## **RYU Controller**

Wednesday, January 4, 2017 12:26 PM

Just discovered that I can accomplish

MON-START
MON-PARAM CHANGE
MON-STOP
With edit-Config -> Remove > Operations.
L.> Merge

So, on RYU-SDN controller side, Use the API wrappers as below. MON\_START \rightarrow edit-config, "Create

MON\_START (-> edit\_config, "Create")
MON\_STOP
MON\_PARAM\_CHANGE -> edit\_config, "Remove".

For handling Notif", there is a "listener" defined by the "Session" class (ncclient package). Figure out a way to use it so that Notif " Could be handled synchronously.

RYU SDN Controller: Latest version 4.10 downloaded to the local folder from this repository. https://github.com/osrg/ryu/releases/tag/y4.10

There are some instructions available in readme file in the mentioned path. It is sufficient to run the below command.

shrikanth@mds:~/RYU/ryu-4.10\$ sudo python setup.py install

Additionally, install pip install -r tools/optional-requires

Uninstalled the **ncclient** that came with RYU Controller.

To install ncclient that supports subscription, uninstall the one that came with RYU and follow the steps as in the readme.txt document of ncclient distribution.

#### Requirements:
\* version >= Python 2.6 or Python3
\* setuptools 0.6+
\* Paramiko 1.7+
\* lxml 3.3.0+

10/21/2017 OneNote Online

```
* libxml2
* libxslt

If you are on Debian/Ubuntu install the following libs (via aptitude or apt-get):
* libxml2-dev
* libxslt1-dev

#### Installation:

[ncclient] $ sudo python setup.py install

or via pip:

pip install ncclient
```

I had to run this to get the module working.

http://stackoverflow.com/questions/28329977/parse-xml-file-in-python-and-display-it-in-html-page --> this is important for RYU Programming.

This is to fix the element Tag functionality.

http://stackoverflow.com/questions/19888280/replacing-xml-tags-in-python

http://stackoverflow.com/questions/18159221/remove-namespace-and-prefix-from-xml-in-python-using-lxml

https://sourceforge.net/p/ryu/mailman/message/29988398/ --> Defining RYU Events. And running multiple applications simultaneously!!

ryu/controller/dpset.py

From < https://sourceforge.net/p/ryu/mailman/message/29988398/>

http://ryu.readthedocs.io/en/latest/api\_ref.html