

# Key Management Ensures Sustainability in the Digital Transformation

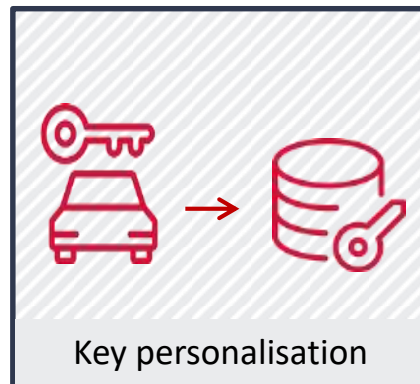
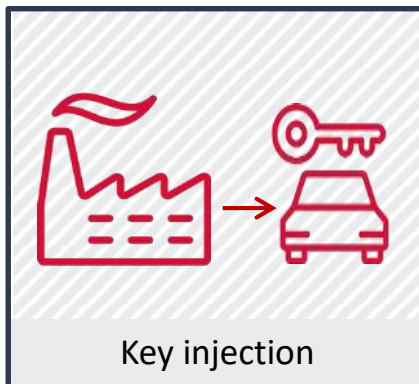
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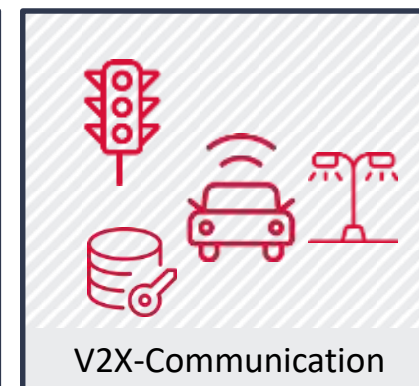
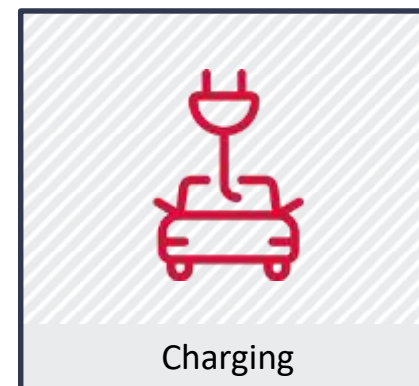
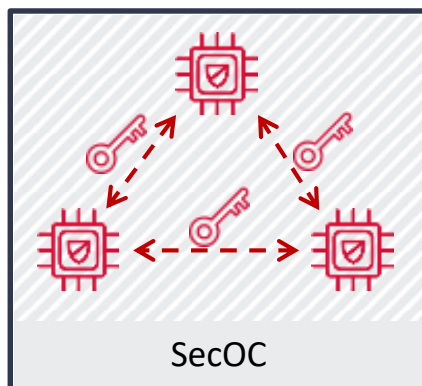
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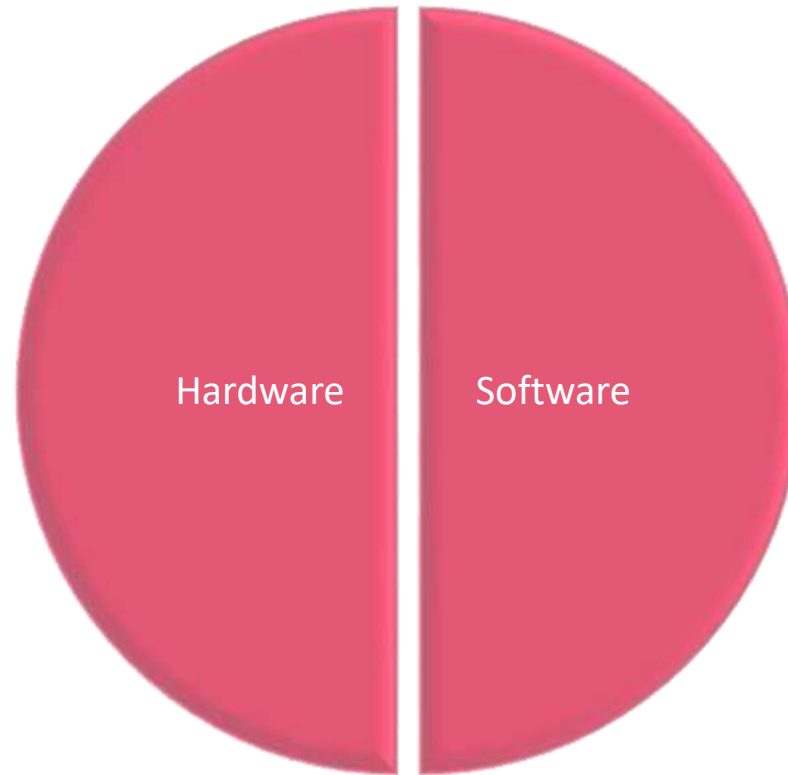
# Public Key Infrastructure (PKI) – typical use cases



