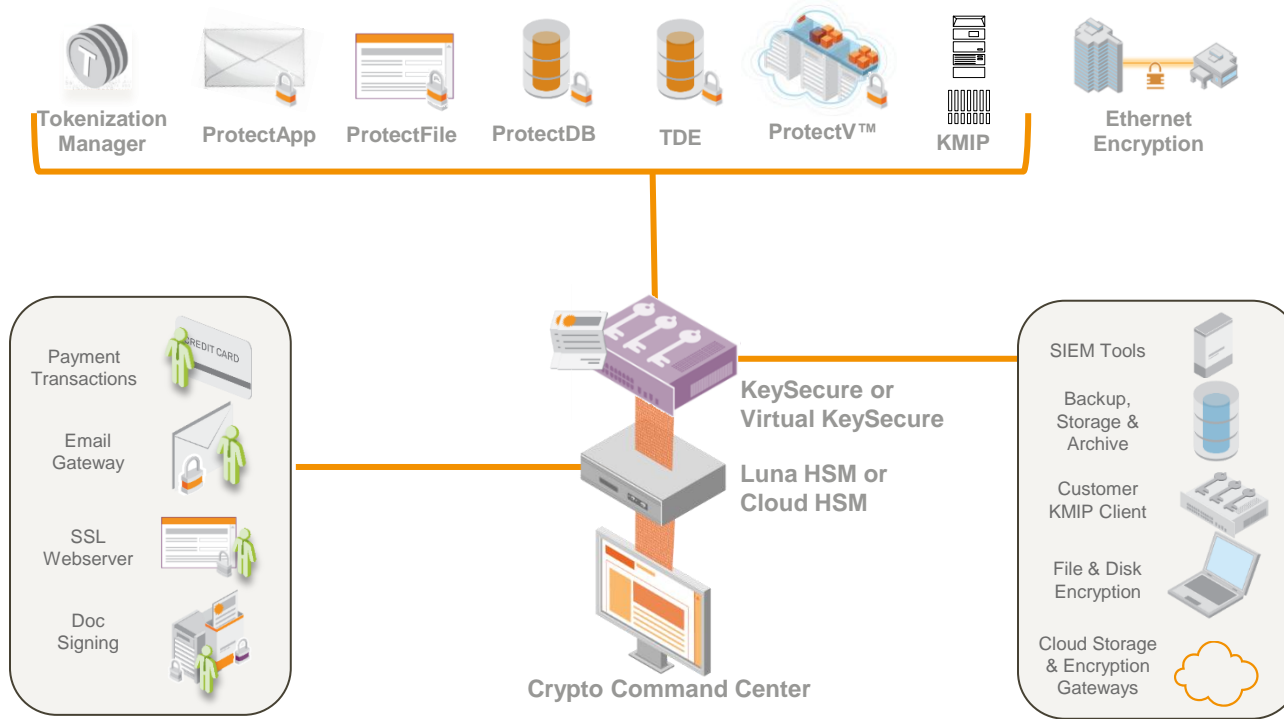


“Many organizations understand the benefits of encryption ... but have difficulty on the question of just where to encrypt the data?”

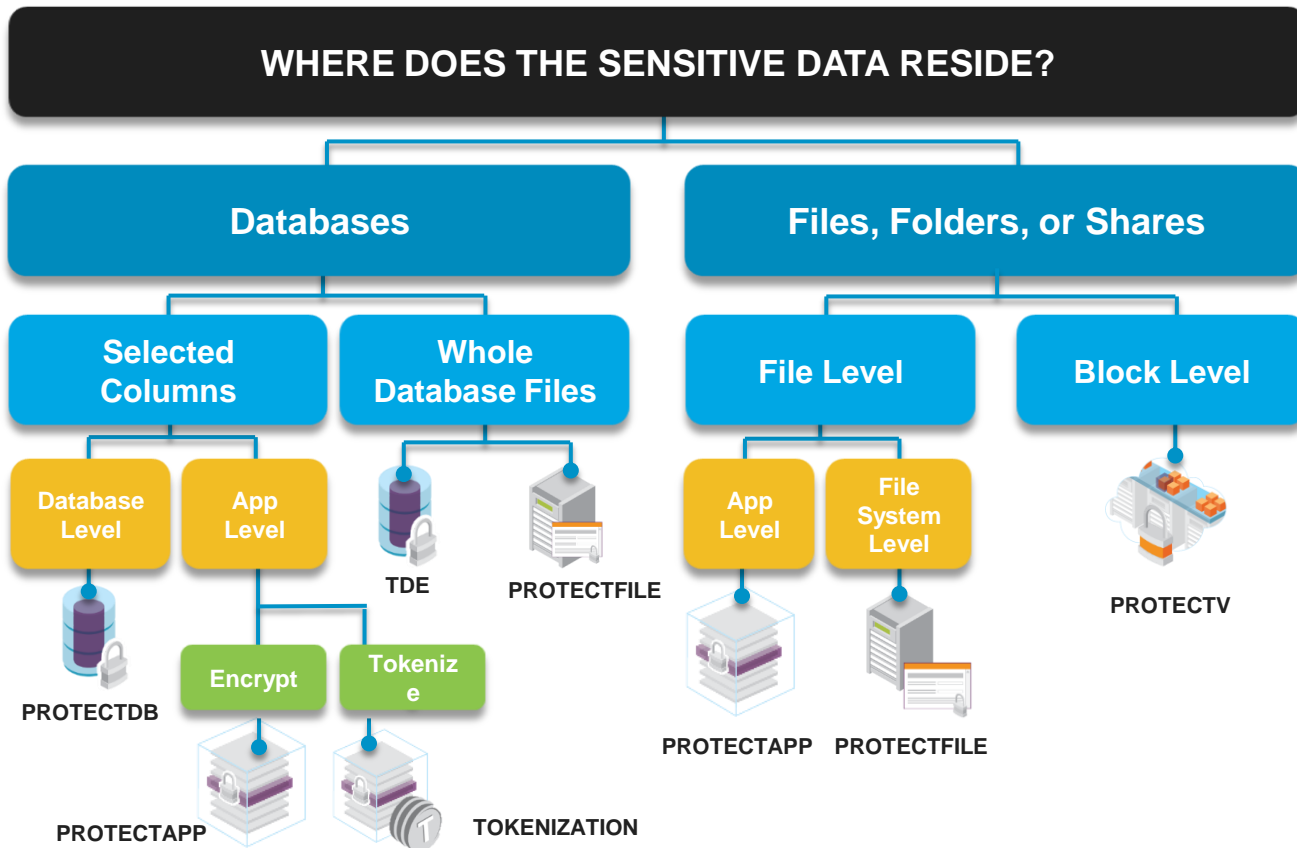
Jon Oltsik, Senior Analyst, Enterprise Strategy Group

