

Internal training

INTRODUCTION TO ANSIBLE

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Lecture #6 – Usecases



ERLEBEN, WAS VERBINDET.

Course Content

1. Lektion #1: Introduction

1. Configuration management
2. Ansible. How it works?
3. Vagrant. Training env

2. Lektion #2: First playbook

1. First playbook
2. Ansible modules
3. Facts & variables

3. Lektion #3: Base features

1. Jinja2 templating
2. Conditions
3. Loops

4. Lektion #4: Plugins & modules

1. Plugins
2. Modules
3. Handlers

5. Lektion #5: Best practices

1. Roles
2. Working with inventory
3. Repository structure

6. Lektion #6: Usecases

1. Golden images
2. Management infrastructure
3. CI/CD integration

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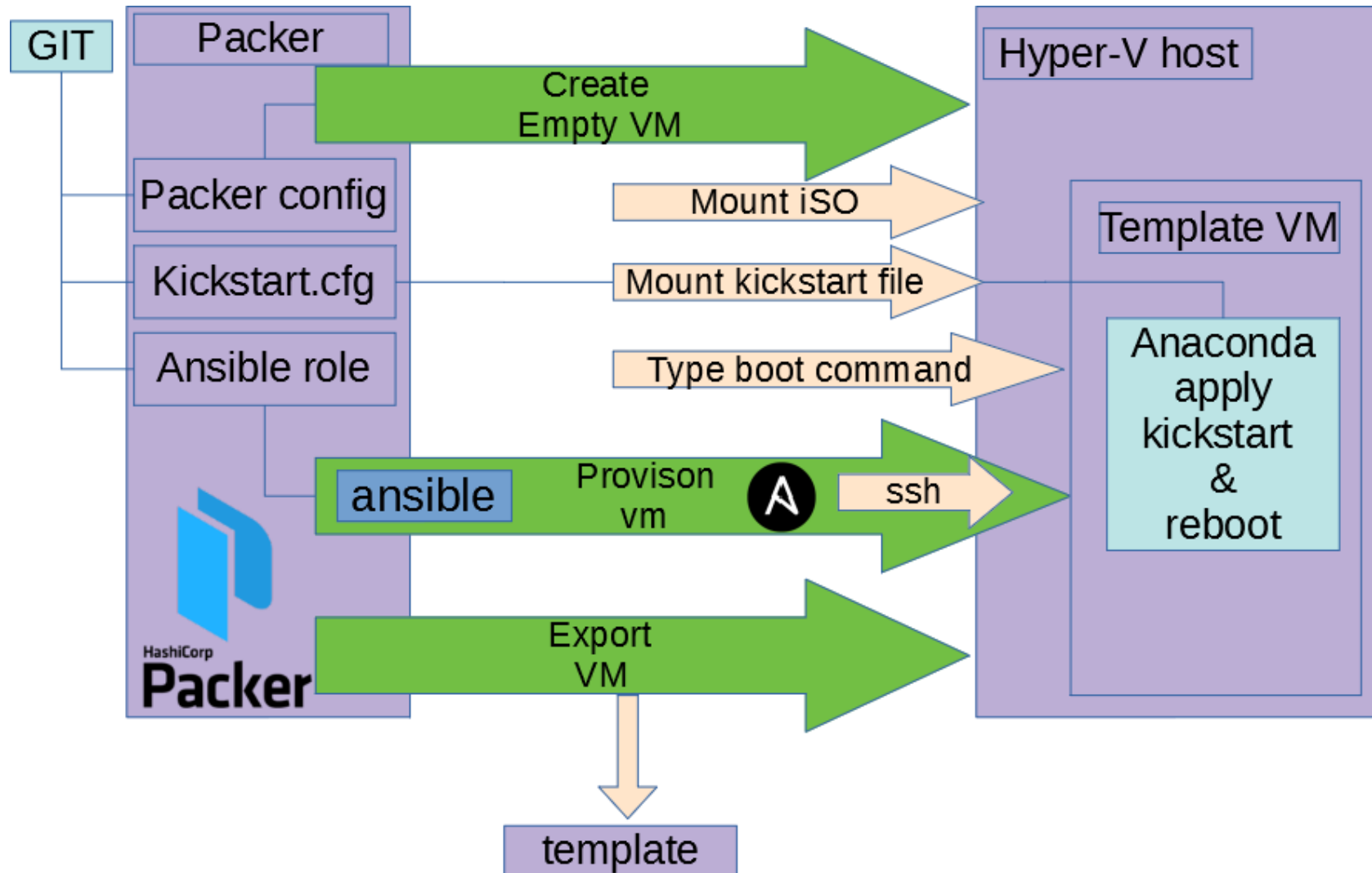
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Lecture #6. Usecases

