



**PrimeKey**



# Hybrid PKI: Solution for IoT

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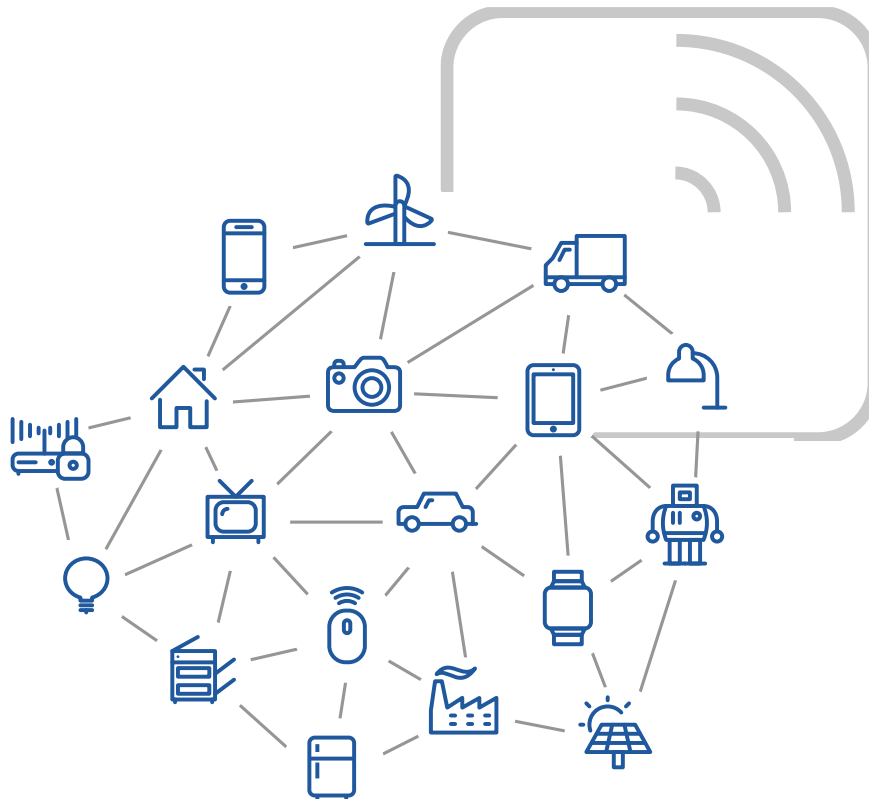


**Worldwide IoT security spending to reach \$1.5 billion  
in 2018** (Gartner)

**PKI is gearing up for IoT, defacto standard on  
Internet and it will be the same for IoT** (PrimeKey)

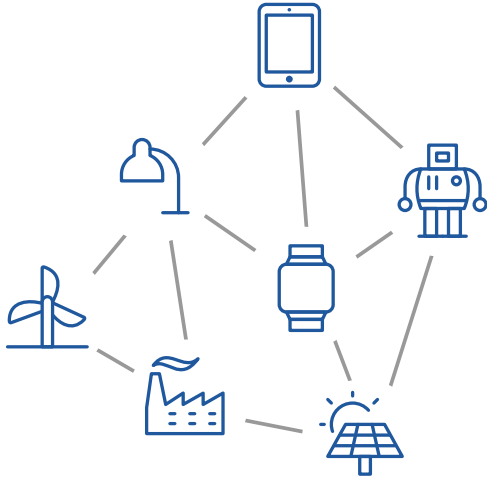
# IoT is diverse

- There is no such thing as *one-fits-all* in the IoT universe.
- Many different technologies and many different products will be deployed for different IoT use cases.
- We focus on the security/PKI aspects for those who build IoT solutions.

