

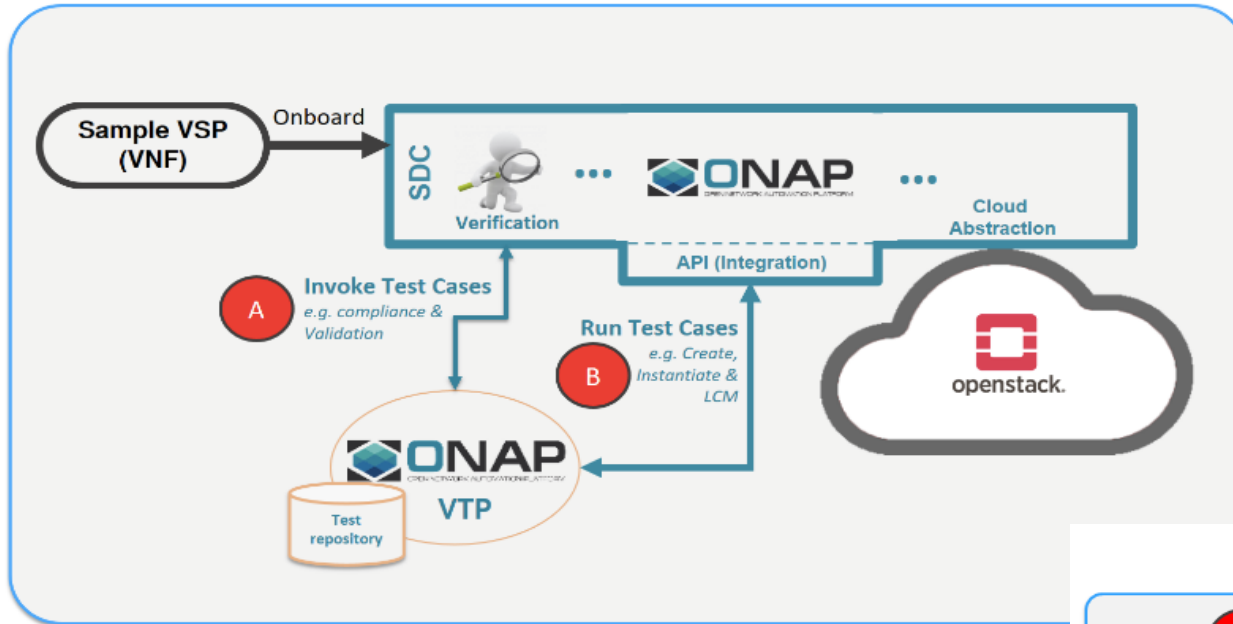


# Demo: OVP Tosca VNF Validation on ONAP

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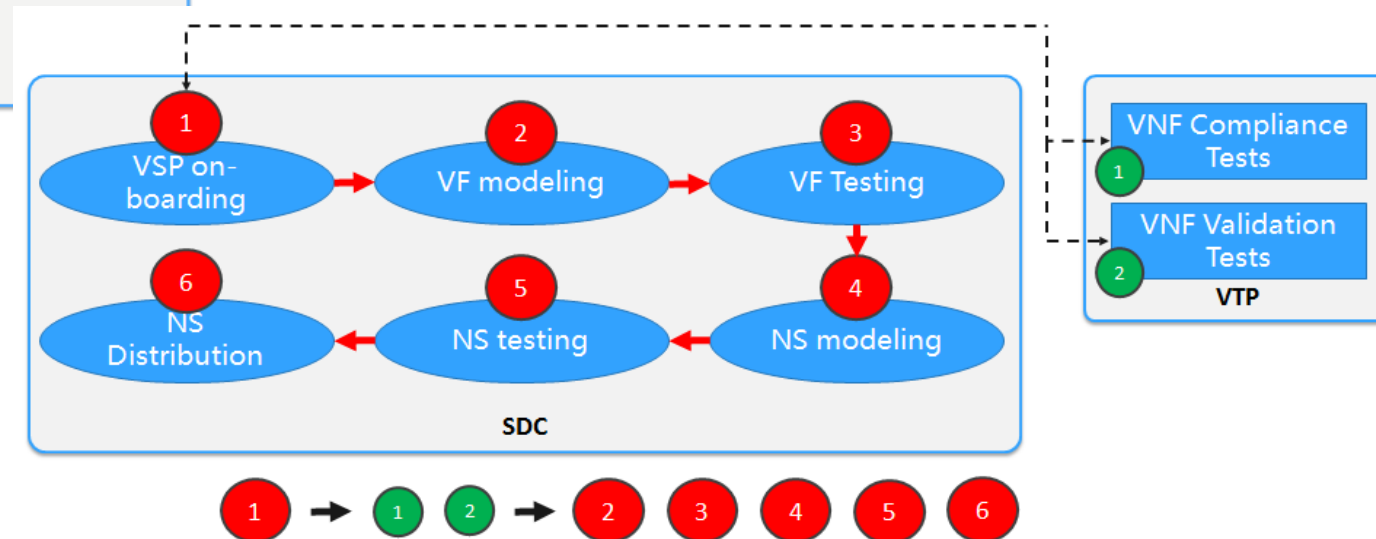
Kanagaraj Manickam (Huawei)

