

# StarWind Deduplication SDK – Unprecedented Simplicity of Integration

*Benefit without R&D. Deploy ready-to-use technology.*

*You won't believe how easy and seamless integration can be!*

## Key Advantages

- ✓ Easy-to-integrate
- ✓ Data processed in-line
- ✓ Block-level data processing
- ✓ Low CPU and memory requirements
- ✓ Open API

## About StarWind

StarWind Software is an industry-leading provider of high performance, easy-to-use, and affordable solutions for storage virtualization and management.

StarWind also delivers its most advanced and best-of-breed technologies as software development kits (SDK). Such an approach enables other software vendors and service providers to easily implement an extensive set of robust StarWind technologies within their own custom solutions.

StarWind SDK products include Deduplication SDK, iSCSI SAN SDK, and Log-Structured File System SDK.

Learn more by visiting:  
[www.starwindsoftware.com](http://www.starwindsoftware.com)

## Put deduplication to work to your advantage

The industry-leading StarWind Deduplication SDK is aimed at software developers, hardware vendors, and integrators of storage and backup systems. These are usually targeted at managing a large amount of data and need to leverage powerful dedupe technology for the search and elimination of redundant data.

Research and development of the custom deduplication module is often unreasonable in terms of time and money. Expand your product capabilities without R&D investments! Employ StarWind Deduplication SDK in your custom solution!

## Integration simplicity

StarWind SDK is very easy to integrate. Usually, the entire process takes just a few days and you can start testing dedupe in your product within 4-6 days after your purchase. Integration is strongly supported by the StarWind technical engineers and SDK documentation.

StarWind developed highly potent APIs that serve as connectors between StarWind SDK and OEMs solutions. Open API is used to export deduplicated disk device via iSCSI. Thus, you eliminate the necessity to integrate the programming code to your product and simplify the entire process.

## SDK components that you receive

- 1)** Unique blocks base is the core of the dedupe module. It enables the fast searching of duplicated data blocks and allows for the creation of an integral storage system with deduplication. Unique block base:
  - ✓ Checks if a data block already exists in the base
  - ✓ Adds a unique block to the base
  - ✓ Stores the service information required for fast data searching
  - ✓ Calculates the number of references created for a unique data block
- 2)** Data location map and unique blocks storage ensure the fast creation of the fully-functional data storage based on StarWind Deduplication SDK.
- 3)** SDK complete API documentation, SDK core API libraries in C and C++, sample codes and developer tools

## StarWind Deduplication SDK capabilities

FEATURE & CAPABILITY	BENEFITS & RESULTS
Advanced deduplication algorithm	Decreased memory and CPU requirements* (only 2MB of memory required per 1GB of data).
In-line data processing	Duplicates are eliminated before data is written to disk thereby reducing the time and disk space requirements.
Data processing on the block level	Deduplication does not depend on the file system or operating system used.
Variable block size	Deduplication can be adjusted for a particular environment providing higher dedupe rates. The supported sizes are 4KB, 8KB, 16KB, 32KB, 64 KB, 128KB, 256KB, and 512KB.
Compatibility with any server	No hardware lock-in.
Open API	Compatibility with any system, standardization and simplicity of integration. Presents deduplicated disk device via iSCSI as any local disk.
Support of storage with grid architecture	Possibility of workload distribution between several servers and the building of scalable storage solutions.

\* Compared to competitive solutions