

Neuinstallation ioBroker auf einem Banana Pi M2 Ultra

Quellen:

- [Banana Pi M2 Ultra, technische Daten](#)
- [Banana Pi M2 Ultra, Armbian](#)
- [Banana Pi M2 Ultra, Armbian - Installation](#)
- [InfluxDB Installation](#)
- [InfluxDB 1.x Installation](#)
- [Grafana Installation](#)
- [Grafana ohne Login](#)
- [Verbindung InfluxDB 2.0 <-> Grafana](#)
- [Jeelink Klon](#)
- [LaCrosse Temperatur- & Feuchtesensor TX29DTH-IT, 868 MHz](#)
- [FHEM Wiki zu JeeLink/Lacrosse Klon im Eigenbau](#)
- [Arduino Sketch für JeeLink Empfänger](#)
- [Verdrahtung Arduino Nano und 868 MHz RF-Modul](#)

Das Grundsystems

Installation

Die Verwendung von InfluxDB 2.x setzt ein 64-bit Betriebssystem voraus.

Ein Desktop bzw. eine vollständige grafische Oberfläche wird nicht benötigt. Daher bezeichnet man ein solches System als „Headless“.

Somit basiert dieses Heimautomatisierungsprojekt auf einem Banana Pi M2 Ultra (32bit).

Installation siehe [hier](#).

Konfiguration

Während des Bootvorganges erhält der Raspberry eine IP Adresse vom Router. Diese kann über die entsprechende Weboberfläche des Routers ermittelt werden.

```
# Grundsystem auf den aktuellen Stand bringen:
```

```
ssh -l root <IP>
```

```
# default Passwort: "1234"
```

```
# Passwort ändern Dialog abarbeiten!
```

```
apt-get update && sudo apt-get upgrade
```

```
apt-get install aptitude mc apt-transport-https software-properties-common  
wget
```

Feste IP für eth0 einstellen



Seit Armbian auf Desibian 13 „Trixie“ basiert wird Netplan zur Konfiguration der Netzwerkschnittstellen verwendet.

[Hier](#) gibt es hilfreiche Konfigurationsbeispiele.

```
mv /etc/netplan/10-dhcp-all-interfaces.yaml /root/  
mcedit /etc/netplan/20-static-ip.yaml
```

```
network:  
  version: 2  
  renderer: networkd  
  ethernets:  
    end0:  
      addresses:  
        - 192.168.10.11/24  
      routes:  
        - to: default  
          via: 192.168.10.1  
      nameservers:  
        addresses:  
          - 192.168.10.1  
          - 192.168.100.1  
  
reboot  
#
```

System auf der SATA HDD installieren

Der EMMC-Flash hat mit 8GB (zu) wenig Platz



```
armbian-install
```

Die folgenden Schritte sind **nicht** notwendig, wenn das System auf eine SATA HDD installiert wird.

```
mkdir -p /mnt/sda1  
# UUID der externen HDD ermitteln:  
blkid  
# fstab Eintrag erzeugen  
echo "UUID="xxxxxxxxxxxxxxxxxxxxx" /mnt/sda1 ext4 defaults 0 1" >>  
/etc/fstab  
systemctl daemon-reload  
mount -a
```

NTP

```
# 1. Check status
timedatectl
# 2. Install if missing (usually pre-installed)
sudo apt update
sudo apt install systemd-timesyncd
# 3. Verify it's active (system clock synchronized: yes, NTP service:
active)
timedatectl
# 4. (Optional) Set your timezone
sudo timedatectl set-timezone Europe/Berlin # Or your local zone
# 5. (Optional) Configure NTP servers (defaults usually work)
sudo nano /etc/systemd/timesyncd.conf
# Uncomment and set servers like: NTP=0.pool.ntp.org 1.pool.ntp.org
# 6. Restart service (if changes made)
sudo systemctl restart systemd-timesyncd
```

InfluxDB 1.x

Quelle: <https://docs.influxdata.com/influxdb/v1/introduction/install/>

Installation

```
sudo su
#wget -q https://repos.influxdata.com/influxdata-archive_compat.key
#echo '393e8779c89ac8d958f81f942f9ad7fb82a25e133faddaf92e15b16e6ac9ce4c
influxdata-archive_compat.key' | sha256sum -c && cat influxdata-
archive_compat.key | gpg --dearmor | sudo tee
/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg > /dev/null
#echo 'deb [signed-by=/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg]
https://repos.influxdata.com/debian stable main' | sudo tee
/etc/apt/sources.list.d/influxdata.list

# influxdata-archive_compat.key GPG Fingerprint:
9D539D90D3328DC7D6C8D3B9D8FF8E1F7DF8B07E
#wget -q https://repos.influxdata.com/influxdata-archive_compat.key
#echo '393e8779c89ac8d958f81f942f9ad7fb82a25e133faddaf92e15b16e6ac9ce4c
influxdata-archive_compat.key' | sha256sum -c && cat influxdata-
archive_compat.key | gpg --dearmor | sudo tee
/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg > /dev/null
#echo 'deb [signed-by=/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg]
https://repos.influxdata.com/debian stable main' | sudo tee
/etc/apt/sources.list.d/influxdata.list

wget -q https://repos.influxdata.com/influxdata-archive.key
gpg --show-keys --with-fingerprint --with-colons ./influxdata-archive.key
```

```
2>&1 | grep -q '^fpr:\+24C975CBA61A024EE1B631787C3D57159FC2F927:$' && cat
influxdata-archive.key | gpg --dearmor | sudo tee
/etc/apt/keyrings/influxdata-archive.gpg > /dev/null
echo 'deb [signed-by=/etc/apt/keyrings/influxdata-archive.gpg]
https://repos.influxdata.com/debian stable main' | sudo tee
/etc/apt/sources.list.d/influxdata.list
```

```
apt-get update
apt-get install influxdb influxdb-client
```

```
systemctl unmask influxdb.service
systemctl enable influxdb
systemctl start influxdb
systemctl status influxdb
```

Konfiguration

```
sudo su
influx
> CREATE USER "admin" WITH PASSWORD 'influxdbadmin' WITH ALL PRIVILEGES
> CREATE USER "iobroker" WITH PASSWORD 'iobroker'
> CREATE DATABASE "iobroker"
> GRANT ALL ON "iobroker" TO "iobroker"
> exit
#
mcedit /etc/influxdb/influxdb.conf
[http]
enabled = true
bind-address = ":8086"
auth-enabled = true
log-enabled = true
write-tracing = false
pprof-enabled = true
https-enabled = false
#
systemctl restart influxdb
```

Datenbankgröße ermitteln

```
sudo su
du -sh /var/lib/influxdb/data/iobrokerdb/
```

Backups

Quelle:

https://docs.influxdata.com/influxdb/v1/administration/backup_and_restore/#back-up-all-databases