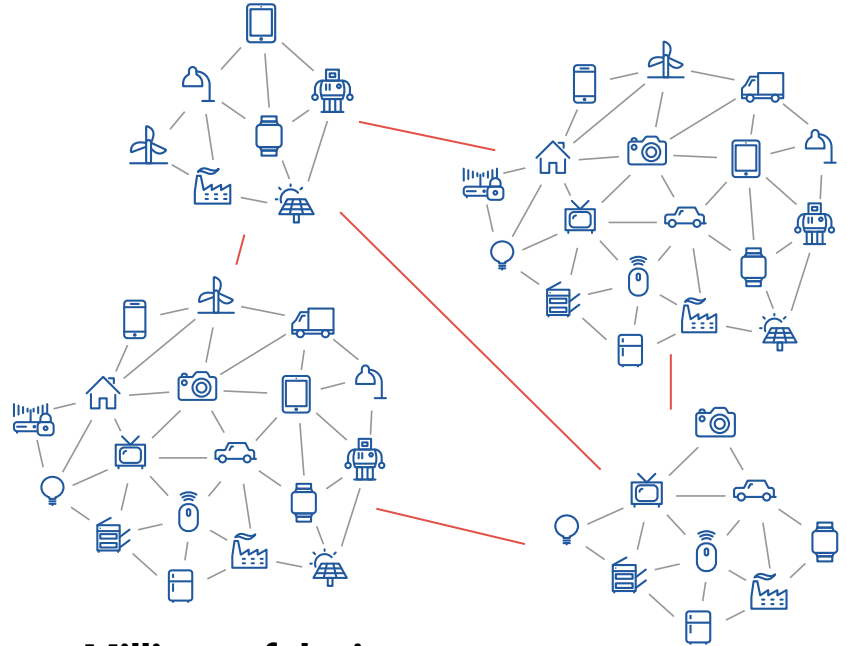




# Then number of devices can grow quickly



5-10 connected devices ...



Millions of devices...



