



netFIELD APP
PROFINET TAP

BROWNFIELD IOT
ENABLEMENT IN 15 MINUTES



ENABLE BROWN-FIELD MACHINERY FOR IOT APPLICATIONS

Equipping brown-field machinery with condition monitoring and data analytics applications allows to get the IoT-benefit out of existing machine installations. The **netFIELD** App PROFINET Tap allows extracting machinery process data simply by

monitoring the existing network traffic. There is no need to change PLC or machine configuration. It works with any PROFINET network, independent of PLC or device vendor.

EASILY INTEGRATED AND CONFIGURED WITHIN MINUTES.

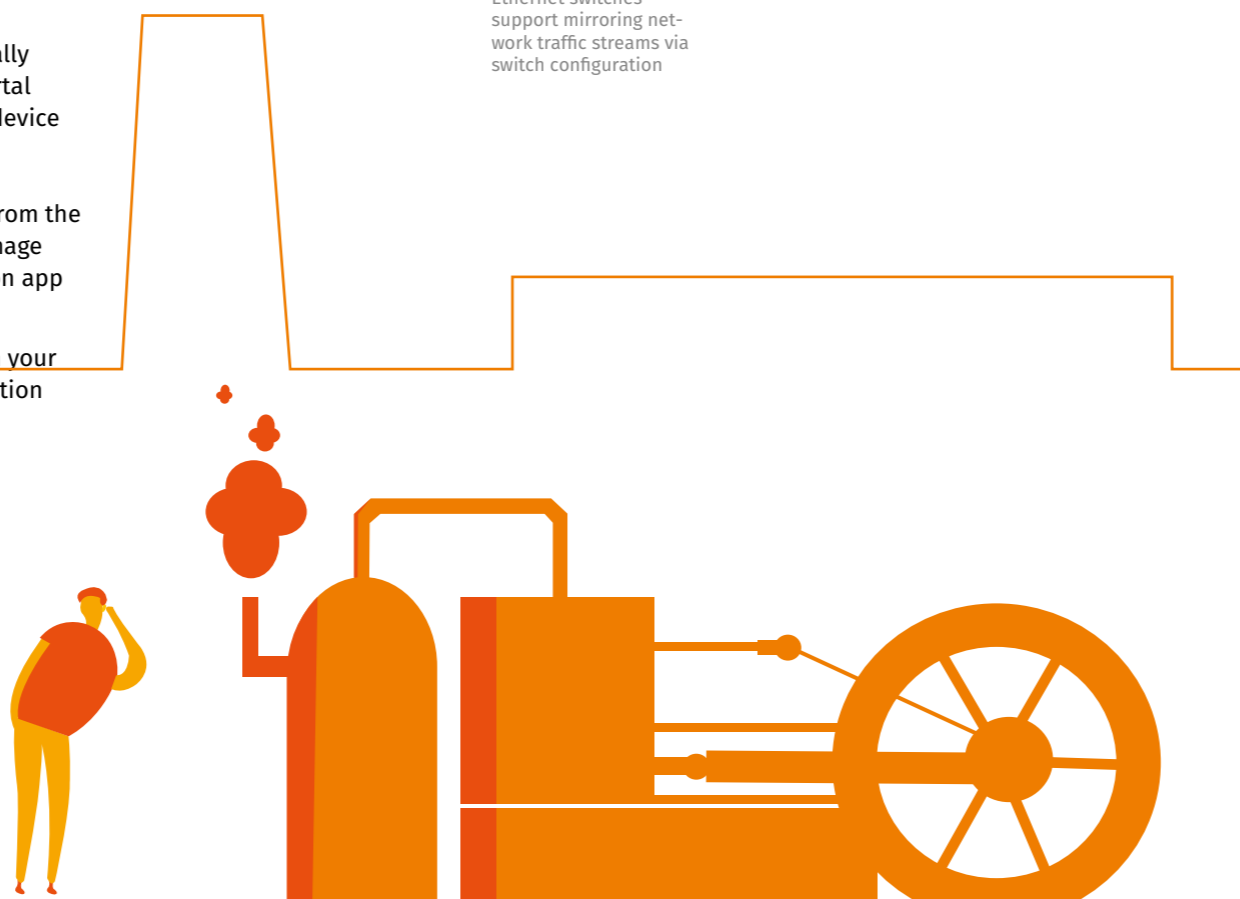
As there is no need of touching the network or PLC configuration the required integration effort is minimal. The rich configuration app allows importing symbol information from device description files. In a Siemens environment integration is even easier, TIA Portal semantics can be used directly.

