

# Consult Integration Technical Documentation

## Request Formats

All requests are `https` requests unless specified otherwise. All request bodies and responses are `application/json` unless specified otherwise.

## Authentication

All endpoints are secured using Bearer Authorization. We will provide you with the token. For example if the token is `ABC1234` then your header should look like:

Unset

`Authorization: Bearer ABC1234`

# Recording a Consult

For each unique consult session a new **uuid** needs to be generated. This same uuid should be used to retrieve the summary and letter for the session

We recommend that the audio be sampled at 44.1khz, 16 bits depth and encoded as LPCM.

At regular intervals samples of the audio stream should be sent to the endpoint, we recommend an interval of 2 seconds.

We will assume all bytes sent to us are in Big endian. (Note: If Little endian requires less effort, we can change the way we process the bytes on our end)

## Request

```
Unset
POST /api/consult/{uuid}

Request Body:
{
  audioData: String
  sampleRate: Long // Long is the equivalent of a signed int64
  sampleDepth: Long
  sampleLength: Long
  psuedoTimestamp: Long
}
```

**audioData** base64 encoded raw audio bytes

**sampleRate** is the original sample rate of the audio i.e. 44100

**sampleDepth** is the original depth of the audio i.e. 16

**sampleLength** represents the length of the audio bytes. i.e. if we audio take every 2 seconds from the audio stream, then sampleLength should have the value 2000

**pseudoTimestamp** represents the start time of audio data relative to the first sample in milliseconds

For example if we use an interval of 2 seconds:

```
Unset
First request body
{
```

```
    audioData: 67ef.....,  
    sampleRate: 44100,  
    sampleDepth: 16,  
    sampleLength: 2000,  
    pseudoTimestamp: 0  
  }
```

Second Request body

```
{  
  audioData: 8c6d.....,  
  sampleRate: 44100,  
  sampleDepth: 16,  
  sampleLength: 2000,  
  pseudoTimestamp: 2000  
}
```

Third Request body

```
{  
  audioData: 91u7.....,  
  sampleRate: 44100,  
  sampleDepth: 16,  
  sampleLength: 2000,  
  pseudoTimestamp: 4000,  
}
```

## Response

If successful

```
Unset  
200 OK
```

else;

```
Unset  
{  
  error: String // Represents the error code e.g. BAD_REQUEST  
  errorMessage: String // Human readable error message  
}
```

# Requesting a Summary

Use the same `uuid` you generated earlier for the consult recording to make the request.

## Request

```
Unset
POST /api/consult/{uuid}/summary
```

## Response

If successful

```
Unset
200 OK
{
  summary: String
}
```

else;

```
Unset
{
  error: String // Represents the error code e.g. BAD_REQUEST
  errorMessage: String // Human readable error message
}
```

# Requesting a Letter

Use the same `uuid` you generated earlier for the consult recording to make the request.

## Request

```
Unset
POST /api/consult/{uuid}/letter
```

## Response

If successful

```
Unset
{
  letter: String
}
```

else;

```
Unset
{
  error: String // Represents the error code e.g. BAD_REQUEST
  errorMessage: String // Human readable error message
}
```

# Tech stack

## Application

- Springboot (6)
  - Spring web mvc
  - Spring security
  - Spring data jpa
- Kotlin
- JPA/Hibernate
  - Springboot integration
- Junit

## Database

- Postgresql
- Liquibase
  - Springboot integration

## Docker

- containerisation

## K3S

- Infrastructure

## AWS

- EC2

## Misc

- FFMPEG

**Project**

☐ Gradle - Groovy ☒ Gradle - Kotlin

☐ Maven

**Language**

☐ Java ☒ Kotlin ☐ Groovy

**Spring Boot**

☐ 3.4.0 (SNAPSHOT) ☐ 3.4.0 (M1) ☐ 3.3.3 (SNAPSHOT) ☒ 3.3.2

☐ 3.2.9 (SNAPSHOT) ☐ 3.2.8

**Project Metadata**

Group

Artifact

Name

Description

Package name

Packaging ☒ Jar ☐ War

Java ☐ 22 ☐ 21 ☒ 17

**Dependencies**

ADD DEPENDENCIES... ⌘ + B

**Spring Web**

WEB

Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.

**Spring Security**

SECURITY

Highly customizable authentication and access-control framework for Spring applications.

**Spring Data JPA**

SQL

Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.

<https://start.spring.io/>