



## TwinCAT 3: Real-time-capable data communication via OPC UA

Direct integration of OPC UA Pub/Sub communication into the TwinCAT 3 runtime paves the way for straightforward realization of machine-to-machine (M2M) and device-to-cloud (D2C) scenarios based on the OPC UA Pub/Sub specification.

With a new extension of the OPC UA specification, which Beckhoff played a prominent role in helping develop, the publisher/subscriber principle is being introduced into the established and standardized OPC UA communication protocol. Two different transport paths can be defined for data transmission: UDP and MQTT. UDP enables efficient and real-time-capable data exchange in a local network between machines or machine components, whereas transport via an MQTT message broker primarily, but not exclusively, supports cloud scenarios.

As an early adopter, Beckhoff implemented an initial prototype implementation of the UDP transport path back in 2016. Now, the implementation of MQTT adds a second transport path. With the new TwinCAT 3 function OPC UA Pub/Sub (TF6105), Beckhoff provides a package that can be used to configure and use both OPC UA Pub/Sub UDP and MQTT Publisher and Subscriber directly in TwinCAT 3.

More information:

[www.beckhoff.com/tf6105](http://www.beckhoff.com/tf6105)