Erstellen

```
sudo su
influxd backup -portable /path/to/backup-destination
# or do it in one line:
cd /; influxd backup -portable /mnt/usb-stick/backup/influxdb/`date +%Y%m%d`
```

Wiederherstellen

```
sudo su
influxd restore -portable /path/to/backup-destination
```

InfluxDB 2.x

Installation

```
sudo su
cd ~
wget -q https://repos.influxdata.com/influxdata-archive_compat.key
echo '393e8779c89ac8d958f81f942f9ad7fb82a25e133faddaf92e15b16e6ac9ce4c
influxdata-archive_compat.key' | sha256sum -c && cat influxdata-
archive_compat.key | gpg --dearmor | sudo tee
/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg > /dev/null
echo 'deb [signed-by=/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg]
https://repos.influxdata.com/debian stable main' | sudo tee
/etc/apt/sources.list.d/influxdata.list
apt-get update
apt-get install influxdb2
systemctl start influxdb
systemctl status influxdb
```

Konfiguration

Die Konfiguration der InfluxDB erfolgt über den Browser via <http://RASPI-IP:8086>.

Grafana

Installation

```
sudo su
#wget -q -O /usr/share/keyrings/grafana.key https://apt.grafana.com/gpg.key
#echo "deb [signed-by=/usr/share/keyrings/grafana.key]
```

```
https://apt.grafana.com stable main" | sudo tee -a
/etc/apt/sources.list.d/grafana.list
#wget -q -O - https://packages.grafana.com/gpg.key | sudo apt-key add -
#echo "deb https://packages.grafana.com/oss/deb stable main" | sudo tee -a
/etc/apt/sources.list.d/grafana.list

sudo mkdir -p /etc/apt/keyrings/
wget -q -O - https://apt.grafana.com/gpg.key | gpg --dearmor | sudo tee
/etc/apt/keyrings/grafana.gpg > /dev/null
echo "deb [signed-by=/etc/apt/keyrings/grafana.gpg] https://apt.grafana.com
stable main" | sudo tee -a /etc/apt/sources.list.d/grafana.list

apt-get update
# Install the latest OSS release:
apt-get install -y grafana
# Start System Service aka. Server
systemctl daemon-reload
systemctl start grafana-server
systemctl status grafana-server
systemctl enable grafana-server.service
```

Grafana Server: <http://IP:3000>

Grafana ohne Login

```
mcedit /etc/grafana/grafana.ini
# [auth.anonymous]
enabled = true
systemctl restart grafana-server
```

Backup

Quelle: <http://cactusprojects.com/backup-restore-grafana/>

Erstellen

```
sudo su
cp /var/lib/grafana/grafana.db /path/to/backup-destination
cp /etc/grafana/grafana.ini /path/to/backup-destination
# or do it in one line:
cd /; mkdir /mnt/usb-stick/backup/grafana/`date +%Y%m%d`; cp
/etc/grafana/grafana.ini /mnt/usb-stick/backup/grafana/`date +%Y%m%d`; cp
/var/lib/grafana/grafana.db /mnt/usb-stick/backup/grafana/`date +%Y%m%d`
```

Wiederherstellen

```
sudo su
cd /path/to/backup-destination
cp grafana.db /var/lib/grafana/
cp grafana.ini /etc/grafana/
```

ioBroker

Wiederherstellung

Folgende Backup Dateien via Backup Adapter wieder einsozielen:

- iobroker_<TIMESTAMP>_backupiobroker.tar.gz
- influxDB_<TIMESTAMP>_backupiobroker.tar.gz
- grafana_<TIMESTAMP>_backupiobroker.tar.gz
- javascripts_<TIMESTAMP>_backupiobroker.tar.gz

Installation

```
sudo su
# automatische Installation:
curl -sLf https://iobroker.net/install.sh | bash -
```

Nach der Installation ist die ioBroker Instanz erreichbar unter <http://<Raspberry-Pi-IP>:8081>.

Steuerung

```
# ioBroker starten:
iobroker start
# ioBroker stoppen:
iobroker stop
# ioBrker Infos anzeigen
iobroker info
```

Backups

Erstellung

Siehe unten → Script oder per 'Backupup' Adapter

Wiederherstellung

- Verzeichniss '/opt/iobroker/backups' anlegen
- Kopieren des Backups dort hinein

Backups die mit dem Backup-Adapter erstellt wurden können nachde dem kopieren via Web-Interface wieder eingesielt werden.

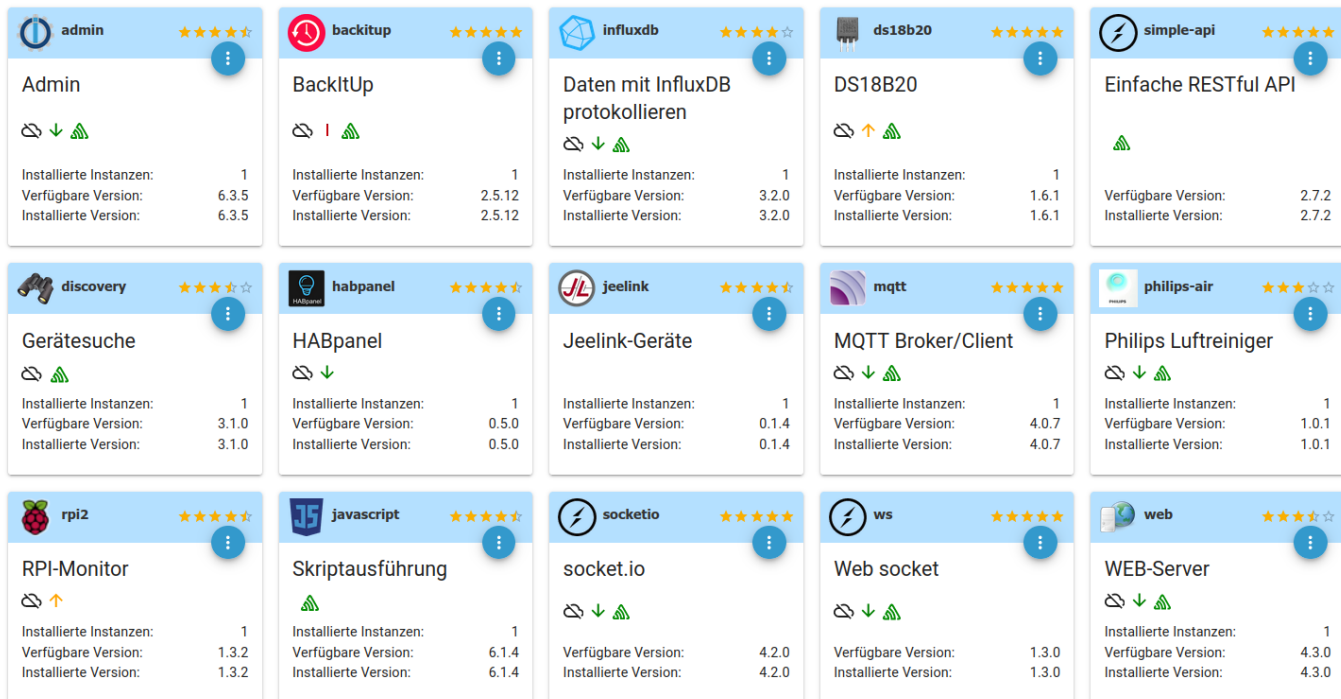
Alternativ kann auch die Konsole verwendet werden:

```
sudo su
cd /opt/iobroker
iobroker stop
iobroker restore 0
iobroker stop
```

Adapter installieren

Als Adapter werden alle Schnittstellen zu externen aber auch zu internen Datenquellen (z.B. Shelly Sensoren, Temperatur, Luftfeuchte, GPIO, 1-Wire, etc.) und Senken (Shelly Aktoren) bezeichnet.

