Software Release Notes

dSS V1.19.0

digitalSTROM AG uses Software Release Notes (SRN) to provide information about software changes and updates of existing products.

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dS Energy: Feature Extension

Your home has a Photo Voltaic (PV) System but you are frustrated that you cannot automate your energy intensive consumers to turn on when you have surplus production?!
Not anymore! With this release, we now enabled the dSS to be configured to turn any device you want on or off based on the currently produced power. Additionally, using the dS SmartHome App, you can monitor the real time production and consumption of power as measured by all your dSMs and observe historical energy trends (more in the Section "dS Smart Home" App.

Prerequisites

In addition to updating your dSS to this newest version (1.19.0), to measure the production power of your PV System (or any other system that produces electricity), you will need to install an additional dSM per inverter (See section on "dSM" below). These dSMs then need to be configured in the Hardware tab of the dSS Configurator to measure production (see Figure 1). Additionally, a scale factor can be set in case a current transformer is used or when measuring only one phase of a 3-phase inverter.
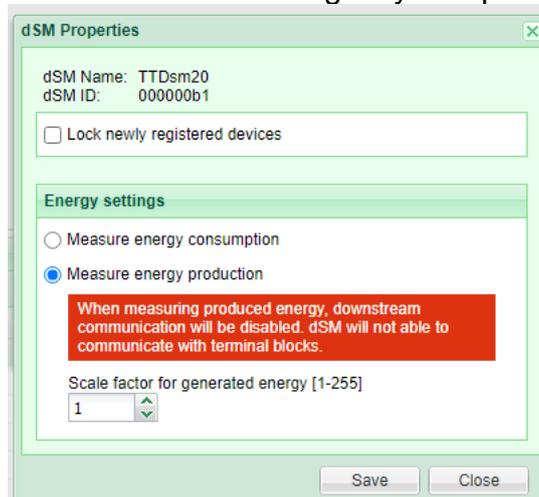

Figure 1: Setting dSM to measure energy production.

Setting up load management using UDS

Once the dSMs have been configured for measuring production, in the User Defined States (UDS) Add-on it is possible to configure new states that will become active and inactive based on the currently produced power that is measured (see Figure 2).
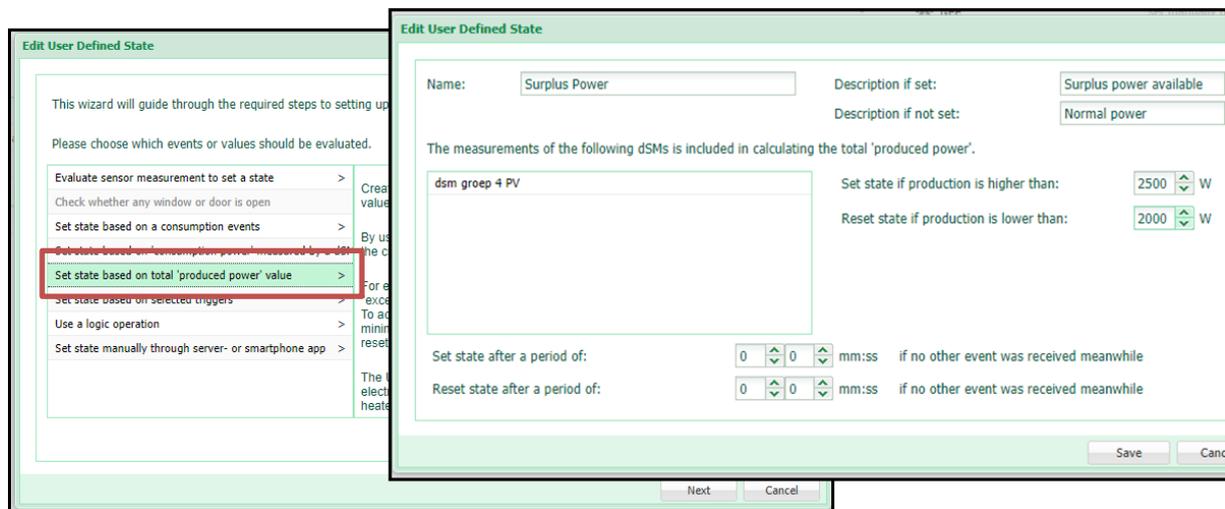

