



## DIGITAL WORKFLOWS BY SENNHEISER

How to save time, cost and hassle  
with software-supported workflows

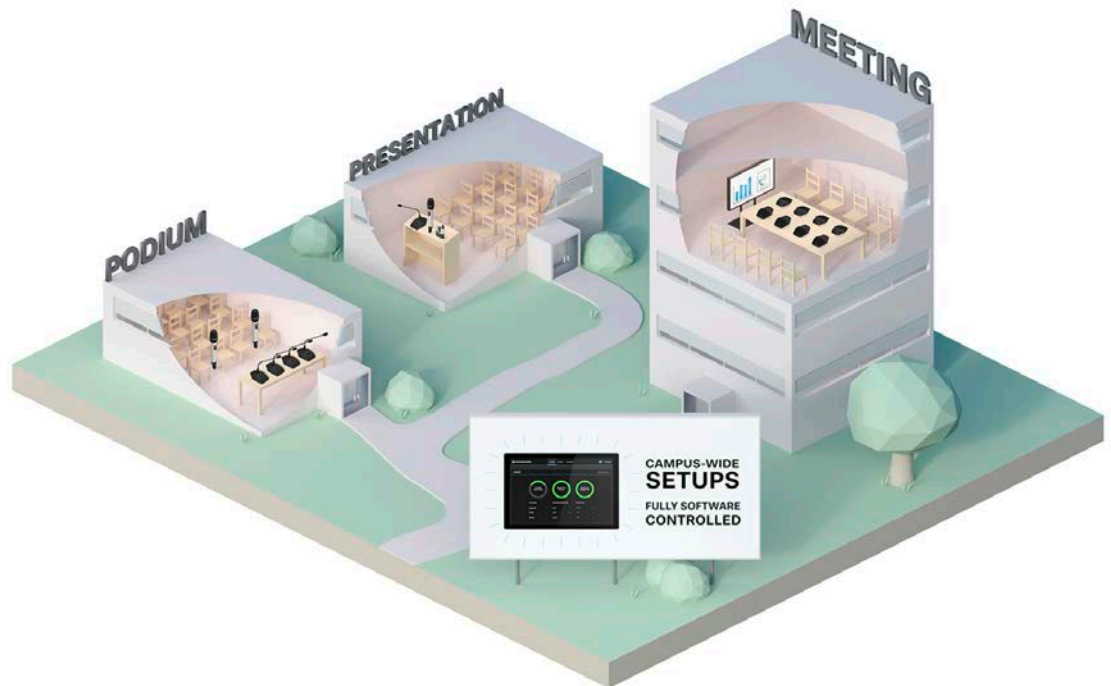


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## How to save time, cost and hassle with software-supported workflows by Sennheiser



Digital workflows are the next logical step after the digitization of AV equipment that has led to a wide convergence of IT and AV. Not only are workflows such as checking the battery status of a microphone transferred into the digital domain. New ways of product interaction are created. That unlocks a broad range of benefits in the daily interaction of people and devices.

The trend to product standardization in large-scale IT-based audio setups calls for a central software management tool with global access that allows the easy operation of complex systems with multiple microphones. Digital Workflows by Sennheiser are optimized for location-based processes of monitoring, controlling and maintaining. Moreover, they offer a broad range of support features.

The combination of automatic notifications, display of status information and the possibility to share responsibility and delegate tasks make costly, time-consuming and nerve-racking procedures associated with former analog workflows obsolete.

With digital workflows and centralized control of devices in the network, the daily business of IT staff in AV management becomes easier, faster and more cost-efficient. Sennheiser is the right partner when it comes to AV solutions that can be integrated easily and safely into existing networks.



## Definition: What is a digital workflow?

Digital workflows are software-supported workflows. The combination of IT-friendly AV devices and a centralized control software forms the basis of wholistic digital workflows that are optimally tailored to daily business challenges for most efficient working. A centralized device monitoring solution like the Sennheiser Control Cockpit, which is accessible everywhere in the network on all common platforms, gives you complete remote control over your entire wireless microphone setup.

