

# Convert & Import Data into InfluxDB

When using Telegraf it's easy enough to insert data into Influx and visualize it with Grafana - but what if you have metrics that Telegraf doesn't have the capacity to pull and report to Influx?

In this example I'm using uBot to scrape several metrics into a .txt file that I want to insert into Influx. It doesn't matter how you scrape the, whether you use VBScript, Python or uBot, as long as that data is written to a specially formatted .txt file.

In my particular case, I'm using uBot to scrape metrics from my power company and from my ISP to give me the following metrics:

- Power company pay period
- Kilowatt usage to date
- Amount due (if any)
- ISP amount due (if any)
- Data usage to date

Once this data has been scraped, it's written to a text file in a specific format that I will cover below.

[Click here](#) for a tutorial on how to use uBot to scrape metrics into this specifically formatted text file.

**i** This is a Windows specific tutorial.

**i** This tutorial might be compatible with Linux/other platforms when you remove the Unix/Windows (ANSI/UTF-8) file type conversion process.

## Dependencies:

- Windows
- Powershell
- Notepad (or other text editor)
- InfluxDB
- Grafana

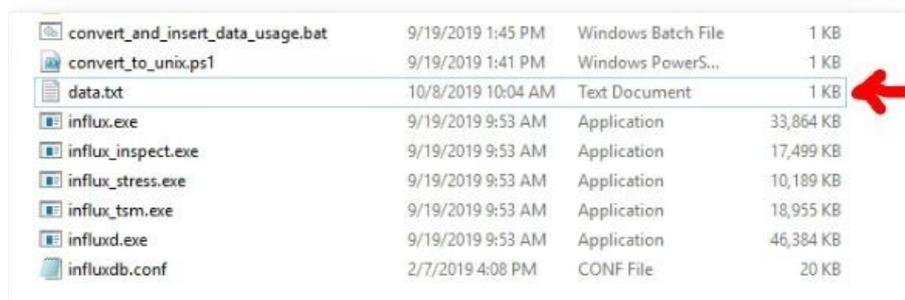
## 1. The text file's format

This tutorial assumes that you have already scraped metrics from some source ([Click here for a tutorial on how to scrape metrics with uBot](#)). The format for the .txt file is as follows:

Data.txt:

```
# DML\n# CONTEXT-DATABASE: telegraf\n\ndataUsage,host=att value=29\nATT_Due,host=att value=0\ngulfPowerDue,host=gulfpowerDue value=469.54\ngulfPowerKWh,host=gulfpowerKWh value="3,540"\ngulfPowerPeriod,host=gulfpowerPeriod value="6"
```

I outputted the above .txt file from uBot and saved it on my hard drive as "data.txt", and this is what it looks like on my Windows system:



File Name	Date Modified	Type	Size
convert_and_insert_data_usage.bat	9/19/2019 1:45 PM	Windows Batch File	1 KB
convert_to_unix.ps1	9/19/2019 1:41 PM	Windows PowerS...	1 KB
data.txt	10/8/2019 10:04 AM	Text Document	1 KB
influx.exe	9/19/2019 9:53 AM	Application	33,864 KB
influx_inspect.exe	9/19/2019 9:53 AM	Application	17,499 KB
influx_stress.exe	9/19/2019 9:53 AM	Application	10,189 KB
influx_tsm.exe	9/19/2019 9:53 AM	Application	18,955 KB
influxd.exe	9/19/2019 9:53 AM	Application	46,384 KB
influxdb.conf	2/7/2019 4:08 PM	CONF File	20 KB