- influxDB (Datenbank zur Speicherung von Messwerten)
- DS18B20 (Auslesen von 1-Wire Temperatursensoren)
- HABpanel (Steuerung von Aktoren vis Webseite)
- Jeelink-Geräte (Empfangen von 868mHz LaCrosse Temperatur- und Feuchtesensoren (hier z.B. TX29DTH-IT) mit Hilfe eines Jeelink Klones)
- MQTT Broker (zur Datenverarbeitung von MQTT-fähigen Sensoren und Aktoren)
- Philips Luftreiniger (für die Anbindung eines Philips Air Purifier 4000i Series (Typ: AC4236/10)
- RPI-Monitor (Nutzung von GPIOs z.B. zum Einlesen eines Reed-Kontaktes für den Gaszähler)
- Skriptausführung (Javascript und Blockly)
- WEB-Server (für HABpanel)
- Shelly

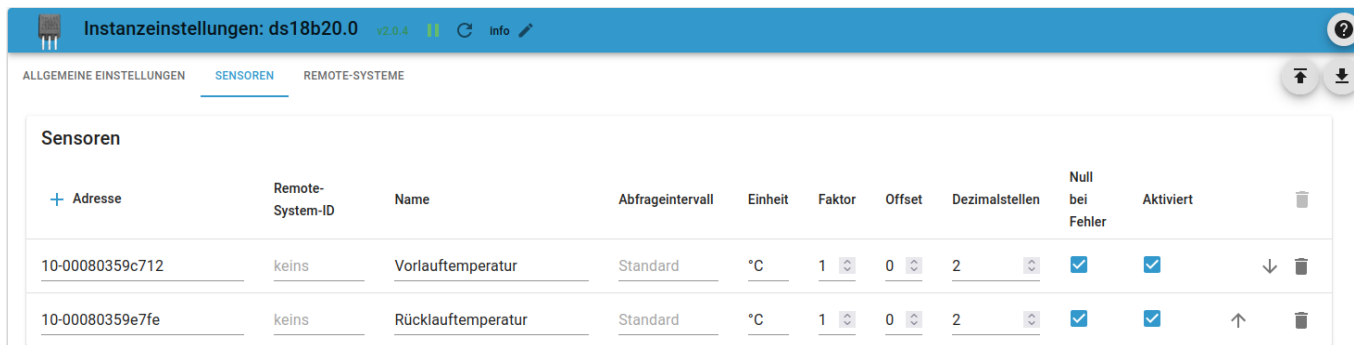


Adapter konfigurieren

Die oben aufgeführten Adapter sind nach der Installation unter Instanzen zu finden und müssen dort konfiguriert werden.

1-Wire

DS18B20



JeeLink

TBC - Empfänger bauen und programmieren → TBC

Jeelink Settings

/dev/ttyUSB0	57600
Serial port	Baud rate
/dev/ttyUSB0 or /dev/ttyACME0	usually 57600

Jeelink Command (trial)

Befehl aktivieren
usually empty

Befehl für Stick-Setup
usually empty

Sensorkonfiguration

gültige Sensortypen:
emonTH, emonWater, LaCrosseDTH, LaCrosseDTT, LaCrosseBMP180, HMS100T, LaCrosseWS, EC3000, EMT7110, level

id	type	uid	Name	Löschen
1 22	LaCrosseDTH	▼ Badezimmer	THS_#03	
2 43	LaCrosseDTH	▼ Küche	THS_#05	
3 21	LaCrosseDTH	▼ Wohnzimmer	THS_#06	
4 11	LaCrosseDTH	▼ Wintergarten	THS_#08	
5 14	LaCrosseDTH	▼ Schlafzimmer	THS_#04	
6 37	LaCrosseDTH	▼ Jonas	THS_#02	
7 40	LaCrosseDTH	▼ IT-Schrank	THS_#09	
8 9	LaCrosseDTH	▼ Lager	THS_#07	
9 8	LaCrosseDTH	▼ Außensensor	THS_#00	

MQTT

Für IKEA Sensoren -> Die angepasste Firmware gibt es [hier](#).

Instanzeinstellungen: mqtt.0

VERBINDUNG | MQTT EINSTELLUNGEN

IP Server/Broker WebSockets benutzen

Verbindungseinstellungen

IP Adresse [IPv4] 192.168.10.11 - eth0 Port 1883

SSL

Authentifizierungseinstellungen

Benutzer mqttuser Passwort Passwort (wiederholen)

Philips

Instanzeinstellungen: philips-air.0 v1.0.3 warn

Geräte-IP
192.168.10.125

Lebenszeitüberschreitung 30000 ms

Wiederverbindungsintervall 30000 ms

Kommunikationsprotokoll
CoAP

Gaszähler

Reedkontakt am GPIO #17 - Name: Gaszähler

Instanzeinstellungen: rpi2.0 GPIOs

Die Eingänge sind hochgezogen Entprellungsperiode (ms) 100

Die Tasten sind hochgezogen Entprellungszeitraum für Schaltflächen (ms) Taste lange Druckdauer (ms) Doppelklickzeit (ms)

Abfrageintervall für DHTxx / AM23xx-Geräte (ms)

Empfohlenes Minimum ist 2s. Auf Null setzen, um die Abfrage zu deaktivieren.

