

INSIST

Deliverable

D4.1.1 – Definition of System Connections and Data Models

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0.2	Güven Fidan, Argedor	Finalisation of the document
0.3		
0.4		

Abstract

This document explains the infrastructure of the developed common data base. The required information for system connection is also presented in this document.

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1. Executive Summary

Based on the Activity 4.1 a common data base platform is developed for the interoperability of diverse systems. This document explains the infrastructure of the developed common data base. The required information for system connection is also presented in this document.

2. Decomposition Description

2.1. Accessing Rest Services

Rest URI: `http://54.93.165.221:8080/`

2.2. Authentication

The REST API uses Basic Authentication for access grant. (https://en.wikipedia.org/wiki/Basic_access_authentication)

- Put “Authorization: Basic {base64encodedusernamepass}” to your request header to authorize.
- {base64encodedusernamepass} is “username:password” encoded in base64.
- username: argedor
- Password: argedor12

2.3. Creating DB For The Company

First a db:collection pair need to be created in order to push data. It can be done by:

To restrict creation of Database-Collection by mistake, end points first checks whether the Database-Collection pair is exists or not, and returns “DB-Collection pair doesn't exist.” if Database-Collection pair is not exist. To create the Database-Collection pair, submit a POST request to:

- `InsistDataLayer/rest/data/create/{dbName}/{collectionName}`

2.4. Inserting Data

To insert data to a Collection in a Database, submit a POST request to:

- `InsistDataLayer/rest/data/{dbName}/{collectionName}`

Every sensor data should be a json object and encapsulated by json array.

2.5. Inserting File

To upload a file to a Bucket in a Database, submit a POST request to:

- `InsistDataLayer/rest/file/{dbName}/{bucketName}?fileName={fileName}`

fileName query parameter is required.

2.6. Retrieving Data

To get data from a Collection in a Database submit a GET request to:

- `InsistDataLayer/rest/data/{dbName}/{collectionName}/{firstDate}`

The first data to retrieve will have an insert date greater than or equal {firstDate}

(Format: yyyy-MM-dd'T'HH:mm:ss.SSS)

2.7. Retrieving File

To get a list of files from a Bucket in a Database submit a GET request to:

- `InsistDataLayer/rest/file/{dbName}/{bucketName}/info/{firstDate}`

The first data to retrieve will have an insert date greater than or equal {firstDate}

(Format: yyyy-MM-dd'T'HH:mm:ss.SSS)

To download a file from the Database-Bucket pair, submit a GET request to:

- `InsistDataLayer/rest/file/{dbName}/{bucketName}/{id}`