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**Worldwide access to professional water management.  
With SMART.SWS**

**New!  
Discover  
SMART.SWS**

# The SWS water management system and SMART.SWS

## The all-rounder for networked sanitary fittings.

The intelligent SCHELL water management system SWS has been developed by SCHELL's hygiene experts specifically for public sanitary facilities. The system helps facility managers maintain drinking water quality, protect against damage from leaks, document runtime parameters from the drinking water installation and ensure cost-effective operation. The networking, control and monitoring of all electronic fittings and temperature sensors is handled by the central water management server. All major fittings in public sanitary facilities are included, from wash basin taps and shower fittings to WC/urinal fittings and leak protection valves.

### SCHELL SMART.SWS – Worldwide access to professional water management.

SMART.SWS is a visualisation solution for one or more buildings using SCHELL water management systems. The visualisations shown are based on data from the SWS server. SMART.SWS offers a quick overview of the most important runtime parameters for the SWS systems. As well as considering a single SWS server separately, multiple SWS server instances can be viewed together if permitted by the user role. SMART.SWS can be used for any facility that has deployed SCHELL SWS: users merely require an internet connection.

### Graphical reporting on the following data to ensure effective SWS operation:

- Stagnation flushes
- Thermal disinfections
- Temperature curves
- Water volumes (calculated from parameters)
- Frequently/rarely used fittings
- Battery charge states
- System messages

### Your advantages:

- Safety for operators, offering a quick functional overview of their systems
- Safety for users – clean drinking water
- Time and cost savings, with a quick overview and efficient maintenance planning (e.g. replacing batteries)
- Runtime parameter monitoring (VDI 6023) from any location and any device with a web browser
- The right view for each user
  - Properties
  - Building
  - Water management system
- Remote access to the SWS server (with separate password for extra security)



# SMART.SWS – a guide to the technology.

## How SMART.SWS is integrated.

To ensure that access to the SCHELL drinking water management system can be set up for any device with internet access, SCHELL has created its own platform at the Azure EU cloud host. All data transfer is naturally encrypted for all communication to and from this platform.

### Platform usage:

- Dedicated SCHELL platform at Azure EU
- Reporting on SWS systems
- Remote server access possible via login
- User and role management
  - Administrator
  - Facility Manager
  - Technician

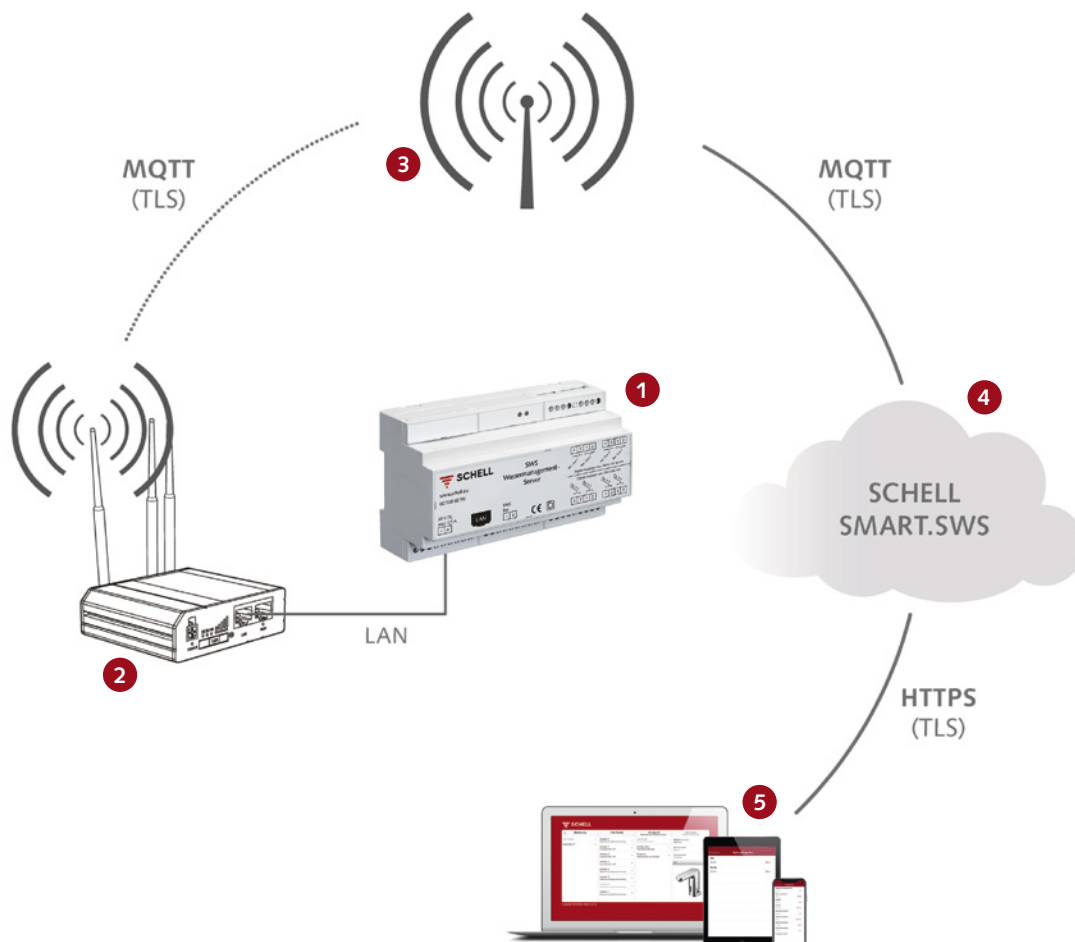
- 1 SWS server
- 2 LTE router with SIM card
- 3 Mobile phone network
- 4 MS Azure cloud platform
- 5 Internet-capable device

