

Kickstart 🚀 with HashiCorp Packer

Cloud Infrastructure Meetup – April
Edition

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Packer

Agenda

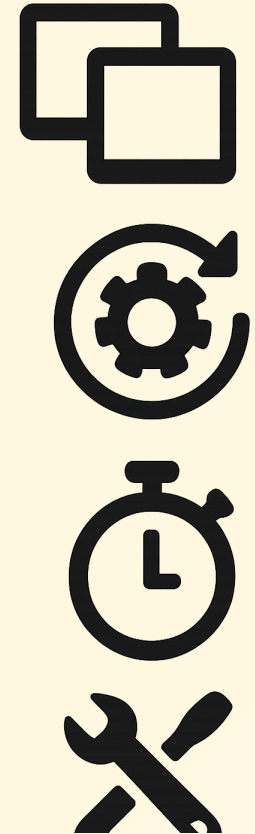
- What is Packer?
- Why use Packer?
- Core Concepts
- Demo: Build image(s)
- Q&A

What is Packer?

- Open-source tool by HashiCorp
- Automates machine image creation
- Supports AWS, GCP, Azure, etc.
- Encourages immutable infrastructure
- Lightweight with minimal dependencies
- Extensible via Plugins

Why Use Packer?

- Reproducible image builds
- Great for automation and CI/CD
- Saves time in provisioning
- Works with config tools like Ansible, Chef



Core Concepts

- **Template** – main JSON/HCL config file
- **Builders** – platform target (e.g., `amazon-ebs`)
- **Provisioners** – configure machine (e.g., shell script)
- **Post-processors** – optional steps after image creation

```
packer {  
  required_plugins {  
    amazon = {  
      source  = "github.com/hashicorp/amazon"  
      version = "~> 1"  
    }  
  }  
}  
  
source "amazon-ebs" "basic-image" {  
  # ...  
}  
  
build {  
  sources = ["source.amazon-ebs.basic-image"]  
  
  provisioner "shell" {  
  
  }  
}
```

Packer Workflow

1. Define Template
2. Launch temporary VM
3. Provision and configure
4. Save the final image

```
packer {  
  required_plugins {  
    amazon = {  
      source  = "github.com/hashicorp/amazon"  
      version = "~> 1"  
    }  
  }  
}  
  
source "amazon-ebs" "basic-image" {  
  # ...  
}  
  
build {  
  sources = ["source.amazon-ebs.basic-image"]  
  
  provisioner "shell" {  
  
  }  
}
```

Packer Commands

- `packer init`
- `packer validate`
- `packer build`

Bonus

- `packer fmt`

Live Demo Overview

- Walkthrough of simple Packer template
- Use shell provisioner
- Build an AWS AMI or Linode image
- Tools: VS Code + Terminal

Resources and References

- Docs: developer.hashicorp.com/packer
- GitHub: github.com/dtchanpura/meetup-20250412

Q&A

Thanks!

Any questions?