



# DITHUS FÆLLESMØDE DEMO





# Arkitektur

Device layer





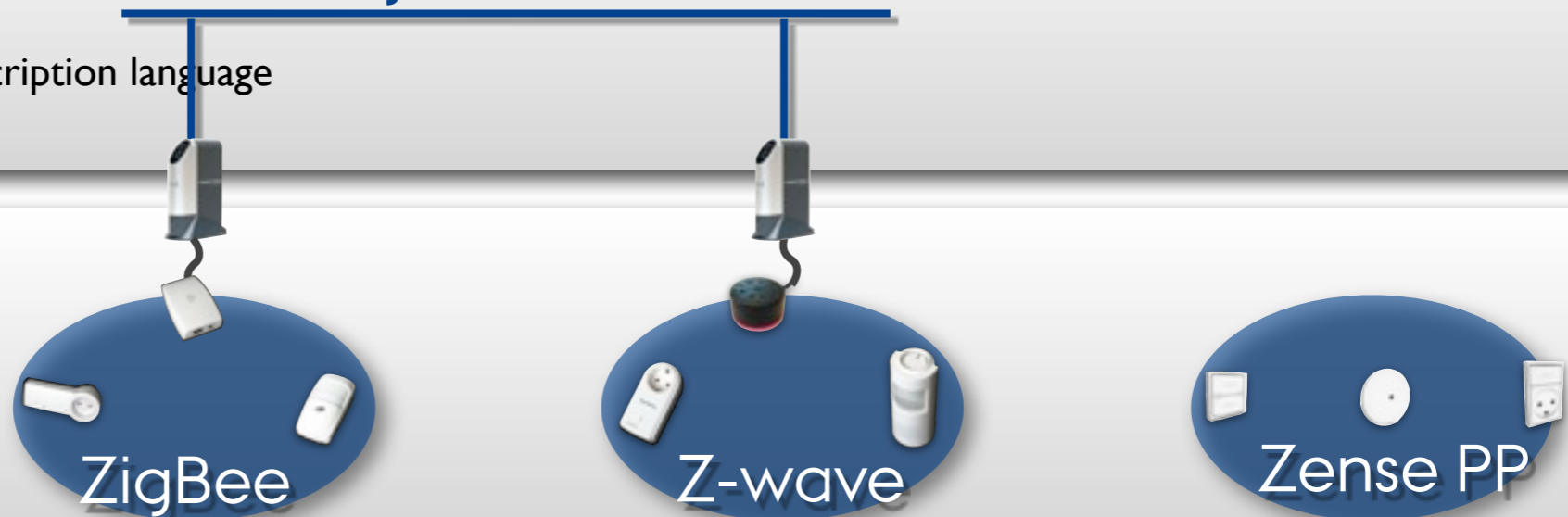
# Arkitektur

## Bridge layer

Serial transport over IP - protocol description language

### heterogeneous network

## Device layer





## Service layer

HTTP/REST web interface - service description language

service protocol

## Bridge layer

Serial transport over IP - protocol description language

heterogeneous network

## Device layer



ZigBee



Z-wave



Zense PP



## Application layer

Controllers - composition languages - web UI



## Service layer

HTTP/REST web interface - service description language

service protocol

## Bridge layer

Serial transport over IP - protocol description language

heterogeneous network

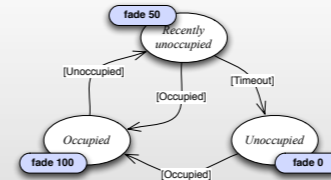
## Device layer





## Application layer

Controllers - composition languages - web UI



## Service layer

HTTP/REST web interface - service description language

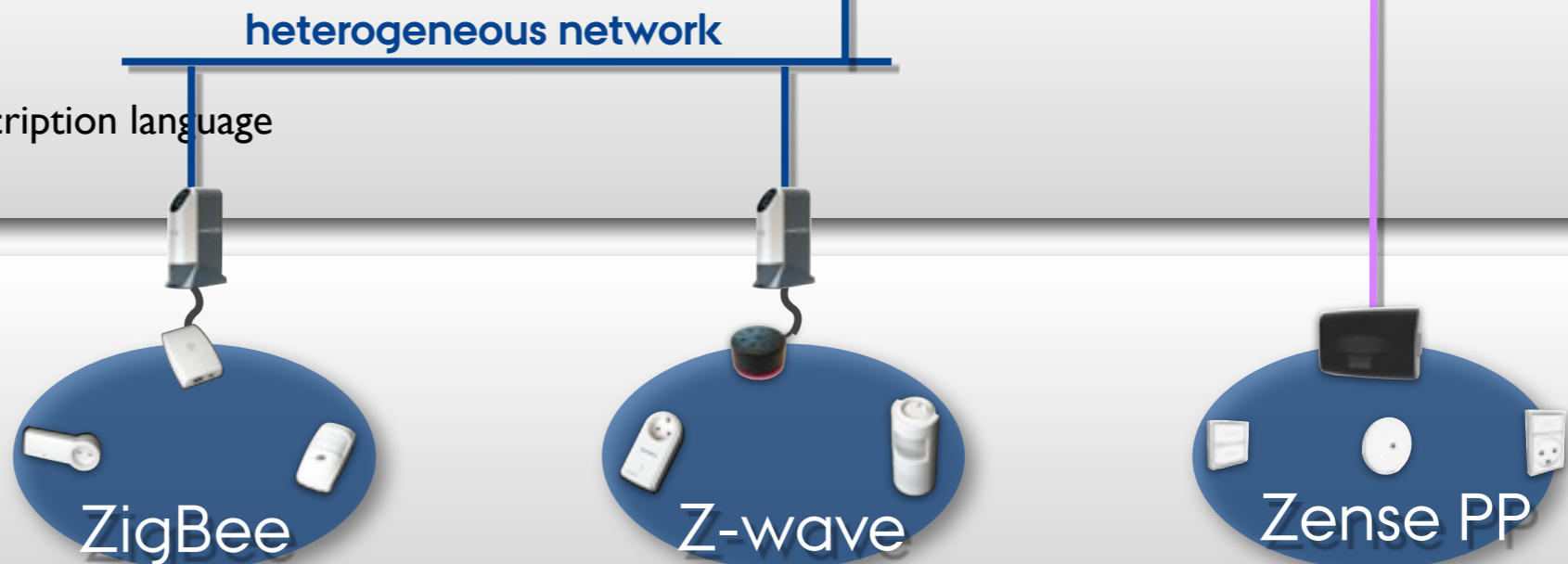