### MQTT

Message queuing telemetry transport (A machine-to-machine communication protocol)

### TLS

Transport layer security (encryption program)

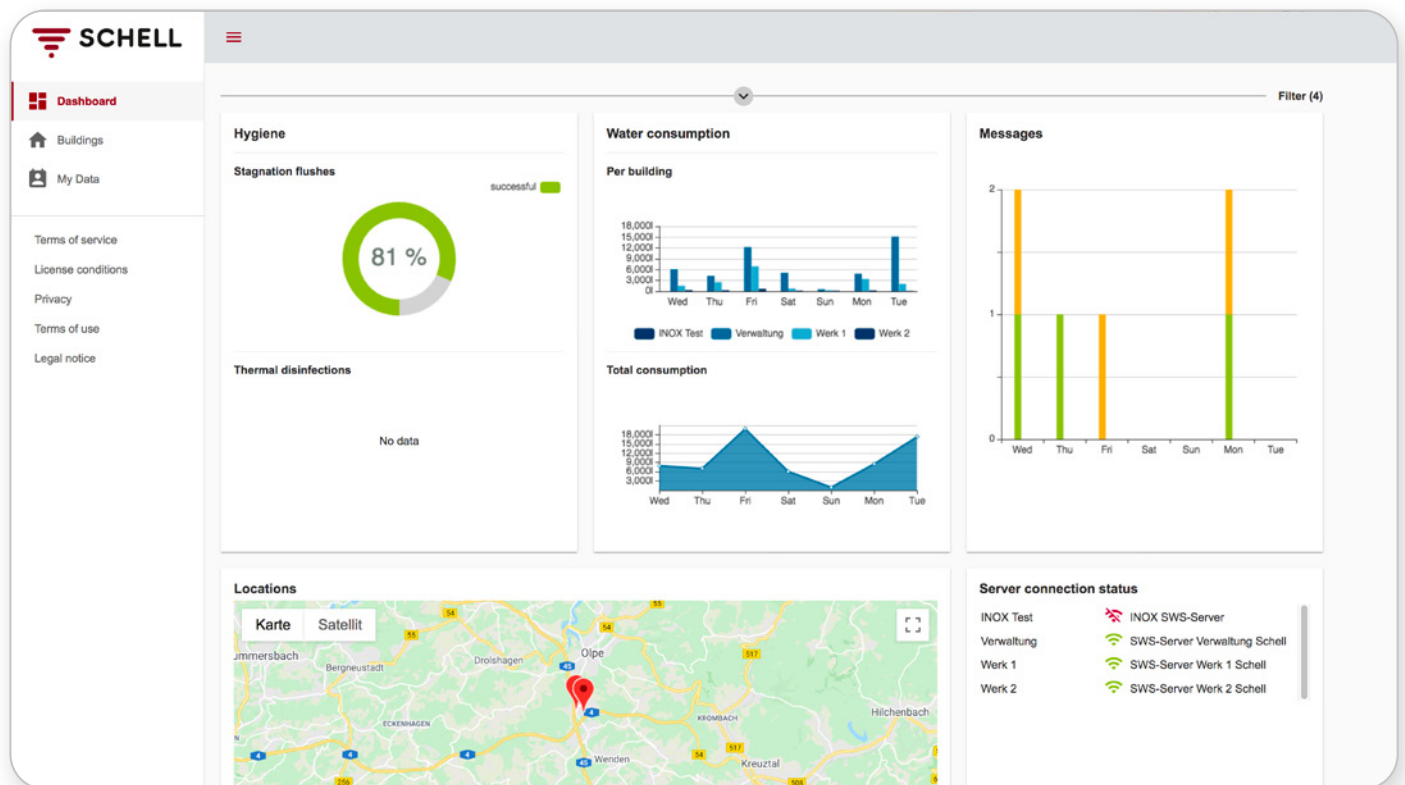


# SMART.SWS

## The user-friendly dashboard.

From a server-level view to a general overview of all of the buildings: messages, calculated water consumption and much more is all attractively visualised by the SMART.SWS dashboard. The views vary by user role, so as to ensure that only the relevant data is displayed for the individual currently logged in.