## Sennheiser Control Cockpit: Everything under control



The Sennheiser Control Cockpit is the core software to control audio systems in corporate and educational applications. In interaction with Sennheiser's IT-friendly AV portfolio (MobileConnect, SpeechLine Digital Wireless, SL Ceiling Mic 2, evolution wireless G3/G4), the Sennheiser Control Cockpit provides optimal Digital Workflows for device setup, monitoring, control, maintenance and assistance. The easy-to-use control software provides a global dashboard overview of all compatible network enabled devices of Sennheiser at any time. The staff will be informed by push-notifications before undesired incidents might occur. The Sennheiser Control Cockpit enables IT managers and helpdesk staff to monitor and control AV setups within their very own field of expertise. Our convenient workflows have been co-developed together with end-users to cater for common but also specific workflow needs.



## 3 eye-opening Digital Workflows that re-define daily business routines

To underline the benefits of digital workflows, the following examples give you an impression of what is possible and how deeply software-supported workflows can change and optimize your daily business routines.

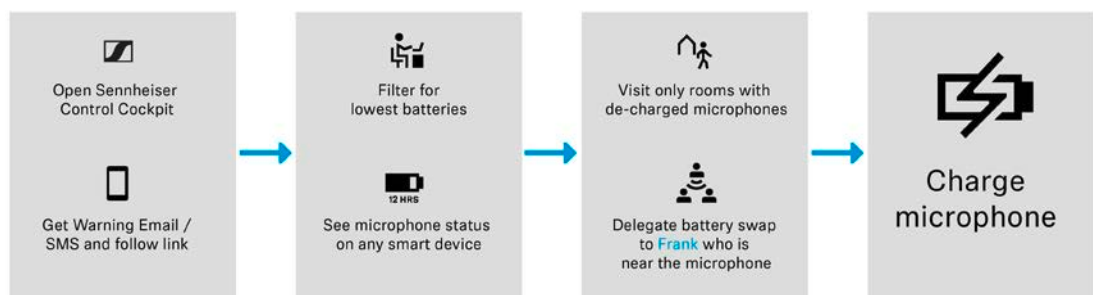
### 1. Digital battery management: How to check battery status

Without digital workflows and centralized monitoring of devices in the network, the process for checking the battery status is time-consuming and tiring. You or your staff need to personally visit every location equipped with portable devices such as wireless microphones. In a campus-style setup, this can mean many lecture halls, typically equipped with several devices each. The first thing is finding the microphone, as it is often not kept where it is supposed to be. For microphones that are not equipped with rechargeable batteries, primary cells have to be swapped prior to every usage. Depending on battery runtime and operational schedules, this could happen even two times a day – for every lecture room.

The digital workflows for battery checking do not only save time but also offer multiple new ways to manage many devices with ease. As network-enabled microphones such as evolution wireless G4 and SpeechLine Digital Wireless can be centrally monitored, you can check the respective battery status from a central management tool like the Sennheiser Control Cockpit. Its global device dashboard already provides an overview of your entire campus device fleet and lets you see the battery lifetime of all wireless microphones that are in use. By using the network-enabled charging stations, you can also see the time-to-full charging time. This allows for full 360° monitoring coverage.

Other than the analog workflow of going to every location, the Sennheiser Control Cockpit's sort and filter functions allow identifying mission critical battery states in seconds with two clicks. You can easily identify the very portables that need a recharge together with their location. So you save time by only visiting the respective locations or by delegating within your team because you know which of your colleagues is nearby anyway or could cope the task along the way.

You can even subscribe for battery status notifications sent out via email or SMS. As soon as a battery enters a critical state of an hour of runtime left, an alert can be sent out. It will also be stored in a message list of events, notifications and alerts. This allows for evaluating your internal processes and user behavior. Maybe it is only this microphone in that one location running empty every Wednesday...





## 2. Location-based management: How to support the user at his actual position

Before the emergence of network-enabled devices and adding location meta data to devices, wireless microphones had to be managed in a complicated way – offline. Digital Workflows by Sennheiser are optimized for location-based processes and offer a broad range of support features. If something like a run-flat battery occurs or the microphone user may be confused with a mute status, the service or help desk personnel gets the call from the microphone user from his location: “I am in room xyz and the microphone is not working”.

This can have various reasons: maybe the microphone is simply muted, maybe the battery is empty, maybe the microphone belongs to another location and is not linked up. With the Sennheiser Control Cockpit, it can easily be identified what the actual cause for the support inquiry is and the problem can be solved fast.