service protocol

## Bridge layer

Serial transport over IP - protocol description language

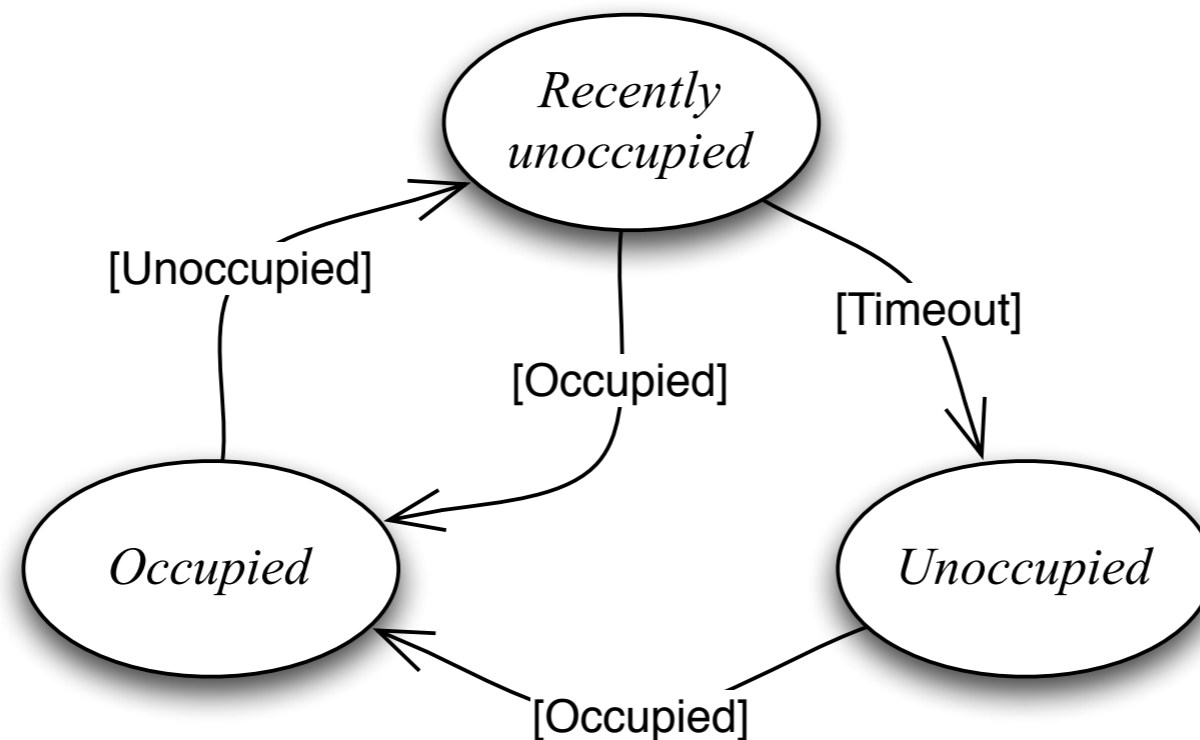
heterogeneous network

## Device layer



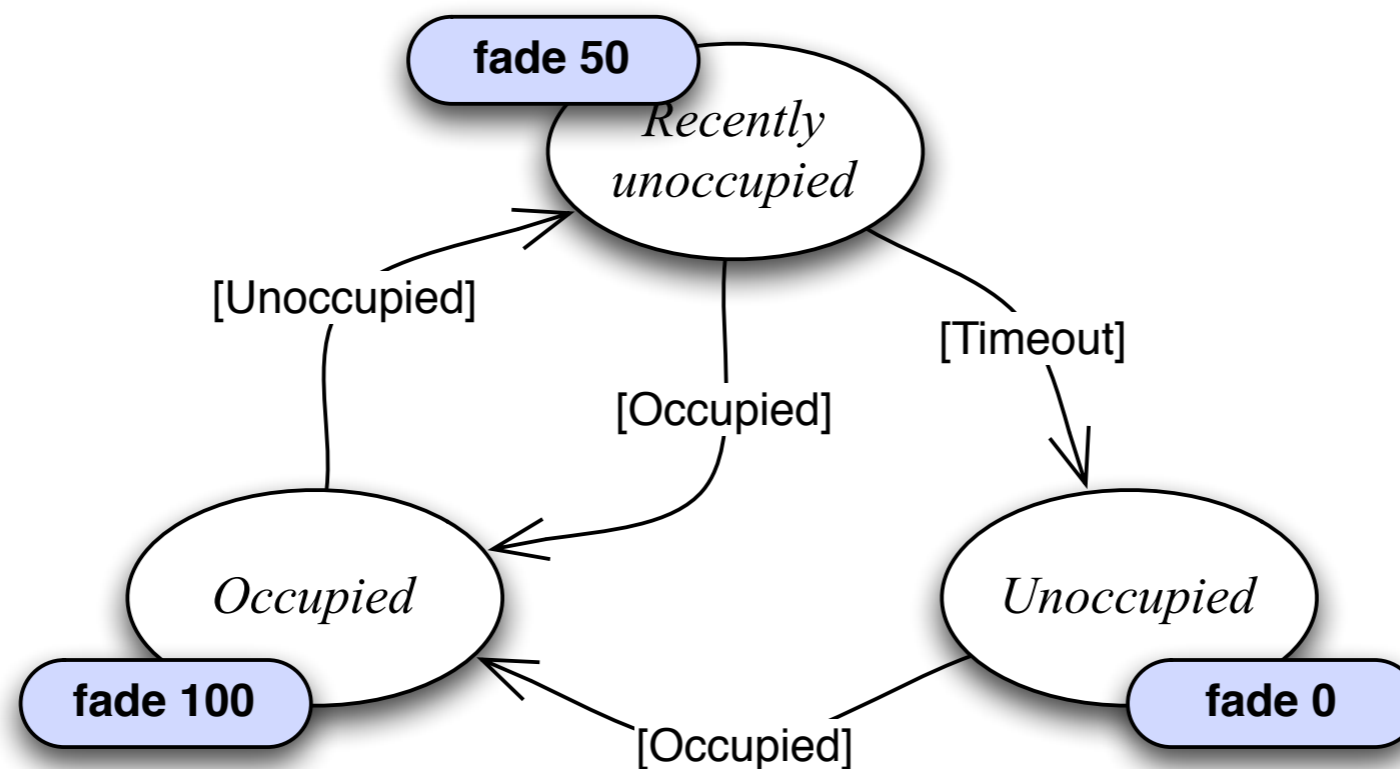
# SIMPEL KOMPOSITION - LOGIK

- › Presence sensor styrer fader i tre niveauer - modelleret vha. tilstandsmaskine



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# SIMPEL KOMPOSITION - KONFIGURERING

- › Konfigureres og inspiceres via web-GUI

**Composite connecting a presense sensor with fader**

↗ PIR value url	<input type="text" value="http://voodoo-child.local.:8080/services/40000/ms1?stream"/>
↗ Fader value url	<input type="text" value="http://voodoo-child.local.:8080/services/20000/some-id2"/>
↗ Timeout	<input type="text" value="2000"/>
↗ Composition state	<input type="text" value="occupied"/>



# BESKRIVELSESFORMAT - SERVICE

```
<?xml version="1.0" encoding="utf-8"?>
<devicelist name="Homeport Register" id="devices">
  <device id="2796" desc="zensehome stikkontakt">
