Packer Tutorial

Pre-Reqs

1. Install packer on your laptop (<https://www.packer.io>)
2. Install AWS CLI on our laptop (<https://aws.amazon.com/cli/>)
3. Create a new AWS IAM user with AdministratorAccess policy and generate Access key for this user. Make a note of these keys.
4. Configure AWS CLI on your laptop with the user you created in step 3 (It will ask you for access key and access key ID.).
5. Make sure you have packer executable in your path.

What is packer?

It is tool you can use to build your own image with all pre-packaged softwares. This is not limited to AWS. You can use it for Azure, VMWare, OpenStack etc. It will create a machine using your source AMI install and configure your desired software and create a new AMI. This will help you deploy your machines faster. You can script everything in EC2 bootstrap script but that means longer provision time. With pre-Built AMI you can provision EC2 instances fast.

Copy httpd.json file and install\_httpd.sh files from google drive folder. You can copy it where your packer executable is or you can copy it to another folder just make sure you have packer executable in PATH variable.

* + Json file has 3 sections. Variables, Builders and Provisioners.
    - Variable section will have all the variables (Obviously).
    - Builders section have details about your source and target AMIs
    - Provisioners will install your custom components. In our example we are running shell script to update OS and install apache web server. You can run tools like ansible, chef or puppet in provisioners section. You can also copy files from your local machines.

Update json file with proper ami ID. Use latest Amazon Linux AMI id. If you are not using using us-east-1 region then update region in json file.

Validate your json file

packer validate httpd.json

Now run packer to create AMI

packer build httpd.json

It will create machine. Run your shell script and create AMI. Go to your AMI section of EC2 and check your new AMI.