

## Venture Services Seeheim

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# about

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- founded in 2014 (by Dr. Gunter Kuechler)
- team of 5 people
- intelligent ~~smart~~ home engineering for assisted living
- b2b and b2c solutions for germany and austria (2017)
- bring institutional research in AAL software / hardware to the markets
- integrate IT off-the-shelf products (where possible)
- focus on functionality and core application; utilize modern platforms
- proud member of



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## **motivational aspects**

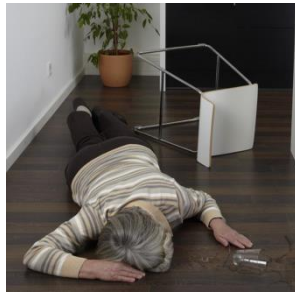
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**1.**

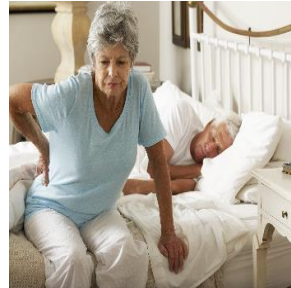
**homes should take care for their people –  
very much as a car today does for his driver**

# motivational aspects

## critical situations



Quelle: igd.fraunhofer.de



Quelle: pflegeleuchtturm.de



Quelle: busch-jaeger.de

apartment



Quelle: schnurloses.net

neighbourhood



Quelle: herzberatung.de

family



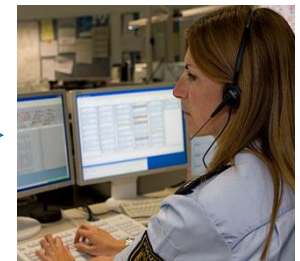
Quelle: assistedhome.de

concierge



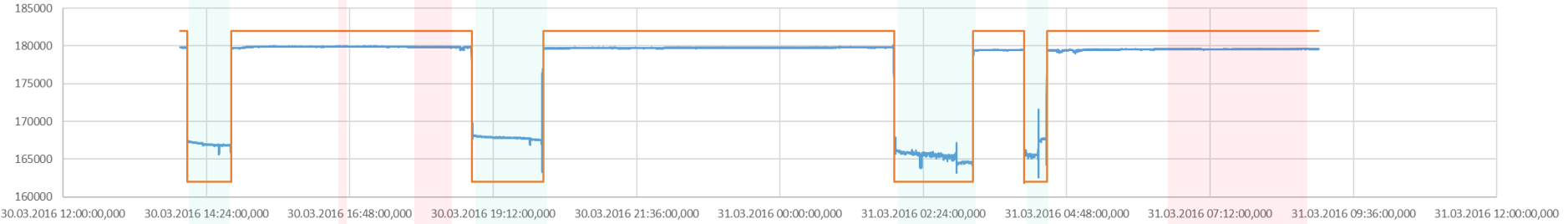
Quelle: savoy-sharm.com

call center

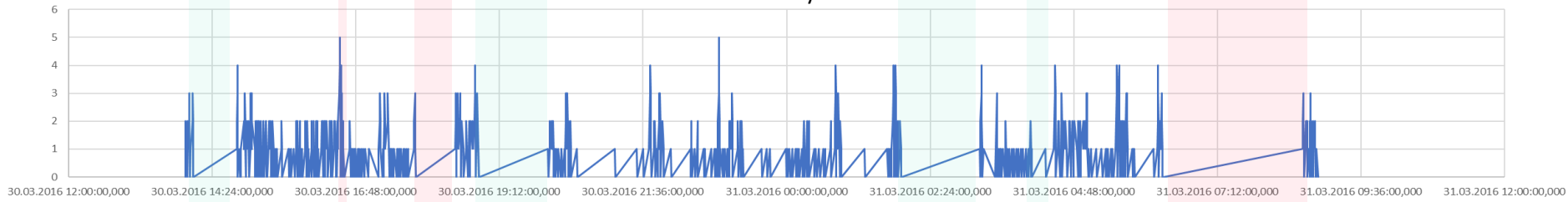


Quelle: baden-wuerttemberg.de

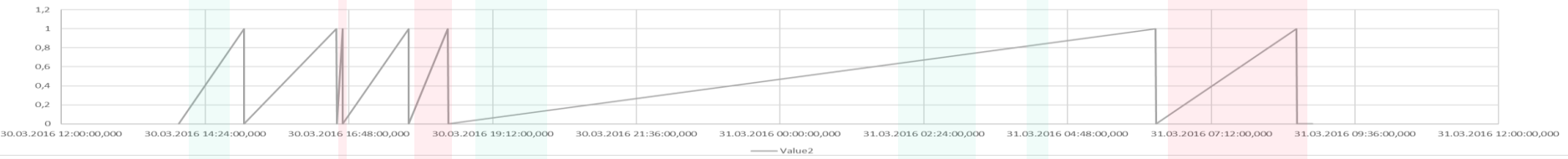
### Bed Occupation



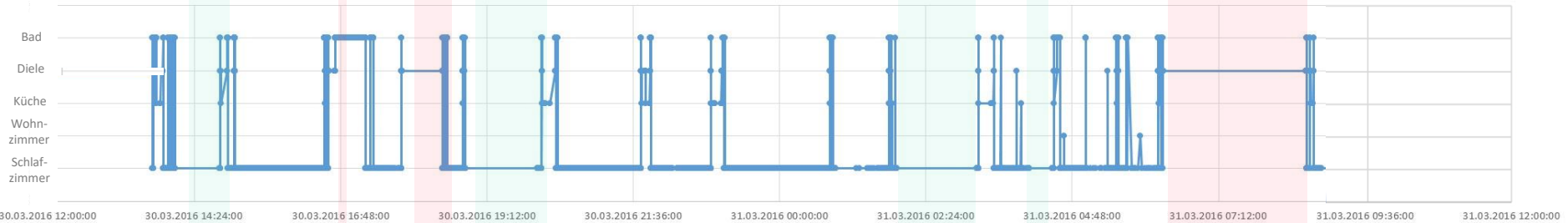
### Activity



### Door Contact



### Motions



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## **motivational aspects**

