



Document title  
**SendGetDataidd**  
Date  
**2024-10-21**  
Author  
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Contact

Document type  
**IDD**  
Version  
**4.4.1**  
Status  
**RELEASE**  
Page  
**1 (7)**

# SendGetDataidd Interface Design Description

## Abstract

This document describes the 'SendGetData' protocol with TCP/IP payload security and integer payload encoding variant of the 'SendGetData' service.

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# 1 Overview

Profile Type	Type	Version
Transfer protocol	TCP/IP	1.0
Data encryption	N/A	-
Encoding	Integer	-
Compression	N/A	-
Semantics	None	-
Ontology	N/A	-

Table 1: Communication and semantics details used for the 'SendGetData' service interface

This document provides the Interface Design Description IDD to the *GetSendData – Service Description* document. For further details about how this service is meant to be used, please consult that document.

The rest of this document describes how to realize the GetSendData service interface in detail. Both in terms of its operations (Section 2) and its information model (Section 3).

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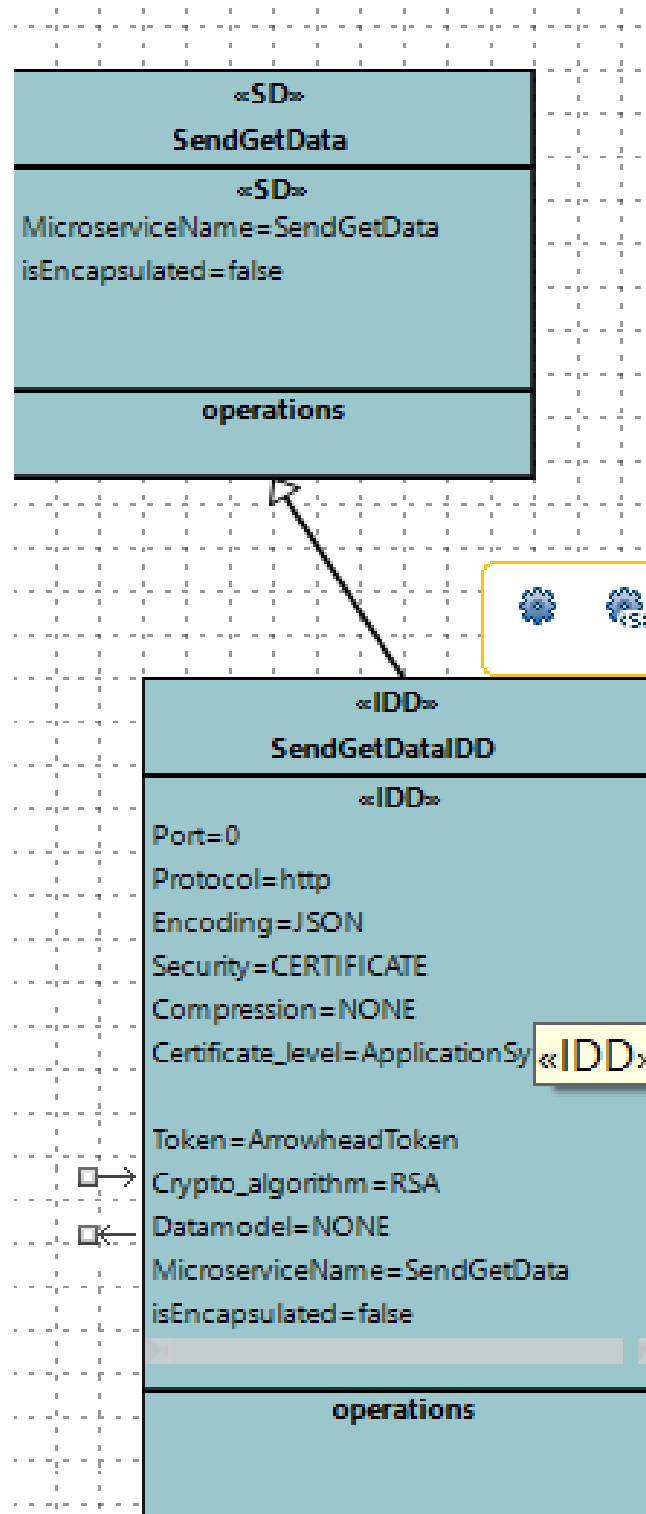


Figure 1: SD service and IDD document



## 2 Service Operations

The interfaces of the GetSendData service, its operations, data models and implementation are provided below. An SysML service overview is found in Figure ???. A SysML overview of the operation datamodels is found in Figure ???.da

### 2.1 POST /sendgetdata/send

Operation: **SendData**  
Input: **Integer**  
Output: **Integer**

This operation sends numerical data from one system to another.

### 2.2 GET /sendgetdata/get

Operation: **GetData**  
Input: **Integer**  
Output: **Integer**

This operation retrieves numerical data from another system.

### 2.3 GET /sendgetdata/result

Operation: **ResultData**  
Input: **Integer**  
Output: **Integer**

This operation returns the result of processed data as an integer.

### 2.4 GET /sendgetdata/echo

Operation: **Echo**  
Output: **StatusCodeKind**

This operation checks if the 'SendGetData' service is active and available, providing a simple status response.

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## 3 Data Models

Below is the preferred approach to data model description.

### 3.1 struct **SendGetData**

This structure describes the profile of the 'SendGetData' service.

Field	Type	Description
Protocol	tcp/ip	Protocol used for sending and receiving data.
Port	Integer	Port of the provider system. (e.g., 1002)
Microservicename	String	Name of the microservice, in this case, "SendGetData".

Table 2: Struct: SendGetData

### 3.2 Primitives

### 3.3 struct **SendGetData**

This structure describes the profile of the 'SendGetData' service.

Type	Description
Integer	A whole number, used for sending and receiving values between systems.
StatusCodeKind	Represents status codes, such as 200 for success or 404 for not found.
String	UTF-8 string format, used for naming conventions like "SendGetData".

## 4 Revision History

### 4.1 Amendments

No.	Date	Version	Subject of Amendments	Author
1	2020-12-05	4.4.1		Adam Epstein
2	2021-07-14	4.4.1	Minor edits	Adam Epstein
3	2022-01-17	4.4.1	Minor edits	Adam Epstein

### 4.2 Quality Assurance

No.	Date	Version	Approved by
1	2022-01-17	4.4.1	Adam Epstein

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