Getting Started with the Automated Energy Data - Energy Comparison Service

Introduction

This document will help you get up and running with the Automated Energy Data - Comparison Service. The full interface specification can be found in this repository (Automated Energy Data – Design Document v1.0.pdf).

Prerequisites

Before you get started, you'll need to register your application with us. Send the following pieces of information:

1) Telephone number
2) An email address that we can contact you with
2) Your app's name (to be presented on the authorisation screen)
3) Your app's redirect URL of your app
4) An image/logo for your (to be presented on the authorisation screen)

Send us an email at registrations.midata@first-utility.com. In return we'll give you a **client id** and a **client secret**.

Obtain an access token

Before using the Comparison Service, you will first need to obtain an access token. The authentication mechanism we use is the OAuth 2 Implicit Flow. There are four simple steps required to get an access token:

1. Call the authorization endpoint

Send the following request:

HTTP GET:
URL: https://api.first-utility.com/api/oauth/authorize?client_id=<your client id>&response_type=token&redirect_uri=<your redirect URLl>&scope=supplydetails
This will redirect the browser to a Log-in page.

2. Log-in

At the Log-in page enter a username and password. For example:
Username and Password:
Username: midata9999
Password midatademo
This will redirect your browser to the Authorize page.

3. Authorize

The 'Supply Details' checkbox will already be ticked. Simply hit 'Allow'. Notice that your apps's name and image are displayed here!
This will redirect your browser to your application's redirect URL.

4. Extract access token from redirect

You will find the access token appended with a '#' to your app's redirect URL. We've provided some JavaScript (oauth.js in the midata-test-tool repo) to help you get started.
Here's an example redirect:
http://localhost/midata#access_token=vmWtL0h5GxGAGxHa3dH6WXbcUh6XJ85Sn20FwLCMdPvT3ODnNES2Tu&expires_in=1799&token_type=Bearer
The access token you'd extract would be: vmWtL0h5GxGAGxHa3dH6WXbcUh6XJ85Sn20FwLCMdPvT3ODnNES2Tu

You've got an access token and you can start using the Comparison Service!

Call the Comparison Service

Send the following HTTP request:
HTTP: GET
URL: https://api.first-utility.com/midata/energy/v2/supply-details
HEADER**:** Authorization VALUE**:** Bearer <access token you extracted>
HEADER: Accept VALUE: application/json

Example response:

```
{
  "midata":{
    "energy":{
      "comparison":{
        "electricity":{
          "mpan":"0000000000002",
          "lastUpdatedDate":"20150122",
          "currentProvider":"First Utility",
          "currentTariffName":"iSave Everyday dual fuel",
          "contractEndDate":"20160430",
          "currentPaymentMethod":"DD",
          "postcode":"CV349DB",
          "estimatedAnnualConsumptionKwh":4200,
          "estimatedAnnualSpendIncVATPounds":600,
          "startDate":"20130113",
          "historicAnnualConsumptionKwh":8000
        },
        "gas":{
          "mprn":"0000000002",
          "lastUpdatedDate":"20150122",
          "currentProvider":"First Utility",
          "currentTariffName":"iSave Everyday dual fuel",
          "contractEndDate":"20160430",
          "currentPaymentMethod":"DD",
          "postcode":"CV349DB",
          "estimatedAnnualConsumptionKwh":12500,
          "estimatedAnnualSpendIncVATPounds":500.03,
          "startDate":"20130113",
          "historicAnnualConsumptionKwh":10900
        },
        "payloadCreationDate":"20150122"
      },
      "currentTariff":{
        "fuels":{
          "electricity":{
            "tariffComparisonRateIncVAT":17.03,
            "standingChargeIncVATPencePerDay":1.56,
            "unitRatesIncVAT":{
              "day":{
                "pencePerKwh":16.844
              }
            }
          },
          "gas":{
            "tariffComparisonRateIncVAT":3.93,
            "standingChargeIncVATPencePerDay":2.66,
            "unitRatesIncVAT":{
              "standard":{
                "pencePerKwh":3.885
              }
            }
          }
        }
```

```
        }
      }
    }
  }
}
```

The response contains a currentTariff element that is not part of the official specification – this can be ignored.

Test Accounts

There are several examples that you can experiment with. The details are summarised here:

Account number	User id	emailaddress	password	account type
9999	midata9999	midata9999@midata.first-utility.com	midatademo	Dual Fuel Fixed
9998	midata9998	midata9998@midata.first-utility.com	midatademo	Dual Fuel Variable
9997	midata9997	midata9997@midata.first-utility.com	midatademo	Electricity Only
9996	midata9996	midata9996@midata.first-utility.com	midatademo	Dual Fuel E7