## 2. Using Powershell to convert data.txt's file format from Windows to Unix

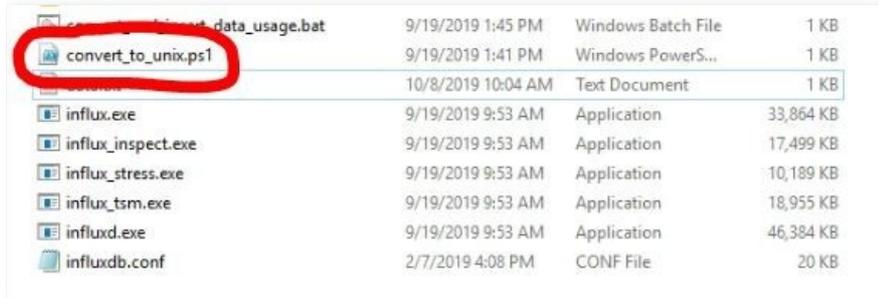
Influx will not accept a Windows formatted text file. It must be converted from ANSI (Windows) to UNIX (UTF-8). You can use a Powershell

script to do that, so copy and paste the commands below and save them into a Powershell executable file, which is a text file with the extension ".ps1". In my case, I've saved the file as "convert\_to\_unix.ps1".

Be sure to change the "data.txt" to reflect your data file's name and location:

```
$original_file = 'C:\Users\USERNAME\Documents\influxdb-1.7.3-1\data.txt'  
$text = [IO.File]::ReadAllText($original_file) -replace "`r`n", "`n"  
[IO.File]::WriteAllText($original_file, $text)
```

This is what my saved Powershell script looks like on my Windows system:



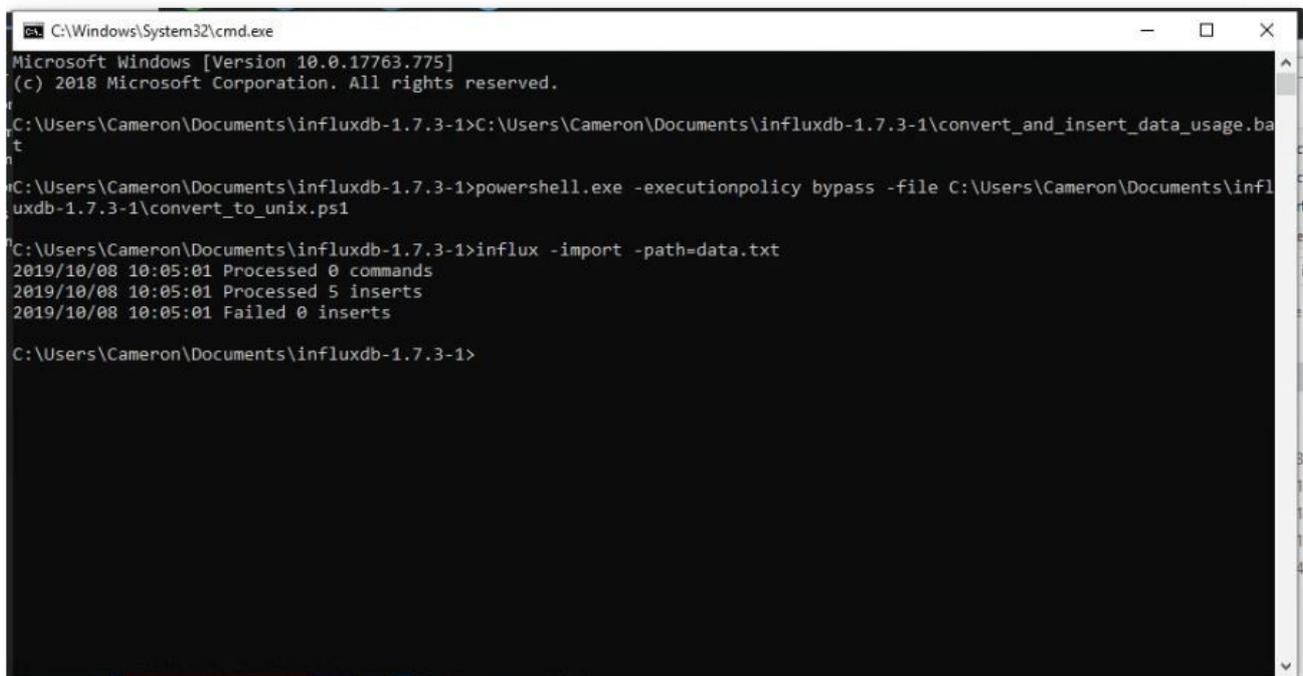
File Name	Modified	Type	Size
convert_to_unix.ps1	9/19/2019 1:41 PM	Windows PowerS...	1 KB
data_usage.bat	9/19/2019 1:45 PM	Windows Batch File	1 KB
influx.exe	9/19/2019 9:53 AM	Application	33,864 KB
influx_inspect.exe	9/19/2019 9:53 AM	Application	17,499 KB
influx_stress.exe	9/19/2019 9:53 AM	Application	10,189 KB
influx_tsm.exe	9/19/2019 9:53 AM	Application	18,955 KB
influxd.exe	9/19/2019 9:53 AM	Application	46,384 KB
influxdb.conf	2/7/2019 4:08 PM	CONF File	20 KB

