

Highly Available KNX Networks



Master Studies: Computater Engineering

Harald Glanzer

Technische Universität Wien
IInstitut of Computer Aided Automation
Automation Systems Group
Advisor: Ao.Univ.Prof.Dr. Wolfgang Kastner

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

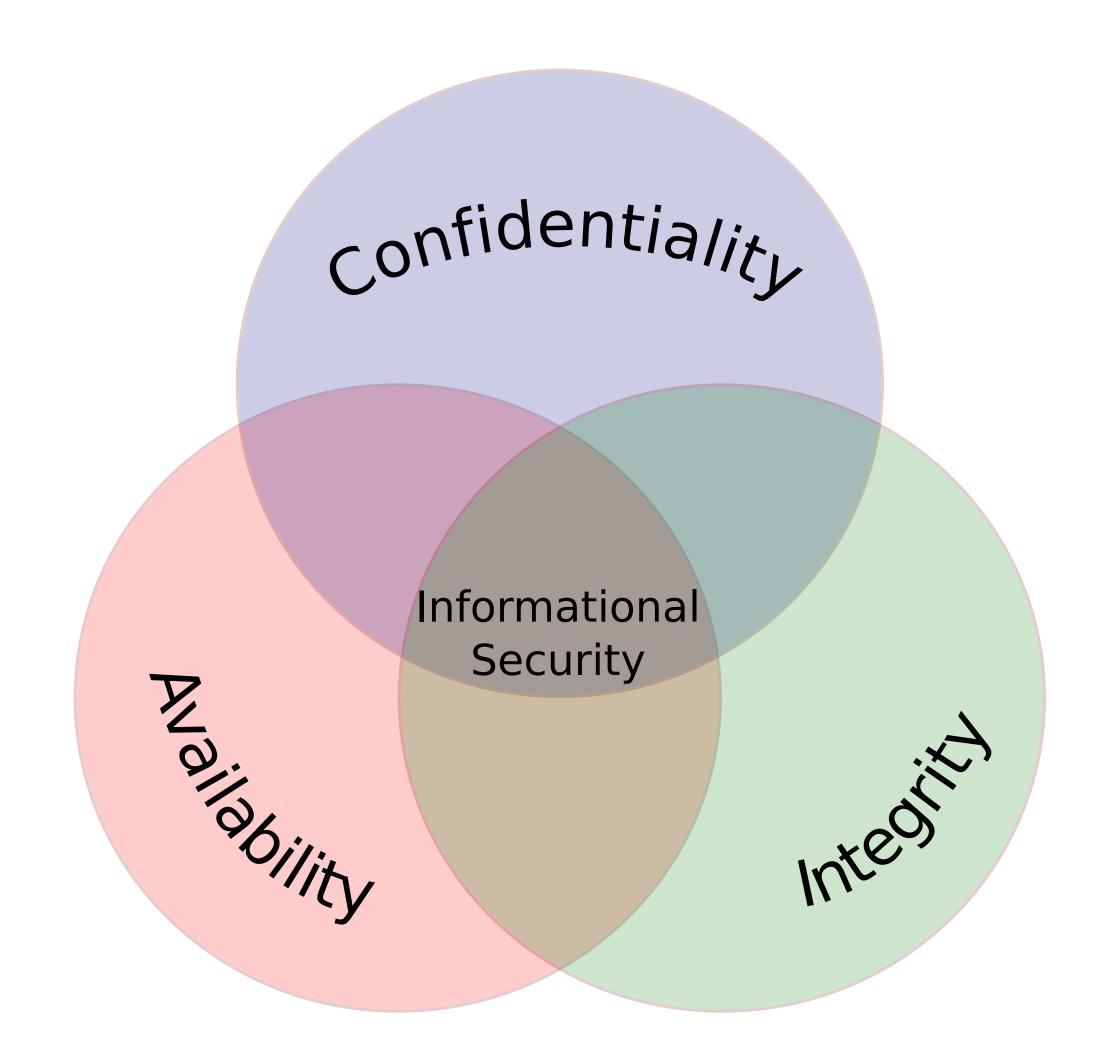
Provide High Availability for KNX to protect against transient HW faults, as well as DOS attacks

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



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....