# RCS-IT: Container Registry WG

## Agenda and Minutes

Indico Category PSO Registry Docs Epic

## January 21st 2025, 15h00

- registry-wlcg.cern.ch
  - Integration with SBOMs available
- validate registry feature availability for RCS needs
  - https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/88
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
  - https://docs.google.com/document/d/1cjfT6ajUifCzUWIpnL\_IQ15vQeiqN1FDkcTv XK59E2U/edit
  - Which container engine to use for that? Rely on apptainer?
  - Collected images from ALICE and ATLAS
  - Jan 21, 2025 CMS, ALICE a realistic scenario is running containers with apptainer and using images from unpacked.cern.ch in the Grid.
    - Clemens Lange will try to fish some data from older experiments
- Execute the planned scale tests and produce a report on the results
  - https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/87
- Setup of a distributed registry infrastructure with at least 2 sites in addition to CERN
  - Could discuss with Fermilab if they can provide one
    - Clemens Lange / Spyridon Trigazis Will follow this fermilab.
- Configure CVMFS unpacked as a backend for the registry
  - o Do we need a separate instance separate from the existing unpacked.cern.ch?
    - Spyros: Let's rely on unpacked.cern.ch, I will double check with the cvmfs team.
- Define and execute containerized workflows relying on this registry instance(s). Include the image build and push as well as the workload launch from those artefacts
- Spyros: Get in touch with cvmfs for the webhook setup to publish in cvmfs
  - TODO add gitlab issue

#### December 10th 2024, 15h00

- Deploy the central registry at CERN
   https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/99
  - ongoing MR
     <a href="https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge\_requests/98">https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge\_requests/98</a>
  - DONE <u>registry-wlcg.cern.ch</u>,
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
  - https://docs.google.com/document/d/1cjfT6ajUifCzUWIpnL\_IQ15vQeiqN1FDkcTv XK59E2U/edit
  - Which container engine to use for that? Rely on apptainer?
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- Execute the planned scale tests and produce a report on the results
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### November 26th 2024, 15h00

- Deploy the central registry at CERN
   https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/99
  - ongoing MR
     https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge\_requests/98
  - Finalizing last bits we permissions today

- DONE Infrastructure (base cluster, S3 bucket), LB: registry-wlcg.cern.ch,
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
  - https://docs.google.com/document/d/1cjfT6ajUifCzUWIpnL\_IQ15vQeiqN1FDkcTv XK59E2U/edit
  - Which container engine to use for that? Rely on apptainer?
  - Collected images from ALICE and ATLAS
- Execute the planned scale tests and produce a report on the results
  - o <a href="https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/87">https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/87</a>
- Setup of a distributed registry infrastructure with at least 2 sites in addition to CERN
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  - Do we need a separate instance separate from the existing unpacked.cern.ch?
    - Spyros: Let's rely on unpacked.cern.ch, I will double check with the cvmfs team.
- Define and execute containerized workflows relying on this registry instance(s). Include the image build and push as well as the workload launch from those artefacts

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- validate registry feature availability for RCS needs
  - https://qitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/88
- Spyros: Get in touch with cvmfs for the webhook setup to publish in cvmfs
  - o TODO add gitlab issue

#### October 29th 2024, 15h00

- Deploy the central registry at CERN
   https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/99
  - ongoing MR
     <a href="https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge\_requests/98">https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge\_requests/98</a>
  - Still under review
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
  - https://docs.google.com/document/d/1cjfT6ajUifCzUWIpnL\_IQ15vQeiqN1FDkcTv XK59E2U/edit
  - Which container engine to use for that? Rely on apptainer?
  - Collected images from ALICE and ATLAS
- Execute the planned scale tests and produce a report on the results
  - o <a href="https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/87">https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/87</a>

- Setup of a distributed registry infrastructure with at least 2 sites in addition to CERN
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- Define and execute containerized workflows relying on this registry instance(s). Include the image build and push as well as the workload launch from those artefacts
- validate registry feature availability for RCS needs
  - https://qitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/88
- What is important is to have a registry to point the users to with proper integration with gitlab/others.
- AOB
  - Spyros: Get in touch with cvmfs for the webhook setup to publish in cvmfs
  - Presentation by CVMFS and Clemens on container snapshotters https://indico.cern.ch/event/1338689/contributions/6011588/

#### October 15th 2024, 15h00

- Previous action items
  - Setup bi-weekly events **DONE**
    - meetings and room booking done until March 18th 2025
  - Setup MM channel DONE
    - https://mattermost.web.cern.ch/it-dep/channels/rcs-it-container-registry-w
       α
  - Deploy the central registry at CERN
     https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/99
    - ongoing MR
       <a href="https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge-requests/98">https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/merge-requests/98</a>
  - Progress on the scale test plan
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
  - https://docs.google.com/document/d/1cjfT6ajUifCzUWIpnL\_IQ15vQeiqN1FDkcTv XK59E2U/edit
  - Which container engine to use for that? Rely on apptainer?
  - Spyros: Add a mattermost channel to sync **DONE**
  - Add indico events every 2 weeks DONE
- Execute the planned scale tests and produce a report on the results
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- What is important is to have a registry to point the users to with proper integration with gitlab/others.
- AOB

### October 1st 2024, 15h00

- Setup a dedicated instance of the Registry at CERN for this scalability effort
  - https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/99
- Document in detail the scale tests to be executed number of images, size of images, total capacity, concurrent pulls and push operations
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- https://gitlab.cern.ch/kubernetes/automation/releases/kops-registry/-/issues/88
- AOB
  - What is important is to have a registry to point the users to with proper integration with gitlab/others.
- Action items for next meeting:
  - Progress on the scale test plan

- Deploy the central registry at CERNSetup MM channel
- Setup bi-weekly events