As a supporter you need to interact with the microphone user in the respective location. No longer is it required to take the walk to the location to review, analyze and trouble-shoot, all of this can be done anywhere on the campus, anywhere within the network.

The Sennheiser Control Cockpit is accessible anywhere on the campus via a browser and is managed by locations. You can either access the location overview to directly switch to the room where the user is located. Or you can filter or search for either room or devices in the device list. Digital workflows are not just digitized processes as such. They also allow for seamless hardware-software interaction. With “filter by remote identify” activated, any identification of a wireless microphone or stationary receiver will bring this very device into selection in the Sennheiser Control Cockpit. You know exactly which device the user is holding. Moreover, remote identification is possible by either pressing the identify button on a device or in the software interface which will trigger flashing LEDs for direct feedback.

Knowing the device and location now allows for support. If the microphone is simply muted, the mute switch status can be altered in the software, activating the user’s microphone and making it “work” again. If the battery is empty, you can either guide towards a fully charged microphone or prepare a spare one with a remotely triggered pairing process.

All settings that can be adjusted on the device hardware are accessible within the software – and even some more. Potential issues can be identified quickly and direct trouble-shooting without the necessity to walk to the respective location is possible.





### 3. Staying up-to-date: How to benefit from updates in a snap

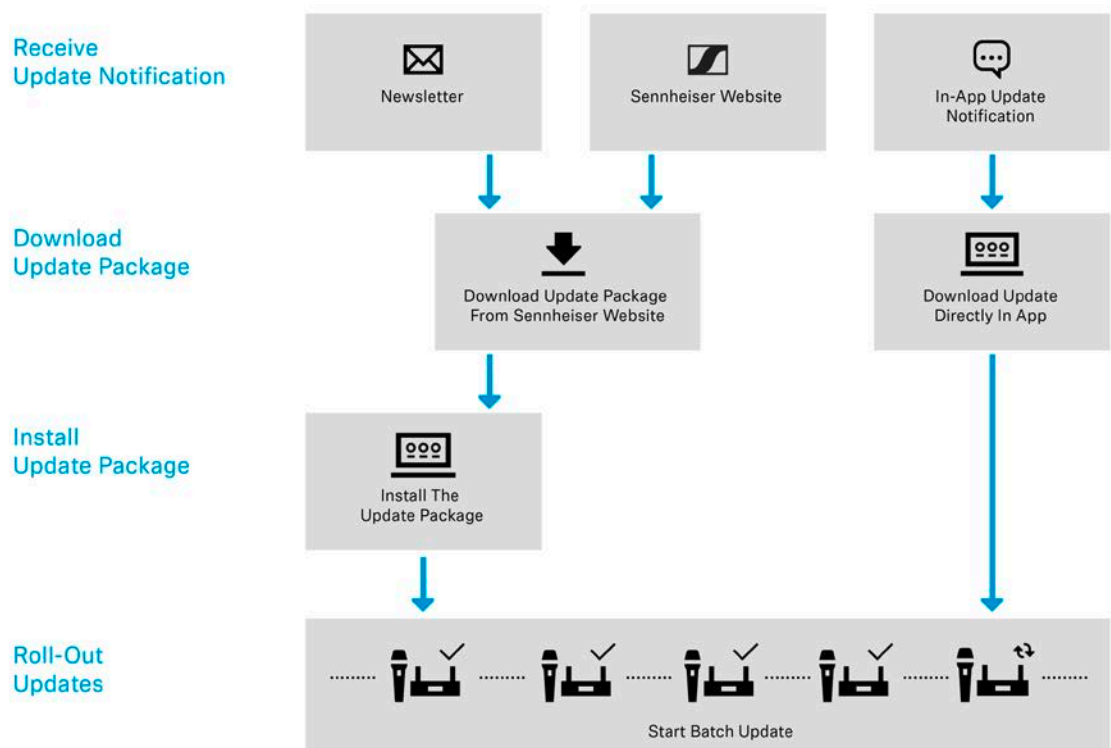
On the pursuit of perfect user experience, software and firmware updates add value and benefits to already installed devices. They allow to benefit from new workflows and features or device skills. To easily gain access to new software or firmware versions, updates and communication, digital workflows are tailored for seamless roll-out.

