

SODA API Standards for Data and Storage

Version v0.0.1 June 2020

## Abstract

SODA API Standards for Unified Data and Storage are an umbrella API Standards comprising of a collection of multiple data and storage API specifications released by the [SODA Foundation](#) (under Linux Foundation). It provides unified RESTful API interfaces with standardized data models for data and storage across the edge, core(on-prem), and cloud. It will consolidate, update, or develop API definitions to provide unified, extensible, and open industry standards collaborating with partners, vendors, and standard associations.

It will have the universal application with needed customization as per the country, region and other legal needs where it is used/deployed

Current Version Status: This is a draft version released as RFC for further collaboration and refinement. The respective implementations are available at [github.com/sodafoundation](https://github.com/sodafoundation).

## Purpose

SODA API Standards aim to put together a set of specifications that would be:

- Unified
- Open
- Vendor-neutral
- platform-agnostic
- Environment aware
- Extensible

## Usage

## Copyright

Copyrights belong to SODA Foundation 2020-2021

The SODA Foundation grants permission for commercial or non-commercial usage. However, currently, the specification is in draft and RFC. Hence, before your business usage, please contact us through <https://sodafoundation.io>

## Warranty and Disclaimer

There is no warranty for the usage of these API Specifications.

The information contained in this publication is subject to change without notice. The SODA Foundation makes no warranty of any kind with regard to this specification, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The SODA Foundation shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use.

## Revision Summary

### Version History

0.0.1 June 2020: Initial draft for RFC

### Changelog for this version

V0.0.1 June 2020:

- Draft for RFC
- The initial draft of Unified API On-prem
  - File and Block Data Management API
  - Storage Infrastructure Management API
- The Initial draft of Unified API for Cloud
  - S3 Compatible Object API
  - File & Block Data Management for Cloud. (Basic APIs)

## Acknowledgments

All the contributors to [github.com/sodafoundation/api](https://github.com/sodafoundation/api), [github.com/sodafoundation/multi-cloud](https://github.com/sodafoundation/multi-cloud), [github.com/sodafoundation/delfin](https://github.com/sodafoundation/delfin) projects. Other community members and committee members of The SODA Foundation.

# SODA Foundation

## Introduction

[SODA Foundation](#) is an open-source project under the Linux Foundation that aims to foster an ecosystem of open-source data management and storage software for data autonomy. SODA Foundation offers a neutral forum for cross-projects collaboration and integration and provides end-users quality end-to-end solutions.

## Feedback and Suggestions

[Contact us here.](#)

## Terms & Definitions

- SODA : SODA Open Data Autonomy (a recursive acronym)
- REST : Representational State Transfer

# SODA API Standards for Data and Storage

## Introduction

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## Scope

### Overall Scope

SODA API Standards for Data and Storage aim to put together a set of specifications that would be:

Unified | Open | Vendor-neutral | Platform agnostic | Environment aware | Extensible

This document provides the latest versions of all API specifications under SODA API Standards for Data and Storage.

## Audience

Main audience members are (not limited to) SODA API Standards Team, API Specification Software implementors, Platform&Vendors who want to utilize SODA API for their solutions.

# Architecture

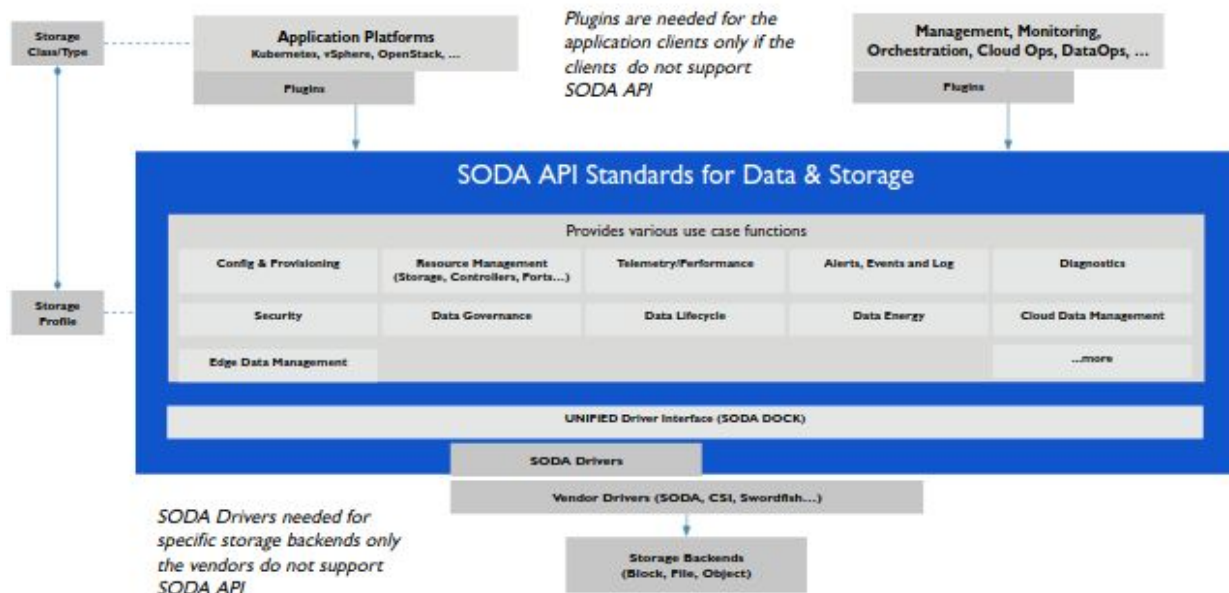


Figure 1: SODA API Standards for Data and Storage

SODA API Standards for Data and Storage is a set of API specifications for different use case domain.

*Note: The API Architecture is in progress and will be updated.*

## API Specifications

### Unified API for On-Prem

Provides all the API Specifications for on-premise data and storage operations or services. It provides APIs for block, file and object storage types in different use case domains.

### Block and File Data Management API Specifications

API View : <https://www.apimatic.io/apidocs/soda-block-file>

API YAML : <https://github.com/sodafoundation/api/blob/master/openapi-spec/swagger.yaml>

### Infrastructure Management API Specifications

API View : <https://www.apimatic.io/apidocs/soda-infra-manager>

API YAML : <https://github.com/sodafoundation/delfin/blob/master/openapi-spec/swagger.yaml>

## Unified API for Multi-Cloud

Provides all the API Specifications for cloud data and storage operations or services. It provides APIs for block, file, and object storage(s3 compatible) types in different use case domains.

API View : <https://www.apimatic.io/apidocs/soda-multi-cloud>

API YAML : <https://github.com/sodafoundation/multi-cloud/blob/master/openapi-spec/swagger.yaml>

## Software Implementation of API Specifications

### Unified API for On-Prem

Block and File Data Management API Specifications

<https://github.com/sodafoundation/api>

Infrastructure Management API Specifications

<https://github.com/sodafoundation/delfin>

### Unified API for Multi-Cloud

<https://github.com/sodafoundation/multi-cloud>

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