# IOT use cases and PrimeKey customers

Automotive



Finance



Industry/ Energy



Telecom/LTE



MOTOROLA



NOKIA

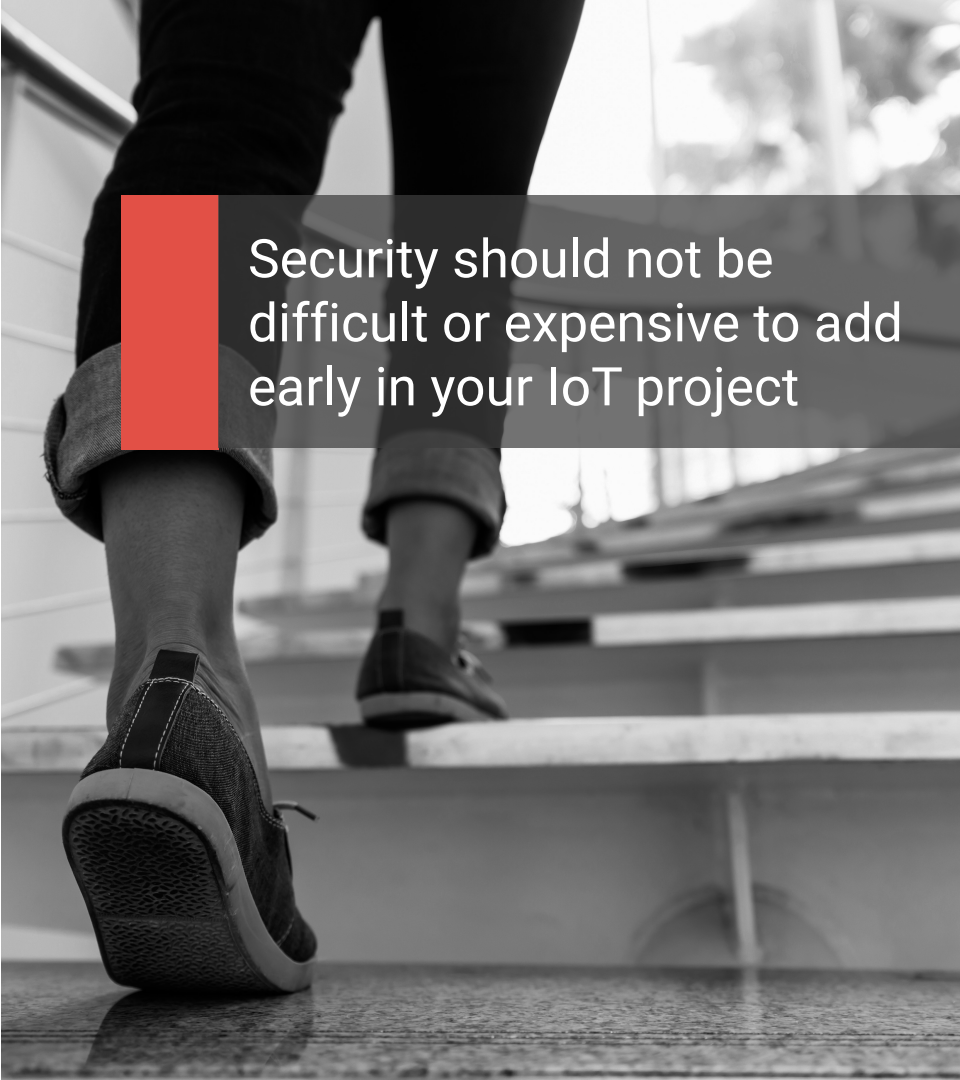


Health



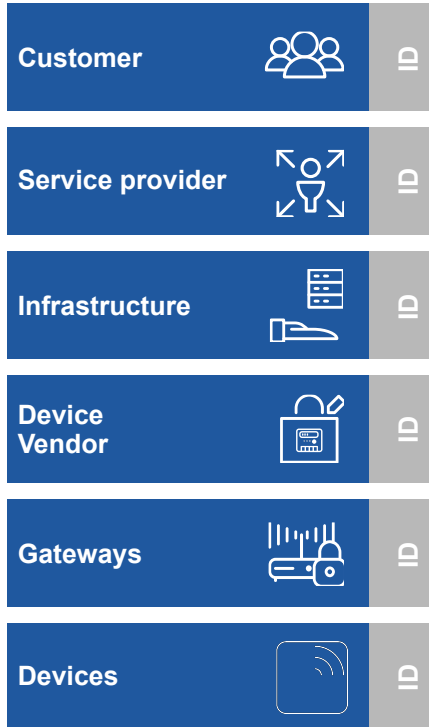
# Small Start

- Easy to get started
- Scale with your business case
- Based on open, flexible and multi-tenant infrastructure components – many stakeholders – new eco-systems
- Control and peace of mind



Security should not be difficult or expensive to add early in your IoT project

# Complicated and sometimes Immature IoT Eco systems



- Multiple players stakeholders
- New business models
- Operations and maintenance
  - Devices shifting owners
  - On-premise, as a service or hybrid
- Standard and Compliance requirements