Digital workflows ensure convenient access to updates. If the host PC of the Sennheiser Control Cockpit has internet access, it will receive and display update information on-screen. In most cases, the update can easily be performed directly in the software. Additionally, the update information can be shared via an e-mail newsletter.

New device firmware can also be uploaded manually to the Sennheiser Control Cockpit or, in case of internet access, directly accessed with the tool.

A great benefit of the centralized management is the roll-out of new firmware. Devices of the same kind can be selected as a group and updated simultaneously. The workflow guides through the update process and reports its success in the end. This makes it easy to benefit from new functions or skills that are permanently added in ongoing development.

The latest software revision of the Sennheiser Control Cockpit is available for download at [www.sennheiser.com](http://www.sennheiser.com). The latest firmware revisions are available on the respective product pages.





## Digital Workflows by Sennheiser

A short extract from all the key Digital Workflows for Sennheiser's network enabled microphone systems:

SETUP	MONITORING	CONTROL	ASSISTANCE	MAINTENANCE
Device discovery & device management	Dashboard monitoring	Remote control of device settings	Information via email & SMS before possible error	Newsletter & on-screen notification for software and firmware updates
Initial device configuration	Software/hardware interaction – search or filter devices	Identify devices	Support hub with a link to the related chapter in the manual	Batch update of multiple devices
Notification services Setup & security settings	Notification logistics – (shared responsibility)	Reset devices or values	Remote initiation of pairing process (prepare spare microphone)	Maintenance & management of batteries
...	...	...	...	...

A complete overview of all key Digital Workflows by Sennheiser can be found in the download section of the Sennheiser Control Cockpit website:

[www.sennheiser.com/control-cockpit-software](http://www.sennheiser.com/control-cockpit-software)





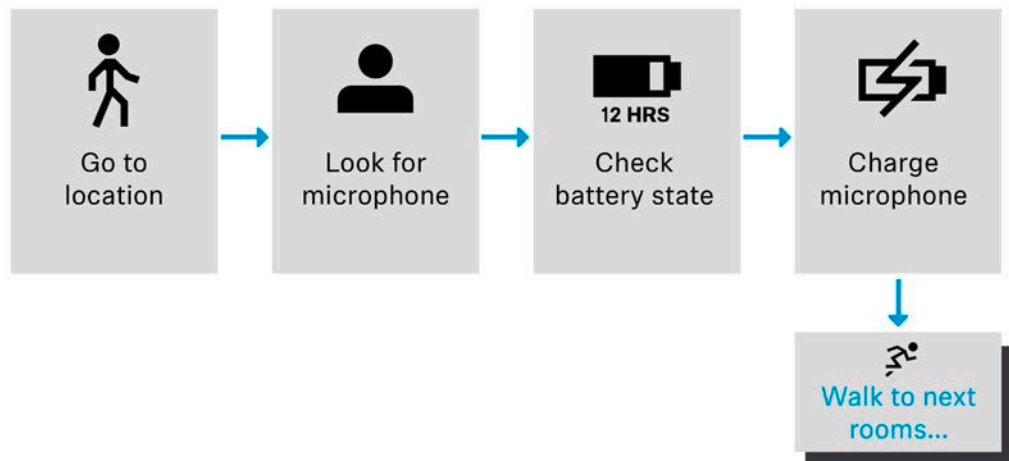
## The benefits of Digital Workflows

### by the example of battery change

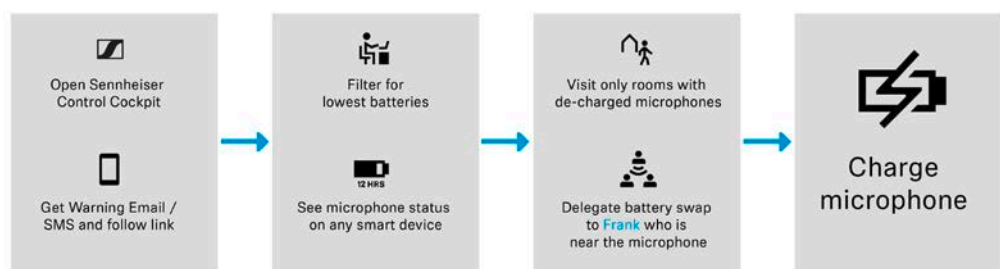
Enterprises and educational institutions spend a lot of time and money on manually servicing microphone solutions that are spread all over the campus. Checking the battery status and function of each device can be a challenge when microphones are dispersed among conference rooms, offices or auditoriums. In campus-wide setups, there are typically long ways between all the devices in different rooms. With only little staff and a lot of devices to set up, control and maintain, this can become problematic.