IoT-enable your machine within minutes in five simple steps:

- 1 Lead out existing network traffic via a network TAP (1) device or the mirror port of a switch (2)
- 2 Automatically read in the PROFINET configuration from a machine startup
- 3 Add data semantics automatically simply by importing the TIA Portal Engineering project or GSDML device description files
- 4 Select information of interest from the whole machine process data image interactively in the configuration app
- 5 Subscribe to MQTT messages in your monitoring or analytics application

(1) TAP = Terminal Access Port, a hardware device which allows mirroring network traffic without interference to existing infrastructure

(2) Many managed Ethernet switches support mirroring network traffic streams via switch configuration



HOW IT WORKS UNDER THE HOOD

Containerized software

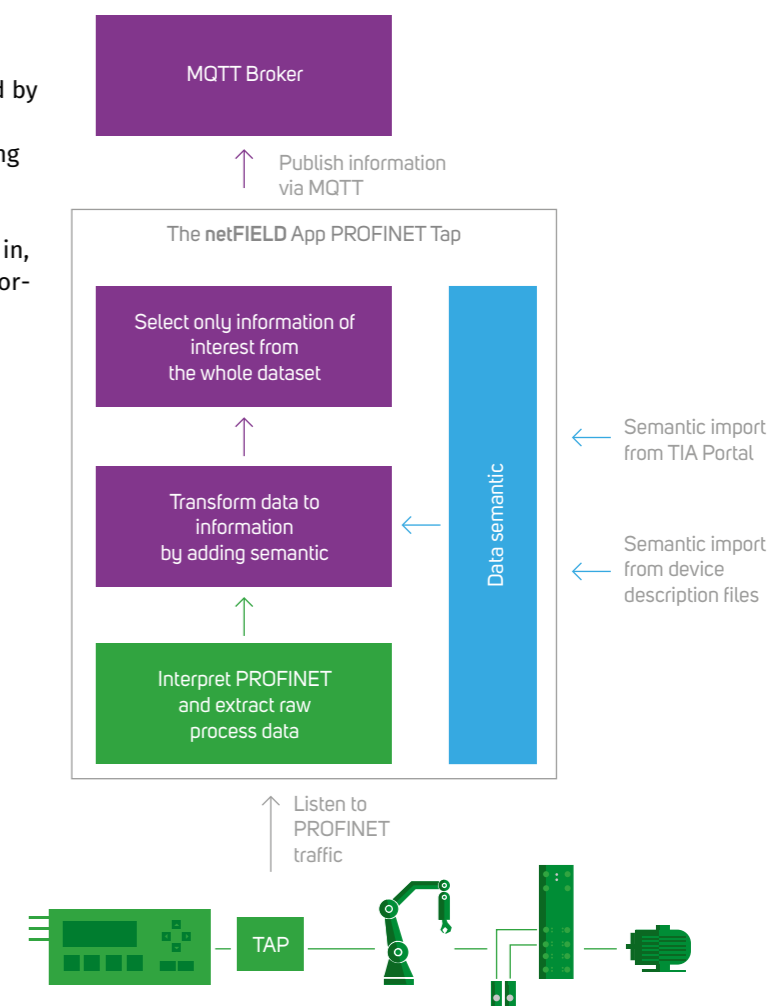
- The **netFIELD** App PROFINET Tap is delivered as a containerized software which allows easy deployment and software management.
- The software container delivers a built-in rich configuration app which can be used easily via a web-browser without the need of installing any additional software tools.

Form data to information

- The extracted raw fieldbus data is automatically enriched by semantics during the capture process.
- The required semantic information can be read in by using AutomationML as interchange format with TIA Portal in a Siemens environment.
- Alternatively, GSDML device description files can be read in, allowing mapping semantic information in any non-vendor-specific environment.
- Of course, it is always possible to "fine tune" semantics manually via the configuration app.

Deep packet inspection with integrated fieldbus intelligence

- The **netFIELD** App PROFINET Tap analyses the existing machine network traffic using deep packet inspection technologies.
- It "understands" the fieldbus protocol by itself and thus does not require you as an end-user to deep-dive into fieldbus technology.
- Due to the listening-only functionality, **netFIELD** App PROFINET Tap is absolutely invisible to your existing machine components and thus cannot disturb the existing process.



There is no need of touching your working machine, nor changing PLC or machine configuration

Automatic PROFINET configuration detection and semantic mapping from TIA Portal or GSDML

Secure by design due to the listening-only functionality



Article	Order Number	Category	Version
netFIELD App PROFINET Tap	1917.007	Data Acquisition	1.0.0

HEADQUARTER

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