Red Hat OpenShift

Subscribe your RHEL VMs with the power of Tekton

Using Openshift V4.10+

Sebastian Rodriguez Isaziga, RHCA, RHCI, RHCX
Cloud Architect EMEA
shebi@redhat.com

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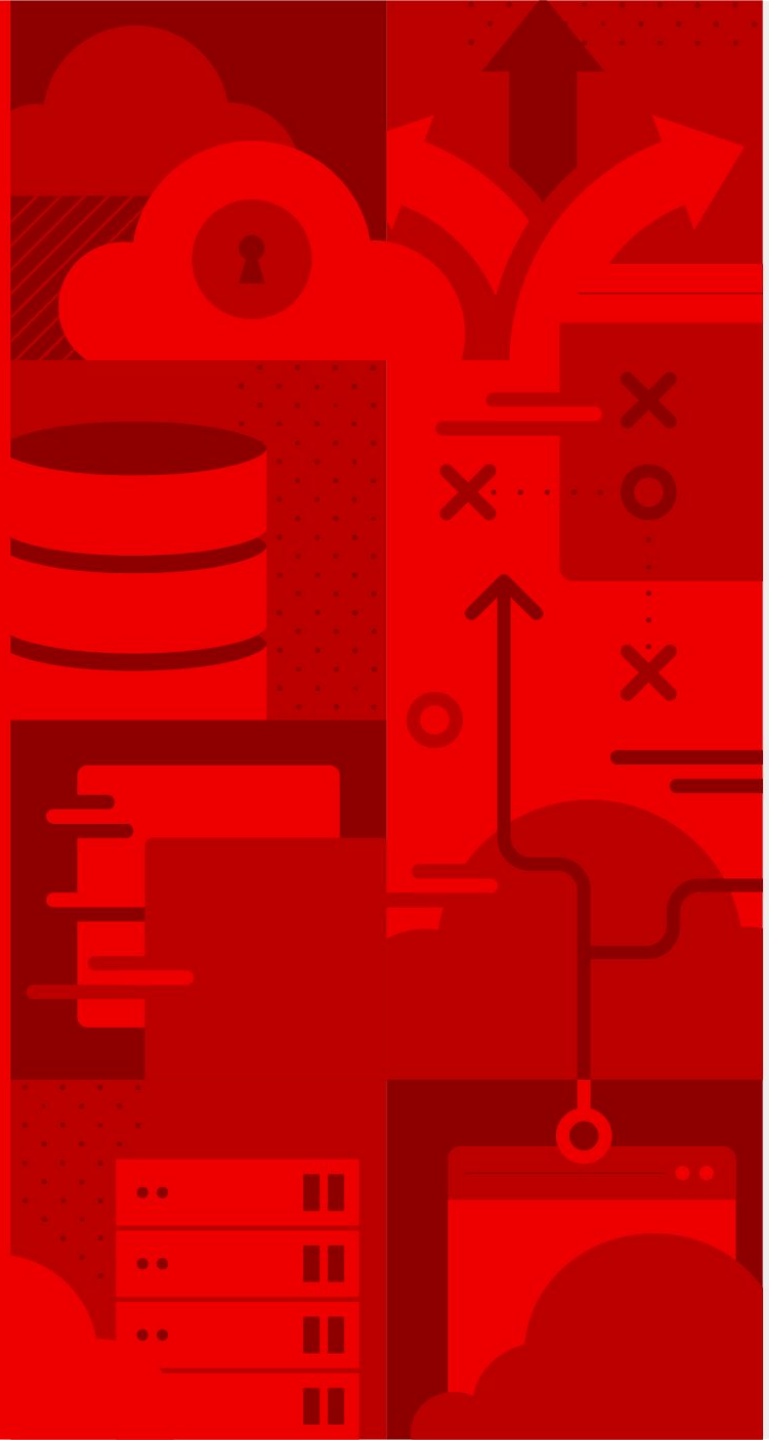