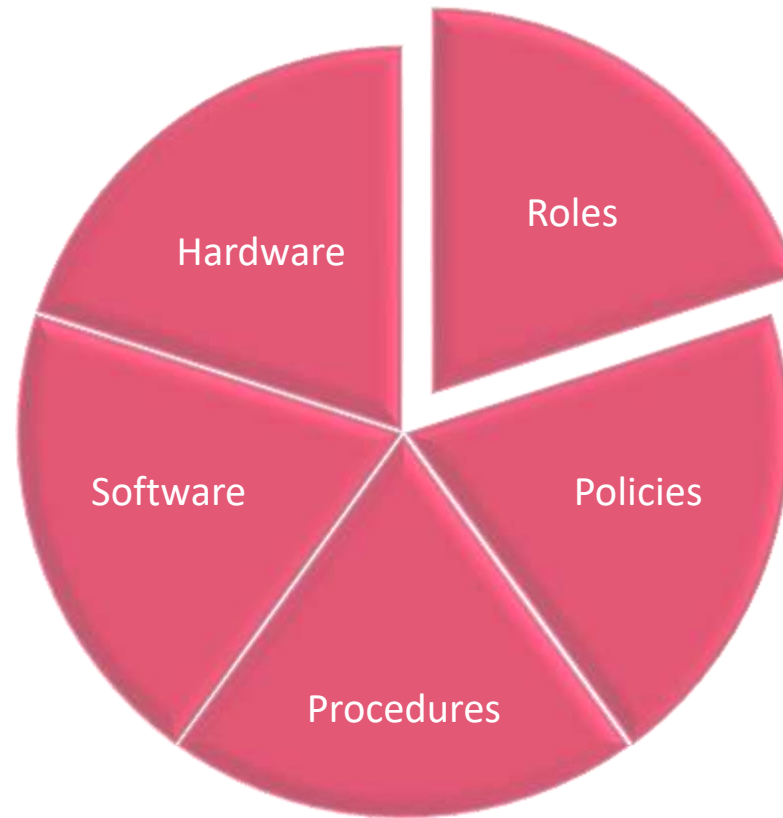
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eID PKI Suite