Golden Images



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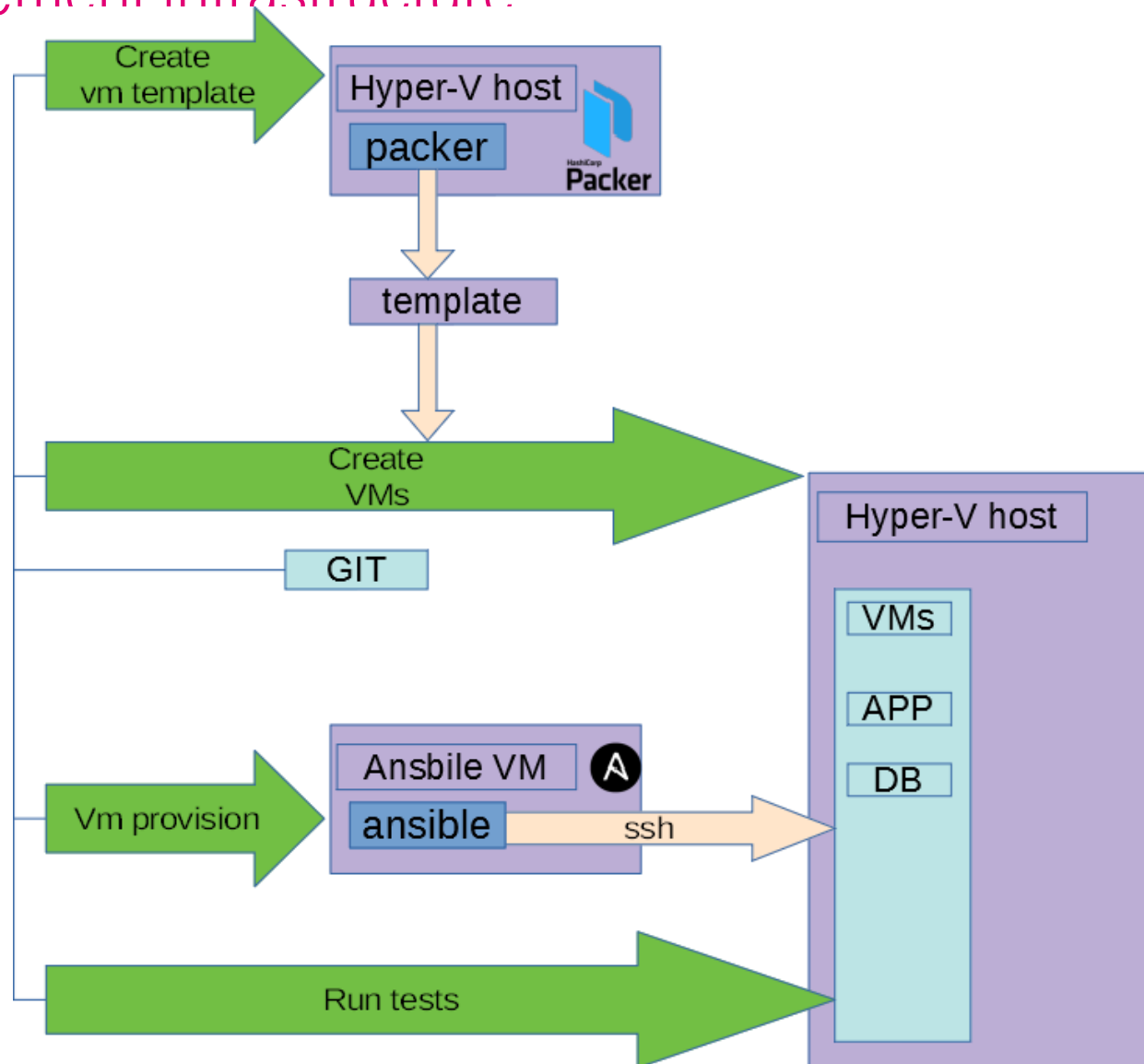
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Lecture #6. Usecases

Management infrastructure



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Lecture #6. Usecases

CI/CD integration

Build	Trigger	Repo	Branch	Description
Update all infrastructure VMs	commit	cde-ansible	master	Test & apply all roles to all VMs
Update VMs group	manual	cde-ansible	any	Apply specified roles(role= vm-group)
Update VMs group and run testkitchen	manual	cde-ansible	any	Test & apply specified roles(role= vm-group)
ansible tests	manual	cde-ansible	any	Test specified target (all / vm-role-vagrant)
Run playbook	manual	cde-ansible	any	Run ansible playbooks from cde-ansible/playbooks