Figure 2 - Create a UDS based on produced power

Know Limitation: Currently, the power value that can be entered is limited based on the dSM type that is used. This is a bug and this limit will be removed in a hot-fix that will follow soon.

After having set up the desired UDS, you can use it to trigger an automation rule in the Event Responder. In combination with a SW-KL200 or SW-UMR200, it is thereby possible to switch any load on or off based on the currently produced power. In case of white goods that are natively integrated into digitalSTROM, such as washing machines and dryers from V-Zug, Siemens or Bosch, it is possible to trigger the start of a pre-configured program when extra power is available.

We are excited to hear back from you how you use this new feature to optimize your energy balance. Let us know!

Smartphone App "dS Smart Home"

- New: Extension of the energy monitoring features
  - All values related to consumed energy, now appear in orange while the new values related to produced energy are in green.
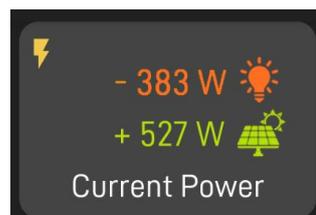 - "Current Power" Tile has been extended with produced power (See Figure 3).

Figure 3 :Current Power Tile

o Clicking on the "current power" tile, will show a detailed view of the current power measured by each dSM in the installation (see Figure 4).

Consumed Power	Watts ⌄
dsm groep 10	162
dsm groep 3	79
dsm groep 2	27
dsm groep 11	0
dsm groep 4 PV	0
Produced Power	Watts ⌄
dsm groep 4 PV	792

Figure 4: Detailed view of current power

o Clicking on the "energy consumption" tile opens a bar graph which allows more detailed views of historical energy trends (see Figure 5).
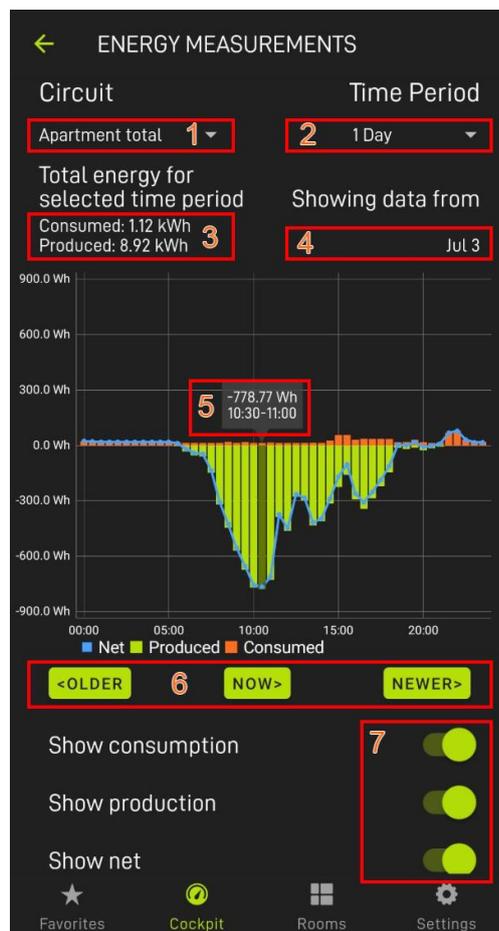
1. Select whether to view values for a specific dSM or the whole apartment.
2. Select the time period to be shown in the graph (see Table 1 for possible values)
3. Total consumed and produced energy for selected time period.
4. The date of the shown time period. In this example, the whole day of July 3.
5. Marker showing detailed information on selected measurement point.
6. Scroll to older dates, or back towards the present.
7. Show or hide respective data series.

