

RegioGraph Online Installation Manual

This document contains information about installation and basic administration of the RegioGraph online platform (TeamConnect and Location Advice). For user related documentation, please refer to the RegioGraph Planning and RegioGraph Strategy help system.

Version 0.17.16

April 2026

Content

1.	System Requirements	3
1.1	Hardware and operating system	3
1.1.1	Hardening IIS	3
2.	Installation	4
2.1	Step 1: .NET Framework 4.8.....	4
2.2	Step 2: Installation directory, server alias, SSL certificate	5
3.	Uninstall and repair	6
4.	User and group administration	7
4.1	Users	7
4.2	Groups.....	7
4.3	Active Directory	8
4.4	SSO with SAML.....	8
4.5	Mail server configuration	9
4.6	Password requirements	9
5.	How to update the license	10
6.	How to use RegioGraph Desktop and RegioGraph TeamConnect	10
7.	Configuration	11
7.1	Customize starting page	11
7.2	Show values as links.....	12
7.3	Adjustment options in the filter area.....	13
7.4	Specify an alternative name as host	13
7.5	File size and format limitations for attachments.....	14
7.6	Activate swagger	14
7.7	Diagnostic logging	15
7.7.1	Log4net	15
7.7.2	Serilog	16
7.8	Service application configuration	17
7.8.1	Exchanges.....	17
7.8.2	Geocoder.....	17
7.8.3	Repository	17
7.8.4	Usermanagement.....	17
7.8.5	WMTS	18
7.8.6	Zones	18

1. System Requirements

1.1 Hardware and operating system

For a default installation of RegioGraph Online we recommend the following machine setup. Depending on the usage patterns, a bigger machine might be necessary. You can use a virtual server for this purpose.

Hardware

This should be sufficient for up to 10 users:

- CPU: 4 Prozessoren
- RAM: 16 GB
- HDD: 200 GB

This should be sufficient for up to 50 users:

- CPU: 8 Prozessoren
- RAM: 32 GB
- HDD: 200 GB

This should be sufficient for up to 100 users:

- CPU: 16 Prozessoren
- RAM: 64 GB
- HDD: 200 GB

Operating system

- Windows Server 2019/2022/2025, 64-bit
- Internet Information Services (Version 10.X)

1.1.1 Hardening IIS

Hardening IIS via security control from Microsoft:

<https://techcommunity.microsoft.com/t5/itops-talk-blog/windows-server-101-hardening-iis-via-security-control/ba-p/329979>

To prevent vulnerabilities caused by older DOS 8.3 name conventions (SFN) which can be sent in a HTTP request add a registry key named NtfsDisable8dot3NameCreation to HKLM\SYSTEM\CurrentControlSet\Control\FileSystem. Set the value of the key to 1 to mitigate all 8.3 name conventions on the server.

If you want to set the maximum number of parallel requests and the maximum number of requests within a certain time, you will find instructions on how to do this also at Microsoft.

<https://learn.microsoft.com/en-us/iis/configuration/system.webserver/security/dynamicipsecurity/denybyrequestrate>

Open Web Application Security Project (OWASP) guide to hardening IIS:

https://www.owasp.org/index.php/Hardening_IIS

Center for Internet Security IIS 10 Benchmark. <https://www.cisecurity.org/cis-benchmarks>

2. Installation

If you already have an installation, please backup your old installation first.

The default location of your old installation is usually under `C:\inetpub\wwwroot\rgonline`, stop the IIS with the IIS Manager and copy this folder.

Then you can uninstall the old version. After the uninstallation, delete the installation folder (`C:\inetpub\wwwroot\rgonline`).

The following files should be copied back after the new installation:

- **apildata**

comments.sqlite, notifications.sqlite, usermanagement.sqlite, adis.json, mail.json, password.json, saml.json, token.json, TilesTeamConnectMaps.sqlite

Please rename User.txt to User.txt_ and Groups.txt to Groups.txt_.

