arable.client module

class **arable.client.ArableClient**

Bases: `object`

A client for connecting to Arable and making data queries.

```
>>> from arable.client import ArableClient
>>> client = ArableClient()
>>> client.connect(email='user@loremipsum.com', password='#@#SS',
tenant='loremipsum')
```

connect(*email=None*, *password=None*, *tenant=None*, *apikey=None*)

Logs the client in to the API.

Parameters:

- **email** – user email address
- **password** – user password
- **tenant** – user's tenant name

```
>>> client.connect(email='test@loremipsum.com', password='$#$!%',
tenant='loremipsum')
```

devices(*device_id=None*, *name=None*)

Lists the devices associated with the user's group.

```
>>> client.devices()
```

Parameters: **device_id** – optional; look up a single device by id; takes precedence over name, if present

```
>>> client.devices(device_id='<object id>')
```

Parameters: **name** – optional; look up a single device by name (serial); ignored if device_id is present

```
>>> client.devices(name='A000##')
```

`query`(***kwargs*)

Query Arable pod data.

```
>>> client.query()
>>> devices=["DeviceName"]
>>> a.query(select='microclimate', devices=devices, measure="calibrated",
limit=10000)
>>> csv = a.query(format='csv', devices=devices, measure='hourly')
```

```
>>> dt = datetime.datetime.now() - datetime.timedelta(hours=12)
>>> start = dt.strftime("%Y-%m-%dT%H:%M:%SZ")
>>> json = a.query(devices=devices, measure='L1_hourly', start=start)
```

Parameters:

- **devices** – optional; list of device names to retrieve data for
- **location** – optional; id of a location to retrieve data for; devices ignored if this is present
- **start** – optional; beginning of query time range
- **end** – optional; end of query time range
- **order** – optional; “time” (time ascending) or “-time” (time descending)
- **limit** – optional; maximum number of data points to return; defaults to 1000
- **format** – optional; use format=csv to get csv-formatted data; otherwise data is returned as json
- **select** – optional; “all”, “spectrometer”, “microclimate”, or “radiometer”
- **measure** – optional; “calibrated”, “hourly”, or “daily”