

Running Chapel on the Cloud



Benson Muite

Kichakato Kizito

<https://kichakatokizito.solutions>

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Outline



- Linux Packaging
- Fedora on the cloud
- Current progress
- Language development considerations

Linux Packaging



- Coherent environment
 - Develop applications
 - Application interoperability
 - Easy installation

Fedora Linux Packaging



- Packaging Guidelines
 - Shared libraries with sonames preferred
 - No RPaths
 - Dependency bundling discouraged
 - Single python version and dependency versions - no virtual environments
 - Specific C and C++ compiler build flags
 - Chapel package management integration?

Fedora on the Cloud



- Fedora on the cloud
- Fedora package is available

Current Progress



- It installs
- Dependencies that give higher performance still needed
- Still need good way to launch and compile

Language Development Considerations



- Integrating with an operating system takes time
- More thorough testing
- Conduit to distribute programs - C, C++, Python, Ruby, R have good integrations
- Chapel package management integration?
- Enables reproducible data science and engineering

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