    <deviceinfo />
    <service value_url="http://voodoo-child.daimi.au.dk.:8080/services/2796/power"
      id="power" desc="Current wattage">
      <parameters>
        <parameter max="655350" step="1" type="int" unit="W" min="0" />
      </parameters>
    </service>
    <service value_url="http://voodoo-child.daimi.au.dk.:8080/services/2796/switch"
      id="switch" desc="The state of the device">
      <parameters>
        <parameter type="string" values="On, Off" unit="state" />
      </parameters>
    </service>
  </device>
</devicelist>
```



# BESKRIVELSESFORMAT - META

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```

<?xml version="1.0" encoding="UTF-8"?>
<devicelist name="My home" id="devices">
  <device id="30000" uid="123234234">
    <deviceinfo />
    <service id="some-id5" desc="Temperature">
      <parameters>
        <parameter id="1" type="int" min="0" max="30000" step="1"
          scale="mili" unit="celcius" />
      </parameters>
      <command type="get">
        <write>
          <chars length="6">\x05\x60\x06\x02\x31\x00</chars>
        </write>
        <read>
          <chars length="4" />
          <chars length="3">\x31\x05\x05</chars>
          <short signedness="unsigned" param="1" />
        </read>
      </command>
    </service>
  </device>
  <device id="20000" uid="12343534">
    <deviceinfo />
    <service id="some-id2" desc="Light Intensity">
      <parameters>
        <parameter id="1" type="int" min="0" max="655350" step="10"
          scale="mili" unit="Lumen" />
      </parameters>
      <command type="put">
        <transforms>
          <transform id="t1" type="module" moduleid="ab1x" arg1="10"
            arg2="0" inverse="false" />
        </transforms>
        <write>
          <chars length="3">\x03\x26\x01</chars>
          <short signedness="unsigned" param="1" transform="t1" />
          <char>\x05</char>
        </write>
      </command>
    </service>
  </device>
</devicelist>

```