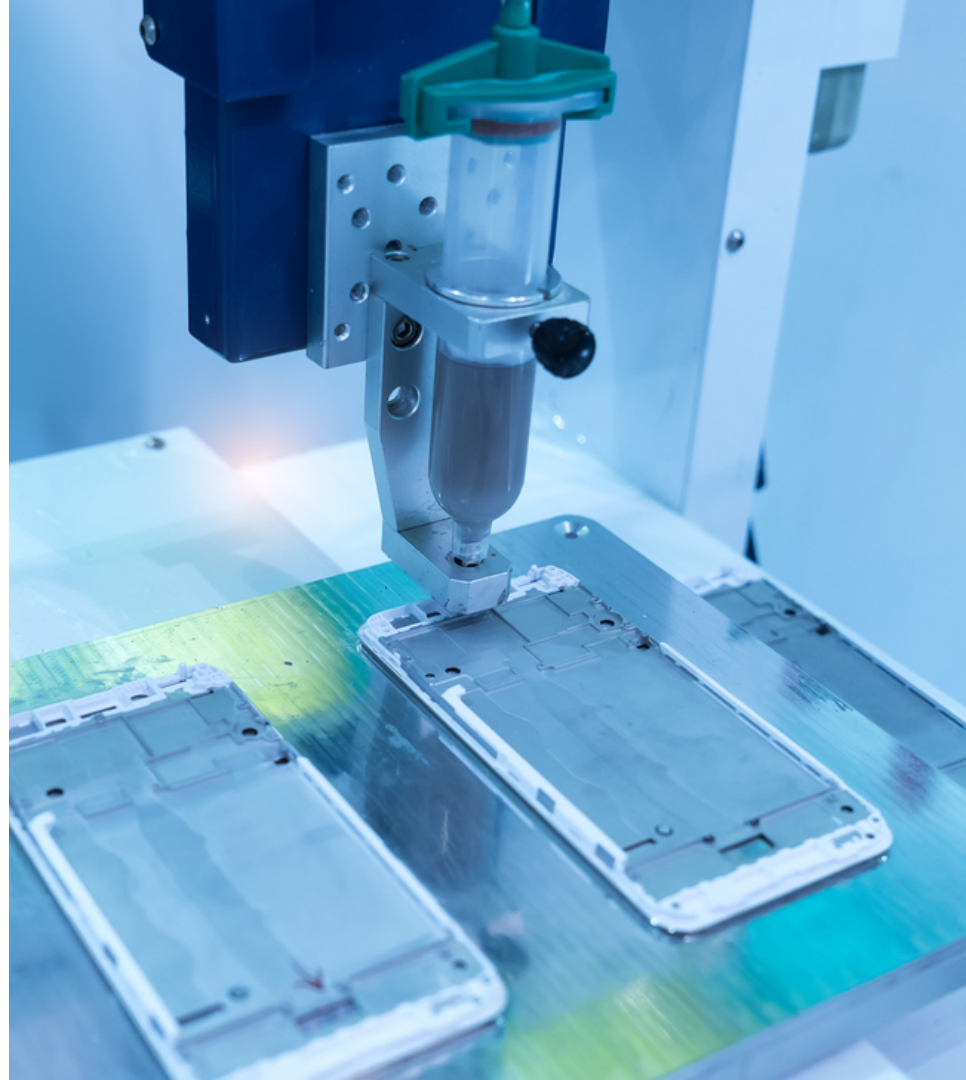




# What do our Customers ask!

Requirements we received in IoT Projects:

- Worldwide location
- Online RA for self registration
- Load peaks
- PKI Solution for OT & IT
- High availability
- Integration in to existing solution
- ...



## On premises

existing Root CA



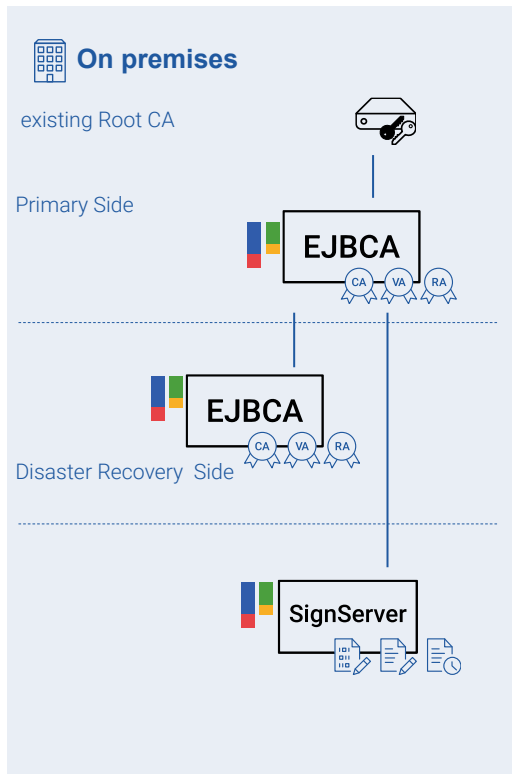
Open Source



## Project Log

- Starting Point: OpenSource for trial.