The following illustration shows the difference between analog workflows (“management by walking”) and Digital Workflows by the example of a classical everyday task: the battery check.

#### The Analog Workflow – Management by walking



#### Daily business routines – optimized by Digital Workflows

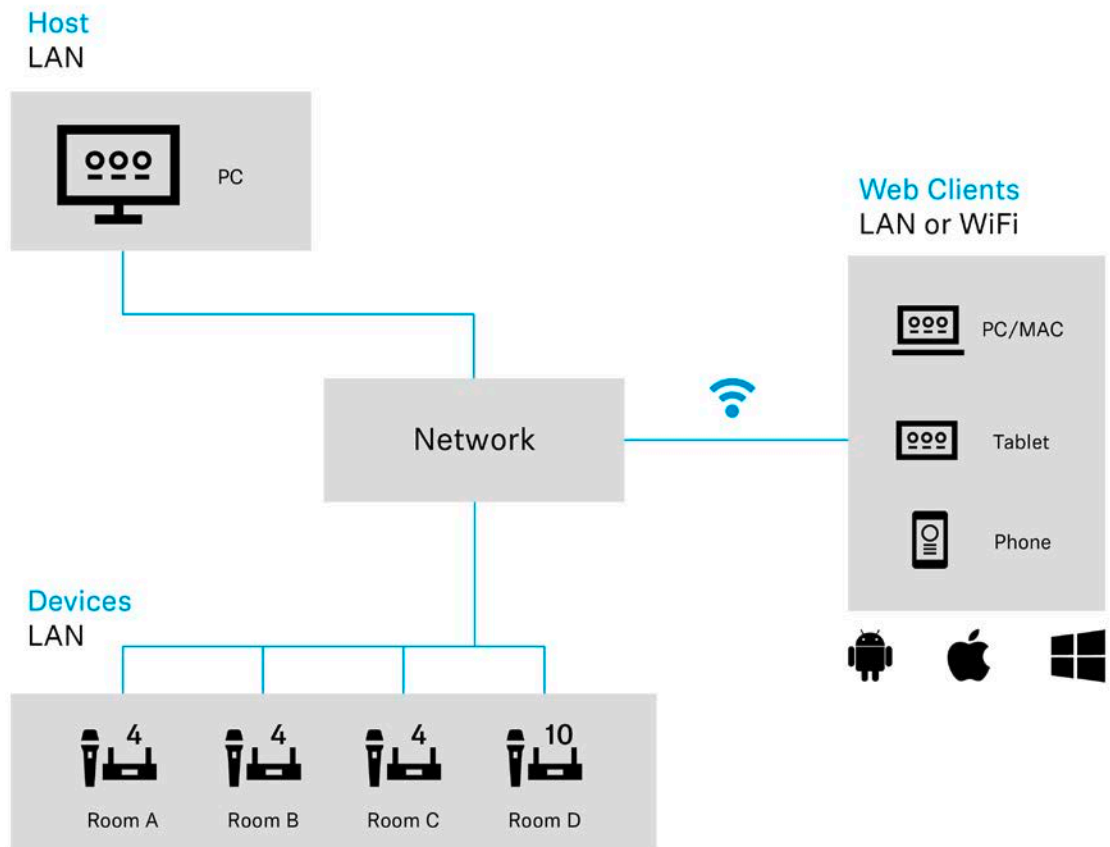


The combination of automatic notifications, display of status and the delegation to a responsible colleague who is near the microphone that needs to be charged makes costly, time-consuming and nerve-racking management by walking obsolete.



## Network Requirements: What do you need for Digital Workflows by Sennheiser?

For Digital Workflows in network setup, the Sennheiser Control Cockpit software must be installed on a host PC that provides the web client and browser to control all network enabled devices.



## Download the Sennheiser Control Cockpit

[www.sennheiser.com/control-cockpit-software](http://www.sennheiser.com/control-cockpit-software)