Agenda

- Status Quo
- Proposed Architecture
- Demo Time
- Conclusions

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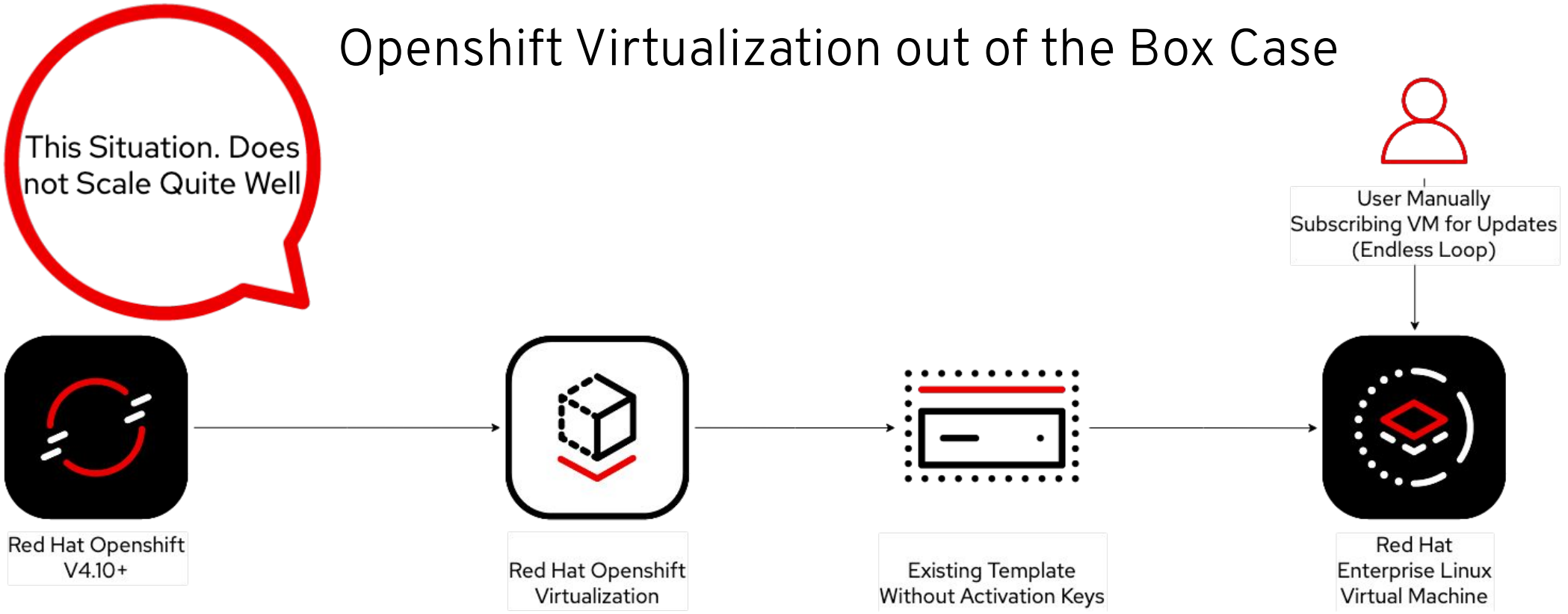
Openshift Virtualization out of the Box Case



Source:
https://docs.openshift.com/container-platform/4.12/virt/about-virt.html
https://docs.openshift.com/container-platform/4.12/welcome/index.html
https://access.redhat.com/solutions/25327
https://access.redhat.com/solutions/3341191