# VNF Validation Testing Strategy using ONAP

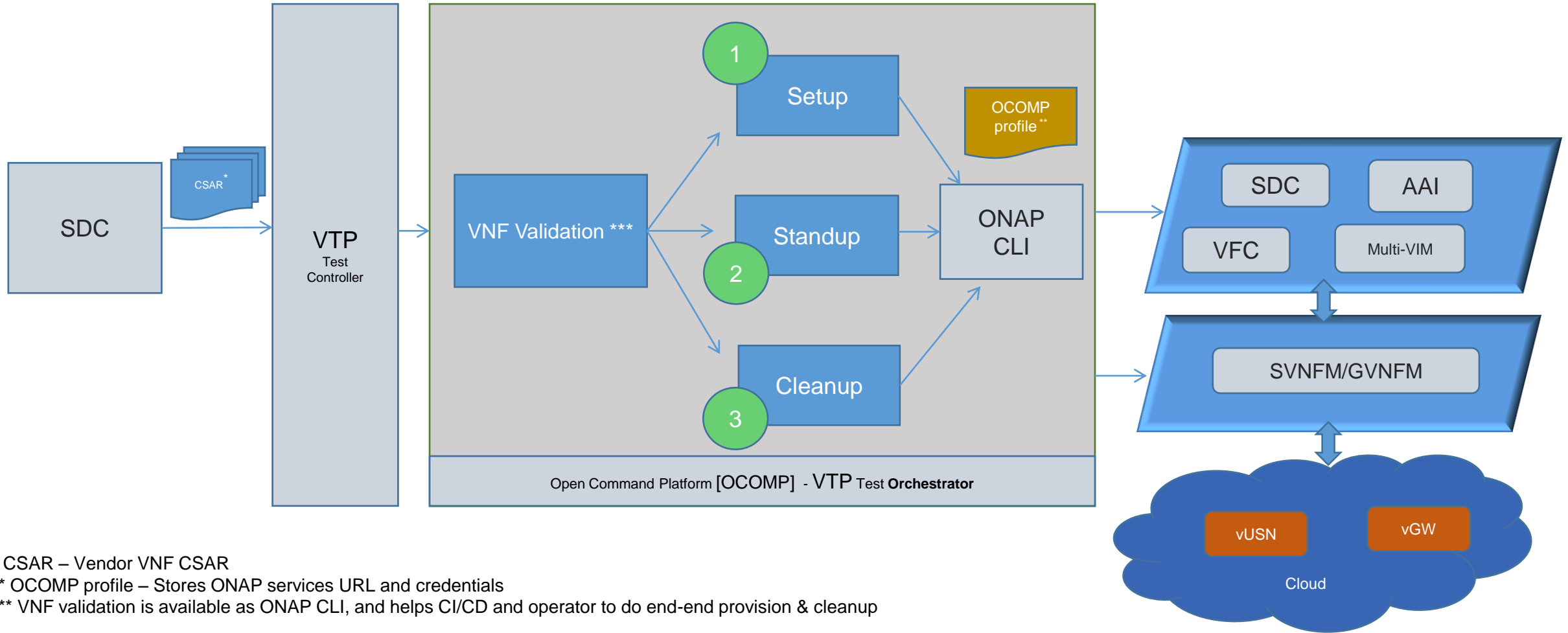


## End-to-end VNF Validation Test Execution (Both TOSCA and HEAT)

### VNF Validation @ SDC



# TOSCA VNF Validation Testing E2E Flow using ONAP



\* CSAR – Vendor VNF CSAR

\*\* OCOMP profile – Stores ONAP services URL and credentials

\*\*\* VNF validation is available as ONAP CLI, and helps CI/CD and operator to do end-end provision & cleanup

ONAP projects

OVP test cases

OCOMP is renamed from OCLIP

# TOSCA VNF Validation Testing Steps

SDC v.1.4.1 ONBOARD Huawei Software Products vUSN Validation

vUSN V 1.0 Draft Versions Page

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Overview General Process Details Networks **Validation** Validation Results Activity Log

**ONAP TOSCA VNF VALIDATION USING ONAP CLI AND OPEN COMMAND PLATFORM (OCOMP) INPUTS :**

\* Configuration file path Path to the ONAP vendor service product (VSP) for the VNF to provision Path to the TOSCA CSAR for the VNF to provision

vUSN.csar  vUSN.csar

Path to the TOSCA CSAR for the NS service to provision \* VNFM driver to use. One of gvnfmdriver or hwnfmdriver Existing ONAP object ids to use instead of creating them while running this task

ns.csar   **SDC Trigger the validation testing in VTP (request-id: lcm5)**

setup or standup or cleanup or provision or validate \* VNF Name \* VNF Vendor Name

timeout for command to complete given task in milliseconds

lcm15	lcm15-1568462686636	onap-dublin	aai	customer-list	onap-dublin	completed	2019-09-14T12:04:46.000	2019-09-14T12:04:47.000
lcm15	lcm15-1568462640537	onap-dublin	sdc.onboarding	vlm-create	onap-dublin	completed	2019-09-14T12:04:00.000	2019-09-14T12:04:01.000
lcm15	lcm15-1568462836920	onap-dublin	aai	subscription-delete	onap-dublin	completed	2019-09-14T12:07:16.000	2019-09-14T12:07:16.000
lcm15	lcm15-1568462728943	onap-dublin	sdc.onboarding	vsp-package	onap-dublin	completed	2019-09-14T12:05:28.000	2019-09-14T12:05:29.000
lcm15	lcm15-1568462650375	onap-dublin	sdc.onboarding	vlm-feature-group-create	onap-dublin	completed	2019-09-14T12:04:10.000	2019-09-14T12:04:10.000
