box

Package Masonry: Generating Executables for Interpreted Languages

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LESS WORK FOR THE SRE

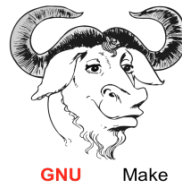# What are build Systems?

Tools?
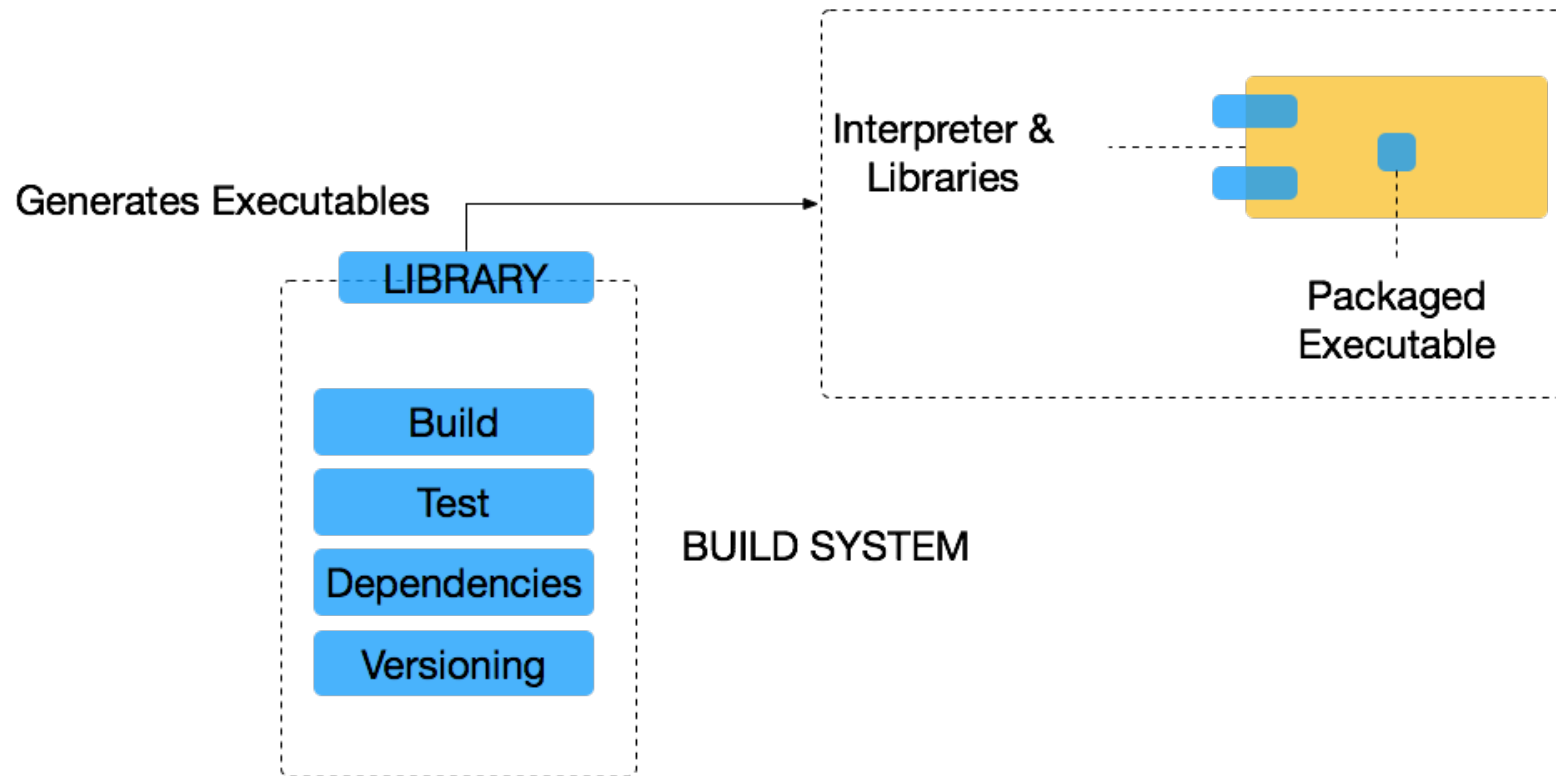
UP NEXT

High Level Overview

Generates Executables

Interpreter & Libraries

Packaged Executable

LIBRARY

Build

Test

Dependencies

Versioning

BUILD SYSTEM

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THE MEAT

Build Tools

Simplicity Is Bliss
$ ./myapp

First Up - Python

Python Executable (Zip File)

Python has had the ability to execute directories or ZIP-format archives as scripts since version 2.6

- PEP 411
- ./python myapp.zip

Add some tooling and you get:

- Essentially Virtual Environments
- ./myapp

Enables:

- Self contained archive

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PEX and Pyzzer
Search PYPI

Next Up - Ruby

Let's review some possibilities

High Level Approaches

- Portable Ruby Binaries
- AOT Compiler

Why you care:

- Self contained libs.
- Self contained interpreter.