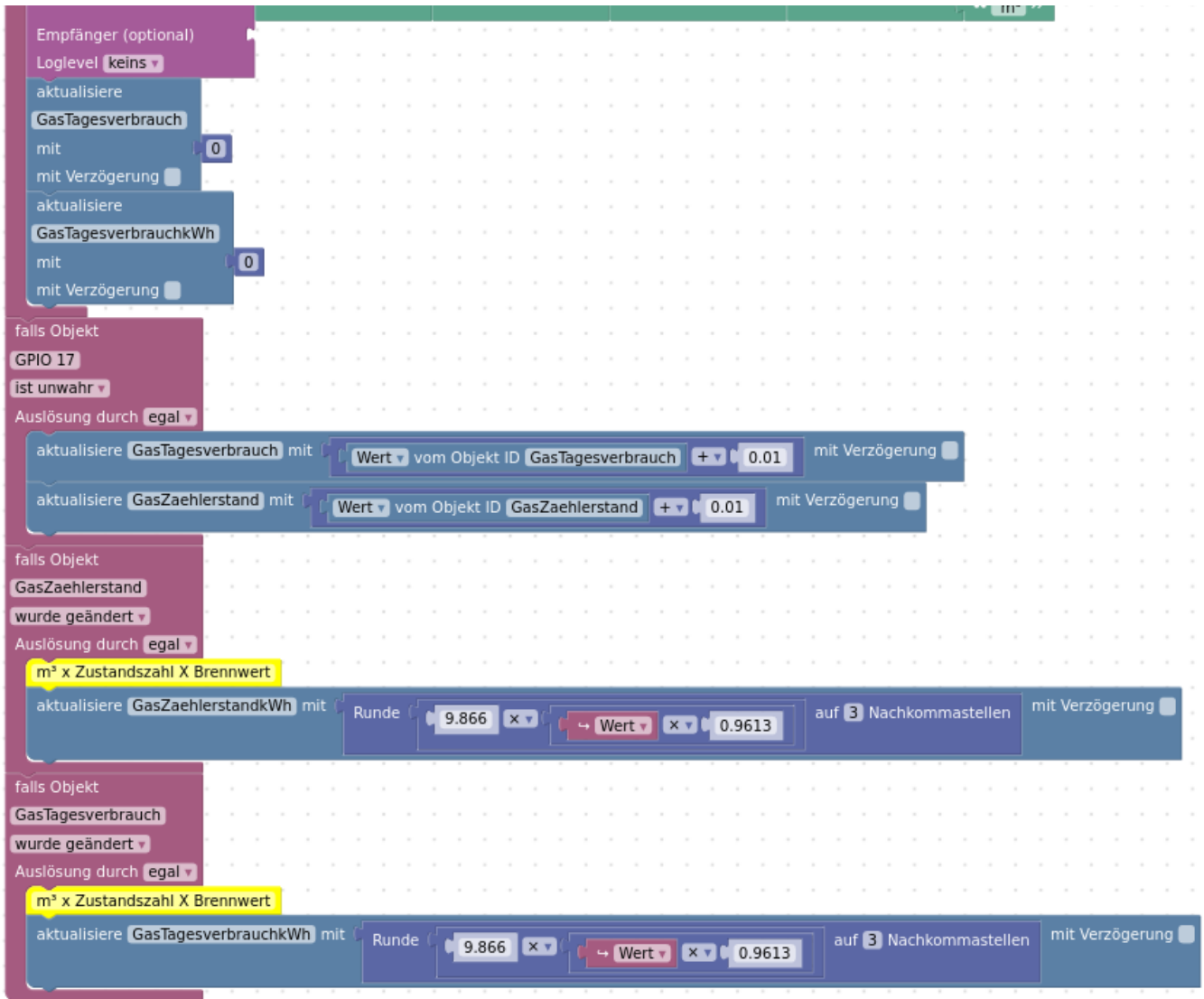
Port numbers relate to Broadcom SOC channel, not physical pins.

Enable	Typ	Etikette
<input type="checkbox"/>	Eingang	Etikette
<input type="checkbox"/>	Eingang	Etikette
<input checked="" type="checkbox"/>	Eingang	Gaszähler
<input type="checkbox"/>	Eingang	Etikette

Blockly

The screenshot displays the configuration interface for an ioBroker service, likely a cron job. It is organized into several sections:

- Data Point Creation (Datenpunkt erzeugen):** Four blocks are shown, each for a different data point:
 - GasZaehlerstand:** Object ID: GasZaehlerstand, Init-Wert: 0, Common: {"type":"number", "unit":"m³"}
 - GasZaehlerstandkWh:** Object ID: GasZaehlerstandkWh, Init-Wert: 0, Common: {"type":"number", "unit":"kWh"}
 - GasTagesverbrauch:** Object ID: GasTagesverbrauch, Init-Wert: 0, Common: {"type":"number", "unit":"m³"}
 - GasTagesverbrauchkWh:** Object ID: GasTagesverbrauchkWh, Init-Wert: 0, Common: {"type":"number", "unit":"kWh"}
- Zeitplan (Cron Job):** Configuration for a recurring task:
 - signal CMB:** signal-cmb.0
 - Meldung (Message):** A sequence of steps:
 - erstelle Text aus: "Gas Tagesverbrauch am "
 - erstelle Text aus: Datum/Zeit (Zeit berechnen basierend auf Aktuelle Zeit als Datum-Objekt, 1 Tage nach TT.MM.JJJJ)
 - erstelle Text aus: " "
 - erstelle Text aus: Runde Wert vom Objekt ID GasTagesverbrauch auf 3 Nachkommastellen
 - erstelle Text aus: " m³ "
 - Empfänger (optional):** Loglevel: keins
 - aktualisiere (update):** GasTagesverbrauch
 - mit (with):** 0



Und das ganze als XML:

+++ Title |

gaszaehler_blockly.xml

```

<xml xmlns="https://developers.google.com/blockly/xml">
  <block type="create" id="0B{}LlRd,d!Br67@Vl bv" x="113" y="-112">
    <field name="NAME">GasZaehlerstand</field>
    <value name="VALUE">
      <block type="math_number" id="zCMHZ;$=evsZ~g#$$B,d">
        <field name="NUM">0</field>
      </block>
    </value>
    <value name="COMMON">
      <block type="text" id="+waJXiBe~1dn@SNBXD]b">
        <field name="TEXT">{"type":"number", "unit":"m³"}</field>
      </block>
    </value>
    <next>
      <block type="create" id="2[=]D*fweUy]z]fKRb*N">
        <field name="NAME">GasZaehlerstandkWh</field>