lcm15	lcm15-1568462716283	onap-dublin	sdc.onboarding	vsp-validate	onap-dublin	completed	2019-09-14T12:05:16.000	2019-09-14T12:05:17.000
lcm15	lcm15-1568462796391	onap-dublin	aai	vnfm-list	onap-dublin	completed	2019-09-14T12:05:06.000	2019-09-14T12:05:06.000
lcm15	lcm15-1568462832790	onap-dublin	sdc.onboarding	vlm-archive	onap-dublin	completed	2019-09-14T12:07:12.000	2019-09-14T12:07:13.000
lcm15	lcm15-1568462751910	onap-dublin	sdc.catalog	service-model-add-vf	onap-dublin	completed	2019-09-14T12:05:51.000	2019-09-14T12:05:53.000
lcm15	lcm15-1568462724148	onap-dublin	sdc.onboarding	vsp-submit	onap-dublin	completed	2019-09-14T12:05:24.000	2019-09-14T12:05:26.000
lcm15	lcm15-1568462737036	onap-dublin	sdc.catalog	vf-model-add-artifact	onap-dublin	completed	2019-09-14T12:05:37.000	2019-09-14T12:05:38.000
lcm15	lcm15-1568462680301	onap-dublin	aai	service-type-list	onap-dublin	completed	2019-09-14T12:04:40.000	2019-09-14T12:04:40.000
lcm15	lcm15-1568462829647	onap-dublin	sdc.onboarding	vsp-archive	onap-dublin	completed	2019-09-14T12:07:09.000	2019-09-14T12:07:09.000
lcm15	lcm15-1568462643939	onap-dublin	sdc.onboarding	vlm-entitlement-pool-create	onap-dublin	completed	2019-09-14T12:04:03.000	2019-09-14T12:04:04.000
lcm15	lcm15-1568462766343	onap-dublin	sdc.catalog	service-model-test-request	onap-dublin	completed	2019-09-14T12:06:06.000	2019-09-14T12:06:08.000
lcm15	lcm15-1568462771798	onap-dublin	sdc.catalog	service-model-test-start	onap-dublin	completed	2019-09-14T12:06:11.000	2019-09-14T12:06:13.000
lcm15	lcm15-1568462663250	onap-dublin	aai	complex-list	onap-dublin	completed	2019-09-14T12:04:23.000	2019-09-14T12:04:23.000
lcm15	lcm15-1568462846546	onap-dublin	sdc.onboarding	service-type-delete	onap-dublin	completed	2019-09-14T12:07:26.000	2019-09-14T12:07:27.000
lcm15	lcm15-1568462801964	onap-dublin	vfc	vnfm-instantiate	onap-dublin	completed	2019-09-14T12:06:41.000	2019-09-14T12:06:42.000
lcm15	lcm15-1568462673192	onap-dublin	aai	complex-associate	onap-dublin	completed	2019-09-14T12:04:33.000	2019-09-14T12:04:33.000