- **apildata\Maps\Exchange**

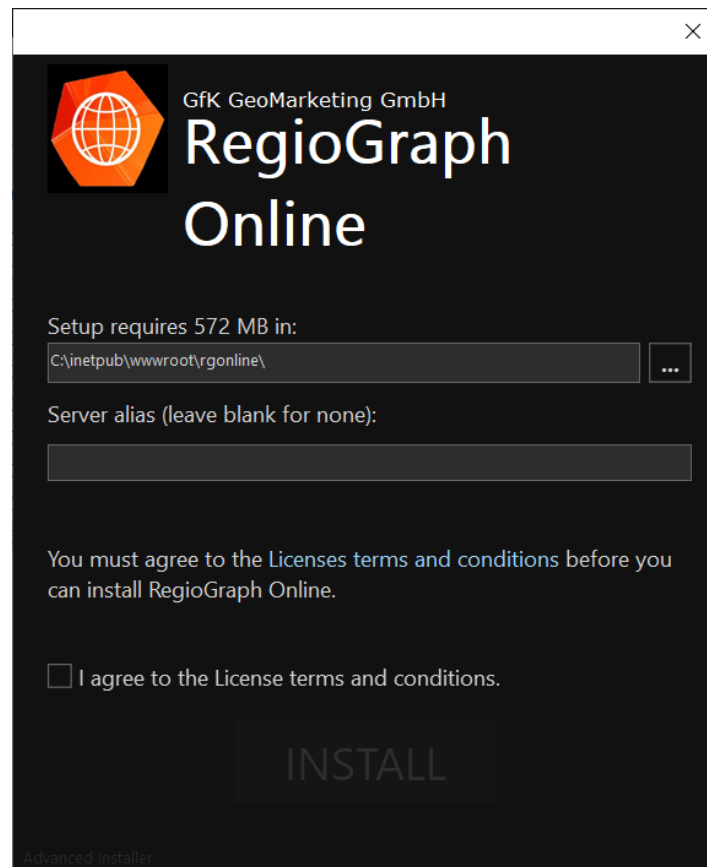
all files in folder

If you have made configuration adjustments for the frontend in the config/config.json file, copy them to the new config/config.json file.

2.1 Step 1: .NET Framework 4.8

You found the required .NET Framework in the installation folder under Resources\.NET Framework 4.8 or you can download the required version from Microsoft.com. After the installation, please restart your windows system before you continue with the installation.

2.2 Step 2: Installation directory, server alias, SSL certificate



Choose a directory in the Internet Information Server (IIS) root folder. The setup copies the necessary files to this folder. By default, this is `C:\inetpub\wwwroot\`. Choose a new directory named “rgonline”.

If you use a server alias, please enter the alias name in the corresponding input field.

Info: RegioGraph TeamConnect and RegioGraph LocationAdvice require an SSL certificate to encrypt data in motion. The installer creates a self-signed certificate during the installation and bind it to the website.

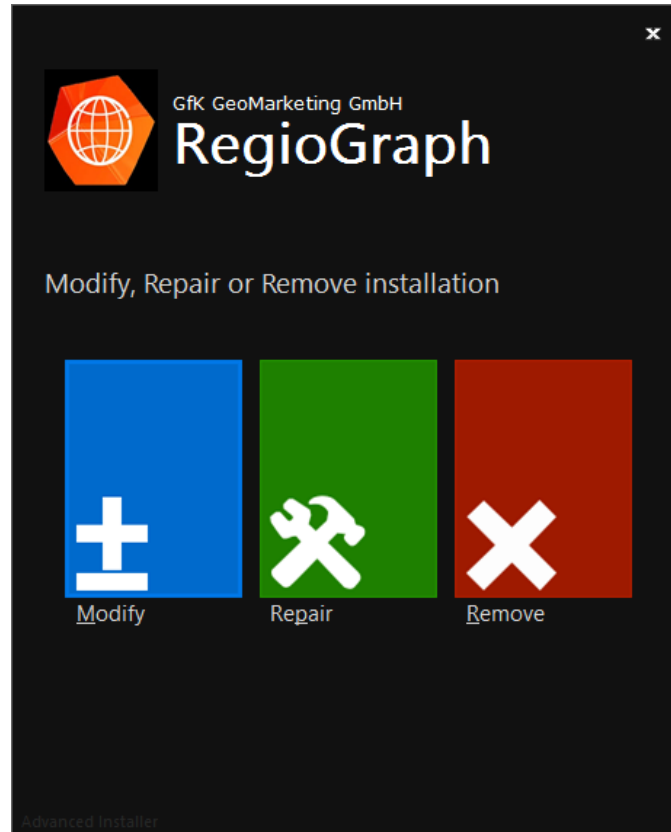
We recommend changing the self-signed certificate with a trusted certificate in IIS Manager after the installation is done.

