P3KI Core enables your devices and services to trust each other – comparable to how humans do – and do so in fully decentralized and offline scenarios. For the first time it's possible to secure machine-to-machine communication in a way that still works during outages and even enables you to not only issue new trust but also communicate it, allowing you to stay operational when it really matters.

P3KI Core allows you to handle tasks not currently efficiently possible: safely and digitally unlock car sharing vehicles parked in underground parking lots, end-to-end authorized IoT device on-boarding processes, reliable sub-contractor authorization, delegatable physical access control with network-on-card communication, and many more.

P3KI Core is built around a Web-of-Trust architecture to offer ultimate flexibility for modelling your scenario. You decide how precisely you need to express trust. This can be delegations of arbitrary permissions, roles, and capabilities within your application. P3KI Core then takes care of the details based on a system founded in solid, mathematically proven Trust Policy Languages which ensure that you're able to delegate at most what you're trusted with yourself.

Any P3KI Core user can use their peer's delegations to form proofs of certain trust relationships existing. These proofs are fully offline verifiable, without the need for any additional central or online authority.

Our technology is based on research that started in 2006, produced two best-of-class diploma theses and has been under active development since 2014 by a growing consortium of partners encompassing five companies and an accumulated 30 years or work. It's the brainchild of internationally renowned cyber security researcher and whitehat hacker Felix 'FX' Lindner and is strongly informed by decades of experience[1,2,3,4,5,6,7] doing cyber security consulting[8] for large multi-nationals from the automotive to telecoms sector.

P3KI Core is fully transport agnostic. You decide how to store, exchange, and communicate trust based on your scenario's specific requirements. Making your solution work as a decentralized and offline-capable system is as simple as four easy steps:

- We analyze your requirements and existing solutions to identify how your systems can best benefit from P3KI Core.
- We design a custom Trust Policy Language that fits your requirements like a glove.
- You add our library or service to your system to gain decentralized access delegation.
- You get exclusive access to our latest Solution Engineering Tools as they become available to help you operate your system more easily and gain valuable insights.

We support a vast number of platforms from low-power ESP32[9], the ubiquitous ARM-based Raspberry Pi,[10] mobile phone platforms like Google®Android®or Apple®iOS®, to enterprise server hardware and cloud systems. You can either directly integrate our easy-to-use software library or pick our deployment friendly RESTful[11] microservice that will feel right at home in your microarchitecture.

To arrange for a complementary initial workshop, call Gregor Jehle at +49 (0)711 2205 1252 or send an email to gregor@p3ki.com.

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[2] https://www.youtube.com/watch?v=fZAs9M-gLbE
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