

Release 4 Test Doc-Type 4

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Introduction

This document covers Test Deployment Environment and Test Case Result for Enterprise Applications on IEC-Type4 AR/VR Blueprint.

The topology in this release for this version includes 3 CentOS 7.8 Physical Machine node .

Akraino Test Group Information

N/A

Overall Test Architecture

Test Minimum Requirements

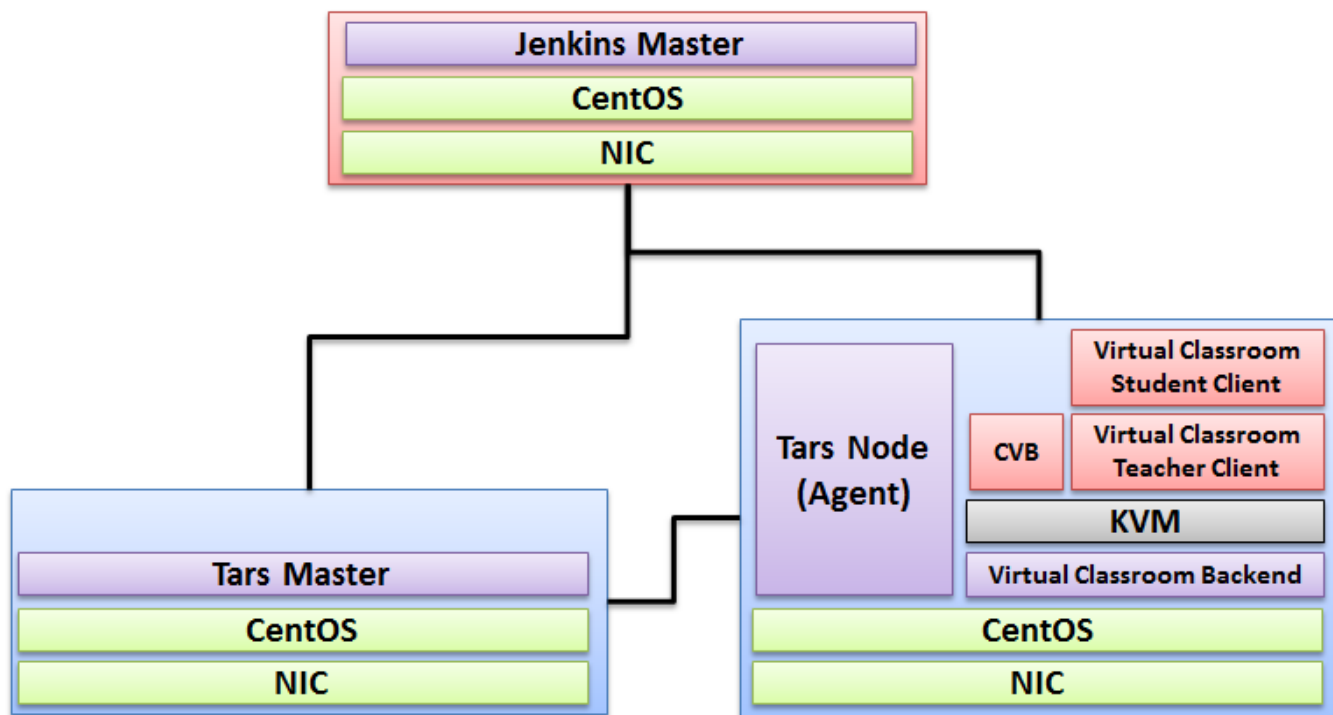
- At least One Student Client, normally one Personal Computer
- At least One Teacher Client, normally one Personal Computer
- At least One Virtual Machine or Physical Server for service side

Test Architecture

For the minimum deployment, we ONLY test the function of the virtual classroom. Just deploy two clients and a server, shown in purple color, will be OK.

If you would like to test CI/CD functions, we would suggest deploying the functions shown in green color.

Furthermore, if you want to test the scale-out feature, adding more Client Devices and backend servers are required.



Test Topology

Step 1: Run Virtual Classroom in the backend

After everything is installed successfully(In terms of the detail installation, refer to [Release 4 Installation Document](#)), run the virtual classroom application via the following commands:

```
cd /root/openvidu-vr/openvidu-vr-room
```

```
http-server -S
```

Step 2: Test on your PC via the browser

Note well: Make sure 8080 port is NOT blocked by the firewall.

Open Firefox on PC and visit the website: IP Address + 8080(Port Number)