Select the Website--> Bindings and change the certificate for https.

You need to agree to the license terms and conditions to start the installation.

3. Uninstall and repair

To uninstall RegioGraph TeamConnect or RegioGraph LocationAdvice, you can use the “Apps and features” entry in the system settings. You need to stop the IIS Server, first.



Alternatively, you can start the Installation executable again to open the Modify, Repair and Remove dialog. Just click “Remove” to uninstall the system.

Files created or copied during installation and operation will not be deleted from the installation directory. Please navigate to the installation folder and remove the remaining files. Please consider creating a backup of your files in case you need to access data afterwards.

4. User and group administration

After the installation procedure, RegioGraph Online is accessible using the default administrator account. The account is named “admin”, the password is “admin” as well. Please remember to change this password for security reasons.

After the login, you can start adding local users or users from active directory or users with SAML and SSO to the system.

To add local users, go to the top right of the screen, click on the profile symbol and chose “Settings”.

4.1 Users

In the Users section, you can click on “Add new user” and enter the display name and the email address. The local user will receive an email with a link to the system to set a new password.

You have the option of creating a filter for the Authorisation and AD group column to quickly add users to groups.

4.2 Groups

Name	Administrator Rights	Upload Rights
Administrators *	☒	☒
Everyone *	☐	☐
Spain User	☐	☐

In the groups section, you can add groups to the system to simplify information sharing and manage rights over many users. A group can have administrator rights or/and upload rights. Admin rights are intended for the administration of users, groups and projects. Upload rights allow you to upload and manage your own projects.

4.3 Active Directory

In the user repository section, you can configure an Active Directory to give users access to the system. The users from the AD groups are updated once an hour. Adding an Active Directory only allows the AD users to log in and use Regiograph Online. Regiograph Online itself has its own definition of groups which can be used to manage rights within the application.

4.4 SSO with SAML

It is possible to use Security Assertion Markup Language (SAML) with Single Sign On (SSO) for authentication. Go to the top right of the screen, click on the profile symbol and chose "Settings". In the SSO section you can configure the SSO.

4.5 Mail server configuration

[← Back](#)
[Profile](#)
[System](#)
[License](#)
[Password](#)
[Authorization](#)
[SMTP](#)
[SSO](#)
[Team Connect](#)
[User management](#)
[Users](#)
[Groups](#)
[Active Directory](#)

SMTP settings

Host	example_mail_out.gfk.com	
Port	25	
Username	example@gfk.com	
Password (ändern)		
Sender email	example@gfk.com	
Subject for password reset email	Deutsch	RG Online: Passwort zurücksetzen.
	English	RG Online: Reset Password
Subject for the welcome email	Deutsch	RG Online: Neues Passwort setzen.
	English	RG Online: Set new Password

[Cancel](#)
[Save](#)

If your users only come from active directory, you can skip this step.

The system will send emails to your users in case you use the internal password system. Therefore, you need to set up an SMTP server. Go to the top right of the screen, click on the profile symbol and chose "SMTP" to configure the SMPT settings. We support SSL and strongly recommend the use of a secure SMTP connection. To do this, select a port on your mail server that supports SSL. If a secure SMTP connection is not possible, you can use an unsecured connection.