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Traveling Ruby, and Ruby Packer
Search Gems

Last Item - NodeJS

The options

The node way:

- AOT Compiler

Why you care:

- Self contained libs.
- Self contained interpreter.
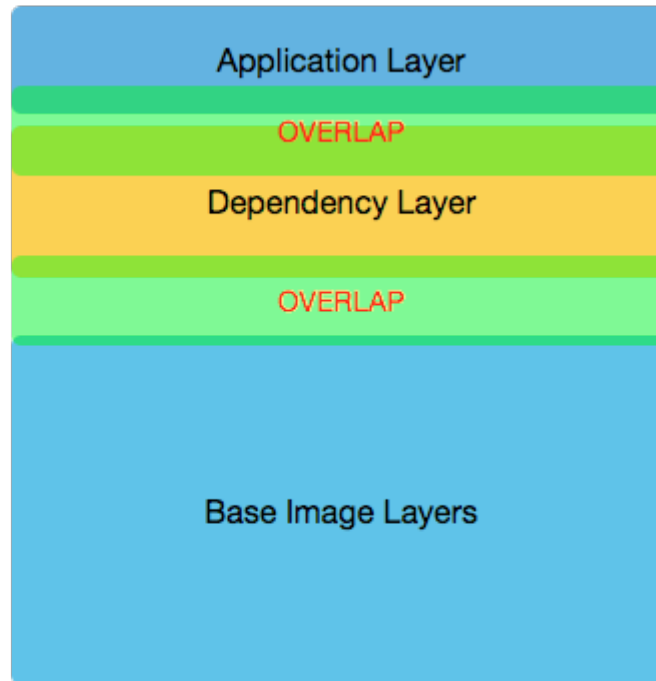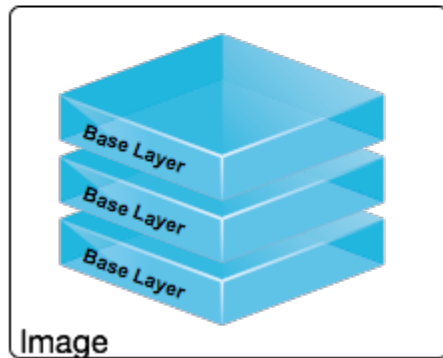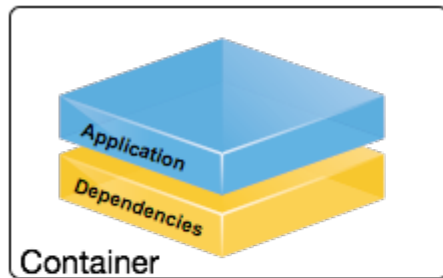
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pkg, nexe, and Node-Packer
Check npmjs

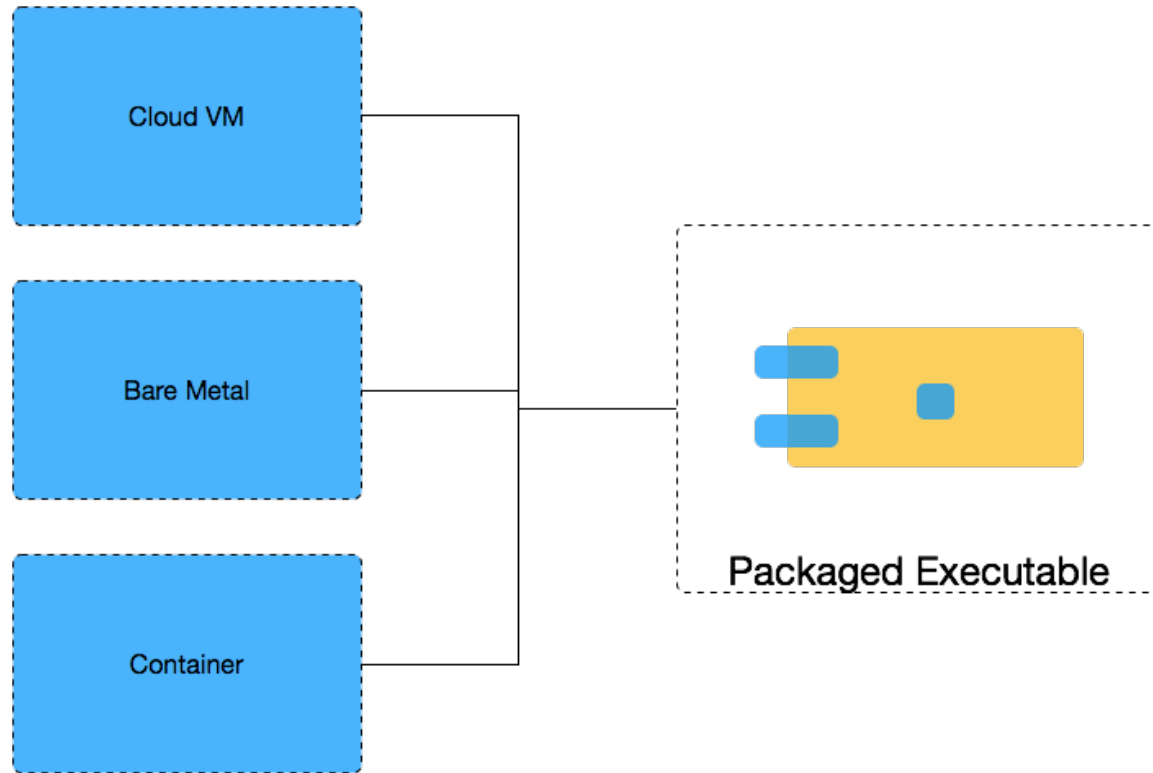# Build Systems - Pants, Bazel, and Buck

Isn't this already solved?

Problem - Maintenance and Security

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High Level Overview

Cloud VM

Bare Metal

Container

Packaged Executable

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Validation points.

Not all tools are created equal.

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Thank you!

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