

SICK AppPool Service Description

Purpose of the AppPool

SICK AppPool serves as a central and secure exchange platform of Sensor Apps. It enables members of the SICK AppSpace Developers Club to publish their Apps to other users of SICK AppSpace, including other developers, system integrators, and their customers.

Functions of the AppPool

Categories of Sensor Apps

Sensor Apps in the SICK AppPool are categorized as follows:

- A **CustomApp** solves a customer-specific application in a productive environment. It is typically customized on the needs of the customer, including source code, App functionalities, and user interface.
- A **StandardApp** solves customer applications. In combination with a programmable device from SICK the package is offered as-is to multiple customers. Minor adjustments towards solving the customer's specific problem are made through the UI of the App and without software development expertise.
- A **SampleApp** is a documented code snippet. It is the starting point for developers to understand how an API function or specific task work.
- A **DemoApp** is a ready to use App for demonstration purposes. A sales representative can use it to give a live demonstration of a programmable SICK device. This demonstration does not involve programming.
- An **AppTemplate** is designed to solve a call of customer problems. It is essentially a Sensor App but with a special structure. This structure allows developers to include function blocks that solve specific tasks. Each function block receives input and delivers an output. These function blocks can then be combined and arranged through a graphical user interface (The Configuration View of AppStudio) to implement the functionality needed for solving an instance of the class of problems for which the AppTemplate was designed at each customer. If necessary, AppSpace developers can add more complex functionalities by adjusting the Lua code of the function blocks. Different from all other App types, the file type of an AppTemplate is .STPK. Once the AppTemplate is configured, an .SAPK file with that configuration can be extracted and deployed on different sensors.

Published Apps

Developers can publish their Apps in the AppPool. The AppPool provides a container that consists of metadata (e.g., App name, description, type, etc.) and one or multiple versions of an App (.SAPK or .STPK files). The creator decides which of these versions may be downloaded, and all other versions are hidden.

Publication Scope

Developers can decide whether an App is public or private.

- A **public** App is visible to all users of the AppPool.
- A **private** App is only visible to the owner and authors of the App. In addition, it can be shared with a select group of additional users of the AppPool. Access to an App is granted by including the users email address in the "Share with users" field of the App metadata. Once a user who has registered with this email address enters the AppPool, that user sees the App automatically.

Roles

Roles in SICK AppPool

Users currently have one of two distinct roles when working with SICK AppPool:

- **Developers** have the right to publish Apps and they may be authors to Apps that other owners have published. Only members of the SICK AppSpace Developers Club are eligible for this role. The corresponding access rights may be requested by writing an email to AppSpace.Registration@sick.com.
- **Consumers** are all other users of the SICK AppPool. They may download Apps which are visible to them, either because the App is public or because the App has been shared with that user. The prerequisite for the role of consumer is a valid user account for SICK Web Services at <https://cloud.sick.com>.

User Relationships with Apps

All users of the SICK AppPool can view and download Apps that have been shared with them as well as see the respective metadata.

In addition, developers may also take the role of owner and / or author of an App:

- The **Owner** of an App is the user who publishes it. Each App has exactly one owner and ownership cannot be transferred. The owner of an App can see all existing versions (visible or invisible), edit the metadata, change the visibility of versions to consumers, define authors of the App, and upload new versions of the App.
- **Authors** are set by the owner of the App. Each App may have one of multiple authors. Authors can see all versions of the App (visible and invisible to consumers) and upload new versions of the App.

Usage of Apps

Apps in the AppPool are published as open, restricted, or under a custom license:

- **Open** Apps may be downloaded and used freely by the consumer (see <https://www.sick.com/de/en/general-terms-and-conditions/w/tac/>).

- **Restricted** Apps may be downloaded but their use is restricted essentially to installing and running the App “as is” (see <https://www.sick.com/de/en/general-terms-and-conditions/w/tac/>). Authors should ensure that the corresponding .SAPK files are built with read protection and using AppStudio 2.3 or higher to prevent illegitimate access to the authors’ intellectual property.
- Apps published under a **custom license** are subject to a specific license agreement determined by the owner of the App. In this case, the AppPool serves as a platform only to facilitate the transfer of the App (see <https://www.sick.com/de/en/general-terms-and-conditions/w/tac/>).

Features of the AppPool

End-to-end-encryption

The files (.SAPK and .STPK) that are uploaded to the AppPool are subject to end-to-end encryption. The key management service is controlled and run by SICK. Keys are distributed to respective AppPool frontends based on each user’s eligibility to download or author an App.

Frontends

The AppPool can be access on the internet at <https://cloud.sick.com> (App downloads, creation of publications, uploads of new versions), from AppManager (downloads of Apps), or from AppStudio (uploads of new versions).