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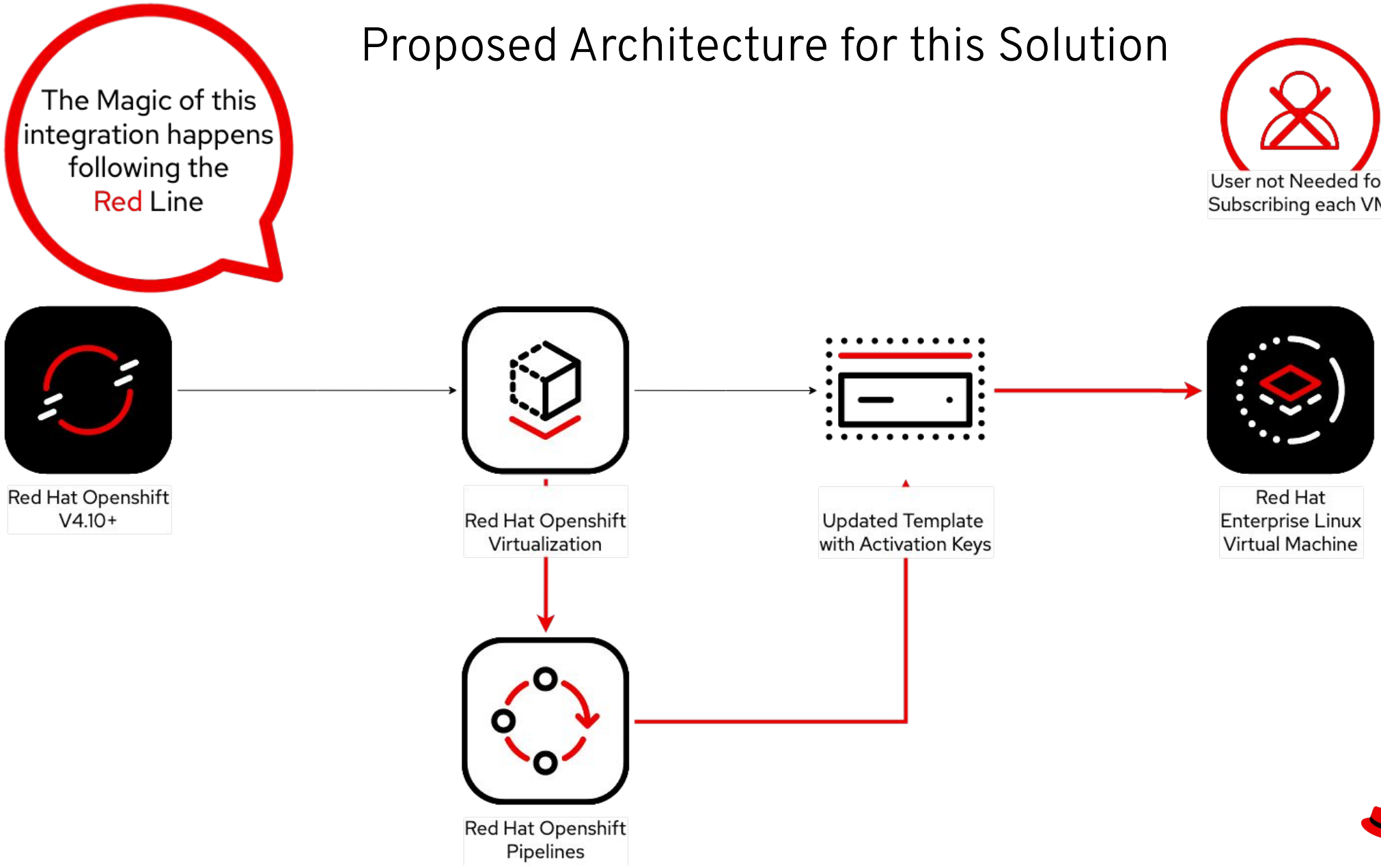
Proposed Architecture for this Solution



Source: https://docs.openshift.com/container-platform/4.12/cicd/pipelines/understanding-openshift-pipelines.html#op-key-features