**Step 1: Choose and trigger validation test case**

**SDC Trigger the validation testing in VTP (request-id: lcm5)**

**Step 3: Check VNF in Cloud**

**Step 4: Monitor validation execution in SDC**

创建 VNC登录 导出列表 更多

az1.dc1 所有可用分区 Manager\_VPC 所有状态 请输入名称

名称	ID	状态	IP	规格	可用分区	操作
VNFD_vUSN20_...	33cbdbbd-551...	运行中	-	4vCPU   28672MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	f8e11736-c67d...	运行中	-	4vCPU   28672MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	3de559bf-e7bb...	运行中	-	4vCPU   14336MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	de55404c-9634...	运行中	-	4vCPU   14336MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	3de559bf-e7bb...	运行中	-	4vCPU   16384MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	7cd228f5-74c6...	运行中	-	4vCPU   16384MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	c18edcfd-cf7e...	运行中	172.28.12.117;1...	4vCPU   24576MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	88da65f1-50dd...	运行中	172.28.12.184;1...	4vCPU   24576MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	2276a4a1-fb79...	运行中	172.30.16.197;1...	8vCPU   49152MB 内存	az1.dc1	启动 更多
VNFD_vUSN20_...	8942ce44-408b...	运行中	172.30.16.75;17...	8vCPU   49152MB 内存	az1.dc1	启动 更多

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**VALIDATION RESULTS** Refresh

- Test Results
- Scenario: onap-dublin | Title: Create feature group Pool | Test Case: vlm-feature-group-create | Status: completed
- Scenario: onap-dublin | Title: Submit Vendor License Model | Test Case: vlm-submit | Status: completed
- Scenario: onap-dublin | Title: Create Vendor Software Product | Test Case: vsp-create | Status: completed
- Scenario: onap-dublin | Title: Unknown | Test Case: vnfm-list | Status: completed
- Scenario: onap-dublin | Title: Unknown | Test Case: vlm-create | Status: completed
- Scenario: onap-dublin | Title: Register a VNF in Onap | Test Case: vnfm-create | Status: completed
- Scenario: onap-dublin | Title: Unknown | Test Case: customer-list | Status: completed
- Scenario: onap-dublin | Title: Add a artifact to a Virtual function | Test Case: vf-model-add-artifact | Status: completed
- Scenario: onap-dublin | Title: Create License Model | Test Case: vlm-create | Status: completed
- Scenario: onap-dublin | Title: Create a cloud region in Onap | Test Case: cloud-create | Status: completed
- Scenario: onap-dublin | Title: Create Entitlement Pool | Test Case: vlm-entitlement-pool-create | Status: completed
- Scenario: onap-dublin | Title: Create a tenant under given cloud region in Onap | Test Case: tenant-create | Status: completed
- Scenario: onap-dublin | Title: Add a service type in Onap | Test Case: service-type-create | Status: completed
- Scenario: onap-dublin | Title: Package Vendor Software Product | Test Case: vsp-package | Status: completed
- Scenario: onap-dublin | Title: Create a customer in Onap | Test Case: customer-create | Status: completed
- Scenario: onap-dublin | Title: Lists the subscription for a given customer in Onap | Test Case: subscription-list | Status: completed

