How to register with open energy

To participate in the Open Energy ecosystem during the beta period, you will need:

- A user account on our directory service
- Cryptographic material used when accessing or providing shared data
- (for Data Providers only) a reference to a description of the information you are publishing

Registering an Organisation with Open Energy

To participate in the Open Energy ecosystem, we need to have a record for your organisation. For obvious reasons, this is not a self-service operation and you will need to contact us directly so we can set this up for you.

1. Share with the Open Energy team the following details to create your Organisation on the Directory:

    a. ORGANISATION NAME
    b. REGISTRATION NUMBER (e.g. as seen on Companies House)
    c. PARENT ORGANISATION REFERENCE ID (if applicable)
    d. LEGAL NAME
    e. COMPANY ADDRESS
    f. Your email address (to act as Organisation Administrator)

2. Once OE confirms the creation of your Organisation on the Directory, you can proceed to the next step.

Creating a User Account on the Directory

Once an organisation exists, you will need a user account in order to configure it via the Directory web interface. Create an account as shown below.

1. Register your account on the Open Energy directory (using the same email address as provided above and a **mobile** phone number). Passwords must be - 8 - 24 characters long and Must have 1 digit, 1 lowercase, 1 upper case, 1 symbol.

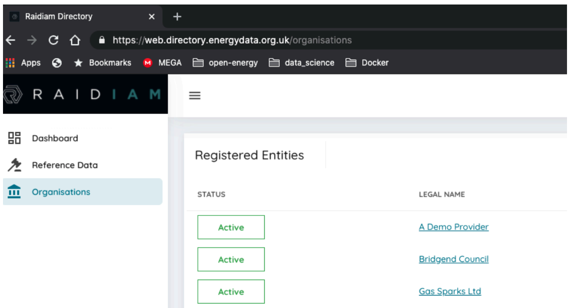
2. You will need to provide SMS and Email confirmation (the Directory will send you codes to each), as well as set up Two-Factor Authentication (2FA) - most easily done using a Smartphone software application such as Google Authenticator or Microsoft Authenticator

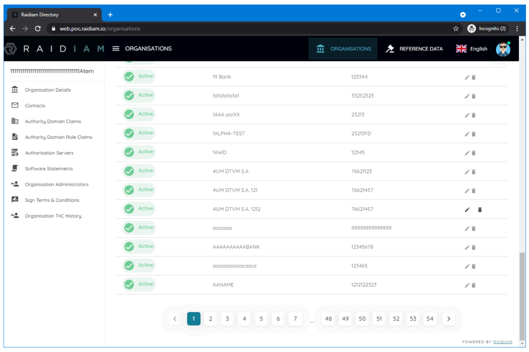
Configuring your Organisation

Once you have an organisation registered with us, and at least one user account you would like to be able to configure that organisation, use the steps below to generate the necessary cryptographic material (needed for both Data Consumers and Data Providers) and to register any data sets you wish to publish (Data Providers only).

1. Now you can log in, click on Organisations to see all of the Organisations that are registered in the Directory

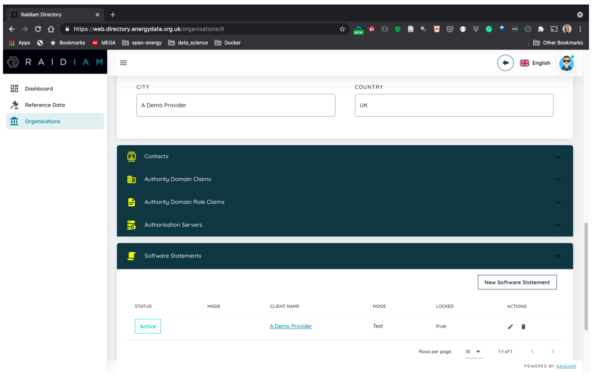
2. You can select any Organisation in order to see their core details, and can select and 'edit' (the pencil icon) details for the Organisation(s) that you are associated with

