Building Automated Machine Images using HashiCorp Packer

Section 1: Introduction to HashiCorp Packer

- What is Packer and who would use it?
  - problem (why)
    - Cloud-Specific Formats
    - Immutable Infrastructure
  - define images as code (versioned)
    - benefits of version control
  - relate how Packer solves problems when using multiple cloud providers
    - describe an "image" with examples (AMI, Template, ARM Template, Compute Engine Template)
  - primary use cases
    - use to create an image factory / Continuous Delivery
    - golden images: Consistent across Development and Production
    - monthly patching
    - immutable infrastructure
- Core Components
  - templates
    - HCL
    - JSON
  - sources
  - builders
  - provisioners
  - post-processors
  - variables
  - communicators
- Installing Packer
  - Installing using a Package Manager
  - Manual Install
    - Adding to $PATH
    - downloading from HashiCorp
    - Unzip
- CLI Commands
  - auto-completion
  - build
    - -debug mode
  - fmt
  - valildate
  - hcl2_upgrade
  - inspect
  - version
  - Environment Variables
    - PACKER_LOG
    - PACKER_LOG_PATH
    - PKR_VAR_xxx
- Packer Workflow (stages)
  - show the manual steps it is automating
  - show example on cloud platform and VMware