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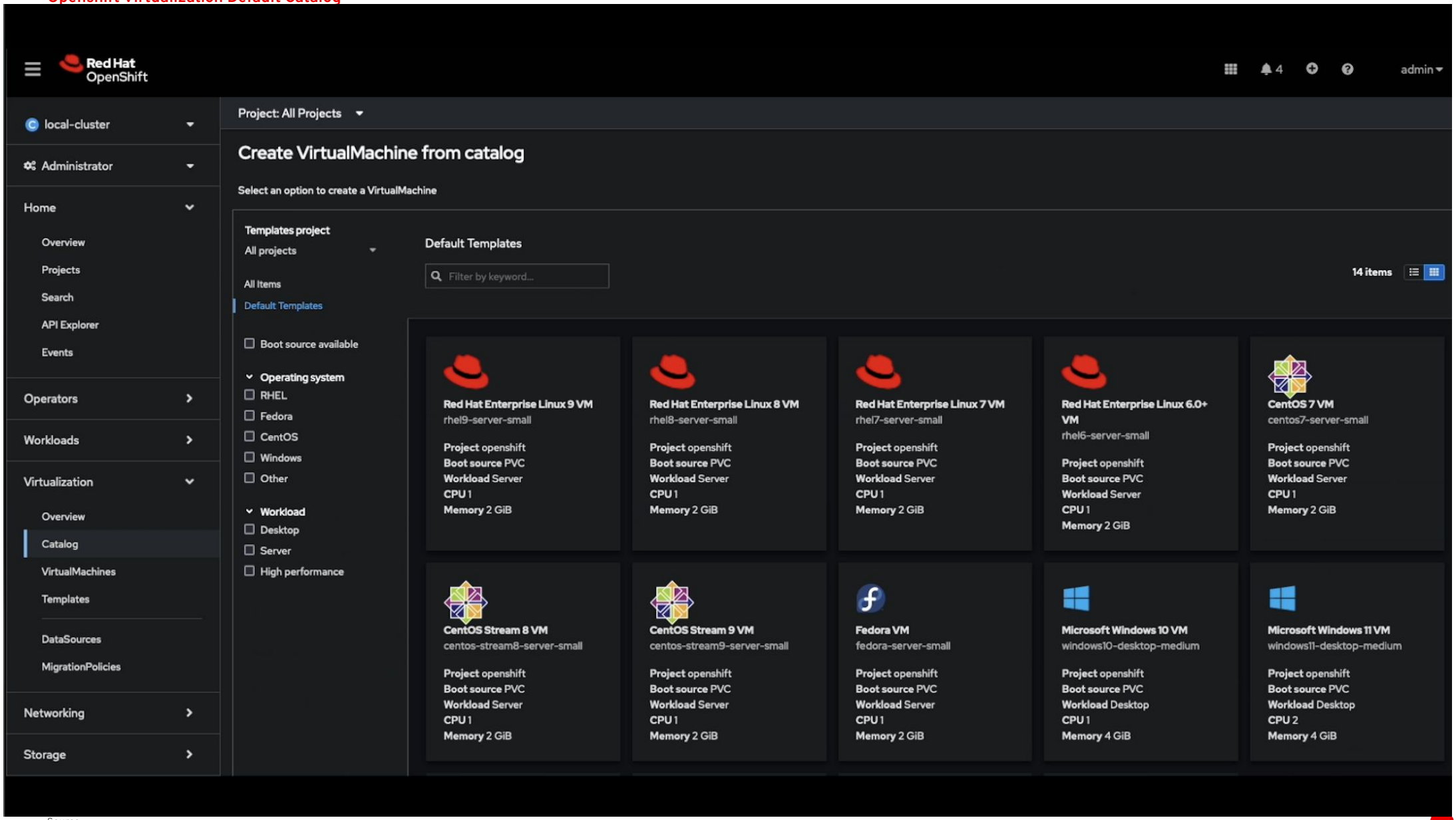
Openshift Virtualization Default Catalog



Source:
https://docs.openshift.com/container-platform/4.12/virt/vm_templates/virt-creating-vm-template.html