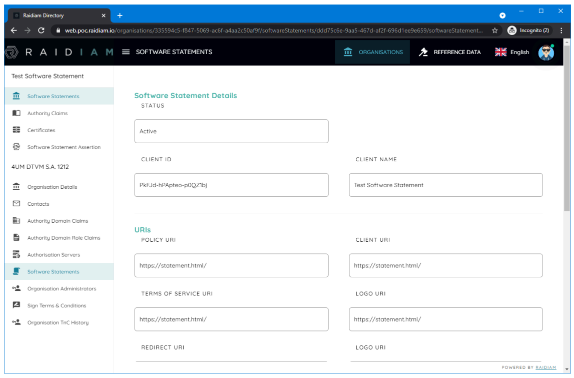




3. To access shared data as a Data Consumer, or to validate credentials as a Data Provider, you must create a Software Statement. This contains an ID for the software client, and cryptographic certificates needed to secure your connection to a Data Provider, or to the directory itself in the case of credential validation

4. To set up a new Software Statement, go to Software Statements





5. Click on **New Software Statement** and fill out the form:e.g.

   a. Mode: test
   b. Version: 1
   c. Environment: Test
   d. Various URIs: they can be dummy URLs for now, e.g. https://www.organisationhostname.com/notes, https://www.organisationhostname.com/logo, etc.
   e. On behalf of: Company Name

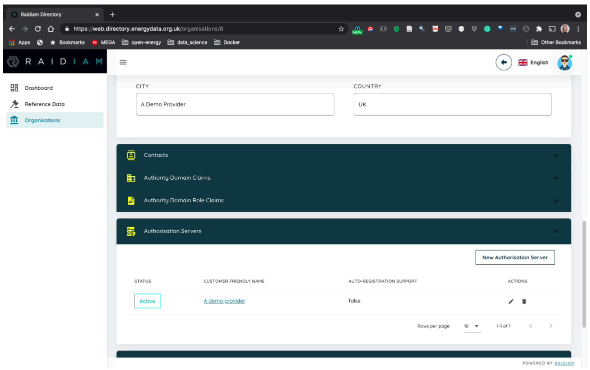
6. Select the Software Statement you have just created.

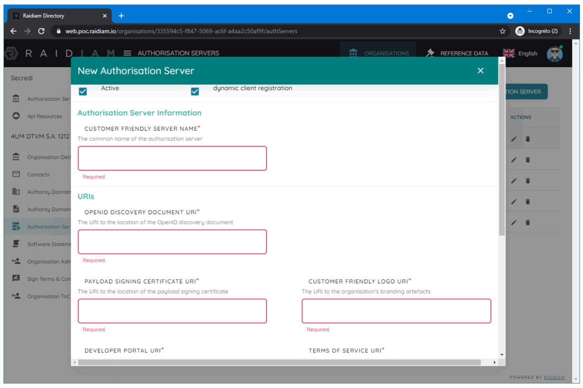
7. Go to Certificates and click on **New Certificate** - This requires command line tools only available on Linux or MacOS. Installation of OpenSSL on Windows is out of scope of this document

    a. Certificate type: Transport
    b. Generate CSR and private key: copy the command and click Continue
    c. Run the command in the command line on your computer. The command will generate two files. Firstly a private key file - this is confidential and must be treated with care. Secondly, a certificate signing request (CSR), this is the file you will need to upload to the directory to generate a client certificate.
    d. Upload CSR: upload the CSR generated in the previous step. DO NOT UPLOAD YOUR PRIVATE KEY (.key file).
    e. Finish adding a new certificate and download the certificate `.pem` file by clicking on the download arrow button.

8. **Data providers only:** in order to publish the information about your data on the Directory, you need to create an **Authorization Server** entry**.** This holds information about the location of data. In order to do it, follow these instructions:

    a. Go to your Organisation and click on Authorisation Servers and **New Authorization Server**.





    b. Add CUSTOMER FRIENDLY SERVER NAME, e.g. <my-organisation> metadata file
    c. Paste the same URL to your metadata file in all of the URI fields. Please, make sure that the metadata file you have published follows [these guidelines](#).
    d. Include the metadata file description, if possible
    e. Click ‘Save’

Publish or Consume Shared Data:

9. Once you have created a private key (.key file) and certificate (.pem file) pair with the Directory, please see [the technical guidelines](#) to:

    a. Access shared data, as a Data Consumer
    b. Publish shared data in a FAPI-compliant manner, as a Data Provider