

THE GDST'S OPEN-SOURCE SOFTWARE DEVELOPMENT KITS (SDKS)

An SDK is a comprehensive collection of tools, libraries, and documentation that empowers developers to create solutions more effectively. For organizations working to implement the GDST Standard, the SDKs offer significant benefits by streamlining development processes, reducing costs, and enhancing the reliability of software solutions. The GDST SDKs are open source, which means anyone can access and use them for free.

SUPPORTING STAKEHOLDER SUCCESS WITH GDST SDK

The GDST's open-source SDKs are designed to facilitate the adoption and implementation of the GDST Standard. By leveraging these tools, IT teams can significantly cut down on the time and resources required to develop traceability solutions that are GDST-capable. This reduction in complexity and cost benefits both traceability solution providers and in-house development teams, making it easier to achieve compliance with the GDST Standard.

KEY RESOURCES WITHIN THE SDKS

The GDST SDKs encompass a range of resources tailored to support various development needs:

Models:

These represent the rules within software that define how data is connected and related, which can vary for each application. The SDKs include models for Event, Master Data, and Identity, based on the EPCIS and GS1 Core Business Vocabulary Standards.

Mappers:

These tools facilitate the conversion of different types of data into a uniform format. The SDKs come with special components that handle this conversion process. These components will help translate traceability data to and from XML, JSON, and JSON-LD formats

Utility Code:

This general-purpose code can be added to software to perform specific tasks. The GDST SDKs currently include useful code for handling the communication protocol.

BENEFITS OF USING THE GDST SDKS

One of the primary advantages of using the GDST SDKs is the reduction in development time. By offering pre-built resources, these SDKs save developers from the tedious task of writing and debugging code from scratch. This not only accelerates development timelines but also lowers overall implementation costs.

Moreover, the SDKs enhance supply chain traceability. They include standardized software development resources that ensure data consistency and facilitate easy data sharing across different systems and stakeholders. This uniformity is crucial for achieving high levels of visibility and traceability throughout the supply chain, thereby supporting interoperability between various systems.

INTEGRATION AND SUPPORT

Integration of the GDST SDKs into existing systems is straightforward. The SDKs are designed to be easily incorporated into existing codebases, accompanied by comprehensive documentation and examples that guide developers through the integration process. This ease of use ensures that developers can quickly implement the required functionalities without significant hurdles.

ACCESS

Access to the GDST SDKs is publicly available. Links to the libraries and detailed documentation can be found within the GDST Developer Documentation, ensuring that developers have all the resources they need at their fingertips.

UPDATES AND FUTURE DEVELOPMENTS

Currently, the GDST SDKs are available in C# and Java. However, the GDST is responsive to the needs of its stakeholders. If there is sufficient demand for the SDKs in other programming languages, additional languages may be supported in the future.

To ensure that the SDKs remain relevant and effective, they will be updated as needed. These updates will incorporate new features, address any bugs, and maintain compatibility with future versions of the GDST Standard. User feedback plays a vital role in this continuous improvement process. Stakeholders are encouraged to provide feedback and requests, which will help prioritize future developments. The GDST Developer Documentation includes links for requesting additional documentation or suggesting edits to existing documentation.

