

January 2026

CNF packaging  
(Whitestack/Orange)

# Packaging a CNF in Sylva Unit



# Back on Supply Chain

- Starting from [WG06 guideline on software Delivery Guideline](#)
- Stakes: collecting OCI artifacts from vendor is still very inconsistent (registry, tar.gz, local registry through professional services)
- Problem: nightmare to precisely know which images are run in which environment and precisely know the system impacted by a new CVE
- Running continuous audit on all production systems is not acceptable
- Basic security mechanisms are not applied (signature)

# CICD architecture to secure the supply chain 'CNF delivery'

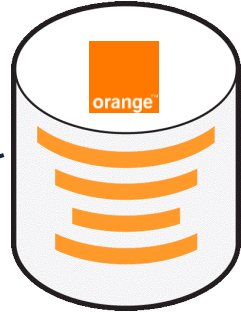
## Overview

Vendor Repository



5G fonctions

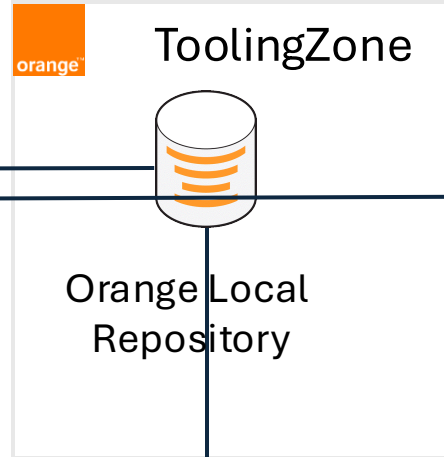
OSCP  
Central  
Repository



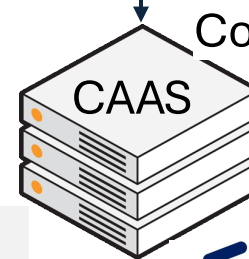
SBOM+CVE



Orange deployment



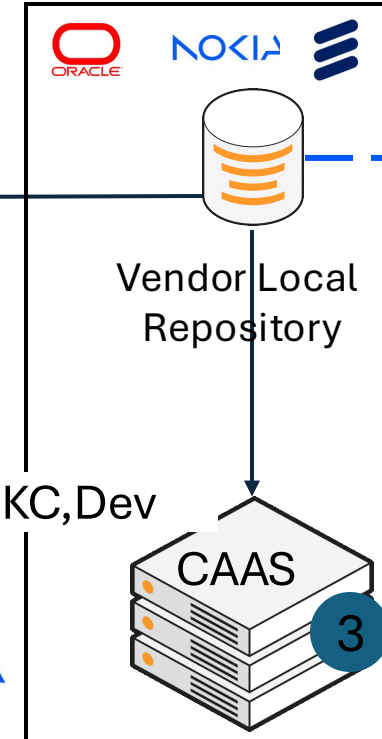
Orange Local  
Repository



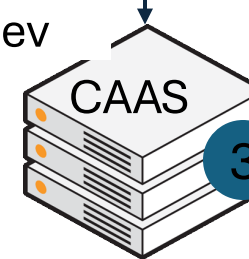
Country,SKC,Dev



Vendor deployment



Vendor Local  
Repository



1

1

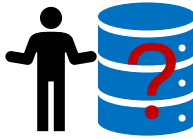
- a) - Provide a simple and secure way to pull/push the image (cloud native OCI)
- b) - CNF promotion

2

- 2 Install all platforms from Orange central repository (OSPC)