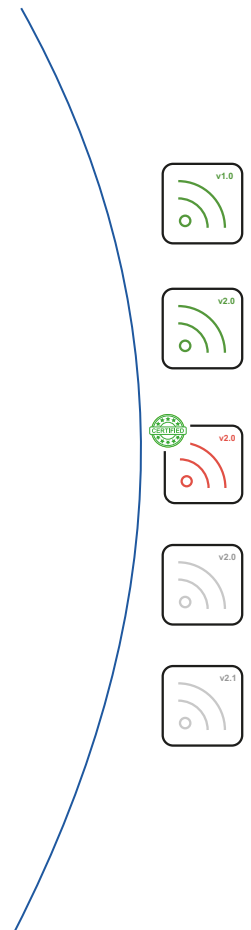
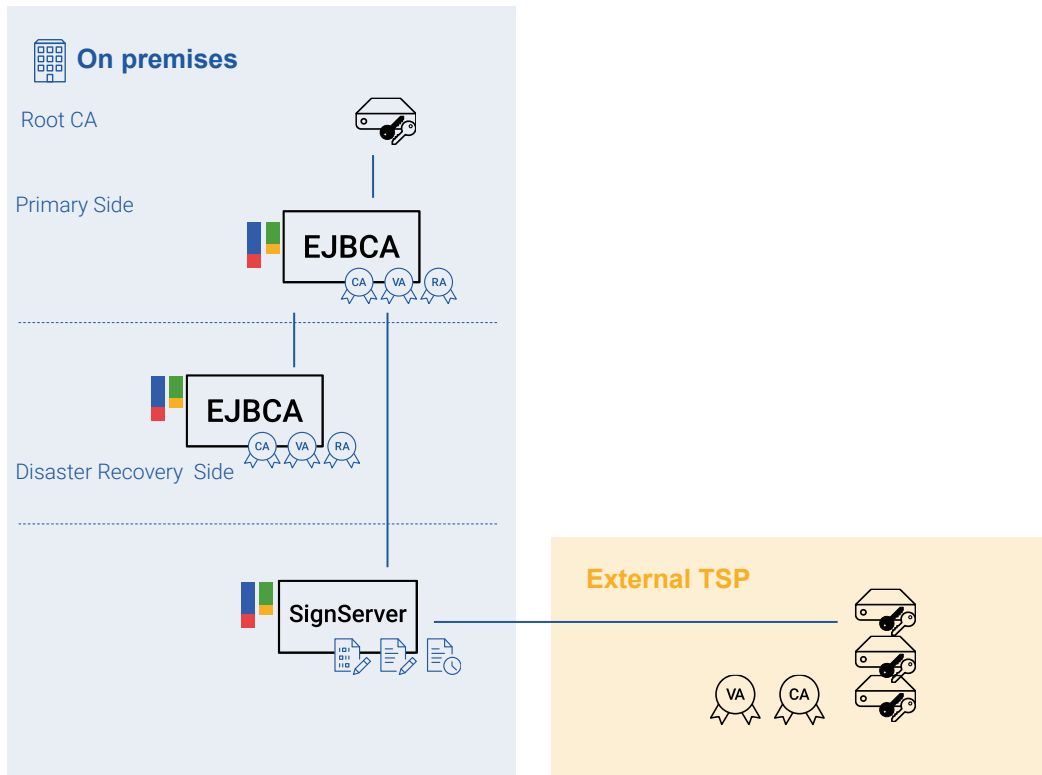




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- Starting Point: OpenSource for trial.
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- 