# A new mindset

## SafeNet Data Encryption Solutions / Crypto Management Platform



# The Right Connector For Every Use-Case



GDPR EXPLAINED

# Crypto / Data protection

# Why encryption?

- ✧ Lost or stolen data in terms of GDPR
  - ✧ Only breach notification
  - ✧ No user information duty
  - ✧ No secrets revealed
  - ✧ No bad publicity
- ✧ Less business impact
- ✧ Breach prevention

# Top HSM Use Cases

## ✧ Public Key Infrastructure



Microsoft



Entrust Datacard



EJBCA  
PKI BY PRIMEKEY



GlobalSign



Symantec  
VeriSign

## ✧ Transparent Data Encryption



## ✧ SSL/TLS Private Key Protection



Blue Coat



OpenSSL  
Cryptography and SSL/TLS made easy

IMPERVA



## ✧ Code Signing



Symantec

## ✧ Data Protection for Cloud Apps



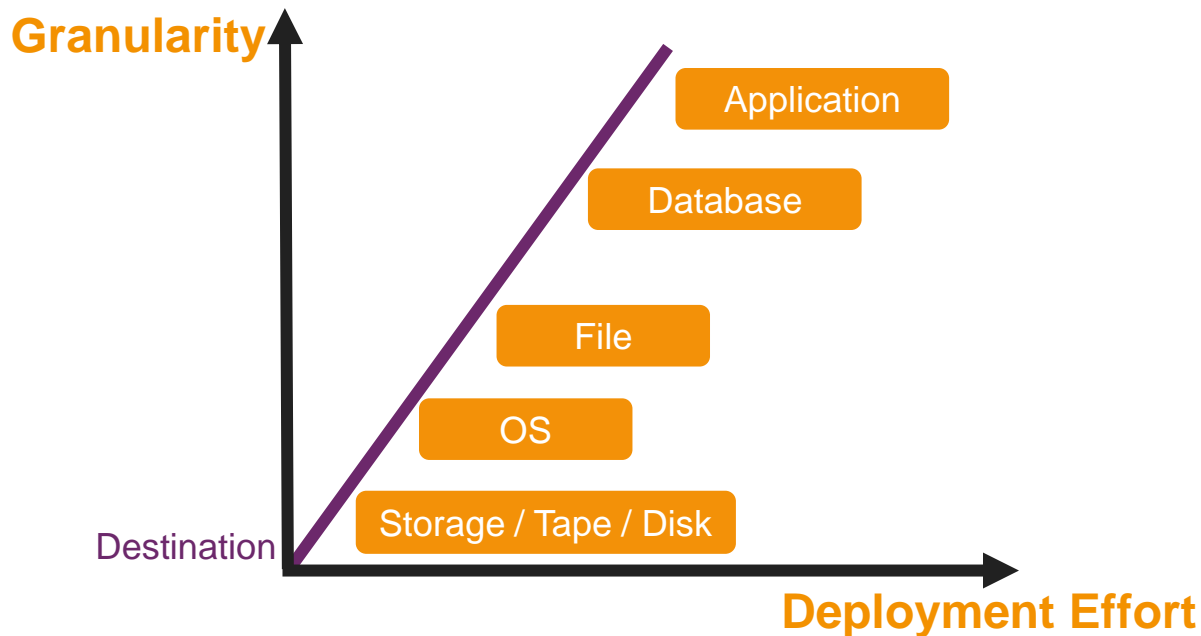
CLOUD FOUNDRY



openstack



# Threats vectors



“Many organizations understand the benefits of encryption ... but have difficulty on the question of just where to encrypt the data?”

Jon Oltsik, Senior Analyst, Enterprise Strategy Group

Just to avoid this ...



<https://www.c-span.org/video/?c4578124/opm-ssn>

GDPR EXPLAINED

# Questions?

GDPR EXPLAINED

Thank you