



**SIEMENS**

*Ingenuity for life*



**Straight talk: TSN**

The turbo for PROFINET and OPC UA.

[siemens.com/tsn](https://www.siemens.com/tsn)

What's the next  
big step for  
digitalization with  
PROFINET and  
OPC UA?



**Straight talk:**

**TSN.**

# Straight talk: TSN ...

... provides the answer to many questions, such as:



What creates the basis for open, integrated networking within the company to enable flexible and deterministic production?



What offers guaranteed and scalable bandwidths as well as a low transmission latency?



What is based on encapsulated streams and ensures that different protocols – even real-time capable – can use the same Ethernet network?



What makes Quality of Service (QoS) possible in standard Ethernet networks?



What helps PROFINET and OPC UA to ensure the basis of the digital enterprise in future plant networks?


## Straight talk: our commitment for digitalization

Digitalization is setting the bar very high, especially when it comes to industrial communication. Siemens already builds on the rapidly expanding open communication standard Industrial Ethernet – with PROFINET at field level and OPC UA from the control level. Here, the benefits are perfectly combined within a single network. But Siemens is going one step further – with TSN (Time-Sensitive Networking), an Ethernet-based technology.

From the automotive industry and machine building to the food and beverage industry, TSN offers key benefits for industrial production – like reserved bandwidths, Quality of Service (QoS) mechanisms, a low transmission latency, and the simultaneous transmission of multiple protocols which can also be real-time capable.

## Straight talk: TSN

TSN creates a standardized basic technology within the framework of IEEE 802.1. It is composed of a number of existing IEEE standards and exclusively pertains to the OSI layer 2 of communication. This means that the user interface remains unchanged even with TSN.



**Published by  
Siemens AG 2018**

Siemens AG  
Digital Factory  
P.O. Box 48 48  
90026 Nuremberg  
Germany

Article No. DFFA-B10489-00-7600  
Printed in Germany  
Dispo 06334  
gB 180125 WS 04183.0

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