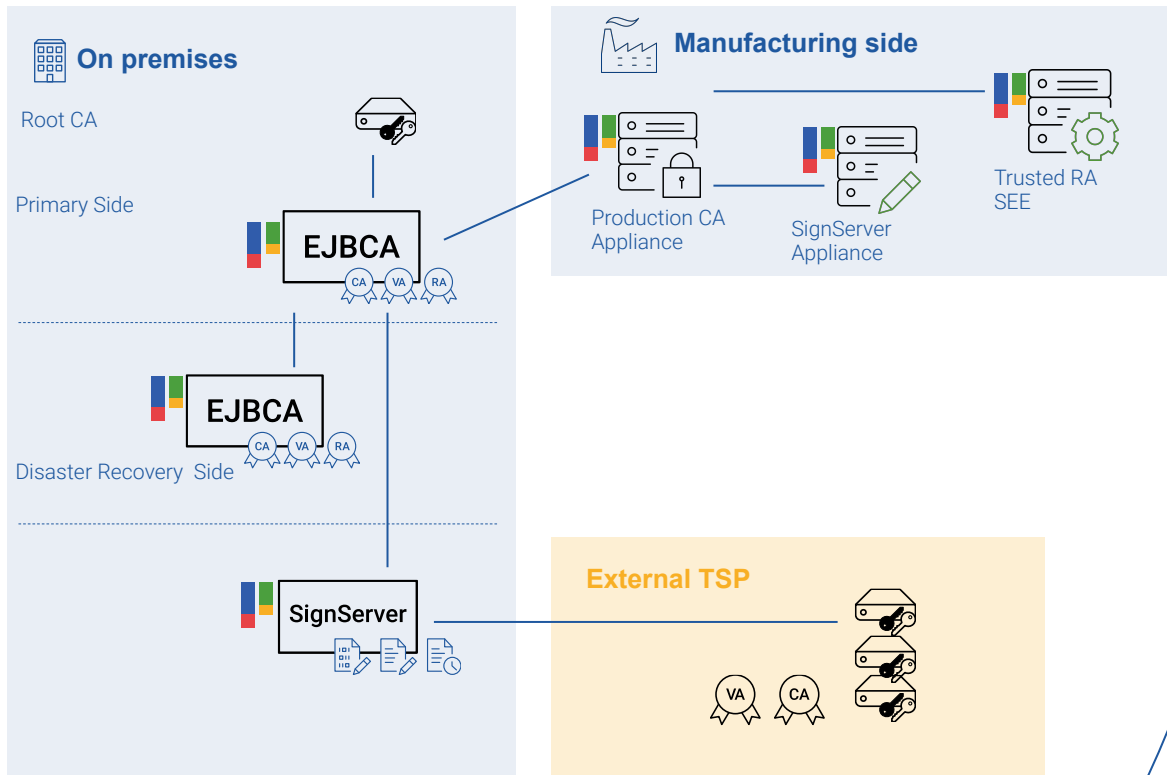


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- Starting Point: OpenSource for trial.
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- Additional Signature generation Service
- Connect with external TSPs, to connect the OT with the IT world



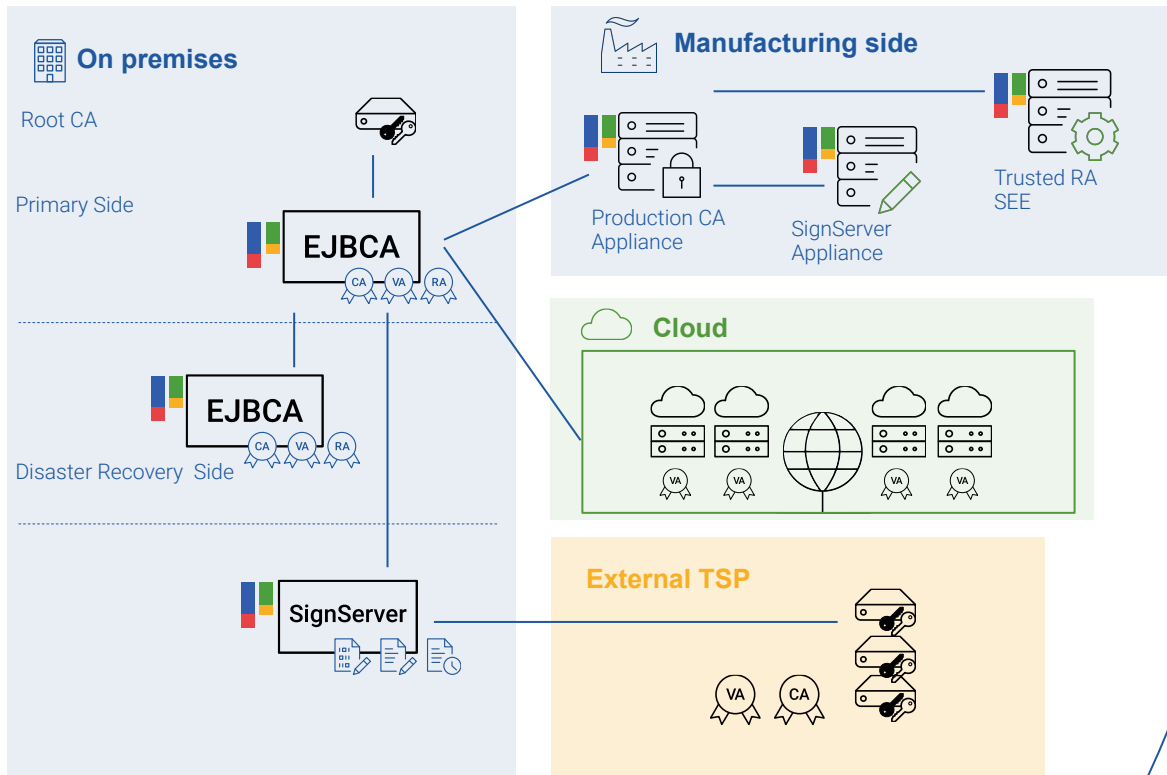




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- Connect with external TSPs, to connect the OT with the IT world
- Setup the different Manufacturing site with issuing CA, during production
- Install Signatur Service for Firmware and Software protection
- Device registration during production in uncontrolled environment
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- Setup the different Manufacturing site with issuing CA, during production
- Install Signatur Service for Firmware and Software protection
- Device registration during production in uncontrolled environment
- Validation Services all over the World with high load during dedicated time-slots
- ....



# The wheel is already invented!

## Conclusion

- The core technology is there !
- "Hybrid deployment" is the key to success !
  - Future Scalability
  - On demand deployment
  - Flexible Integration





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