NSF/IUCRC CAC PROJECT

CONVERTING SCHEME IN INFLUXDB

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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

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**

QUESTIONS?/COMMENTS?