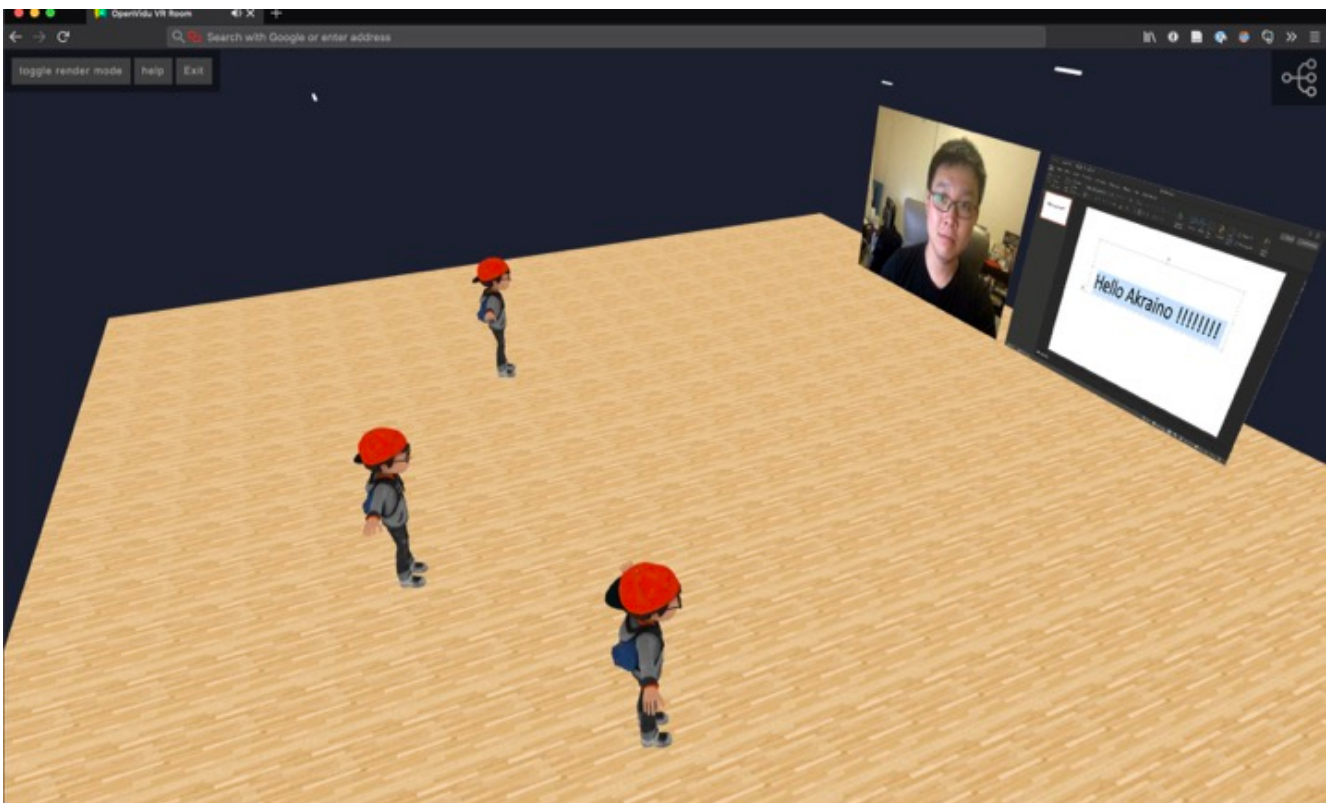
Step 3: Test Teacher Mode

Press the Teacher Mode button and check the Teacher mode. In teacher mode, you will see the classroom as a teacher's view. You can see some students are in the classroom and are listening to your presentation. Then test talking to the student, test on-and-off the presentation screen as so on.



Step 4: Test Student Mode

Press the Student Mode button and check the Student mode. In Student mode, you will see the classroom as a student's view. You can see the teacher and other students on the remote side. Then test talking to the teacher and other students, test on-and-off the presentation screen as so on.



Enjoy the virtual classroom!

BluVal Testing

1. BluVal installation

```
mkdir /home/demo
cd /home/demo
mkdir results
git clone https://gerrit.akraino.org/r/validation.git
cd validation
vi tests/variables.yaml ## update k8s related ip. due to this bp do not use k8s , we don't need to change.
vi bluval/volumes.yaml
```

```
volumes:
# location of the ssh key to access the cluster
ssh_key_dir:
  local: '/root/.ssh/'
  target: '/root/.ssh/'
# location of the k8s access files (config file, certificates, keys)
kube_config_dir:
  local: '/home/demo/.kube/'
  target: '/root/demo/.kube/'
# location of the customized variables.yaml
custom_variables_file:
  local: '/home/demo/validation/tests/variables.yaml'
  target: '/opt/akraino/validation/tests/variables.yaml'
# location of the bluval-<blueprint>.yaml file
blueprint_dir:
  local: '/home/demo/validation/bluval'
  target: '/opt/akraino/validation/bluval'
# location on where to store the results on the local jumpserver
results_dir:
  local: '/home/demo/results'
  target: '/opt/akraino/results'
# location on where to store openrc file
openrc:
  local: '/home/openrc'
  target: '/root/openrc'
```

```
vi bluval/bluval-iec-type4.yaml
```

```
blueprint:
name: iec-type4
layers:
- os
- docker

os: &os
-
name: lynis
what: lynis
optional: "False"
-
name: vuls
what: vuls
optional: "False"

k8s: &k8s
-
name: conformance
what: conformance
optional: "False"
-
name: kube-hunter
what: kube-hunter
optional: "False"
```

./bluval/blucon.sh -l os iec-type4

```
=====
Debug: /opt/akraino/results/os/vuls/debug.log
Output: /opt/akraino/results/os/vuls/output.xml
Log: /opt/akraino/results/os/vuls/log.html
Report: /opt/akraino/results/os/vuls/report.html
```

2. Troubleshooting

```
##iptables issues for centOS8
vi /etc/firewalld/firewalld.conf
in config file change
FirewallBackend=nftables
on
FirewallBackend=iptables
save change and reload firewalld
systemctl restart firewalld.service
```

Test API description

N/A

Test Dashboards

Single pane view of how the test score looks like for the Blue print.

Total Tests	Test Executed	Pass	Fail	In Progress
2	2	2	0	0

Additional Testing

Lynis Report

Lynis log : <https://nexus.akraino.org/content/sites/logs/parserlabs/r4/jobs/iec-type4/lynis.log>

Vuls Report:

Vuls log : <https://nexus.akraino.org/content/sites/logs/parserlabs/r4/jobs/iec-type4/vuls.log>

Bottlenecks/Errata

N/A