Figure 5: Detailed energy bar graph view

▪ Time period and resolution – Based on the selected time period, the time range (resolution or aggregation time) represented by each bar in the bar graph changes. The available combinations

are shown in Table 1. Have fun analyzing your energy usage and showing off to your friends how little energy you use.

Time Period		Resolution of bar in bar graph
12	Hours	15 min
1	Day	30 min
3	Days	1 hour
1	Week	3 hours
2	Weeks	6 hours
4	Weeks	12 hours
12	Weeks	1 day

Table 1: Time period vs resolution

- Fixed: local connectivity is now working correctly. When switching between tabs, you do not have time anymore to make a coffee (both Android and iOS).
  - Released already on Android with version 1.9.2.1875
  - Will be fixed on iOS with version 1.10.0.xxxx
- Fixed: After connecting to the dSS directly using the dSS admin PWD, the apartment is now shown correctly (Android only).
  - Released already on Android with version 1.9.2.1875
- Fixed: Login with iPhone with special character in the device name is now possible again. We just remove them on our side. So feel free to call you device "Superman's iPhone" again (iOS only)
- Improved: The app now clearly indicates which interface is currently used to connect to the apartment, local or cloud. Watch for the vertical double arrow in the green circle in the connection screen (both Android and iOS).

my.digitalSTROM

- New: your weekly dSS backups are available for download in the my.digitalSTROM account pages (will be available after 14.07.2021).
- Fixed: The successful creation of the remote access link to the dSS Configurator as part of the dSS to dS cloud connection process was a bit of a gamble. We have improved the odds in your favor.
  - **Important Note**: after the dSS connection process is complete, it may take several minutes until the remote access link to the dSS Configurator is correctly functioning. Also, after disconnecting the dSS from the dS cloud, please wait at least 5 Minutes until you reconnect the dSS to the dS cloud.
- Fixed: It is possible to log into the dS legacy apps and third party tools (such as ds-tools.net from Christoph Hoffman) using the new (migrated) my.digitalSTROM account (will be available after 14.07.2021).

Server-Apps

- Improved: The procedure to connect the dSS to the dS cloud has been improved to be more intuitive. Also, the presentation of information in the my.digitalSTROM Add-On App has been improved. Not that we do not look forward to your phone calls, but hopefully this will help eliminate the number of phone calls to our support team.
  - **Important Note:** After disconnecting a dSS from the dS cloud, please wait 5 minutes until re-connecting, in order to reduce the odds that the remote link to the dSS Configurator will not work after re-connecting.
- Fixed: Siemens and Bosch App – Washer and Dryers are now always recognized, even if the device is off and offline.

dSS

- Fixed: When configuring the SW-SKM300 to a 2x2-way input, also the second pair of the 2-way input is now behaving correctly.

dSM

- New: Support for measuring produced power. As explained earlier, at least one dSM needs to be installed per Inverter (see Table 2). Just as before, the dSM is installed in series on the circuit to which the inverter is connected.

Inverter Setup	Number of dSMs	Scale factor to set
1x single phase inverter	1	1
1x 3-phase balanced inverter	1	3
1x 3-phase unbalanced inverter	3, one per phase	1
Multiple inverters	For each inverter at least 1, see types of inverters as listed above.	-

Table 2: Number of dSM depending on inverter types

  - Based on the maximum power output of the inverter per phase, the correct dSM is to be chosen
    - **Up to 16A (3600 W) – dSM20**
    - **Up to 25A (5740 W) – dSM25**
    - If above 25A (more than 5740W per phase), then use a current transformer and set the scale factor accordingly (see Figure 1).
  - Note: dSM 12 does not support measuring produced power

Known Limitations

- The u::lux integration currently has some limitations, mainly in constellations where many of them are present. We are working on fixing this bug as well some other u::lux related issues.