3

- 3 Provide the inventory of images in the CaaS at the end of each installation



Mandatory:  
Increase  
Control  
Of  
Supply chain

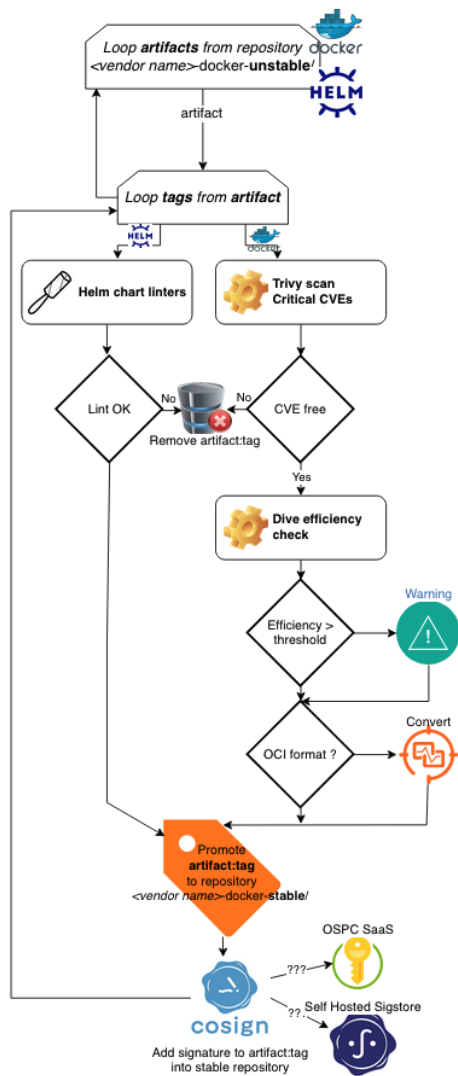
Orange request

- ❑ **Reminder: Conform to Orange CICD proposed : Install from OSPC (Orange Repo.Tech.Orange)**
- ❑ **Provide inventory of installed artefacts**

# Stage 1a: collect the OCI artifacts

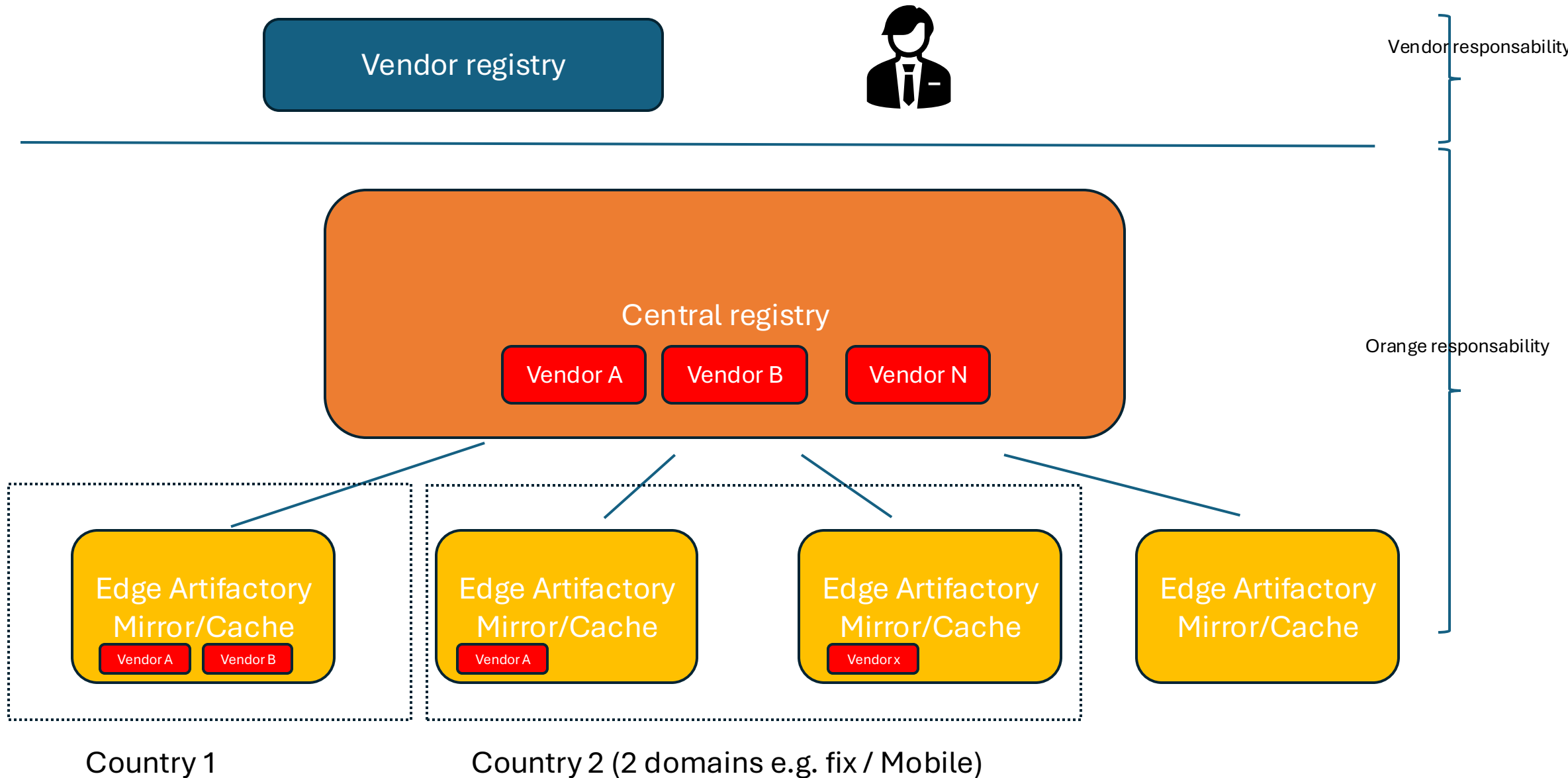
- Central Orange point = JFrog artifactory reachable on Internet (white list)
  - Option 1: Recommended delivery: mirroring towards vendor public registry (already possible with some vendors): automated synchro between vendor registry and Orange registry (token protected)
  - Option 2: Grant an access to an untrusted project to the vendors with IP whitelisted access from Internet (helm push and docker push done by Vendors on orange central Registry)