### Dashboard



The overall overview layout depends on the user role selected:

- Operator: Dashboard for all buildings
- Facility manager: Dashboard for one building
- Technician: Dashboard for one server

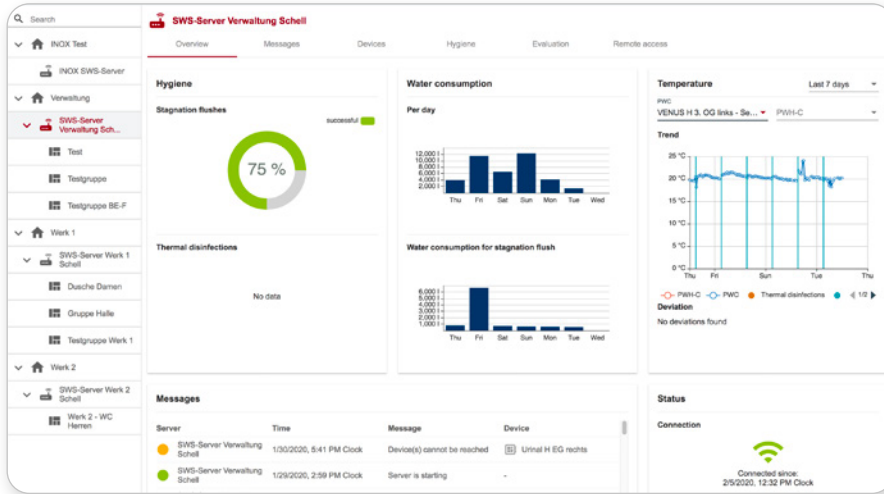
The following data is displayed:

- Overview of successful stagnation flushes according to flush programming
- Overview of water consumption (calculated)
  - Building comparison
  - Total volume
- Server messages
- SWS system location(s)
- Availability of SWS system(s)

# SMART.SWS

## Server-level views.

### Overview



Overview of all information from one server:

- Overview of successful stagnation flushes according to flush programming
- Overview of water consumption (calculated)
  - Total consumption
  - Stagnation flush consumption
- Temperature curves
- Messages
- Server availability

### Device list

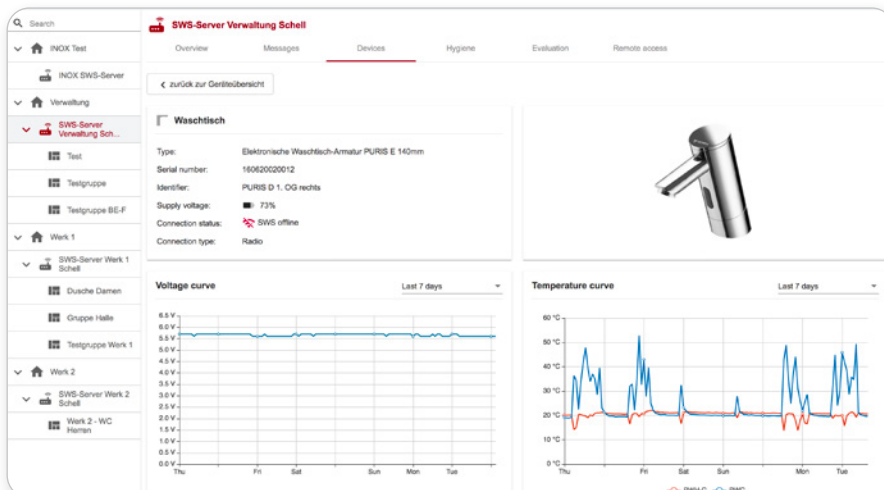
Server	Type	Serial number	Connection status	Supply voltage	Firmware	Details
SWS-Server Werk 1 Schnell	FM WC Damen	616	Online	80%	V1.6 B0	
SWS-Server Werk 1 Schnell	FM WC Herren	603	Online	80%	V1.6 B0	
SWS-Server Werk 1 Schnell	Dusche Damen	181106200CB	Online	80%	V03.02	
SWS-Server Werk 1 Schnell	CELS 4 D	19022502004C	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	CELS 3 D	181210020083	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	CELS 1 D	190229020019	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	CELS 2 D	190225020040	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	Buero Drehene WT	190225020061	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	WC Herren WT rechts	19022502003B	Online	80%	V03.05	
SWS-Server Werk 1 Schnell	WC Damen WT mitte	190225020092	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	WC Herren WT mitte	19022502000F	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	WC Herren WT links	191127020011	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	WC Damen WT links	19010902000B	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	WC Damen WT rechts	18121102001B	Online	80%	V03.09	
SWS-Server Werk 1 Schnell	FM Flur Umkleede Damen	604	Online	80%	V1.6 B0	

Operators can use the information from networked devices for effective maintenance planning.

