

SDK OI4 Open Edge Computing

Development kit for OI4 compliant edge applications

- Effortless development of inter-operable OI4 edge apps
- Ensuring OI4 conformity according to the official development guideline
- Reduced development times without profound technical OI4 knowledge
- Replicable app results of high quality in case of multiple use
- Including a half-day online workshop



Independent development of OI4-compliant edge applications

The Software Development Kit (SDK) OI4 Open Edge Computing simplifies and standardizes the development of Open Industry 4.0 Alliance-compliant apps. Following the OI4 OEC Development Guideline, developers can model a complete app and its assets using the intuitive C-API.

By encompassing all relevant functions from the API to MQTT, it significantly accelerates the development process and prevents fundamental implementation errors from the outset. For the MQTT communication, the SDK utilizes the open-source Eclipse Paho client as an example.

The kit decouples the customer-specific code via the API from all services on the MQTT bus. The mapping of the Master Asset Model is adopted, as well as the encoding/decoding of JSON coded payload on OPC UA PubSub basis within the prescribed MQTT topic namespaces.

The workshop included with the kit streamlines the onboarding process and offers the necessary momentum for a successful implementation. Workshop participants are expected to have a clear concept of the app in mind they intend to create, ideally with pre-existing source code. Essential requirements include a well-established development environment, proficiency in the C/C++ programming language, familiarity with Linux, and knowledge of container technology.



→ SDK OI4 Open Edge Computing
Service hotline: +49 (0) 6190 9907-90
www.hilscher.com

Product information

Technical Data

Technical Data

Includes

Source code with an example application as a container

License

Hilscher source code and software license agreement
<https://hilscher.atlassian.net/wiki/x/7Q02Bg>

Programming languages

C, C++, C# / .NET, TypeScript, JavaScript / NodeJS

Operating system requirement

POSIX compatible OS, such as Linux and Windows

Technical Data

API functionality depth

10 core functions

Integrated MQTT client

Project "PAHO" by Eclipse

Compatibility

Open Industry 4.0 Alliance
 "Development Guideline for Open Edge Computing" V1.1.1

Automatically accessed OEC resources

MAM, Health, Profile, License, LicenseText, PublicationList, SubscriptionList, Data, Metadata, Event, ReferenceDesignation, GenericMethod service

OEC resources not yet supported

Config, Interfaces, ReferenceDesignation

Note: All technical data may be changed without further notice.

Article overview

| Article overview | | |
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| NFL-OI4-SDK | 1917.600 | Development kit for OI4-compliant apps including a half-day online workshop |
| TRAINING | 0027.000 | Training can be expanded on request and on an individual basis |



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