ImageMaster Jenkins

search

GONCHAROV, LEV | LOG OUT

Jenkins

infrastructure

ansible

ENABLE AUTO REFRESH

← Up

ⓘ Status

⚙️ Configure

+ New Item

✕ Delete Folder

👤 People

🕒 Build History

ⓘ Project Relationship

🔍 Check File Fingerprint

📁 Move

🔑 Job Config History

🔑 Credentials

📁 ansible

add description

All

+

S	W	Name ↓	Last Success	Last Failure	Last Duration		
✓	🔧	ansible tests	3 days 4 hr - #285	3 days 4 hr - #284	4 min 23 sec	🔍	🕒
✓	☁️	Run playbook	1 day 2 hr - #3	9 days 22 hr - #2	2 min 23 sec	🔍	🕒
✓	🔧	Update all infrastructure VMs	3 hr 43 min - #131	4 hr 11 min - #130	33 min	🔍	🕒
✓	⚙️	Update VMs group	1 day 1 hr - #326	3 days 2 hr - #321	3 min 0 sec	🔍	🕒
✓	☁️	Update VMs group and run testkitchen	3 days 5 hr - #3	3 days 5 hr - #2	6 min 14 sec	🔍	🕒

Icon: S M L

Legend

📡 RSS for all

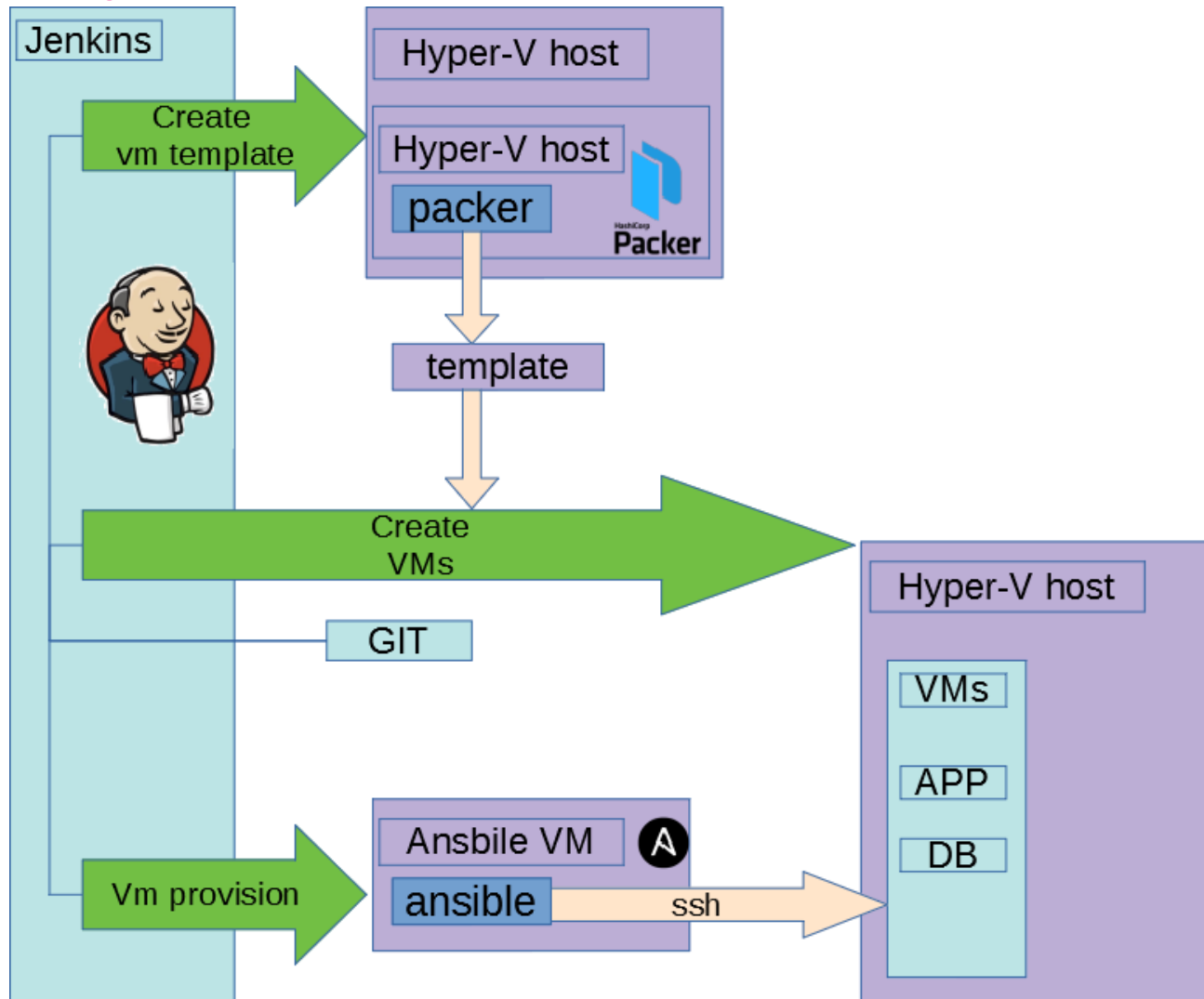
📡 RSS for failures

📡 RSS for just latest builds

Build Queue (1)