4.6 Password requirements

[← Back](#)
[Profile](#)
[System](#)
[License](#)
[Password](#)
[Authorization](#)
[SMTP](#)
[SSO](#)

Password requirements

Minimum password length	8
Minimum count of numbers	1
Minimum count of uppercase characters	1
Minimum count of lowercase characters	1
Minimum count of special characters . ! @ # \$ % ^ & * ? _ ~ - £ ()	1

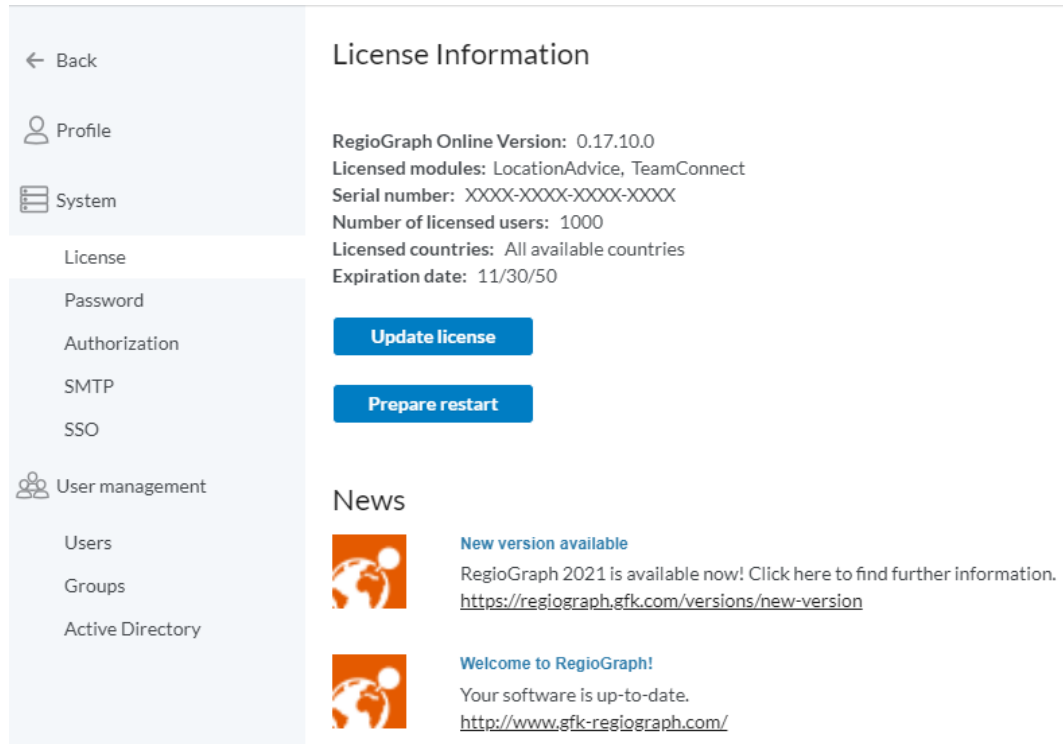
[Cancel](#)
[Save](#)

If your users only come from active directory, you can skip this step.

Go to the top right of the screen, click on the profile symbol and chose "Password" to configure the password requirements.

5. How to update the license

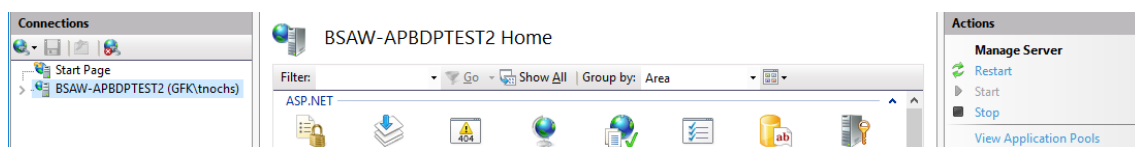
If you want to update the license, go to the top right of the screen, click on the profile symbol and chose "License".



Click on the button *Update license* to load a new license file.

To prevent data loss, click on the button *Prepare restart*.

Now you should open the IIS Manager on the Windows Server and restart the IIS.