Data items displayed:

- Software versions
- Connection status
- Battery charge in percent

### Device details



Devices can be selected individually.

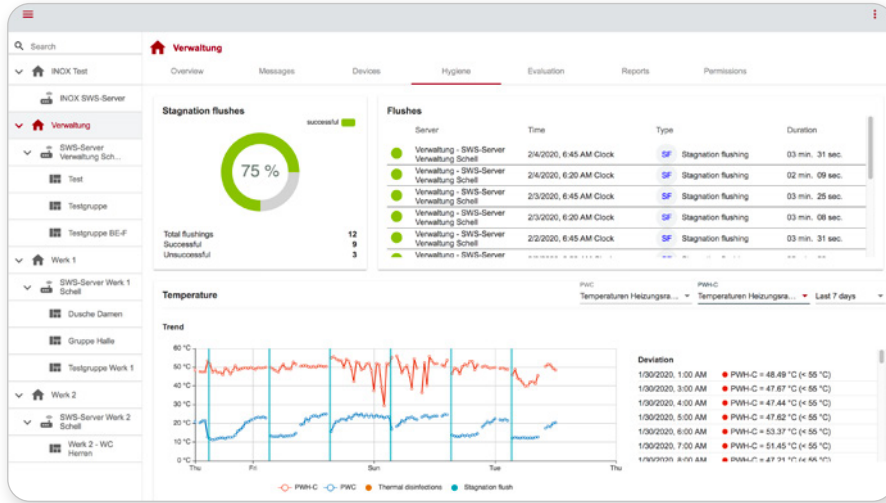
This gives operators more detailed data about fittings:

- Fittings data
- Connection status
- Battery charge curve
- Temperature curve

# SMART.SWS

## Server-level views.

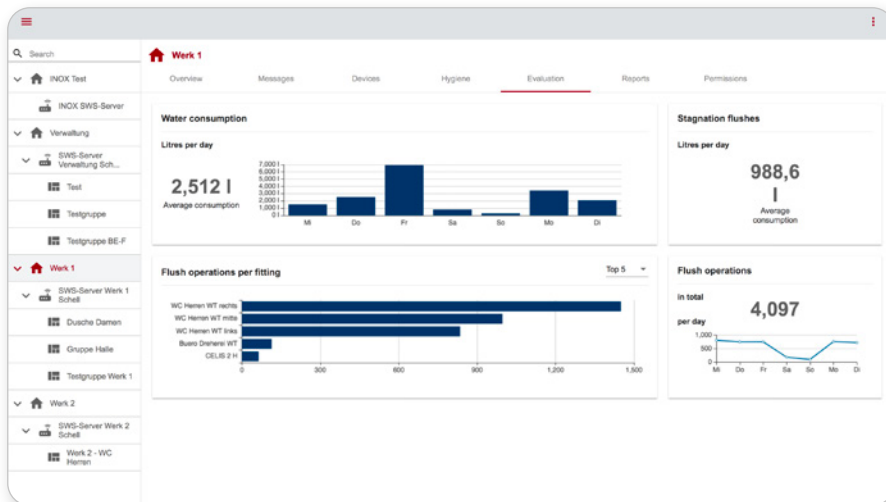
### Hygienic flushes



Information about hygiene flushes and temperature curves help operators to analyse their system(s) accurately:

- Stagnation flushes
  - List
  - Chart
- Temperatures
  - Value too high
  - Value too low

### Reporting



Reports give technicians an indication of the maintenance effort required, as well as unused fittings that could be removed.

Data items displayed:

- Water consumption (calculated)
  - Daily consumption
  - Stagnation flush volumes
- Display of Top 5/Flop 5 fittings:
  - Five fittings used most frequently
  - Five fittings used most infrequently

### Reports



The most important sets of data are sent as a report at regular intervals:

- Clearly formatted and structured report
- Ideal for archiving

## How can you become a SMART.SWS user?

Just order your package and get started.

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SMART.SWS is always made up of two packages. Alongside the one-off Setup Package you then order your ongoing Usage Package. Installation and commissioning are handled by qualified SCHELL service technicians.



### The Setup Package

- All of the SMART.SWS components required
- Installation of SMART.SWS components
- SMART.SWS commissioning



### The Usage Package

- Use of SMART.SWS
- Also covers mobile network charges



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