Other

- We have found out what has caused our cloud to crash in early June and are actively working on implementing measures that would prevent this situation from occurring again.
- The current state of our various cloud services can be seen online at http://status.digitalstrom.com. If you notice any complications with any of the cloud-based services, please inform yourself on this page.
- Please join us on our dS Facebook user group to interact with us and other dS users online.

Software Update Recommendation

Updating to this software-version is recommended to benefit from the latest improvements and features.

Documentation

Further information about the features and how to use them can be found in the latest digitalSTROM manual under "Operation and Configuration" or "Installation".
The latest version of the manuals can be found on:
http://www.digitalstrom.com/en/Partner/Support/Operating-manuals/.

Affected Products

Product	Software Description	New Version	Release date
digitalSTROM-Server • dSS11-1GB • dSS11-E • dSS20 / dSS22 • dSS-IP	dSS Version	1.19.0	07.07.2021
digitalSTROM-Meter • dSM11 • dSM12	ARM-Software-Version DSP-Software-Version	1.42.0.0 1.9.1.0	07.07.2021
digitalSTROM-Meter • dSM20 • dSM25	ARM-Software-Version DSP-Software-Version	2.5.0.0 1.3.0.0	07.07.2021
dS Smart Home App	Version iOS Version Android	1.10.0.xxxx 1.10.0.xxxx	Expected: 29.07.2021 19.07.2021

Note:
The product support for digitalSTROM-Server dSS11 has been discontinued. The dSS11 continues to run with version 1.14.5.
For more information, please visit: https://www.digitalstrom.com/en/support/dss11/

Installation Notes

dSS and dSM

- Execute the software update from the digitalSTROM configurator within the menu *"System / System Update"*.
- The dSS must be connected to the Internet in order to perform the update. Alternatively, the update can be installed by using a USB thumb drive.
- It is advisable to back up your system settings prior to performing a system update within the menu *"System / System Maintenance"*.
- Once the system updates are installed, the system checks again for available updates. In case there are additional dSM firmware updates available, they must be installed manually by clicking the *"Update System"* button.
- A complete list of release notes as well as the USB update file can be found at http://www.digitalstrom.com/Partner/Support/Software-Updates/.

dS Smart Home App

- The newest version of the app is available online
    - iOS: Apple App Store
    - Android: Google Play Store

How to find the version information

dSS and dSM

The currently installed software version can be found within the digitalSTROM Configurator.

Figure 6: version number for dSS and dSM

dS Smart Home App

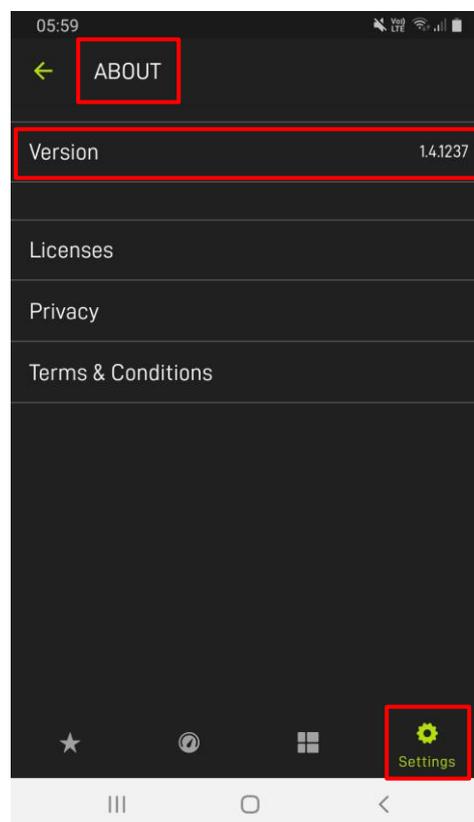The currently installed version can be found in the menu "*Settings / About*".

Figure 7: version number of dS Smart Home App