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**2.**

**my home is my castle – privacy is mandatory**















# motivational aspects

☰ Übersicht




### Sensors

-  Bath
-  Floor
-  Occupation Bed

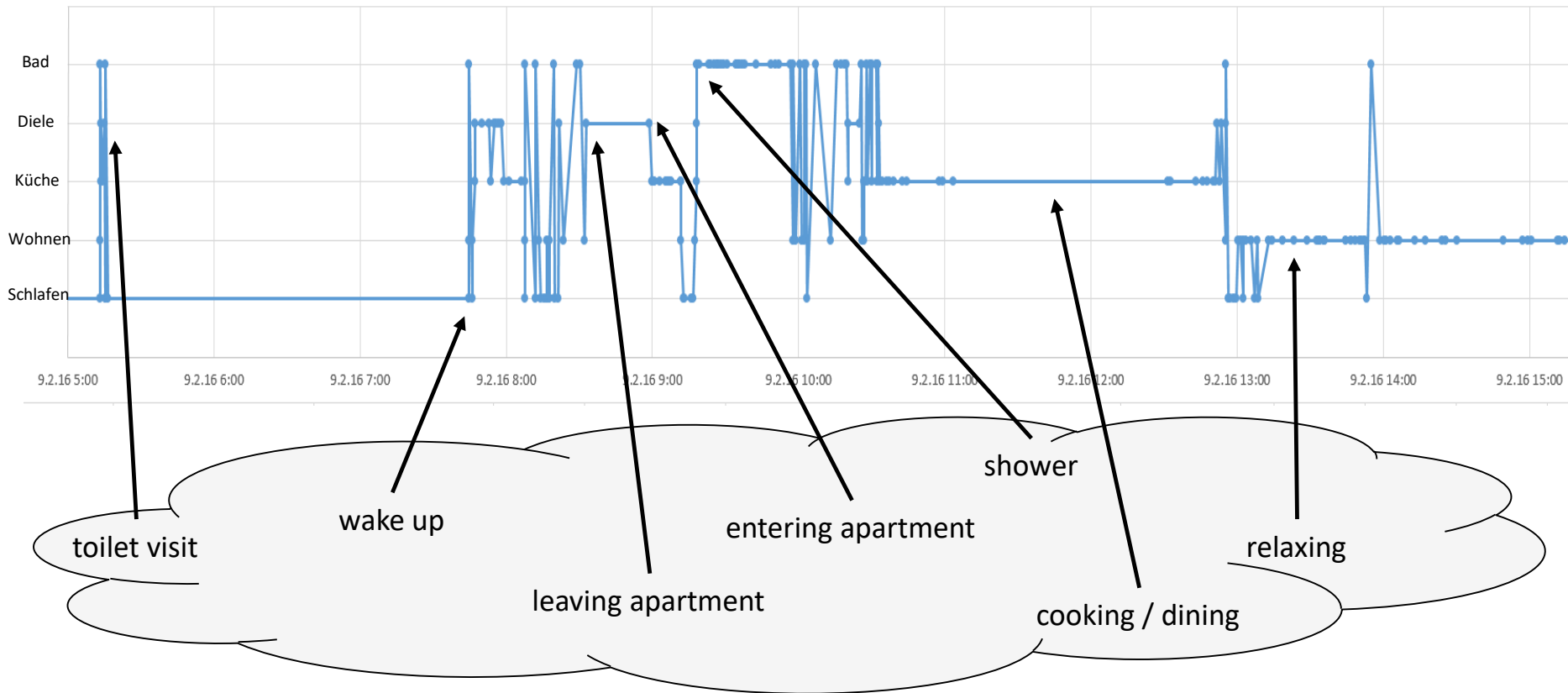
### Light

-  Night Light 1 
-  Night Light 2 
-  Living Room     

-  Sleeping Room     


### Notifications

-  Inhabitant needs help
-  Long Bath Stay
-  No Return to Bed

# motivational aspects





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# companions

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## Assisted Home Solutions

- sales & marketing
- project planning & monitoring



## Fraunhofer IGD Darmstadt

- research in AAL systems & platforms
- collaboration in capacitive and eps sensors



## MartinMajewski.net

- 3d printing specialist
- housing for custom sensor solutions



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## current projects

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### Johanniter-Quartier Rodgau

- assisted living for elderly persons
- 50 apartments with aal instances
- based on OH2 / ESH



### Wohn- und Quartierzentrum Weiterstadt

- fully equipped AAL pioneer building (including an intelligent touch sensitive floor)
- heterogeneous IT infrastructure (universAAL, OH2, WAGO SPS, SIP)



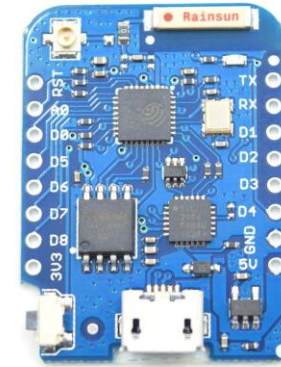
# future topics for openhab2 – SIP binding

- ip telephones become more and more important  
→ DTAG is replacing analogue connections with voip
