Highly Available KNX Networks

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Master Studies:
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Problem and Motiviation

• KNX: Home and Building Automation System used for services like heating, ventilation, ...

• Critical services like burglar alarms, fire detection, access control are based on dedicated solutions

• Unify critical and traditional applications under 'one hood' to reduce maintenance costs

• Problem: no unified concept providing the full CIA-triad AND high availability at disposal

Design Goals

• Provide High Availability for KNX to enable usage in crotocal environments!

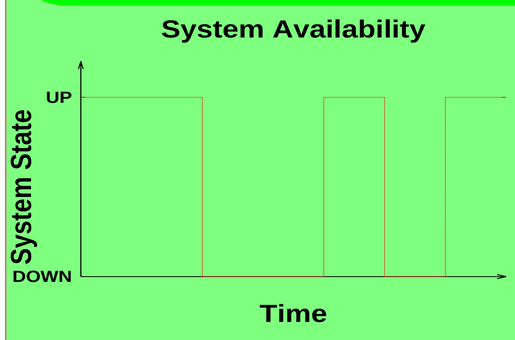
• Also honor Confidentiality and Integrity by implementing strong cryptographic countermeasures

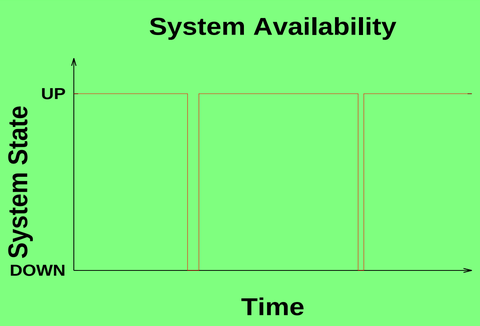
• Keep interoperability in mind by providing a 'plug-and-play' functionality

•Keep protocol overhead small

•Implement a prototype as proof-of-concept

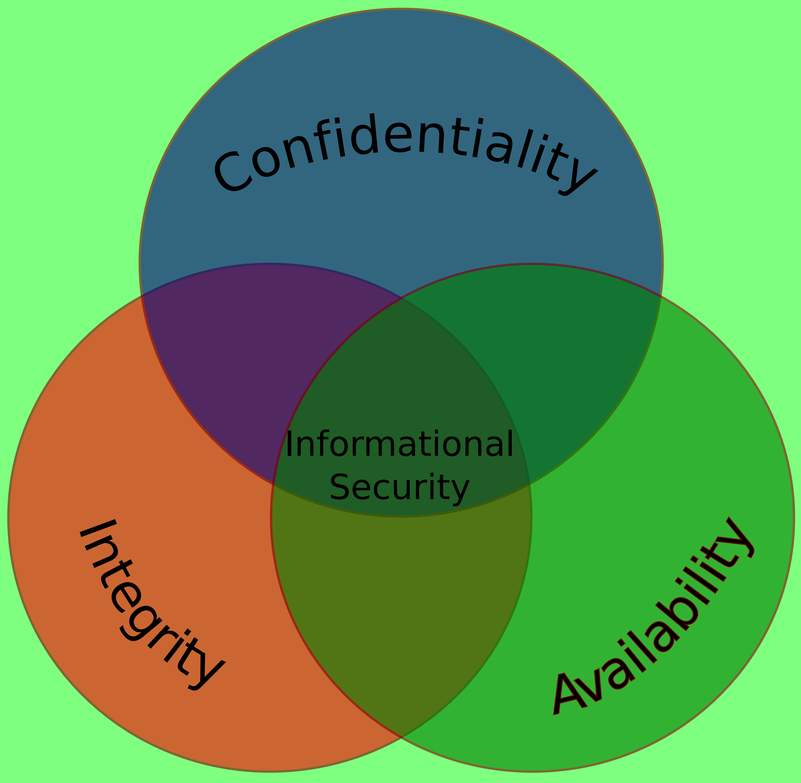
Achieve High Avability!





• Protect against malicous behaviour

• Defend against DOS attacks



Maße:
DIN A0 (841x1189mm)
Header: 190 x 815mm, Rahmen 3pt
Abstand zum oberen und unteren Rand: 12,7mm
Logos: 52 x 195,5 mm

Diese Anmerkungen liegen auf einem eigenen Layer....

Schrift: 30pt, rechtsbündig

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