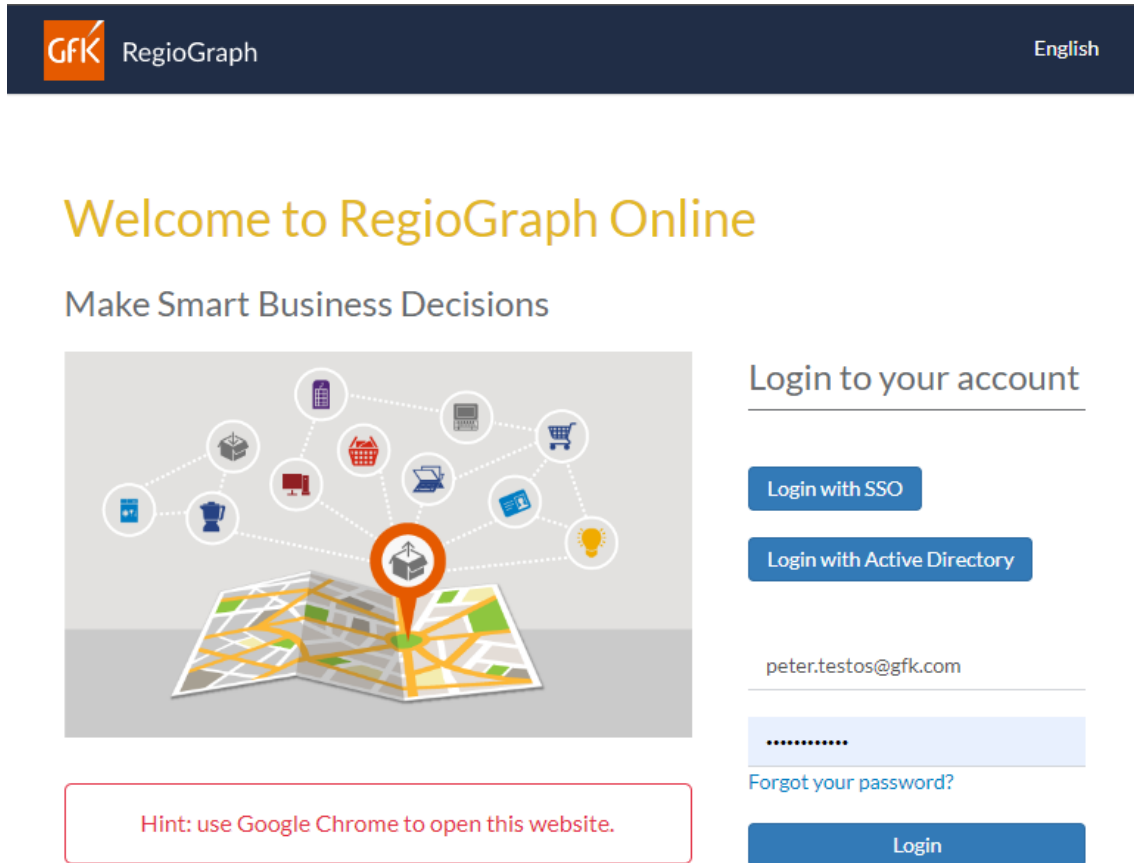
6. How to use RegioGraph Desktop and RegioGraph TeamConnect

For information how to use RegioGraph Desktop and RegioGraph TeamConnect look at:

<https://www.regiograph-help.de/22/DE/index.html?teamconnect.htm>

7. Configuration

7.1 Customize starting page



To customise the start page, open the following file:

"C:\inetpub\wwwroot\{rgonline}\config\config.json"

You can adjust the image in the middle and various texts there.

```
"loginClaimText": {
    "en": "Make Smart Business Decisions",
    "de": "Treffen Sie die richtigen Entscheidungen"
},
"loginBackgroundImage": "../config/images/login-page-img.png",
"loginHintText": {
    "en": "Hint: use Google Chrome to open this website.",
    "de": "Hinweis: verwenden Sie Google Chrome, um diese Seite anzuzeigen."
}
```

7.2 Show values as links

To display values from your table as a link, open the following file:

"C:\inetpub\wwwroot\{rgonline}\config\config.json"

The screenshot shows the NIQ RegioGraph interface. On the left, there is a table of districts with columns for 'Kennziffer Stadt- oder Landkreis', 'territory structure', 'area km²', 'Link', 'address', and 'phone'. The table lists districts 01001, 01002, and 01003. The 'Link' column contains a URL: <https://www.regiograph.de/>. The 'address' column contains 'Bruchsal, Werner-von-Siemens-Str 2-6' for 01001 and 'Frankfurt, Insterburger Str. 16' for 01002. The 'phone' column contains '+49 (0)7251' for 01001 and '+49 (0)69' for 01002. On the right, there is a map of Germany with various regions highlighted in different colors (yellow, green, red, pink).