```

```
<value name="VALUE">
  <block type="math_number" id="6#vjQv4JhiY|mZ` tva4+">
    <field name="NUM">0</field>
  </block>
</value>
<value name="COMMON">
  <block type="text" id="lD}p7.V%=!S:e/(Pj1[e">
    <field name="TEXT">{"type":"number", "unit":"kWh"}</field>
  </block>
</value>
<next>
  <block type="create" id="Jt^U$w~,3R~)UPJJP+$c">
    <field name="NAME">GasTagesverbrauch</field>
    <value name="VALUE">
      <block type="math_number" id="ob;_09!^uke_;c@UqtCZ">
        <field name="NUM">0</field>
      </block>
    </value>
    <value name="COMMON">
      <block type="text" id="Br7y=,dGAF9I]mb?z-, :">
        <field name="TEXT">{"type":"number",
"unit":"m³"}</field>
      </block>
    </value>
    <next>
      <block type="create" id="0S(2ltH~c|{}uV)aZEoI">
        <field name="NAME">GasTagesverbrauchkWh</field>
        <value name="VALUE">
          <block type="math_number" id="uL]uOd@Q!FgAK,u/~li0">
            <field name="NUM">0</field>
          </block>
        </value>
        <value name="COMMON">
          <block type="text" id="?PxPe$PT.{E1el.m,Fl{">
            <field name="TEXT">{"type":"number",
"unit":"kWh"}</field>
          </block>
        </value>
        <next>
          <block type="schedule" id="#TX=ZX{-w2cu=Uj!nu0*">
            <field name="SCHEDULE">0 0 * * * </field>
            <statement name="STATEMENT">
              <block type="signal-cmb" id="n4NEdLb^*N-
$c[YJUMw_ ">
                <field name="INSTANCE">.0</field>
                <field name="LOG"></field>
                <value name="MESSAGE">
                  <shadow type="text"
id="F/ePx6FS0r+[BT|h0L68">
                    <field name="TEXT">text</field>
                </shadow>
              </block>
            </statement>
          </block>
        </next>
      </block>
    </next>
  </block>
</next>
</next>
```

```

        </shadow>
        <block type="text_join"
id="+A!rZ(7aVj!~E{6~WV0m">
        <mutation items="2"></mutation>
        <value name="ADD0">
        <block type="text"
id="8EJ*o[R;:^=5;).KbZeh">
        <field name="TEXT">Gas Tagesverbrauch
am </field>
        </block>
        </value>
        <value name="ADD1">
        <block type="text_join"
id="HeWwloE2zR(^)91A5vLf">
        <mutation items="2"></mutation>
        <value name="ADD0">
        <block type="convert_from_date"
id="s;*kY*B;HuSZ^~w0=Q1B">
        <mutation
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
        <field
name="OPTION">DD.MM.YYYY</field>
        <value name="VALUE">
        <block type="time_calculation"
id="YM!lstPQJsLk~Nr|/C9S">
        <field name="OPERATION">-
</field>
        <field name="UNIT">day</field>
        <value name="DATE_TIME">
        <shadow type="time_get"
id="*vxqb!BXG7I/C$mm0(,6">
        <mutation
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
        <field
name="OPTION">object</field>
        </shadow>
        <block type="time_get"
id="c7c*a4_Wl/:1^bYj[5Gv">
        <mutation
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
        <field
name="OPTION">object</field>
        </block>
        </value>
        <value name="VALUE">
        <shadow type="math_number"
id="|4-%[@-^:5+J56T:106m">
        <field name="NUM">1</field>

```

```
        </shadow>
        </value>
      </block>
    </value>
  </block>
</value>
<value name="ADD1">
  <block type="text_join"
id="=%;,#+%QHjmlt3hl! =~r">
    <mutation items="2"></mutation>
    <value name="ADD0">
      <block type="text"
id="3:2kP58oTBRcZi2),~ld">
        <field name="TEXT">: </field>
      </block>
    </value>
    <value name="ADD1">
      <block type="text_join"
id="tmVWY7$h@F7sTbDx8RxC">
        <mutation items="2"></mutation>
        <value name="ADD0">
          <block type="math_rndfixed"
id="r$r$dA.ncKJ|_gq606gB">
            <field name="n">3</field>
            <value name="x">
              <shadow
type="math_number" id="AThWyAlfX]^N:24Bj)1">
                <field
name="NUM">3.1234</field>
              </shadow>
            <block type="get_value"
id="#R/Z*/!V{2!I`w97g5#$">
              <field
name="ATTR">val</field>
              <field
name="OID">javascript.0.GasTagesverbrauch</field>
            </block>
          </value>
        </block>
      </value>
    <value name="ADD1">
      <block type="text"
id="wPYk)Zw6;xd5M2HRI [=?">
        <field name="TEXT">
m³</field>
      </block>
    </value>
  </block>
</value>
</block>
</value>
</block>
```

```

        </value>
      </block>
    </value>
  </block>
</value>
<next>
  <block type="update"
id="@0uFnK3p@d(aFNzT|/lb" inline="false">
  <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
  <field
name="OID">javascript.0.GasTagesverbrauch</field>
  <field name="WITH_DELAY">FALSE</field>
  <value name="VALUE">
    <block type="math_number"
id="4)r,X`Fg.[q=u_H*lfRk">
      <field name="NUM">0</field>
    </block>
  </value>
  <next>
    <block type="update"
id="TI_1t%q+ZcJ4QYR55c_V" inline="false">
    <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
    <field
name="OID">javascript.0.GasTagesverbrauchkWh</field>
    <field name="WITH_DELAY">FALSE</field>
    <value name="VALUE">
      <block type="math_number"
id="r%v}PcT3aL`0u#bfv}2v">
        <field name="NUM">0</field>
      </block>
    </value>
  </block>
</next>
</block>
</next>
</block>
</statement>
<next>
  <block type="on" id="4Y-zykZ$Wh;oiRmsNJ5@">
    <field name="OID">rpi2.0.gpio.17.state</field>
    <field name="CONDITION">>false</field>
    <field name="ACK_CONDITION"></field>
    <statement name="STATEMENT">
      <block type="update"
id="9]|sNN!RG]pSo)u[+a:l">
        <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
        <field
name="OID">javascript.0.GasTagesverbrauch</field>