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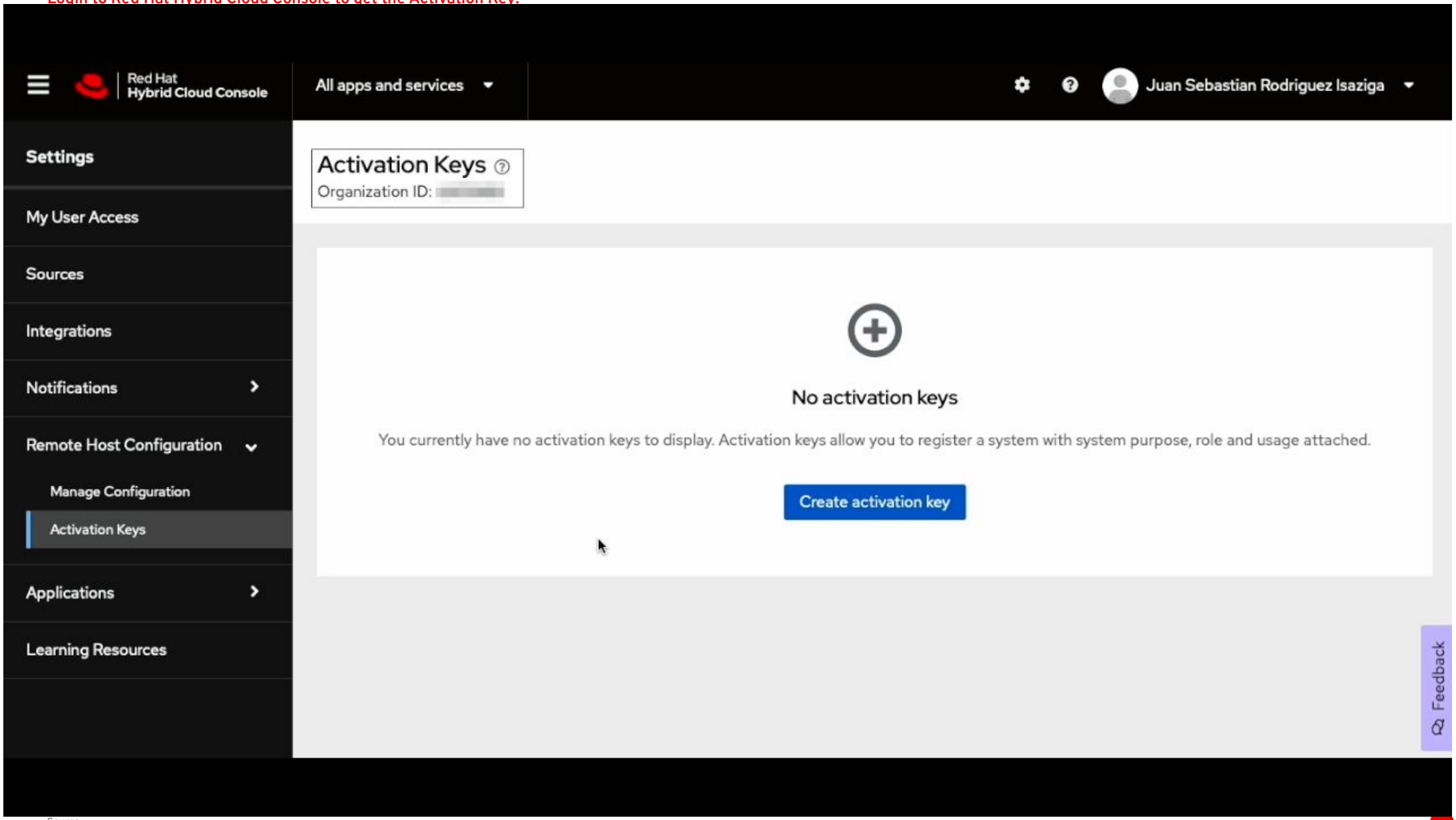
Login to Red Hat Hybrid Cloud Console to get the Activation Key:



