

HiveMQ and

Winterhalter

At a glance

Company

Winterhalter

Location

Meckenbeuren, Germany

Application

Connected Dishwasher

Key Challenge

- Building a reliable IoT connectivity & messaging platform for Winterhalter's connected dishwashers
- Get to market ahead of their competition

Results

- HiveMQ delivered an out-of-the box experience for Winterhalter
- The core of Winterhalter's ConnectedWash solution launched in 2018 is HiveMQ
- HiveMQ is part of the transformation of Winterhalter's organization to be more customer facing

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Winterhalter Creates a Connected Dishwasher with HiveMQ

Winterhalter is a Germany industrial company that manufactures and sells industrial dishwashers to large hotel chains, restaurants, catering business, hospitals. Winterhalter's customers are organizations that need a reliable and economical solution to cleaning large amounts of dishes and glasses. The company has over 1800 employees worldwide and revenue of 300 million euros in 2017. Winterhalter continues a proud tradition of manufacturing their machines in Germany and Switzerland.

In 2015, Benjamin Köb, Head of Digital Products at Winterhalter, started to investigate how to create the next generation of connected dishwashers. The objective was to create value-added digital services that would satisfy customer needs and differentiate Winterhalter from the competition. Winterhalter saw lots of opportunities to create innovative services based on the telemetry data from connected dishwashers.

Selecting MQTT as the standard for moving data

At the start of the project, Winterhalter had very little experience creating IoT applications and back-end cloud services. The project team began to educate themselves by attending IoT events and doing online research. They quickly realized that MQTT was going to be an important standard for moving data from the dishwasher to the back-end cloud services. MQTT provided a lightweight protocol that made efficient use of network bandwidth so it was ideal for any connection type from high bandwidth LAN or WLAN to low bandwidth GSM and 3G modems. The MQTT characteristics also suited their use case for dealing with unreliable network connections.

Winterhalter began looking for solution providers to help with an MQTT implementation. After an unsuccessful engagement with a large vendor, Winterhalter quickly selected HiveMQ as their platform for creating the connected dishwasher. It was easy to get started



with HiveMQ and it worked right out of the box. *"Our initial experience with HiveMQ was that it just worked", explains Mr Koeb. "HiveMQ was available to us on a USB key so we could easily install and get started. Our first impressions with HiveMQ and dc-square, meant we knew we found the product and company to be the core for our solution."*

Successful deployment using HiveMQ

In October 2016, Winterhalter launched CONNECTED WASH as an add-on for its existing dishwashers and in October 2018 they launched the next generation of dishwashers, called UC Series, that included CONNECTED WASH as a standard feature. Based on HiveMQ, CONNECTED WASH has the following features:

- Condition Monitoring: A notification is sent to an operator when the detergent is empty, or other disruptions occur.
- Optimization Hints: Recommendations are sent on how to be more efficient in operating the machine.
- Usage Stats: Customers can compare usage stats across different locations to improve efficiency and employee education.

"Thanks to HiveMQ and the team at dc-square, we have a great partner who cared about our success."

Benjamin Köb
Head of Digital Products at Winterhalter

Since the product launch, over 1000 connected dishwashers have been deployed and Winterhalter hopes for another 5000 by the end of 2019.

Winterhalter is running HiveMQ in their own data center. They have created a series of microservices to process the telemetry data based on the MQTT topic structure and then stored into the corporate database. They also send MQTT messages to remotely configure and manage the deployed dishwashers. In the future, they plan to move HiveMQ and the microservices to a cloud services to improve the overall reliability and scalability.

Selecting partners for successful digital transformation

"Our new digital services has been a significant transformation for our organization," explain Mr Köb. "We needed to change our mindset from a hardware company to think and act more like a software company. This impacted more than just the development team. Services people now needed to know about IP addresses. Marketing events staff needed to order wifi access at events. Data center staff needed to be able to respond to customer situations not just internal employees. It is a change that is making us a more modern and customer facing organization."

HiveMQ has been an important partner in Winterhalter's digital transformation. *"Thanks to HiveMQ and the team at dc-square, we have a great partner who cared about our success," said Benjamin Köeb. "If I had to make one recommendation to someone thinking about creating a connected product, it would be select an experience partner with the the relevant experience. In our case HiveMQ was the correct choice for our success."*