```

```
<field name="WITH_DELAY">FALSE</field>
<value name="VALUE">
  <block type="math_arithmetic"
id="6}2q8C;`zJ=g7E_fxS}|">
    <field name="OP">ADD</field>
    <value name="A">
      <shadow type="math_number"
id="bh@Wx=0!@N|v#@:zwozA">
        <field name="NUM">1</field>
      </shadow>
    <block type="get_value"
id="kR$.7#of[Q%v[4%`)`qw">
      <field name="ATTR">val</field>
      <field
name="OID">javascript.0.GasTagesverbrauch</field>
      </block>
    </value>
    <value name="B">
      <shadow type="math_number"
id="U_G`SdC1Ek1L0eD^e0GZ">
        <field name="NUM">0.01</field>
      </shadow>
    </value>
  </block>
</value>
<next>
  <block type="update"
id="KH(0kBhtIn0cIneAPNH$">
    <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
    <field
name="OID">javascript.0.GasZaehlerstand</field>
    <field name="WITH_DELAY">FALSE</field>
    <value name="VALUE">
      <block type="math_arithmetic"
id="JllB@rBhaoQ78i!%QiN@">
        <field name="OP">ADD</field>
        <value name="A">
          <shadow type="math_number"
id="bh@Wx=0!@N|v#@:zwozA">
            <field name="NUM">1</field>
          </shadow>
        <block type="get_value"
id=";Rlcv?|LRTX~#Ib;c81n">
          <field name="ATTR">val</field>
          <field
name="OID">javascript.0.GasZaehlerstand</field>
          </block>
        </value>
        <value name="B">
```

```

                                <shadow type="math_number"
id="vl8GbhNo/:JJ~V5.2V5z">
                                <field name="NUM">0.01</field>
                                </shadow>
                                </value>
                                </block>
                                </value>
                                </block>
                                </next>
                                </block>
                                </statement>
                                <next>
                                <block type="on" id="X7m/%;,l,u[1#P61eH}b">
                                <field
name="OID">javascript.0.GasZaehlerstand</field>
                                <field name="CONDITION">ne</field>
                                <field name="ACK_CONDITION"></field>
                                <statement name="STATEMENT">
                                <block type="comment"
id="[Q_/w^nv`)y#;e4ru1nD">
                                <field name="COMMENT">m³ x Zustandszahl
X Brennwert</field>
                                <next>
                                <block type="update"
id="8.z/}1(PYiq*8X7[Q9Ae">
                                <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
                                <field
name="OID">javascript.0.GasZaehlerstandkWh</field>
                                <field
name="WITH_DELAY">FALSE</field>
                                <value name="VALUE">
                                <block type="math_rndfixed"
id="+0$=HuhMm)nj7_00c56=">
                                <field name="n">3</field>
                                <value name="x">
                                <shadow type="math_number"
id="aeqHXH7yQcf5k2Qn,tC/">
                                <field
name="NUM">3.1234</field>
                                </shadow>
                                <block type="math_arithmetic"
id="(N6Ay,~*P)f+G|I0~!p2">
                                <field
name="OP">MULTIPLY</field>
                                <value name="A">
                                <shadow
type="math_number" id="XwM0.cfS~dYqK@(o/Pc)">
                                <field
name="NUM">9.866</field>
                                </shadow>

```

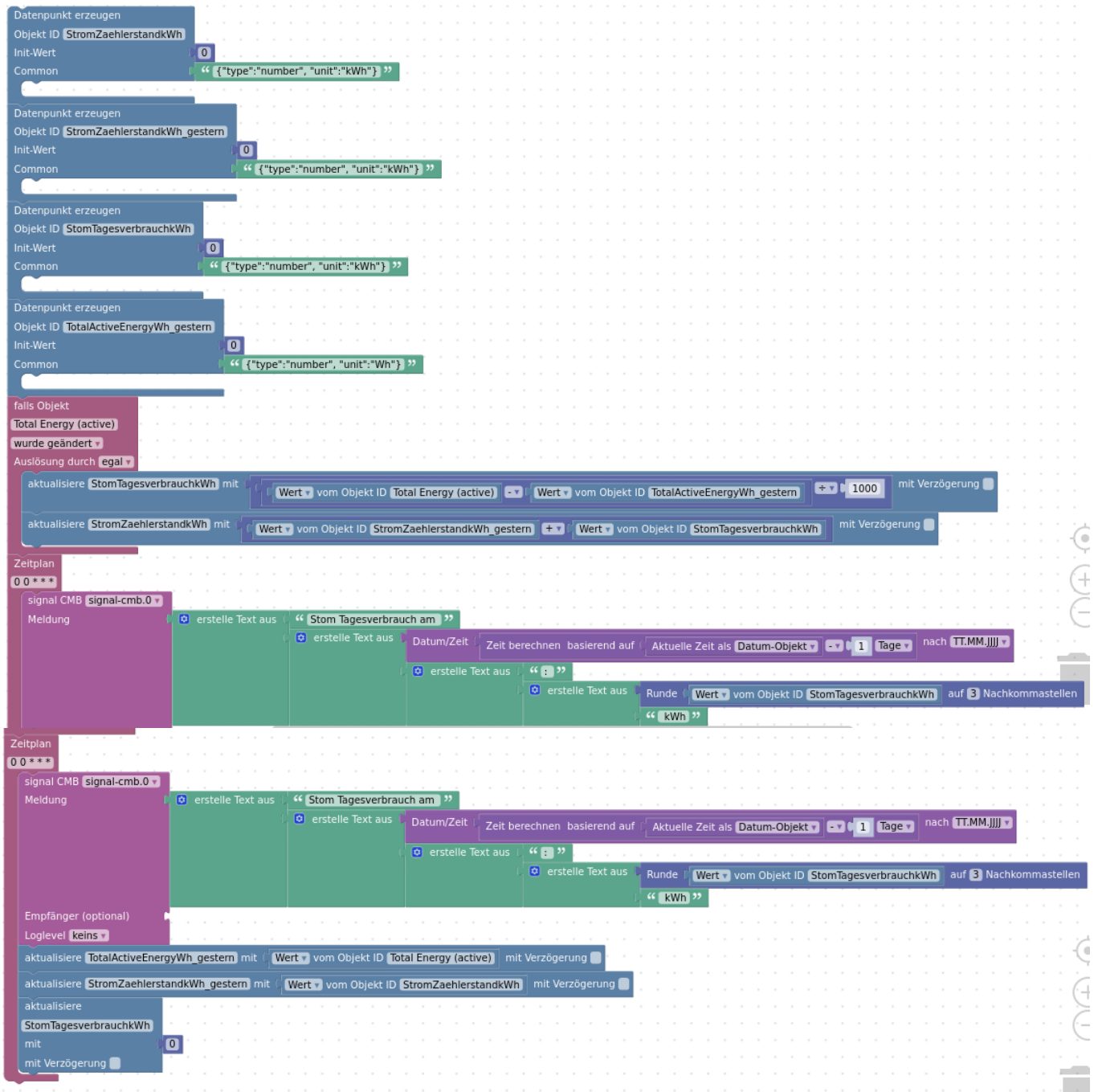
```

        </value>
        <value name="B">
          <shadow
type="math_number" id="}/IuLzLcCeHe!b~b/V0~">
          <field
name="NUM">1</field>
          </shadow>
          <block
type="math_arithmetic" id="7w-+v.aR0eGiRwfMHXNM">
          <field
name="OP">MULTIPLY</field>
          <value name="A">
            <shadow
type="math_number" id="%qWr/Hv}vgETQg]nGDE9">
            <field
name="NUM">1</field>
            </shadow>
          </block>
type="on_source" id="KxNJKuqKY/]s[I!V$Mol">
          <field
name="ATTR">state.val</field>
          </block>
        </value>
        <value name="B">
          <shadow
type="math_number" id="M}_|BoUHL8urPnuw;e9=">
          <field
name="NUM">0.9613</field>
          </shadow>
        </value>
      </block>
    </value>
  </block>
</value>
</block>
</value>
</block>
</value>
</block>
</value>
</block>
</next>
</block>
</statement>
<next>
  <block type="on"
id="1,.5mB=(/f/jzm?Qa)50">
    <field
name="OID">javascript.0.GasTagesverbrauch</field>
    <field name="CONDITION">ne</field>
    <field name="ACK_CONDITION"></field>
    <statement name="STATEMENT">
      <block type="comment" id="-
m! [Gh^zQ_@np0AF3~!!">
```

```

Zustandszahl X Brennwert</field>
<field name="COMMENT">m3 x
<next>
  <block type="update"
id="8:U}a~4U+pX]:KTxvyW}">
  <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
  <field
name="OID">javascript.0.GasTagesverbrauchkWh</field>
  <field
name="WITH_DELAY">FALSE</field>
  <value name="VALUE">
    <block type="math_rndfixed"
id="YcCf+;GbSY/PZ.e(zMeH">
      <field name="n">3</field>
      <value name="x">
        <shadow
type="math_number" id="aeqHXH7yQcf5k2Qn,tC/">
          <field
name="NUM">3.1234</field>
        </shadow>
        <block
type="math_arithmetic" id="%.k-kW,6s)i$)d0kK2[Y">
          <field
name="OP">MULTIPLY</field>
          <value name="A">
            <shadow
type="math_number" id="R^,D.8GKv}Jv!N-k5,?w">
              <field
name="NUM">9.866</field>
            </shadow>
          </value>
          <value name="B">
            <shadow
type="math_number" id="}/IuLzLcCeHe!b~b/V0~">
              <field
name="NUM">1</field>
            </shadow>
          </value>
        </block>
        <field
type="math_arithmetic" id="GZh_TDV2T-Wfkl$v.6%B">
          <field
name="OP">MULTIPLY</field>
          <value name="A">
            <shadow
type="math_number" id="%qWr/Hv}vgETQg]nGDE9">
              <field
name="NUM">1</field>
            </shadow>
          </value>
        </block>
        <field
type="on_source" id="j60tdQ-opx@n@HuS.5;[">