Source:
https://console.redhat.com/settings/connector/activation-keys

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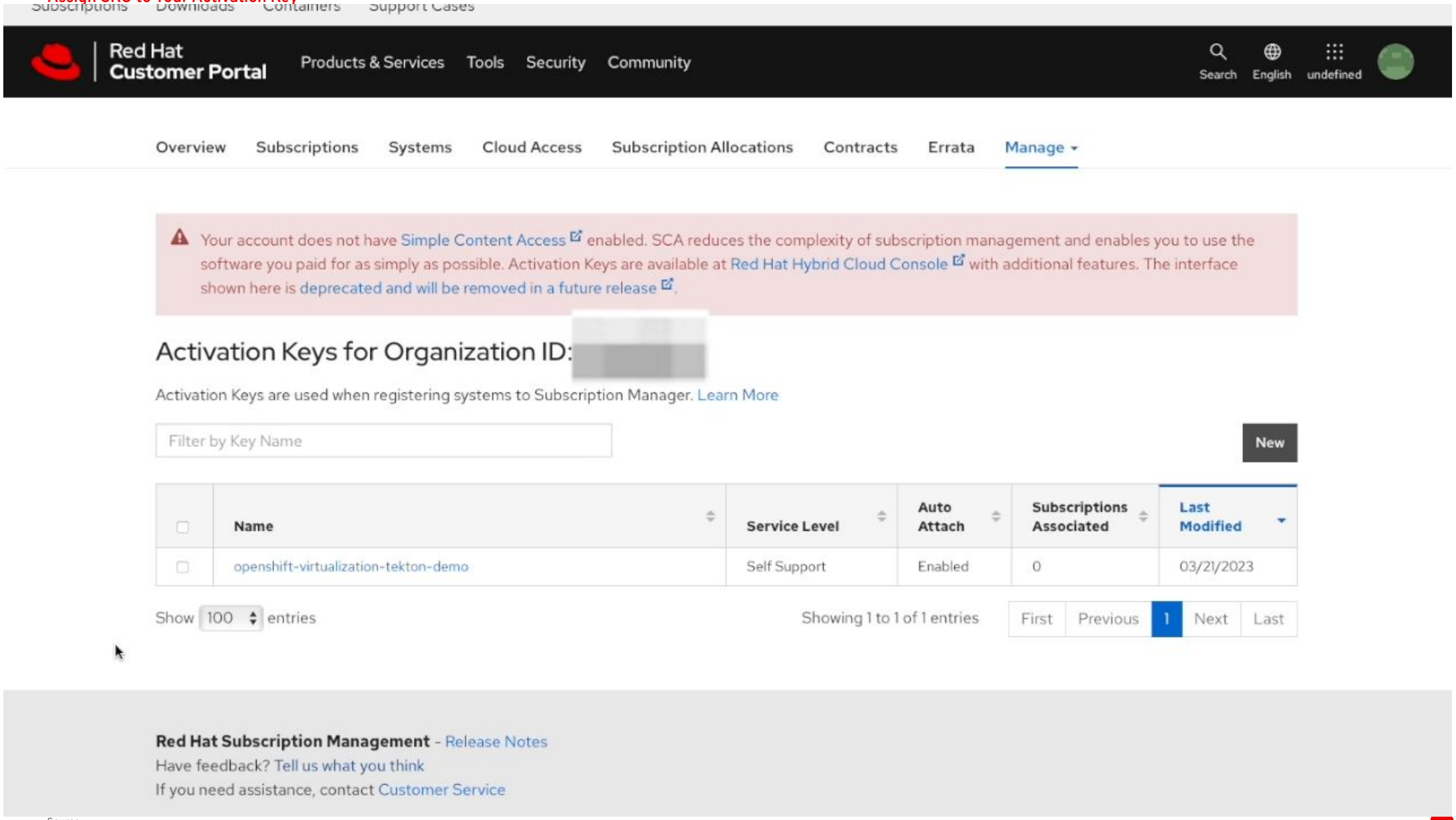
Assign SKU to Your Activation Key