Enter the column names and the formatting (prefix and/or suffix) here.

"linkPatterns": {

"Verknüpfung": "{0}",

"Link": "{0}",

"Telefon": "tel:{0}",

"Phone": "tel:{0}",

"Adresse":

"https://www.google.com/maps/dir/?api=1&destination={0}&travelmode=driving&dir_action=navigate",

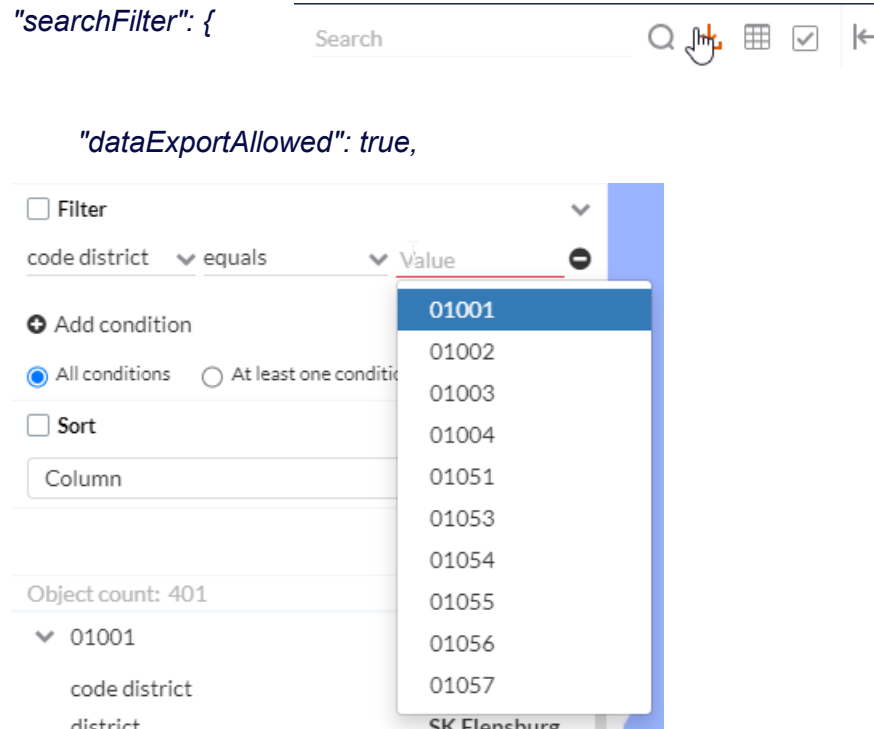
"Email": "mailto:{0}"

}

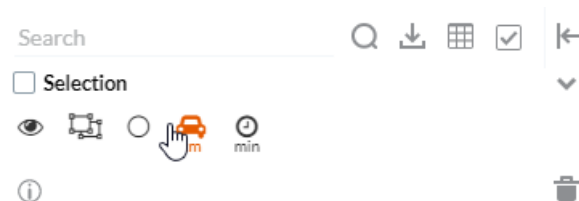
7.3 Adjustment options in the filter area

To adjust some options in the filter area, open the following file:

"C:\inetpub\wwwroot\{rgonline}\config\config.json"



"maxCountValuesForAutocomplete": 100,



"maxZoneDistanceInKm": 60

}

7.4 Specify an alternative name as host

To specify an alternative name as the host name, open the following file:

"C:\inetpub\wwwroot\{rgonline}\api\Global.config"

<AliasName>rgonline.gfk.com</AliasName>

7.5 File size and format limitations for attachments

File size and format limitation server side:

"C:\inetpub\wwwroot\{rgonline}\api\Global.config"

```
<AllowedFileExtensions>jpeg,jpg,bmp,gif,tif,png,txt,csv,pdf</AllowedFileExtensions>
```

```
<!--2147483648 = 2GB; 1073741824 = 1GB-->
```

```
<MaxAllowedFileLength>1073741824</MaxAllowedFileLength>
```

File format limitation in frontend:

"C:\inetpub\wwwroot\{rgonline}\config\config.json"

```
"allowedFileExtensions": ".png, .bmp, .gif, .tif, .jpg, .jpeg, .csv, .pdf, .txt",
```

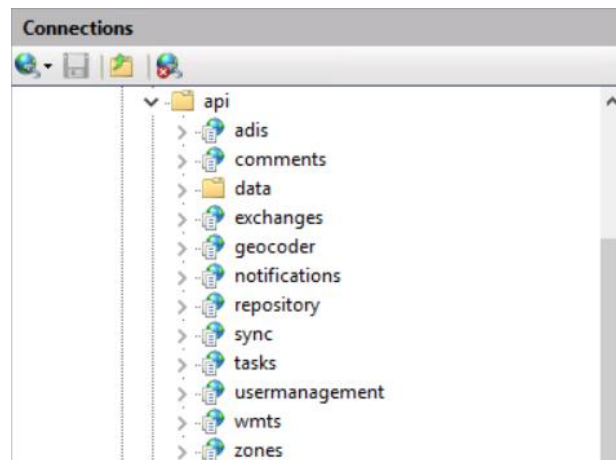
7.6 Activate swagger

To test the endpoints of each application, open the following file:

"C:\inetpub\wwwroot\{rgonline}\api\Web.config" and activate swagger.

```
<add key="swagger:active" value="true"/>
```

The applications are:



Replace the name Geocoder in the url with the names of the other applications to test the respective endpoints.

The screenshot displays the Swagger UI for the `rgonline.gfk.com/api/geocoder` API. The interface is organized into sections for different API groups. The **Geocoder** section lists several endpoints, each with a GET method and a brief description of its function. The **WakeUp** section lists a single endpoint. The interface also includes a 'BASE URL' and 'API VERSION' field, and an 'INVALID' button.

Method	Endpoint	Description
GET	/geojson	Geocodes an address.
GET	/json	Geocodes an address.
GET	/free_format/geojson	Free format search of an address.
GET	/free_format/json	Free format search of an address.
GET	/reverse/geojson	Searches the nearest address of a location.
GET	/reverse/json	Searches the nearest address of a location.
GET	/wakeUp	

[BASE URL: /develop/api/geocoder , API VERSION: v1]

INVALID

7.7 Diagnostic logging

Each application has a web.config file in which the diagnostic logging can be configured.

"C:\inetpub\wwwroot\{rgonline}\api\{application}\Web.config"

7.7.1 Log4net

For backend level we are using log4net. Further information is available at

<https://logging.apache.org/log4net/>

```
<log4net><root>
  <level value="ERROR"/>
  <appender-ref ref="RollingFile"/>
</root>

<logger name="GfK.RegioGraph.Repository.AccessControlled">
  <!-- DEBUG, INFO, WARN, ERROR, FATAL -->
  <level value="INFO"/>
</logger>

<appender name="RollingFile" type="log4net.Appender.FileAppender">
  <lockingModel type="log4net.Appender.FileAppender+InterProcessLock"/>
```

```
<file type="log4net.Util.PatternString" value="..\data\logs\repository-legacy-%date{yyyy-MM-dd}.log"/>
  <appendToFile value="false"/>
  <rollingStyle value="Composite"/>
  <maximumFileSize value="1MB"/>
  <maxSizeRollBackups value="14"/>
  <staticLogFileName value="true"/>
  <datePattern value="yyyy-MM-dd"/>
  <layout type="log4net.Layout.PatternLayout">
    <conversionPattern value="%date{ISO8601} [%-5level] [%2thread] %logger{1}
%method -
    %message%newline%exception"/>
  </layout></appender></log4net>
```

