

# NSF/IUCRC CAC PROJECT

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# CONVERTING SCHEME IN INFLUXDB

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## CURRENT STATUS

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### Time range of database:

updated\_schema: from March 14, 2019 to April 28, 2020

monster\_hpcc: from April 28, 2020 to July 11, 2020

hpcc\_metrics\_phase1: from March 14, 2019 to April 28, 2020

hpcc\_metrics\_phase2: from July 12, 2020 to now



### Current status:

*updated\_schema* had been **partially** converted to the new scheme and the data were saved in *hpcc\_metrics\_phase1*

*monster\_hpcc* are **NOT** converted yet

## Todo item 1:

In database *hpcc\_metrics\_phase1*:

Extract **MemUsage** (Label in the tag) and **CPUUsage** (Label in the tag) data from **UGE** measurement and save into two other measurements: **MemUsage** and **CPUUsage**. After this, you may delete the UGE measurement.

For example:

```
"time": 1583792296,  
"measurement": "UGE",  
"tags":  
  "NodeId": "101.10.1.1"  
  "Label": "MemUsage",  
"fields":  
  "Reading": 0.5
```



```
"time": 1583792296,  
"measurement": "MemUsage",  
"tags":  
  "NodeId": "101.10.1.1"  
  "Label": "UGE",  
"fields":  
  "Reading": 0.5
```

## Todo item 2:

In database *monster\_hpcc*:

Convert the previous scheme to the new schema used in *hpcc\_metrics\_phase1*, and save the data into *hpcc\_metrics\_phase1*. The UGE measurement should also be converted as described in todo item 1.

For example:

```
"time": 1583792296,
"measurement": "Thermal",
"tags":
  "NodeId": "101.10.1.1"
  "Label": "FAN_1",
"fields":
  "Reading": 9310
```



```
"time": 1583792296,
"measurement": "FanSensor",
"tags":
  "NodeId": "101.10.1.1"
  "Label": "FAN_1",
"fields":
  "Value": 9310
```

Data point in monster\_hpcc

Data point in hpcc\_metrics\_phase2

## REFERENCE

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You may refer to the following command to do the converting, or you may write python code to do it.

```
SELECT "Reading" AS "Value" INTO hpcc_metrics_phase1..ThermalSensor FROM
updated_schema..Thermal GROUP BY * WHERE Label = "CPU1Temp"
```

```
"time": 1583792296,
"measurement": "Thermal",
"tags":
  "NodeId": "101.10.1.1"
  "Label": "CPU1Temp",
"fields":
  "Reading": 45
```

Previous Schema

```
"time": 1583792296,
"measurement": "ThermalSensor",
"tags":
  "NodeId": "101.10.1.1"
  "Label": "CPU1Temp",
"fields":
  "Value": 45
```

Updated Schema

You may write some sample codes manipulating the data scheme on your local computer. If there is no problem, you may work on the data in our influx machine.

**Please DO NOT delete/modify any data in the hpcc\_metrics\_phase2**



A black and white photograph of a massive concrete dam. The dam's face is composed of large, rectangular concrete panels with visible vertical joints and some surface texture. A curved walkway or road runs along the top edge of the dam, bordered by a low metal railing. A single person is standing on this walkway, providing a sense of scale to the enormous structure. The sky above is a uniform, dark grey. Overlaid on the center of the image is the text "QUESTIONS?/COMMENTS?" in a bold, blue, sans-serif font.

**QUESTIONS?/COMMENTS?**