# Demo: TOSCA VNF Validation Testing

← → ↻ 🔴 Not secure | 172.30.15.194:543/tenant/src/index.html#/home

**FusionSphere** openstack   Home   Resources   VPC   Application   Monitoring   Users   Manager\_VDC   service\_admin ?

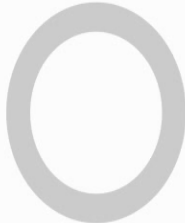
### Home

#### My VDC

Resource	Usage	Total	Used	Available
vCPUs	--	Not limited	6	Not limited
Memory	--	Not limited	24576 MB	Not limited
Shared Storage	--	Not limited	0 GB	Not limited
Elastic IP Addresses	--	Not limited	0	Not limited
VPCs	--	Not limited	1	Not limited
VMs	--	Not limited	1	Not limited



#### VM Statistics

Total Created: 1   Available for Creation: Not limited (4 vCPU, 8 GB Memory) [Change Specs](#)



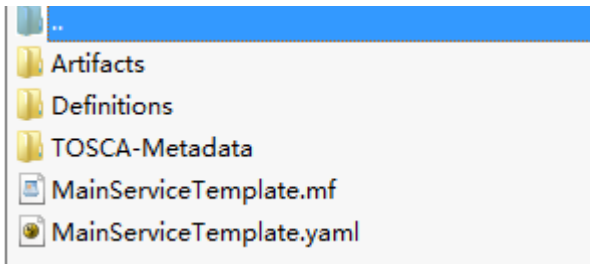
- Total Created: 1
- Available for Creation: Not limited

My VPC az1.dc1 Manager\_VPC   Updated At: 2019-09-18 11:32:09   [Update](#)

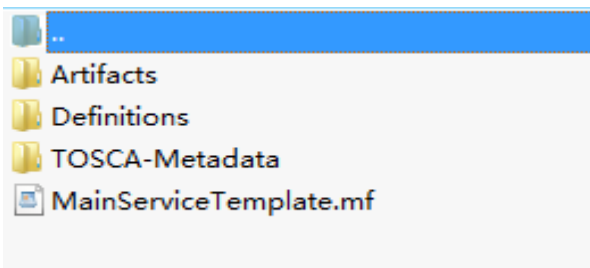
 VMs **1**    Disks **0**

# Demo: TOSCA VNF Validation Exception

## Normal CSAR structure



## Modify CSAR structure



ONAP  
OPEN NETWORK AUTOMATION PLATFORM

Home SDC

SDC v.1.4.1 ONBOARD

ACTIVE ITEMS WORKSPACE ONBOARD CATALOG

ENTITY TYPE

- VSP
- VLM

PERMISSIONS

- Owner
- Contributor

ONBOARDING PROCEDURE

- Network Package
- Manual

+ CREATE NEW VLM

+ CREATE NEW VSP

VLM

- Huawei-01-OVcQIQoz  
Owner - cs0008
- Huawei-APVOISVG  
Owner - cs0008
- Huawei-LcjFI3t3  
Owner - cs0008
- Huawei-SWpARdEI  
Owner - cs0008

VSP

- Huawei VUSN  
Owner - cs0008
- Onap Vsp  
Owner - cs0008

# More Info

Tosca VNF validation

<https://wiki.linuxfoundation.org/display/LN/TOSCA+VNF+Validation+Planning>

Thank you !