Source:
https://access.redhat.com/management/activation_keys
SKU = Stock Keeping Unit - Unique ID for a Product or Service

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Prepare Tekton to Trigger Pipelines to Openshift Virtualization

```
(base) sebastianrodriguez@Sebastians-MacBook-Pro ~ % oc login -u admin
```

Source:

https://docs.openshift.com/container-platform/4.11/cicd/pipelines/understanding-openshift-pipelines.html

https://docs.openshift.com/container-platform/4.12/virt/virtual_machines/virt-managing-vms-openshift-pipelines.html

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Prepare Tekton to Trigger Pipelines to Openshift Virtualization: Create new project and execute both scripts, script 1 is for creating a single template. Script 2 is for using all RHEL templates available in Openshift Virtualization

```
(base) sebastianrodriguez@Sebastians-MacBook-Pro openshift-tekton %
```


Source:

https://gist.githubusercontent.com/shebistar/6e3545f109df46c70dd968d896fcab64/raw/723dcd3f016f5f081be4aafdce1e86678a6e2e48/rhel-inject-subscription.yaml

https://gist.githubusercontent.com/shebistar/911e1ae878cf77a7977f72d67fabd76c/raw/41046381e49ae0b6a0fea003510ded6ad1f6983a/rhel-subscribed-templates.yaml

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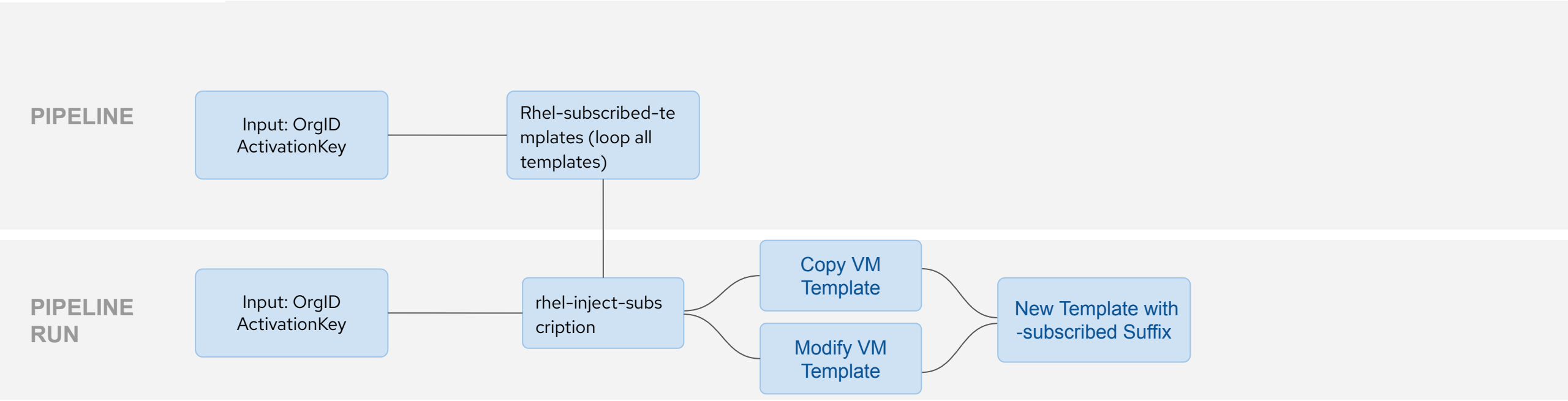
Pipelines details