# What people think PKI is...

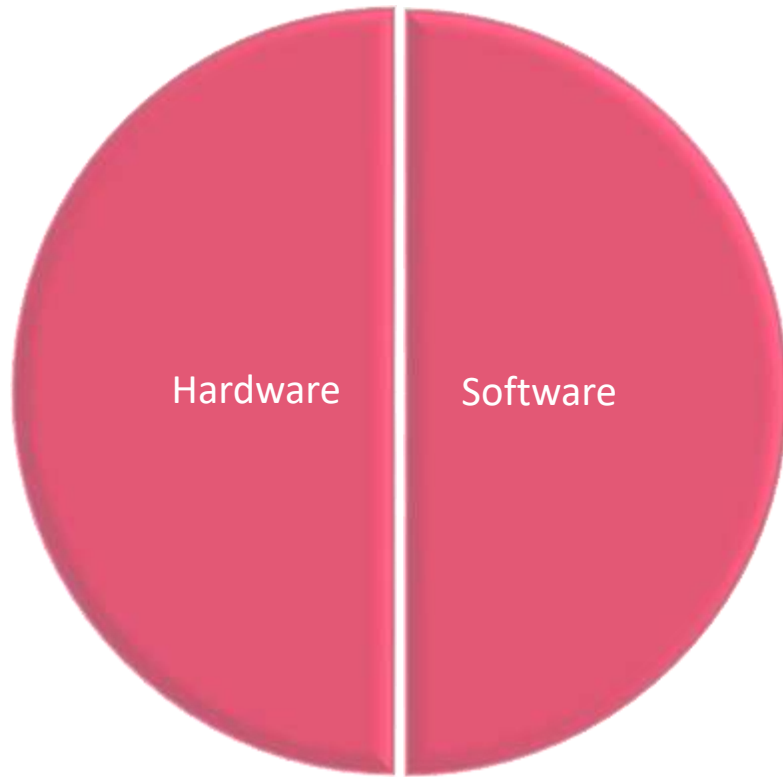


# What PKI actually is...

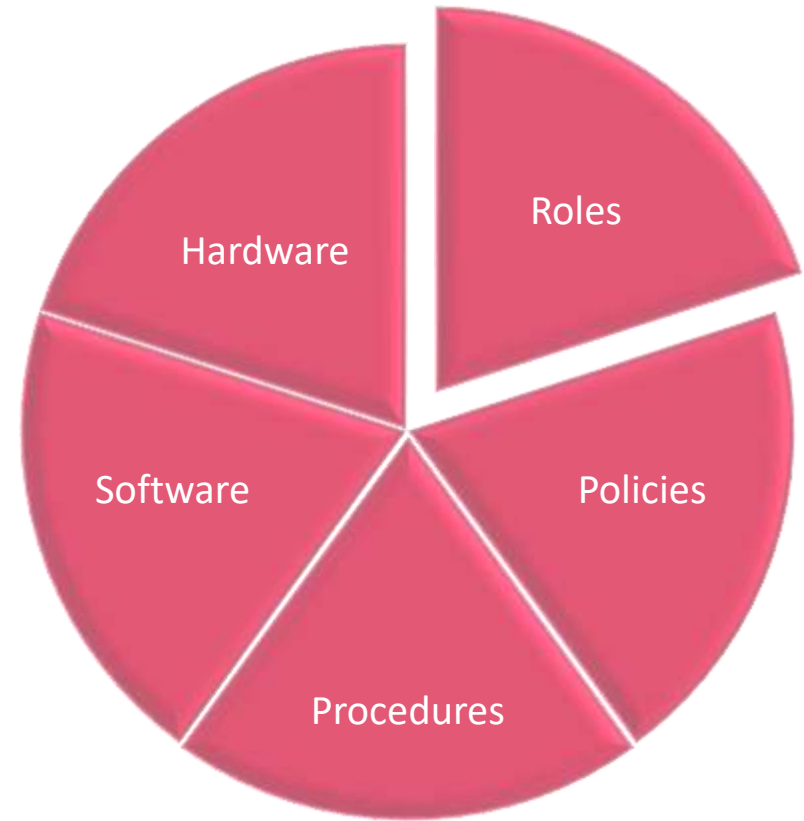


*“A public key infrastructure (PKI) is a set of **roles, policies, hardware, software and procedures** needed to create, manage, distribute, use, store and revoke **digital certificates** and manage public-key encryption.” - Wikipedia*

# Certificate Management System (CMS) vs. Public Key Infrastructure (PKI)



**CMS**



**PKI**

# What is a certificate?

*A certificate is the **representation of the trust in the PKI.***

*Trusting a certificate means  
**trusting the roles, policies, hardware, software and procedures  
defined by the PKI.***

# CMS = Hardware + Software

## Hardware

- Where are central components of the PKI **hosted**?
  - VMs, Cloud, ....
- Where are **keys stored**?
  - HSMs, databases, ....