```

Und das ganze als XML:

++++ Title |

strozaehler_blockly.xml

```

<xml xmlns="https://developers.google.com/blockly/xml">
  <block type="create" id="WNiKV(pYZ3,|L9mDGTHD" x="138" y="-62">
    <field name="NAME">StromZaehlerstandkWh</field>
    <value name="VALUE">
      <block type="math_number" id="0F`c7%Isi~b|@epORR*S">
        <field name="NUM">0</field>
      </block>
    </value>
    <value name="COMMON">

```

```
<block type="text" id="/1(k)0A[2kB~j;PxBH_4">
  <field name="TEXT">{"type":"number", "unit":"kWh"}</field>
</block>
</value>
<next>
<block type="create" id="2[=]D*fweUy]z]fKRb*N">
  <field name="NAME">StromZaehlerstandkWh_gestern</field>
  <value name="VALUE">
    <block type="math_number" id="6#vjQv4JhiY|mZ`tva4+">
      <field name="NUM">0</field>
    </block>
  </value>
  <value name="COMMON">
    <block type="text" id="lD}p7.V%=!S:e/(Pj1[e">
      <field name="TEXT">{"type":"number", "unit":"kWh"}</field>
    </block>
  </value>
  <next>
    <block type="create" id="0S(2ltH~c|{]uV)aZEoI">
      <field name="NAME">StomTagesverbrauchkWh</field>
      <value name="VALUE">
        <block type="math_number" id="uL]u0d@Q!FgAK,u/~1i0">
          <field name="NUM">0</field>
        </block>
      </value>
      <value name="COMMON">
        <block type="text" id="?PxPe$PT.{E1el.m,Fl{">
          <field name="TEXT">{"type":"number",
"unit":"kWh"}</field>
        </block>
      </value>
      <next>
        <block type="create" id="rss(Q.udF1BQD5Bz@T7~">
          <field name="NAME">TotalActiveEnergyWh_gestern</field>
          <value name="VALUE">
            <block type="math_number" id="tx?^zyUsJqm}GHq-b.f3">
              <field name="NUM">0</field>
            </block>
          </value>
          <value name="COMMON">
            <block type="text" id="xDII{fs[B3khS-DSylb8">
              <field name="TEXT">{"type":"number",
"unit":"Wh"}</field>
            </block>
          </value>
          <next>
            <block type="on" id="?c^{.iN$6fj256L#A8Ql">
              <field
name="OID">shelly.0.shellypro3em#c8f09e8314fc#1.EMData0.TotalActiveEner
gy</field>
```

```

    <field name="CONDITION">ne</field>
    <field name="ACK_CONDITION"></field>
    <statement name="STATEMENT">
      <block type="update" id="g+V`|DyKF[]Pmy+=sl;0">
        <mutation xmlns="http://www.w3.org/1999/xhtml"
delay_input="false"></mutation>
        <field
name="OID">javascript.0.StomTagesverbrauchkWh</field>
        <field name="WITH_DELAY">FALSE</field>
        <value name="VALUE">
          <block type="math_arithmetic"
id="11dXVHhW_NGn{g;5pw_+">
            <field name="OP">DIVIDE</field>
            <value name="A">
              <shadow type="math_number" id="v-
*1r6*(074YeD/hDb~_">
                <field name="NUM">1</field>
              </shadow>
            <block type="math_arithmetic"
id="";nKGmG#8.~l5jQA,gp[o">
              <field name="OP">MINUS</field>
              <value name="A">
                <shadow type="math_number"
id="@8B(02U-tIrBZ2qRS*QM">
                  <field name="NUM">1</field>
                </shadow>
              <block type="get_value"
id="]jZ_e/iQou/04%E2EUcM">
                <field name="ATTR">val</field>
              <field
name="OID">shelly.0.shellypro3em#c8f09e8314fc#1.EMData0.TotalActiveEner
gy</field>
                </block>
              </value>
              <value name="B">
                <shadow type="math_number"
id="b6Bt(ksp=pv)Rge1D{;r">
                  <field name="NUM">1</field>
                </shadow>
              <block type="get_value"
id="l+nL:/(/S=]UY|M2-#7M">
                <field name="ATTR">val</field>
              <field
name="OID">javascript.0.TotalActiveEnergyWh_gestern</field>
                </block>
              </value>
              </block>
              </value>
              <value name="B">
                <shadow type="math_number"
id="nkI`PVg;I,we%ojJ,TA*">

