

BeSt-Address Web API Configuration

FPS BOSA DG DIS

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1. Introduction

1.1. Description

This guide describes the configuration settings of the BeSt-Address Web API.

The Belgian Streets and Addresses project (BeSt) combines the address data from the 3 Regions into one single database.

The service is developed and maintained by the Federal Public Service BOSA, and is provided "as-is", without warranty of any kind.

More info about this project can be found on the BOSA page bosa.belgium.be/nl/services/best-address-services

1.2. Runtime requirements

This application requires an OpenJDK 17 or 21 runtime, with 2 GB of RAM, and a connection to a Postgres 13.3 (or newer) database with PostGIS 3.x extension.

2. Configuration parameters

Either set these parameters in an `application.properties` file, or provide them as environment variables.

In the latter case, the parameter names must be set in uppercase, and dots must be replaced with underscores.+ For example, `server.port` becomes `SERVER_PORT`

2.1. Web server parameters

The 'internal' `context-path` and 'external' `base.url` path are often the same, but may need to be changed when running behind reverse proxies.

Parameter	Description	Default Value
<code>server.port</code>	Server port of the API	8080
<code>server.servlet.context-path</code>	Server path of the API ('internal' path)	/belgianAddress/v2
<code>base.url</code>	Base URL to be used in the JSON responses of the API ('external' path).	/belgianAddress/v2
<code>cors.origins</code>	Comma-separated list of allowed Origins (or '*' for all Origins).	not set

2.2. Database parameters

No database updates are being performed via the Web API, meaning that the connection can be set read-only.

Parameter	Description	Default Value
<code>spring.datasource.url</code>	Database connection string	jdbc:postgresql:///postgres
<code>spring.jpa.properties.hibernate.default_schema</code>	Database schema	schema_fsbbest_adm
<code>spring.datasource.username</code>	Database user name	
<code>spring.datasource.password</code>	Database user password	
<code>spring.jpa.properties.hibernate.cache.use_second_level_cache</code>	Enable caching of database results by the application	true

2.3. Log file parameters

Parameter	Description	Default Value
<code>logging.file.name</code>	Path to log file	<code>/mnt/log/best-webapi.log</code>
<code>logging.pattern.file</code>	Log format pattern	<code>%d{yyyy-MM-dd'T'HH:mm:ss.SSS} %level %logger - %msg%n</code>

2.4. Application parameters

2.4.1. Geo search parameters

By default the API allows for searching by geo coordinates within a radius of 100 meters.

A client application can specifically ask for a smaller or larger range, within certain limits set by the API.+ Setting the minimum radius below 1 meter does not make sense, since the error margin of the coordinates themselves is probably 1 meter or more.+ Increasing the maximum radius allows for more results being returned but has a negative impact on performance.

Parameter	Description	Default Value
<code>parameter.radius.min</code>	Minimum radius (in meters) a user is allowed to use when searching for addresses by geo coordinates	1
<code>parameter.radius.max</code>	Maximum radius (in meters) a user is allowed to use when searching for addresses by geo coordinates	1000

2.4.2. Pagination parameters

These parameters limit the number of results per page.

Municipalities and streets are less complex than addresses, so a higher number of municipalities or streets per page has much less impact on server resources (memory, network...) than a higher number of addresses per page.

Parameter	Description	Default Value
`parameter.pagesize.max.addresses	Maximum number of addresses per result page	250
`parameter.pagesize.max.municipalities	Maximum number of municipalities per result page	600
`parameter.pagesize.max.postalinfos	Maximum number of postal infos per result page	400
`parameter.pagesize.max.streets	Maximum number of streets per result page	400

2.4.3. Other parameters

Parameter	Description	Default Value
<code>parameter.encodingfilter</code>	Check if IDs passed as parameter are (incorrectly) encoded twice, which typically happens when the application is behind an incorrectly configured reverse proxy	false