**MDT & Python**

**Why Python**

Python is a powerful interpreted language that can help automate tasks. Learning the language can help operators better understand computer logic and develop critical thinking. Properly used, it can improve the effectiveness of DevOps and the productivity of operators.

Writing python is as simple as typing **python** into a Linux terminal then typing: **print(“hello world”)**. You will see it print out hello world and with it you have written your first bit of python code.

**Where to Start**

The *Introduction to Python Programming* PCTC course is a good starting point for those with no experience in python but it is only intended for basic-level knowledge. It is good to supplement this course with some additional hands-on training.

If you want to learn python on a machine that does not have it installed or the inability to install it, the following website is a great resource. It has an online interpreter so you can do everything in your web-browser. Like every other resource on this sheet it can be accessed on NIPR:

* [**learnpython.org**](https://www.learnpython.org/)

This course focuses on the practical uses of python and is a great read. You will need to have python installed on your machine to follow along. The guide will go over how to install python:

* **automatetheboringstuff.com/chapter0**

**Practice for Proficiency**

These two websites have a number of problems to test you on python knowledge and logic:

* [**hackerrank.com/domains/python**](https://www.hackerrank.com/domains/python)
* [**codingbat.com/python**](https://codingbat.com/python)

The grammar book of python, it is a must have reference for writing readable code:

* [**python.org/dev/peps/pep-0008/**](https://www.python.org/dev/peps/pep-0008/)

**Python 3 > Python 2**

You may have noticed that RHEL7 (The OS of most parts of our toolkit) comes with Python 2 already installed. Python 2 will run some code written for Python 3 but many unexpected things can happen when doing so and it is best not to attempt. It should also be known that Python 2 is end of life. Python 2 will no longer be supported starting in 2020 and the next major release of RHEL will ship with Python 3 only.