```

```
        <field name="NUM">1000</field>
      </shadow>
    </value>
  </block>
</value>
<next>
  <block type="update"
id="SJs~Ys@X?5pv50XP=wqj">
    <mutation
xmlns="http://www.w3.org/1999/xhtml" delay_input="false"></mutation>
    <field
name="OID">javascript.0.StromZaehlerstandkWh</field>
    <field name="WITH_DELAY">FALSE</field>
    <value name="VALUE">
      <block type="math_arithmetic"
id="},ExWVJxj)o(5=vmy1.e">
        <field name="OP">ADD</field>
        <value name="A">
          <shadow type="math_number"
id="@8B(02U-tIrBZ2qRS*QM">
            <field name="NUM">1</field>
            </shadow>
            <block type="get_value"
id="_#ZSu=g6=)eF7:(ey4Bh">
              <field name="ATTR">val</field>
              <field
name="OID">javascript.0.StromZaehlerstandkWh_gestern</field>
              </block>
            </value>
            <value name="B">
              <shadow type="math_number" id="H-
iY+5=={P}IKvpkKUi;">
                <field name="NUM">1</field>
                </shadow>
                <block type="get_value"
id="?DIb~Cgt]yKCn?Eau4?j">
                  <field name="ATTR">val</field>
                  <field
name="OID">javascript.0.StomTagesverbrauchkWh</field>
                  </block>
                </value>
              </block>
            </value>
          </block>
        </next>
      </block>
    </statement>
  <next>
    <block type="schedule" id="#TX=ZX{-w2cu=Uj!nu0*">
      <field name="SCHEDULE">0 0 * * *</field>
```

```

    <statement name="STATEMENT">
      <block type="signal-cmb" id="n4NEdLb^*N-
$c[YJUMw_ ">
        <field name="INSTANCE">.0</field>
        <field name="LOG"></field>
        <value name="MESSAGE">
          <shadow type="text"
id="F/ePx6FS0r+[BT|h0L68">
            <field name="TEXT">text</field>
            </shadow>
            <block type="text_join"
id="+A!rZ(7aVj!~E{6~WV0m">
              <mutation items="2"></mutation>
              <value name="ADD0">
                <block type="text"
id="8EJ*o[R;:^=5;).KbZeh">
                  <field name="TEXT">Stom
Tagesverbrauch am </field>
                </block>
              </value>
              <value name="ADD1">
                <block type="text_join"
id="HeWwloE2zR[^)91A5vLf">
                  <mutation items="2"></mutation>
                  <value name="ADD0">
                    <block type="convert_from_date"
id="s;*kY*B;HuSZ^~w0=Q1B">
                      <mutation
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
                      <field
name="OPTION">DD.MM.YYYY</field>
                      <value name="VALUE">
                        <block
type="time_calculation" id="YM!lstPQJsLk~Nr|/C9S">
                          <field name="OPERATION">-
</field>
                          <field
name="UNIT">day</field>
                          <value name="DATE_TIME">
                            <shadow type="time_get"
id="*vxqb!BXG7I/C$m0(,6">
                              <mutation
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
                              <field
name="OPTION">object</field>
                              </shadow>
                              <block type="time_get"
id="c7c*a4_Wl/:1^bYj[5Gv">
                                <mutation

```

```
xmlns="http://www.w3.org/1999/xhtml" format="false"
language="false"></mutation>
                                <field
name="OPTION">object</field>
                                </block>
                                </value>
                                <value name="VALUE">
                                <shadow
type="math_number" id="|4-%[@-^:5+J56T:106m">
                                <field
name="NUM">1</field>
                                </shadow>
                                </value>
                                </block>
                                </value>
                                </block>
                                </value>
                                <value name="ADD1">
                                <block type="text_join"
id="=%;,#+%QHjmLt3hl!=~r">
                                <mutation items="2"></mutation>
                                <value name="ADD0">
                                <block type="text"
id="3:2kP58oTBRcZi2),~ld">
                                <field name="TEXT">:
                                </field>
                                </block>
                                </value>
                                <value name="ADD1">
                                <block type="text_join"
id="tmVWY7$h@F7sTbDx8RxC">
                                <mutation
items="2"></mutation>
                                <value name="ADD0">
                                <block
type="math_rndfixed" id="r$r$dA.ncKJ|_gq606gB">
                                <field
name="n">3</field>
                                <value name="x">
                                <shadow
type="math_number" id="AThWyAlfX]^`N:24Bj)1">
                                <field
name="NUM">3.1234</field>
                                </shadow>
                                </block>
                                <value name="get_value" id="#R/Z*/!V{2!I`w97g5#"$">
                                <field
name="ATTR">val</field>
                                </field>
                                <value name="OID">javascript.0.StomTagesverbrauchkWh</field>
```


Instanzeinstellungen: influxdb.0 v3.2.0 warn
?

DB SETTINGS
STANDARDEINSTELLUNGEN
EXPERTENEINSTELLUNGEN

DB-Version
1.x

Protokoll Server Port
http localhost 8086

Benutzer Passwort Passwort (wiederholen)
admin

DB Name
iobroker

Request Timeout
30000 Millisekunden

Runden Sie bei der Abfrage die Zahlen auf Protokollieren Sie den letzten Wert erneut beim Start
4

Schreibaktionen zusammenfassen Schreibintervall
0 60

Wert 0 schreibt Werte direkt Sekunden

DIE VERBINDUNG ZUM SERVER TESTEN
ALLE DATEN IN DATENBANK LÖSCHEN

Backup durch Script

v3.10.1
admin

- Übersicht
- Adapter
- Instanzen
- Objekte
- Aufzählungen
- Protokolle
- Benutzer
- Hosts
- Dateien
- Backup
- Skripte

v7.1.4

JS BACKUP_TO_USB-S...

```

1 // Täglich um 03:00 Uhr Nachts wird das Backup ausgeführt. Anpassbar unter "schedule"
2 var usbstick = "/mnt/usb-stick/backup/"; /*Hier den Pfad zum USB-Stick eintragen*/
3
4 function backup() {
5   exec('iobroker backup',
6     function (error, stdout, stderr) {console.log('stdout: ' +
7       stdout)});
8   setTimeout( function() {
9     exec('mv -v /opt/iobroker/backups/* ' + usbstick,
10      function (error, stdout, stderr) {console.log('stdout: ' +
11        stdout)});
12   }, 180000);
13 }
14 schedule("0 3 * * *", function(obj){
15   backup();
16 });

```

```

// Täglich um 03:00 Uhr Nachts wird das Backup ausgeführt. Anpassbar unter
"schedule"
var usbstick = "/mnt/usb-stick/backup/"; /*Hier den Pfad zum USB-Stick
eintragen*/

function backup() {
  exec('iobroker backup',
    function (error, stdout, stderr) {console.log('stdout: ' +
stdout)});
  setTimeout( function() {
    exec('mv -v /opt/iobroker/backups/* ' + usbstick,
      function (error, stdout, stderr) {console.log('stdout: ' +
stdout)});
  }, 180000);
}

schedule("0 3 * * *", function(obj){

```

```
    backup();  
};
```

Update und Bugfixing

```
iobroker stop  
iobroker update  
iobroker fix  
# oder curl -sL https://iobroker.net/fix.sh | bash -  
iobroker upgrade self  
iobroker start
```

From:

<https://von-thuelen.de/> - Christophs DokuWiki

Permanent link:

https://von-thuelen.de/doku.php/wiki/projekte/iobroker_banana_pi_m2u/uebersicht?rev=1767990836

Last update: **2026/01/09 20:33**

