# PACKER



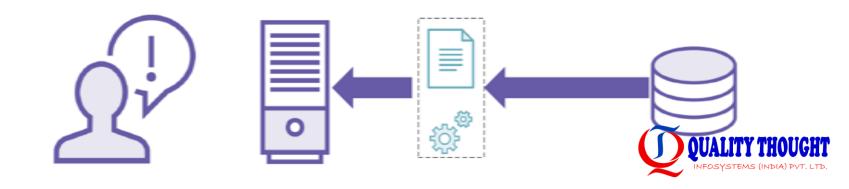
### Immutable Infrastructure



### Immutable

Adjective:

Unchanging over time, or unable to be changed



### Cats and Cattle, Oh My!





XB306-1

XB306-2

XB306-3



### Servers - Cats vs. Cattle

### Cats

Kept alive at all costs

Need manual intervention

Difficult to Scale

**High-stress** 



#### Cattle

Expendable

Work "out of the box"

Easy to Scale

Low-stress





### Other Benefits

Testable Infrastructure

**Reproduce Production** 

Unit of Deployment

**Confident Changes** 



### When To Use It?

# \* ALL THE TIME!





### Packer!



Utilize native tools

Integrate with configuration management
Easy to convert to Docker



## A Packer Template

```
"builders": [
                       JSON
"provisioners": [
                       Template
"post-processors": [
```

```
{
    "type": "amazon-ebs",
    "name": "MyCowServer-AWS",
    "region": "us-west-2"
}
```

### Builders

Generate your image

Provider-specific

Multiple builders = cross-provider builds!



```
{
    "type": "shell",
    "script": "makeMyCowAwesome.sh",
    "only": ["MyCowServer-AWS"]
}
```

### Provisioners

Customize your image

Scripts or configuration management

Can be builder-specific



```
{
    "type": "compress",
    "output": "MyCowServer-VirtualBox.tar.gz",
    "only": ["MyCowServer-VirtualBox"]
}
```

### Post-Processors

Put on the finishing touches

Integration with other services

Key to Docker conversion



# INSTALLING PACKER

https://www.packer.io/downloads.html



# PACKER TEMPLATES

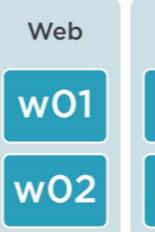
https://github.com/asquarezone/packer-templates

https://github.com/asquarezone/packer-windows



# BUILD INFRA











d01

d02





