Advantech AE Technical Share Document

Date	2022/11/14	SR#	1-4088619092
Category	■FAQ □SOP	Related OS	N/A
Abstract	How to download vibration feature data by using WISE Studio or by using Parser Code Parsing MQTT Raw Data		
Keyword	WISE, data log, parser, JavaScript, LoRaWAN		
Related Product	WISE-2410 series		

■ **Problem Description:**

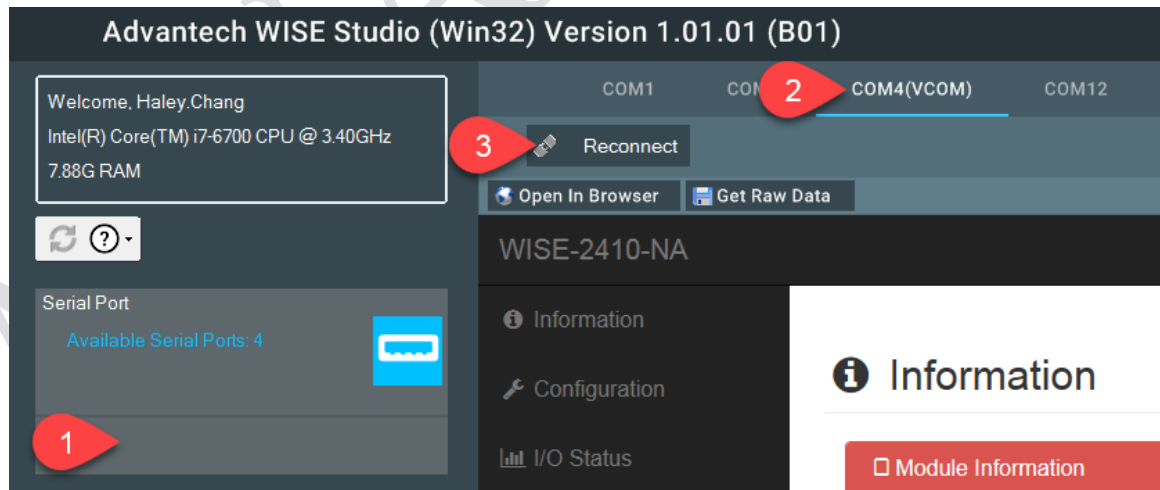This document explains how to download the data log.

There are 2 ways:

    (1) Download by a user through USB connection.

