

PI Connector for UFL REST endpoint samples

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Sending data to the REST endpoint

The following sections provide information on sending data to the REST endpoint of the PI Connector for UFL. The Connector also supports data input from files and serial ports which is not covered here.

The REST endpoint supports the HTTP PUT method with the following headers:

```
'content-type': text/html', 'Accept': 'text/plain'
```

The following sections provide samples of how to “PUT” to the rest endpoint.

Prerequisites to run samples

- PI Connector for UFL:
 - is installed
 - service is started
 - is started (see admin GUI: <https://<server>:<port>/admin/ui>)
- PI Connector for UFL data source has been configured with:
 - Data Source Name: device
 - Config file: device.ini
 - Note: If using an example below verify if specific .ini file is required
 - Data source type: REST
 - Incoming timestamps: Utc (if using the example data file below)

- Obtain the REST endpoint address to use in the samples below

The URL for the REST endpoint is found in the Address field of the Data List Configuration on the PI Connector for UFL administration site after saving the configuration for the first time.

The URL is made up of the the following items based on the example:

<https://server:5460/connectordata/device>

Server Name: web server name

Port: 5460 (installation specific)

URI part1: connectordata

URI part2: device (data source name configured in Data List)

- The following files
 - Device.ini – PI Connector for UFL ini file
 - Relevant code files required for each individual example

Code samples

The following code samples are based on data collection for an asset with rpm, temperature and vibration sensors. Each record sent to the Connector is formatted as follows:

devicename,timestamp (in UTC/GMT),rpm,temperature,vibration

For example:

00-00-00-b2-11-1a,2015-11-06T08:19:18Z,1533,86,2755

Python

Samples were created using Python 3.4.3

File(s) required

piuflgen.py - generate records

piufl.py – send a file to the REST endpoint; Requires requests module.

Procedure

1. Review the previous pre-requisites section and complete any required steps
2. Generate some random data

```
python piuflgen.py > data.csv
```

3. Send the data file to the PI Connector for UFL REST endpoint

Note: The URL for the REST endpoint is found in the Address field of the Data List Configuration

```
python piufl.py URL datafile
```

Example

```
Python piufl.py https://server:5460/connectordata/device data.csv
```