# Stage 1b: Image promotion

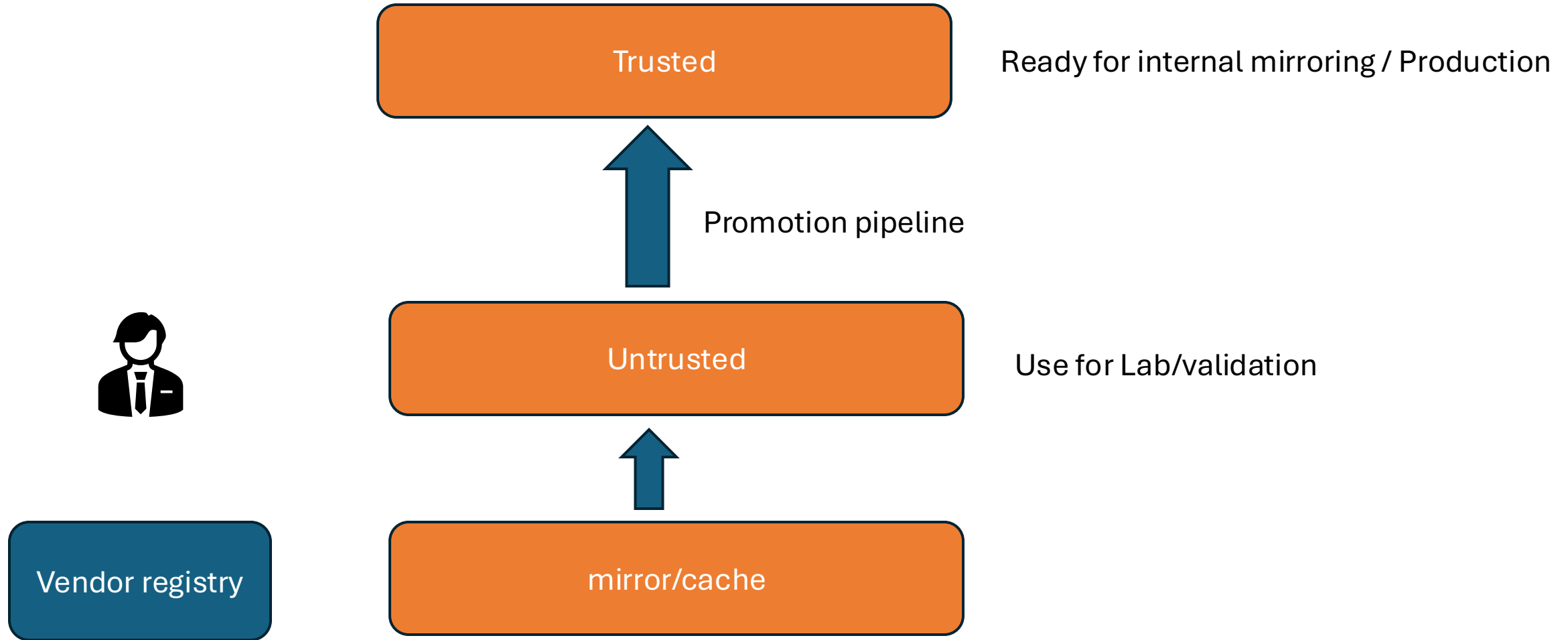


- Helm linting (yaml parser)
- CVE scans (Trivy) including **OpenVex** (vendor when available) and validation team
- Installation **SigStore** NIF TZ to sign images with **Cosign** tool (Innovation, vendors?)
- OCI format check
- Image efficiency

# Stage 1: Multi vendors / Multi countries



# Stage 2: control, promote and give feedback





# Stage 3: images inventory, centralized scans