    (2) Auto download by a program by utilizing a parser provided by Advantech.
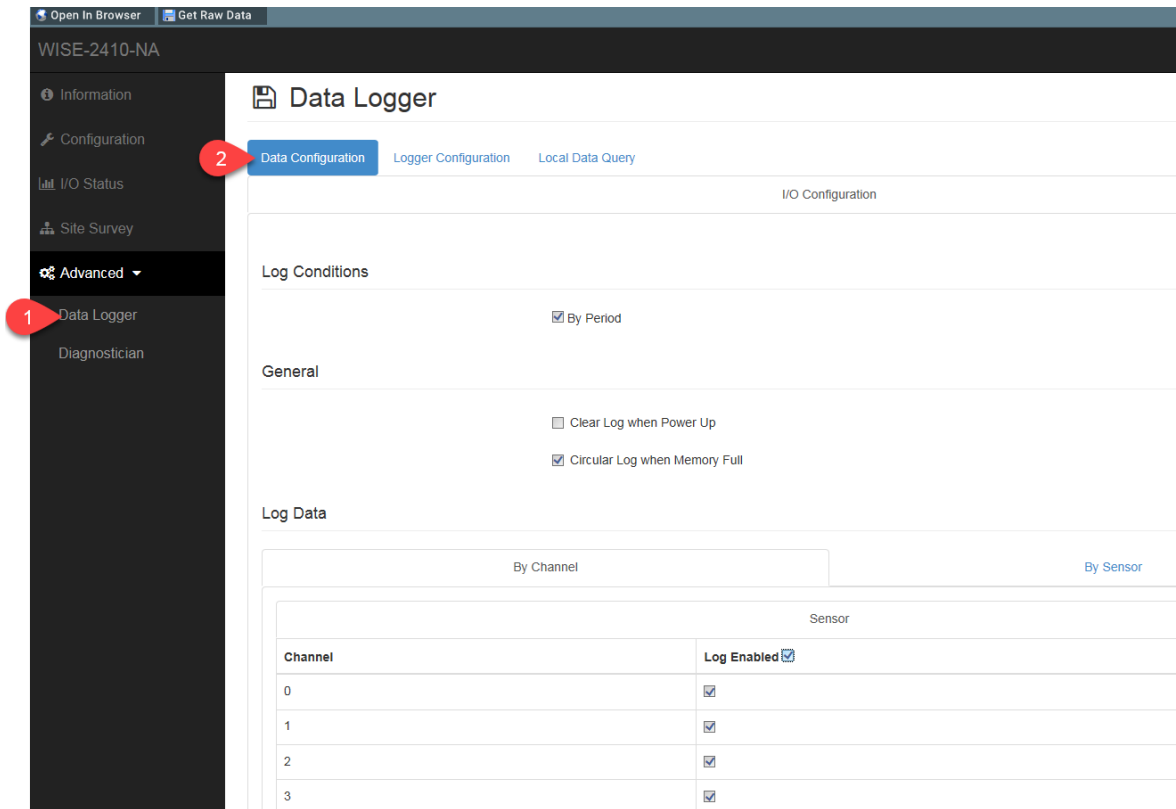
■ **Brief Solution - Step by Step:**
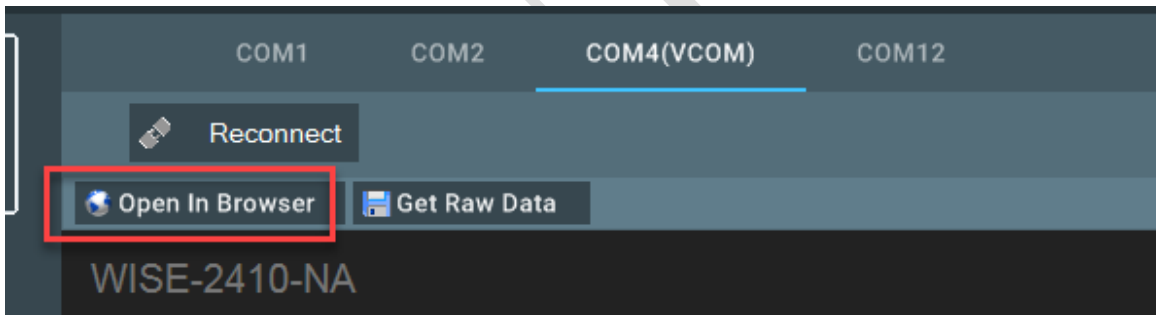
<mark>Solution 1.</mark>

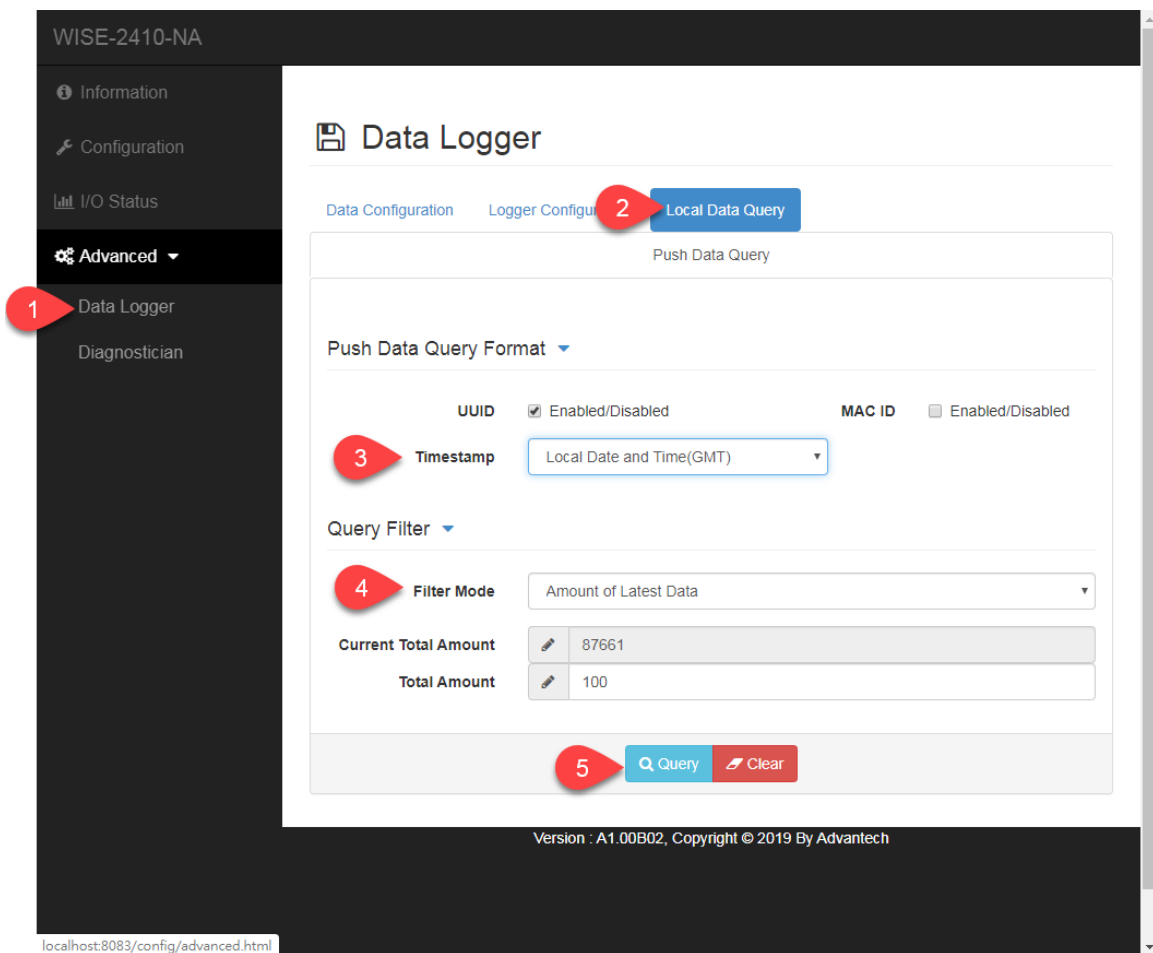Step 1.   Connect WISE-2410 with USB.

