



62443 A Force Bringing IT and OT Together

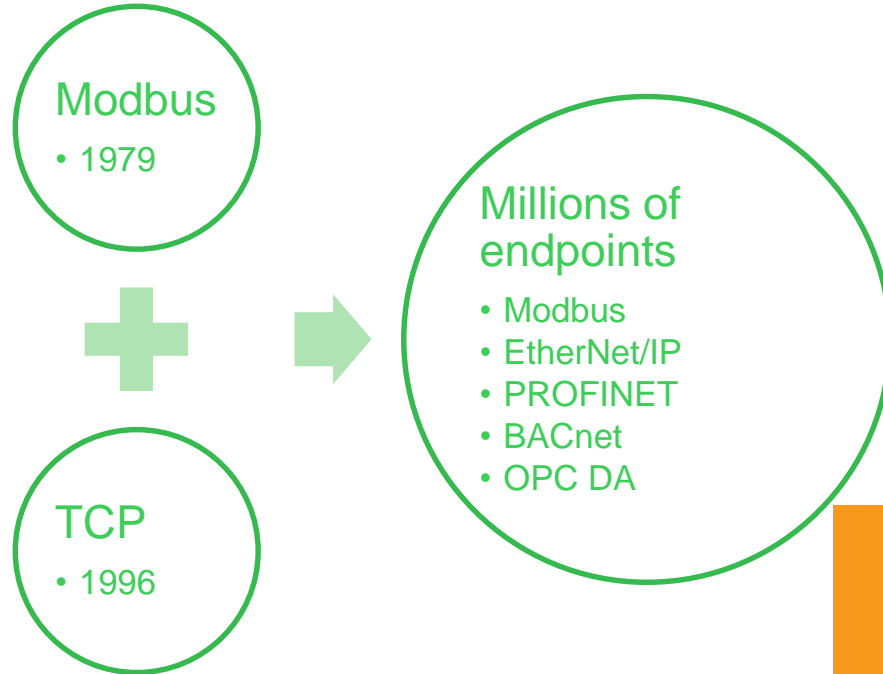
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In the beginning there was Modbus

