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.

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

Warranty and Disclaimer

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

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.
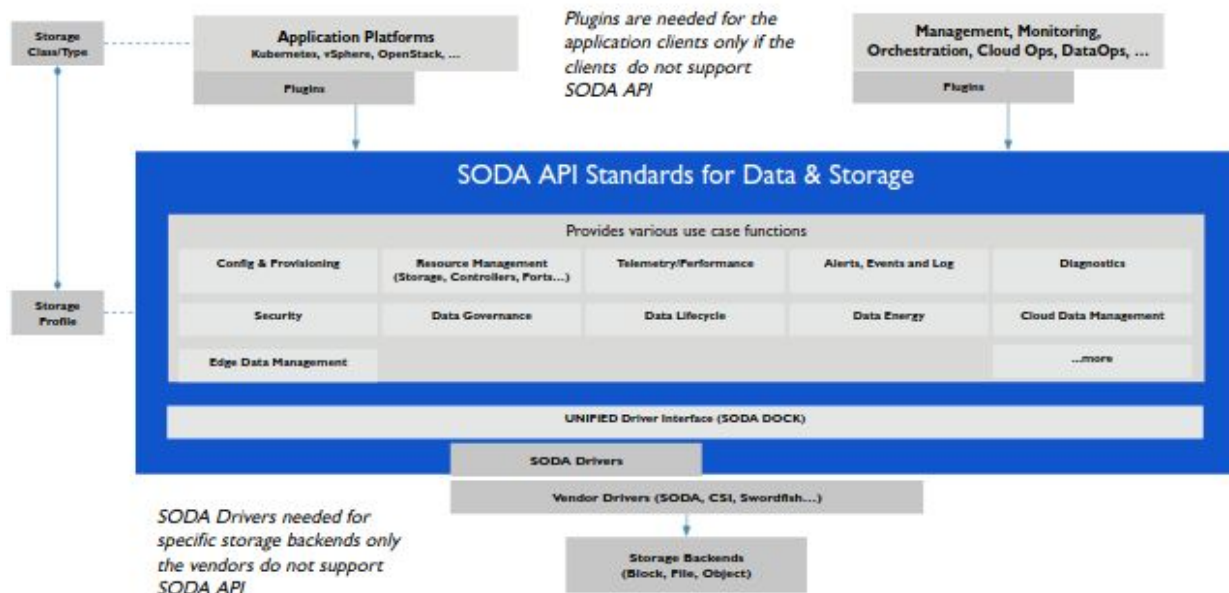
Architecture

Figure 1: SODA API Standards for Data an 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   : ttps://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

soda foundation

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