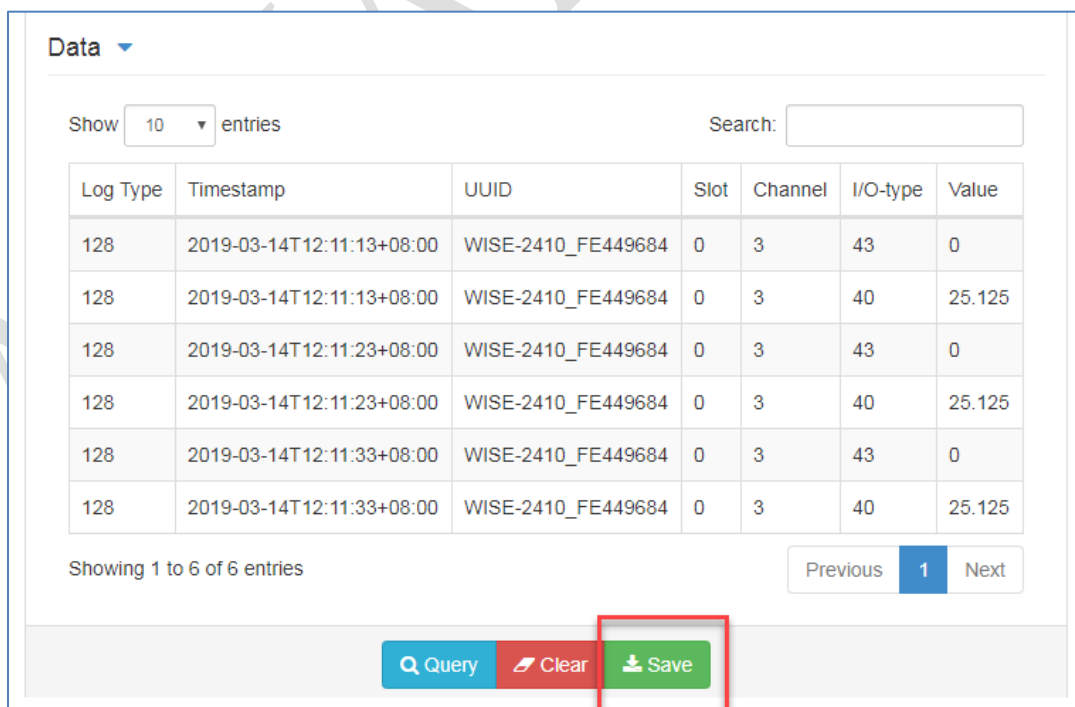Step 2.   Set up when and what to log.

Step 3.   Use Chrome to open the webpage. (IE does not support export function.)

Step 4.   Go to data logger/ local data query. Select the data format, timestamp, and then click on query.

Step 5. There will be a "save" button appears after query. Click on save to save a JSON file.

Step 6. Refer to the FAQ document for the JSON data.

FAQ: What is the JSON format of I/O log of WISE modules?

http://forum.adamcommunity.com/viewthread.php?tid=96444&extra=page%3D1

<mark>Solution 2.</mark>

Step 1.   Connect WISE-2410 with a LoRaWAN gateway. In this document, we use WISE-6610 for demonstration.