And then we added Ethernet



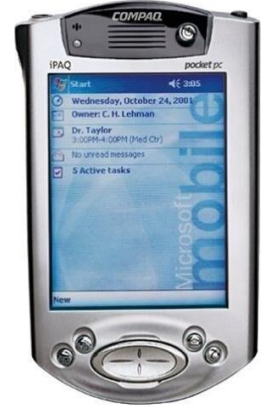
Life Is On



...In the beginning there was also the Internet

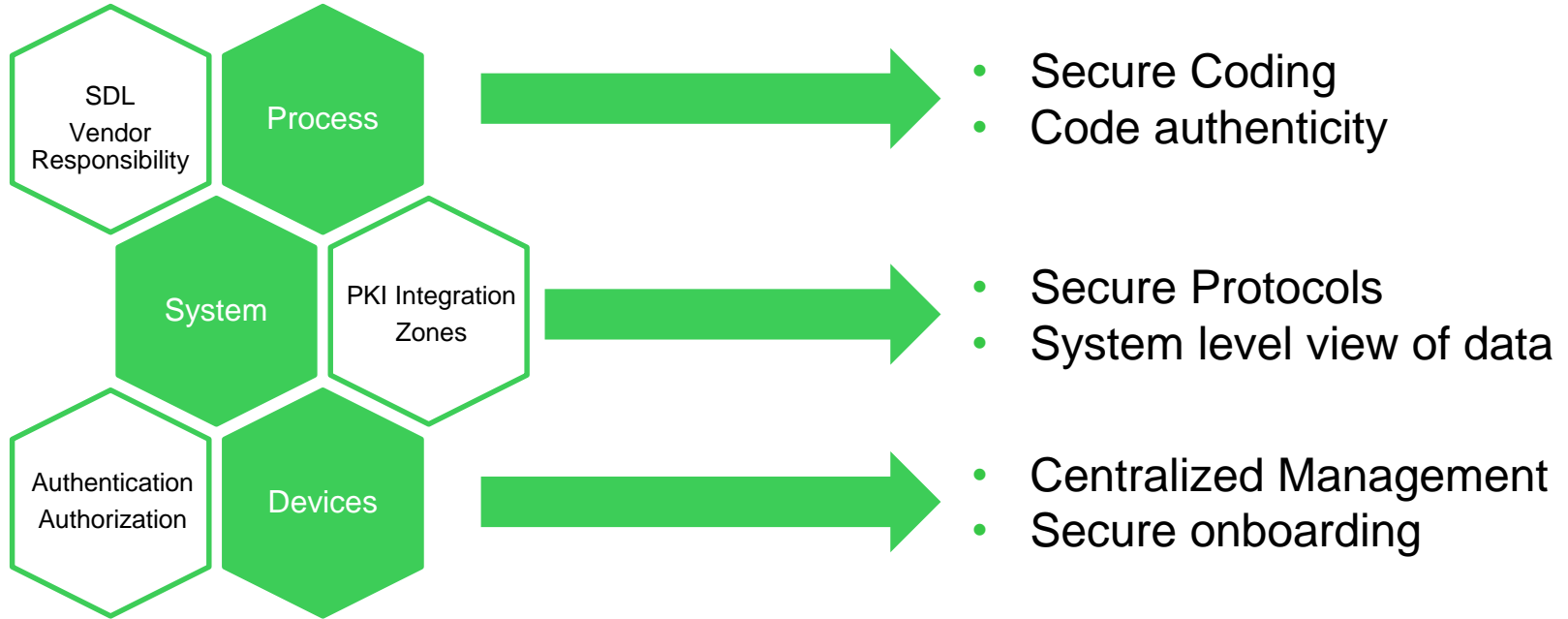


OpenSSL
Cryptography and SSL/TLS Toolkit



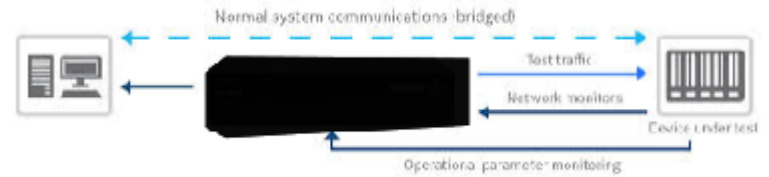
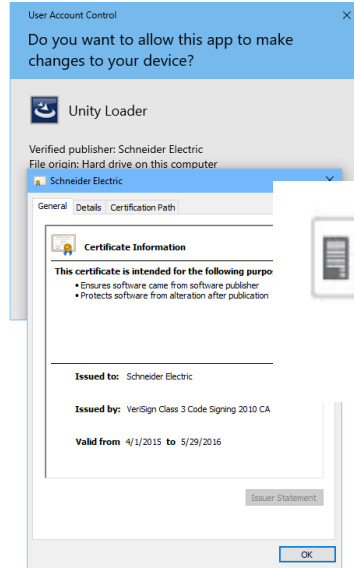
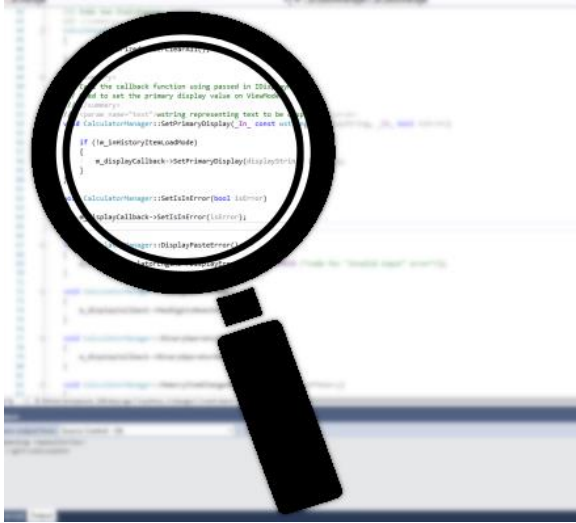
Enter 62443

IT to OT's rescue



OT adapting IT tech

First steps of process



OT adapting IT tech

Protocols and Data



**Entrust
Datacard™**



 Productivity  Reliability  Security  Scalability



OT adapting IT tech

Recognizing reality



Alcoa aluminum refinery



Glen Canyon Dam, Arizona, USA

OT poised to solve tough IT problems

Taming the data geyser

Cities need to become smarter

Urban efficiency delivers liveability and sustainability



IT/OT convergence, not just hardware & software

What we're learning

- IT and OT are equals
- Attack surface can be smaller through collaboration and understanding
- Still learning techniques
 - DevSecOps approaches are still new in IT, should be considered by IT
 - Multi-factor authentication coming into its own in IT, OT can learn much
 - Authentication & AAuthorization such as OAuth 2.0 and OpenID Connect are being adopted

ISASecure and IT/OT Convergence

- ISASecure Conformance Certification is a broad team effort!
- IT teams should be aware of ISASecure conformance requirements and part of the effort
 - Component Security Assurance (CSA)
 - System Security Assurance (SSA)
 - Security Development Lifecycle Assurance (SDLA)
- ISA/IEC 62443 offers excellent guidance that can be used by IT organizations as well

isasecure.org



Life Is On



Schneider
Electric

