



Remote Maintenance
in the Age of
Digital Transformation

Remote Services with Data Glasses

Remote services with data glasses describe a method for providing technical services at a remote location using IT components. In this scenario, data glasses constitute a key component.

Equipped with an integrated camera, display and headset, the data glasses serve as an information transmitter between the person on site and the person who remotely connects with the device. These two components are connected by a Remote Service Online Platform.

Via this online platform, any authenticated terminal devices can access the encrypted video stream of the camera. In doing so, the service employee assumes the perspective of the person wearing the glasses and is able to instruct them directly. By using the glasses, both hands remain free.

In addition, the service provides helpful functions, such as the display of information or documentation for the fulfilment of evidence obligations. The visual representation of information and the addition of images and videos to the visual image of the data glasses is referred to as augmented reality.

The Remote Service Platform can be implemented as a hosted service or on premise. It also provides a ticket system for processing and documenting service requests.

Benefits of Remote Services:

- Reduce reaction and solution timeframes
- Minimize travel expenses
- Detect operating errors
- Documentation of diagnosis and troubleshooting
- Targeted procurement of spare parts
- Counteract shortage of skilled workers

The steep Remote Service Case

We have developed the steep Remote Service Case for the mobile use of data glasses in the deployment area. Based on your specific requirements we integrate all on-site components including power supply (12/24/230 Volt, optionally battery-supported) and data glasses into a robust case.

The case offers a simple and flexible connection to the Remote Service Platform. Optionally integrated encryption hardware enables additional protection of the connection.

Our manufacturer independence creates the necessary freedom to work together with partners who are optimally suited to the respective project and thus to be able to assemble the case according to your wishes.



Remote Service Scenarios

Failure of an IT System

Due to a supposedly defective IT device, a problem occurs in the deployment area. Upon request by the Service Desk support, the administrator starts the Remote Service Case and establishes an automated VPN connection to the Service Desk. He then uses the data glasses to analyze the problem together with the supporter. On the camera image of the glasses, the supporter notices a previously unconsidered error of the device and can thus quickly identify, for example, a wrongly plugged cable as the cause. Using the audio and video connection as well as the displayed symbols, the problem can be solved immediately.

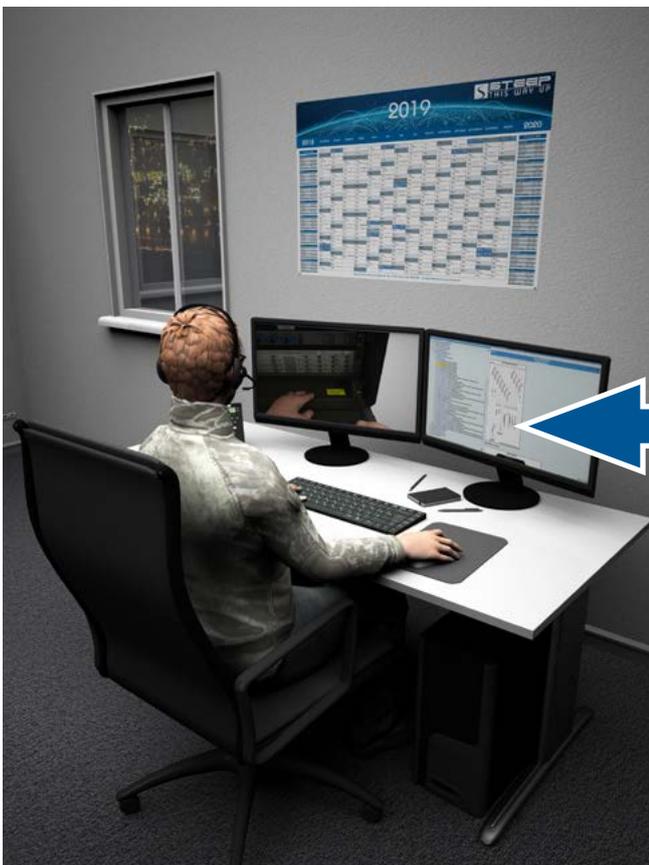
Parallel to the problem solution, errors and solutions are documented in a ticket on the Remote Service Platform via images and videos of the data glasses. By using data glasses, the error can be quickly localized and corrected. An unnecessary supply of spare parts is avoided.

Failure of an Air Conditioning System

An air conditioning system repeatedly fails in the deployment area after a short period of operation. The on-site personnel cannot determine the cause for failure and ask for assistance by the system manufacturer. Upon request by the air conditioning technician at the Service Desk, the technician in deployment starts the Remote Service Case and establishes an automated VPN connection to the Service Desk. By means of the audio and video connection to the data glasses, the air conditioning technician is able to instruct the soldier on site and to quickly identify the defective component. He documents the error pattern using photos of the data glasses and supplies a suitable spare part for the deployment area.

In another remote service session, the air conditioning technician working in the home country and the soldier on site assemble the new component in the air conditioning system together. By means of displayed symbols and technical drawings, further information can be transmitted to the soldier via the glasses. The air conditioning technician follows every step through the camera of the glasses and takes corrective action if necessary.

By employing data glasses and the Remote Service Platform, two on-site deployments of the air conditioning technician can be avoided and the troubleshooting time can be reduced significantly.





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