FAQ: How to connect WISE-2410 with WISE-6610?

http://forum.adamcommunity.com/viewthread.php?tid=96618&extra=page%3D1

Step 2.   Utilize the parser to parsing the data of WISE-2410.

Example parser: Java Script Payload Parser

https://support.advantech.com/support/DownloadSRDetail_New.aspx?SR_ID=1-1UAZL7H&Doc_Source=Download
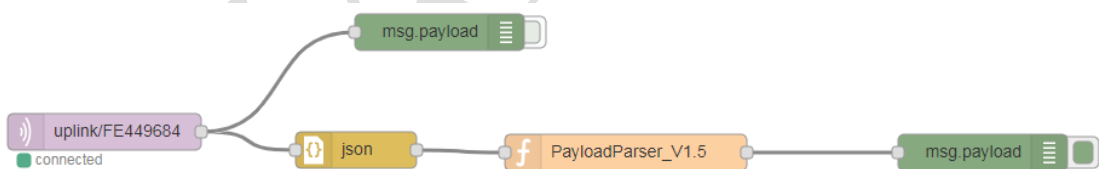
Java Script Payload Parser

Solution : Payload Parser for WISE-2410 series raw data. It would be helpful if a user is using 3rd party LoRaWAN gateway. A user can choose to use the program on JavaScript or Node-Red.

```
// If Program is run in NodeRed
var bIsRunNodeRed = true;

// If Program is NOT run in NodeRed
var bIsRunNodeRed = false;
```

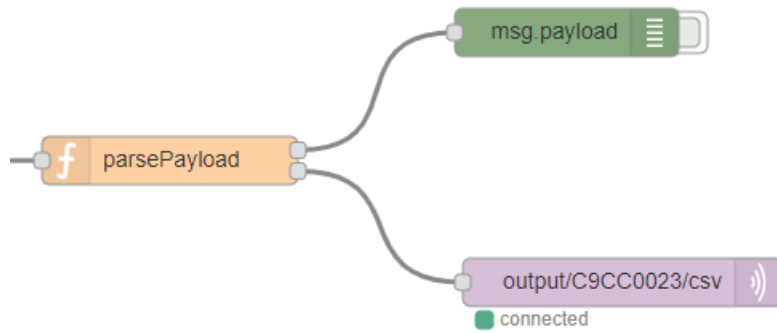| Download File	Released Date	Download Site	
PayloadParser_V1.5.js.zip	2020-02-19	Primary	Secondary
FrameDataParserWiseLoRaModule_Ed1.2.docx	2020-02-19	Primary	Secondary

Parsing result:

2020/2/21 下午5:57:01 aed0882f.0624b8

uplink/FE449684 : msg.payload : Object

{ "SequenceNumber": 8, "TotalLength": 69, "SourceAddress": null, "TempHumi": { "Range": 0, "Event": 0, "SenVal": 25937 }, "Accelerometer": { "X-Axis": { "SenEvent": 0, "OAVelocity": 20, "Peakmg": 29, "RMSmg": 21, "Kurtosis": 10, "CrestFactor": 438, "Skewness": 43, "Deviation": 2 }, "Y-Axis": { "SenEvent": 0, "OAVelocity": 18, "Peakmg": 31, "RMSmg": 22, "Kurtosis": 65500, "CrestFactor": 622, "Skewness": 33, "Deviation": 2 }, "Z-Axis": { "SenEvent": 0, "OAVelocity": 35, "Peakmg": 38, "RMSmg": 26, "Kurtosis": 65490, "CrestFactor": 356, "Skewness": 38, "Deviation": 3 } }, "Device": { "Events": 0, "PowerSrc": 1, "BatteryVolt": 0, "Time": 1552537624 }, "RtuCoil0-0": {} }

CSV output:

◆ Please check the user manual of the "JavaSctript Payload Parser".

◆ Results:

msg.payload

parsePayload

output/C9CC0023/csv
connected

output/C9CC0023/csv

16-03-2020 12:12:44.43964329

```
"TIME","AXIS_TYPE","DATA","LOG_INDEX","BYTE_OFFSET","SAMPLE_INDEX"
1552619214,X,1160,1273,0,0
1552619214,X,580,1273,2,1
1552619214,X,1,1273,4,2
1552619214,X,1,1273,6,3
1552619214,X,1,1273,8,4
1552619214,X,1,1273,10,5
1552619214,X,1,1273,12,6
1552619214,X,1,1273,14,7
1552619214,X,1,1273,16,8
1552619214,X,1,1273,18,9
1552619214,X,2,1273,20,10
```