Lecture #6. Usecases

CI/CD integration

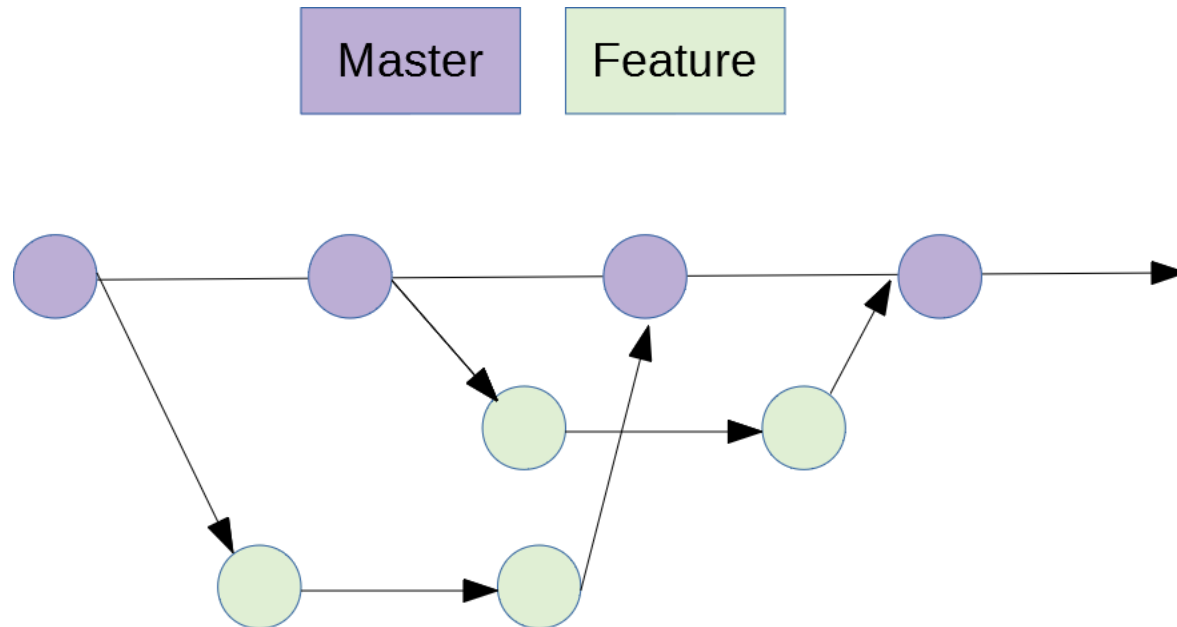


Lecture #6. Usecases

CI/CD integration

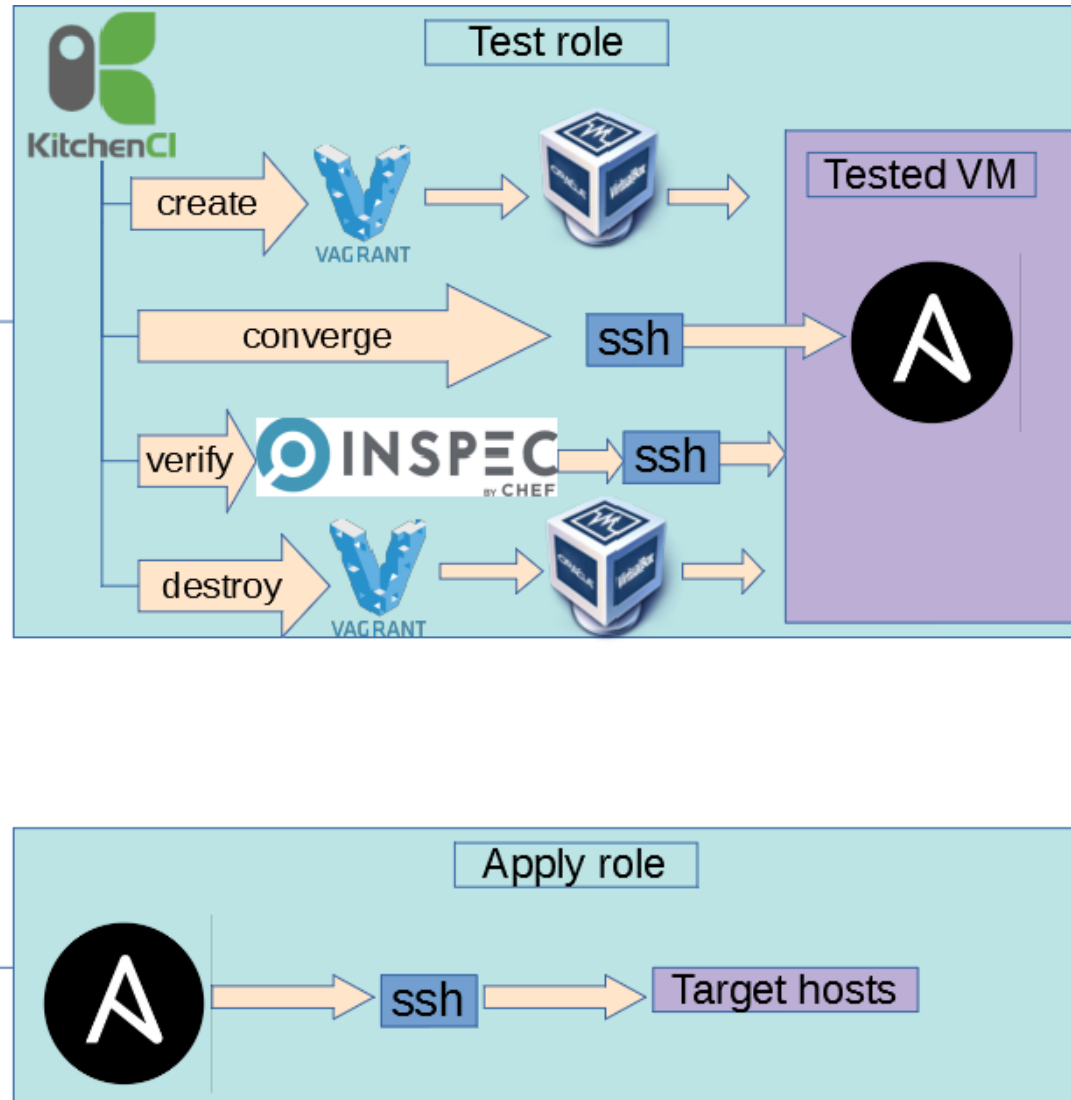
Green build policy

1. each commit can be applied to servers
2. It can't work without tests
3. we can't push directly to master
4. we have to use features branch



Lecture #6. Usecases

CI/CD integration



THANK YOU!

Homework

“

Use the ansible, Luke

”

Obi Wan Kenobi

lev.goncharov@t-systems.com



ERLEBEN, WAS VERBINDET.

Lesson #6. Usecases

Optional homework: Packer

- Download packer <https://www.packer.io/downloads.html>
- Build your vagrant box

```
1 $env:http_proxy='http://spbsrv-proxy2.t-systems.ru:3128'  
2 $env:https_proxy='http://spbsrv-proxy2.t-systems.ru:3128'  
3 git clone http://projects.t-systems.ru/Igonchar/ansible-course-public.git  
4 cd student_files/06/packer  
5 path\to\packer.exe build -on-error=ask -only=hyperv-iso .\centos7.json
```

Lection #6. Usecases

Optional homework : Test your roles

- Read article <http://www.goncharov.xyz/it/test-ansible-roles-via-testkitchen-inside-hyperv.html>
- Test your roles

```
1 $env:http_proxy='http://spbsrv-proxy2.t-systems.ru:3128'  
2 $env:https_proxy='http://spbsrv-proxy2.t-systems.ru:3128'  
3 git clone git clone https://github.com/ultral/ansible-role-testing  
4 cd vagrant  
5 vagrant up  
6 vagrant ssh  
7 cd /vagrant  
8 kitchen converge common-vagrant -l debug
```