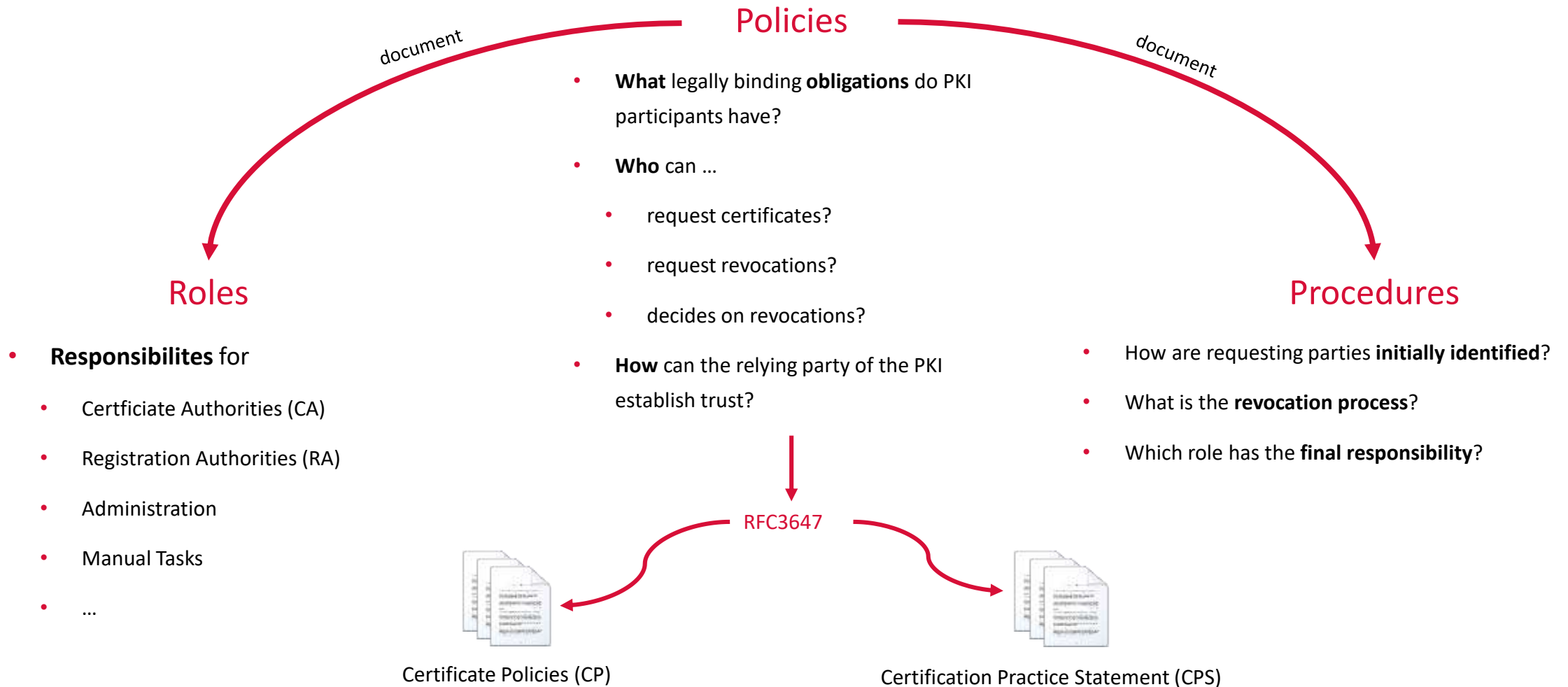


## Software

- How are **certificates** and **certificate authorities** (CAs) ...
  - created?
  - deleted?
  - revoked?
- How to **interface** the PKI?
  - administrators
  - devices



# PKI = CMS + Roles + Policies + Procedures





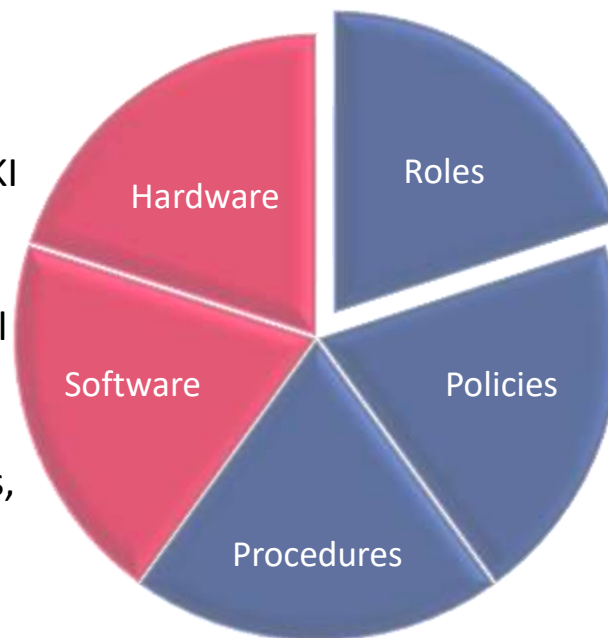
## Money, resources, and expertise

- Big Companies run full CMSs or PKIs internally
- SMEs struggle to build, run, and maintain a full CMS or PKI → need to outsource

## secunet Managed CMS

(in development)

- Covers the hardware and software of the PKI as an **external service provider**
- secunet **hosts** and **administers** the technical part of the PKI for the customer
- Customers still need to define roles, policies, and procedures



## secunet PKI as a Service

(in development)

- secunet Managed CMS
- secunet defines and manages roles, policies, and procedures for customers

# secunet eID PKI Suite

- Since **2009**
- **Operate** and **manage** a CMS/PKI
- Supports **X.509** and **CV** certificates
- **National** and **international** customers
  - Electronic identities & border control  
9 European countries & the EU itself
  - Critical infrastructure
  - Industry 4.0



# Contact



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