- asterisk / freeswitch / fritzbox bindings already exist  
however: only status of calls and light switching is supported
- idea:  
use openhab as a ip telephone (maybe over asterisk?)
- good luck finding a powerful open-source SIP library (or s.th. similar)



# future topics for openhab2 – esp8266 binding

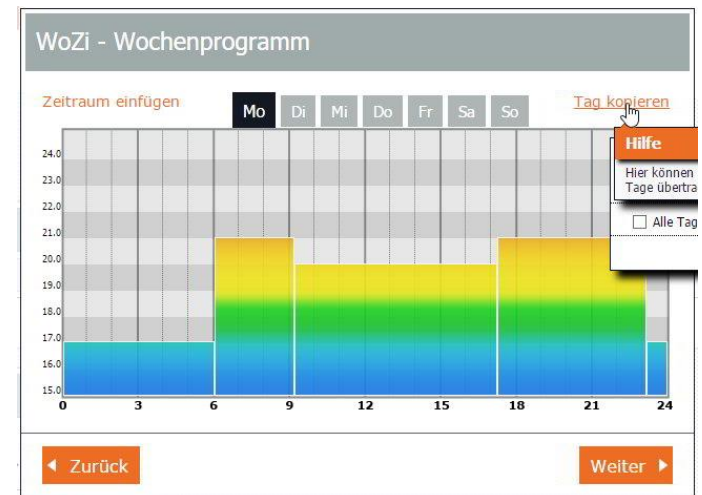
- esp8266 is a cheap iot wifi chip  
→ get wifi on your sensors/actors for 5\$!
- programmable in arduino C  
(amongst others)
- different frameworks / libs available,  
e.g. „Homie“  
<https://github.com/marvinroger/homie-esp8266>  
<https://community.openhab.org/t/framework-homie-for-esp8266/8674>
- but: based on mqtt, no support for pairing / discovery
- idea:  
provide an esp8266 binding with WPS push button support for inclusion
- shortly in development by master student Jan Troester



WEMOS D1 Mini Pro

# future topics for openhab2 – ui for „weekly planning“

- oh2 has different UIs for individual tasks:
  - PaperUI for setup / thing parameters
  - Basic UI for controlling (sitemap concept)
  - HABmin for z-wave networks and charts
  - HABPanel dashboard interface with integrated designer
- no UI (concept) for week plans?
  - heating thermostats
  - rollershutters
  - various household appliances
- at the moment:
  - managed by sub-system  
→ (partly) ugly, not consistent
  - oh2 rules  
→ not applicable for „normal users“





**Thank You!**

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[www.assistedhome.de](http://www.assistedhome.de)