7.7.2 Serilog

For service level we are using serilog. Further information is available at

<https://serilog.net/>

"C:\inetpub\wwwroot\{rgonline}\api\{application}\Web.config"

```
<appSettings>
  <add key="serilog:minimum-level" value="Info"/>
  <add key="serilog:using:File" value="Serilog.Sinks.File"/>
  <add key="serilog:write-to:File.path" value="..\data\logs\repository-{date}.txt"/>
  <add key="serilog:write-to:File.rollOnFileSizeLimit" value="true"/>
  <add key="serilog:write-to:File.retainedFileCountLimit" value="14"/>
  <add key="serilog:write-to:File.outputTemplate" value="{Timestamp:yyyy-MM-dd
HH:mm:ss,fff} [{Level:u}] [{ThreadId}] {Message:l}{NewLine}{Exception}"/>
  <add key="settings:complexity" value="..\data\complexity.json"/>
</appSettings>
```

7.8 Service application configuration

Each service application has its own service.config file in which various settings can be configured. Here are the most important ones for each application:

7.8.1 Exchanges

"C:\inetpub\wwwroot\{rgonline}\api\exchanges\service.config"

```
<!-- The uploaded projects are stored there. -->
<RepositoriesFolder> ..\..\data\Maps\Exchange\</RepositoriesFolder>

<!-- Default view of the projects if no view could be defined or loaded. -->
<DefaultBoundingBoxes>
  <DefaultBoundingBox>5.866315</DefaultBoundingBox>
  <DefaultBoundingBox>47.270238</DefaultBoundingBox>
  <DefaultBoundingBox>15.041832</DefaultBoundingBox>
  <DefaultBoundingBox>55.056816</DefaultBoundingBox>
</DefaultBoundingBoxes>
```

7.8.2 Geocoder

"C:\inetpub\wwwroot\{rgonline}\api\geocoder\service.config"

```
<!-- Default map location -->

<BaseMapsFolder>..\..\data\Maps\BaseMaps\</BaseMapsFolder>
```

7.8.3 Repository

"C:\inetpub\wwwroot\{rgonline}\api\repository\service.config"

```
<!-- The uploaded projects are stored there. -->
<ExchangeRepositoriesFolder> ..\..\data\Maps\Exchange\</ExchangeRepositoriesFolder>

<!-- Geometries in the map should be displayed as bounding boxes. -->
<ShowGeometryAsBBox>false</ShowGeometryAsBBox>
```

7.8.4 Usermanagement

"C:\inetpub\wwwroot\{rgonline}\api\usermanagement\Web.config"

```
<!-- Folder in which the web pages for the mails are located. -->

<RecoveryEmailFolder>\App_Data\Recovery_Emails\</RecoveryEmailFolder>
```

7.8.5 WMTS

"C:\inetpub\wwwroot\{rgonline}\api\wmts\Web.config"

<!-- Default database for base map tiles. -->

<TilesBaseMapsDatabaseFile>..\data\TilesBaseMaps.sqlite</TilesBaseMapsDatabaseFile>

<!-- Default database for uploaded map tiles. -->

<TilesTeamConnectMapsDatabaseFile>..\data\TilesTeamConnectMaps.sqlite</TilesTeamConnectMapsDatabaseFile>

<!-- Default map location -->

<BaseMapsFolder>..\..\data\Maps\BaseMaps\</BaseMapsFolder>

<!-- The uploaded projects are stored there. -->

<ExchangeRepositoriesFolder>..\..\data\Maps\Exchange\</ExchangeRepositoriesFolder>

<!-- Settings for cleaning up old map tiles. -->

<DeleteUpTilesTime>22:00:00</DeleteUpTilesTime>

<DeleteUpTilesAfterDays>30</DeleteUpTilesAfterDays>

7.8.6 Zones

"C:\inetpub\wwwroot\{rgonline}\api\zones\Web.config"

<!-- Default map location -->

<BaseMapsFolder>..\..\data\</BaseMapsFolder>

<!-- Speed profiles: SlowCar, MediumCar, MediumCarPed, FastCar, Pedestrian, Truck -->

<SpeedProfile>MediumCar</SpeedProfile>