### 3. Create the Batch file that fires the Powershell conversion script and the InfluxDB insert commands

Now we will combine the Powershell UNIX conversion script into a BATCH file that, in sequence, converts the "data.txt" file into UNIX format and then immediately calls Influx to import data.txt:

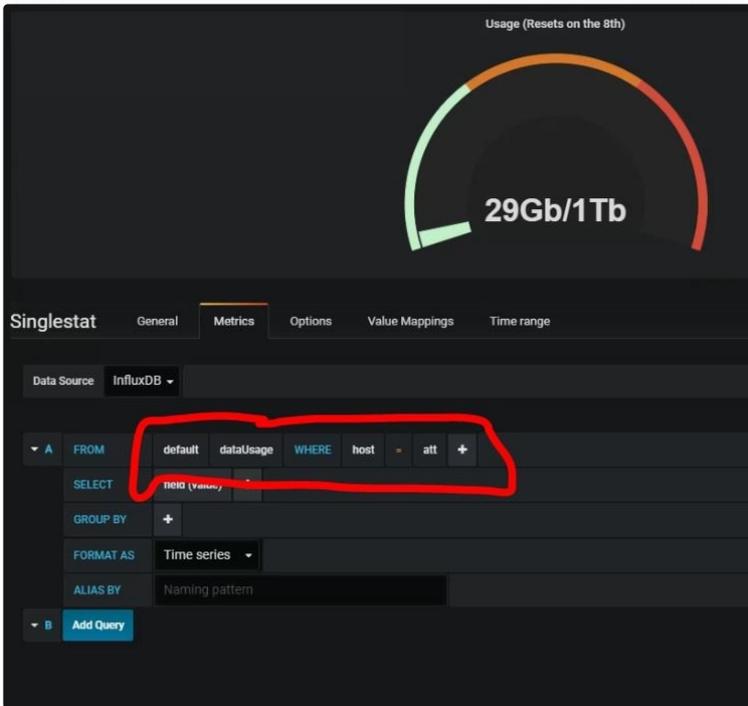
```
powershell.exe -executionpolicy bypass -file C:\Users\USERNAME\Documents\influxdb-1.7.3-1\convert_to_unix.ps1  
  
influx -import -path=data.txt
```

And this is what the command looks like after it has successfully been processed:



```
C:\Windows\System32\cmd.exe  
Microsoft Windows [Version 10.0.17763.775]  
(c) 2018 Microsoft Corporation. All rights reserved.  
  
C:\Users\Cameron\Documents\influxdb-1.7.3-1>C:\Users\Cameron\Documents\influxdb-1.7.3-1\convert_and_insert_data_usage.bat  
t  
  
C:\Users\Cameron\Documents\influxdb-1.7.3-1>powershell.exe -executionpolicy bypass -file C:\Users\Cameron\Documents\infl  
uxdb-1.7.3-1\convert_to_unix.ps1  
  
C:\Users\Cameron\Documents\influxdb-1.7.3-1>influx -import -path=data.txt  
2019/10/08 10:05:01 Processed 0 commands  
2019/10/08 10:05:01 Processed 5 inserts  
2019/10/08 10:05:01 Failed 0 inserts  
  
C:\Users\Cameron\Documents\influxdb-1.7.3-1>
```

At this point these metrics will become available from within Grafana:



Related tutorial:

- [Scraping ISP Data Usage With uBot Studio](#)

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