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Preface

The Python Roll installs and configures Python 2.7.6, Python 3.3.4 and NumPy 1.8.0.
Please visit the Python website\(^1\) and the NumPy website\(^2\) to learn more about these Python and NumPy releases.

Notes

Chapter 1. Installing the Python Roll

1.1. On a New Server

The python roll should be installed during the initial installation of your server (or cluster). This procedure is documented in section 3.2 of the Rocks® usersguide. You should select the python roll from the list of available rolls when you see a screen that is similar to the one below.

![Welcome to Rocks](image)

1.2. On an Existing Server

The python Roll may also be added onto an existing server (or frontend). For sake of discussion, assume that you have an iso image of the roll called `python.iso`. The following procedure will install the Roll, and after the server reboots the Roll should be fully installed and configured.

```
$ su - root
# rocks add roll python.iso
# rocks enable roll python
# cd /export/rocks/install
# rocks create distro
# rocks run roll python | bash
# init 6
```
Chapter 2. Using the Python Roll

2.1. Environment Modules for Python

As of Rocks 6.2 (Sidewinder), Environment Modules are utilized to control Python path names.

- To see the currently loaded modules:
  
  ```
  % module list
  Currently Loaded Modulefiles:
  1) rocks-openmpi
  %
  ```

- To see available modules:
  
  ```
  % module avail
  ------------------------ /usr/share/Modules/modulefiles ------------------------
  dot module-info null use.own
  module-cvs modules opt-python rocks-openmpi
  %
  ```

- To load the opt-python module:
  
  ```
  % module load opt-python
  % module list
  Currently Loaded Modulefiles:
  1) rocks-openmpi 2) opt-python
  ```

2.2. Using the Python Roll

The Python roll installs Python versions 2.7.6 and 3.3.4. These are installed in /opt/python.

The Python roll installs Environment Modules files for Python 2.7.6 and 3.3.4. These are installed in /usr/share/Modules/modulefiles.

NumPy 1.8.0 is compiled and installed with Python 2.7.

Tutorials for using Python and its components are available from the Python website\(^1\). Tutorials for using NumPy are available from the NumPy website\(^2\).

Notes

Chapter 3. Copyrights

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