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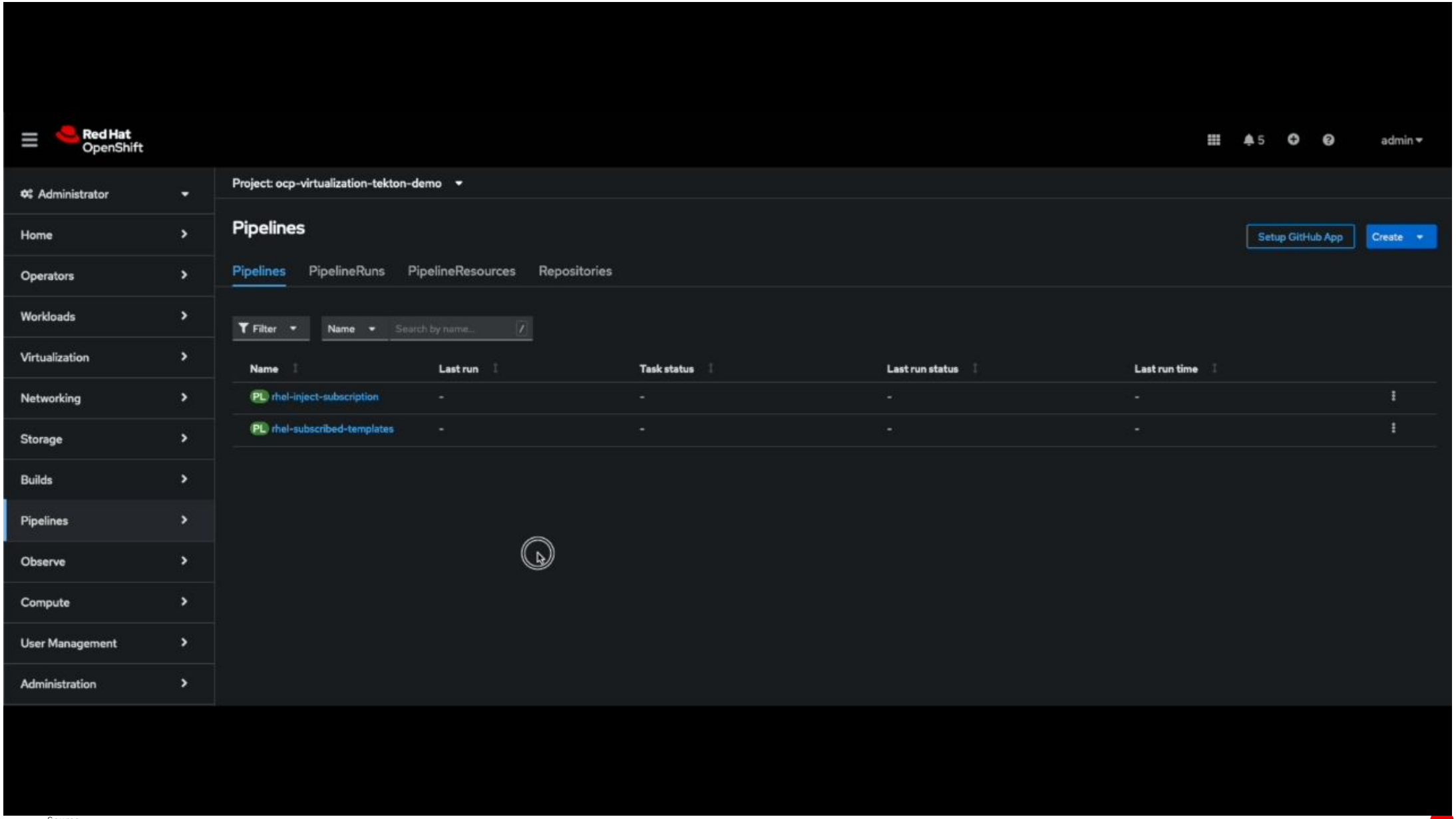
In the Project Already Created. Let's Check both Pipelines (Using the gists below) and Execute the one to Generate Multiple Templates



Source:
https://gist.githubusercontent.com/shebistar/6e3545f109df46c70dd968d896fcab64/raw/723dcd3f016f5f081be4aafdce1e86678a6e2e48/rhel-inject-subscription.yaml
https://gist.githubusercontent.com/shebistar/911e1ae878cf77a7977f72d67fabd76c/raw/41046381e49ae0b6a0fea003510ded6ad1f6983a/rhel-subscribed-templates.yaml

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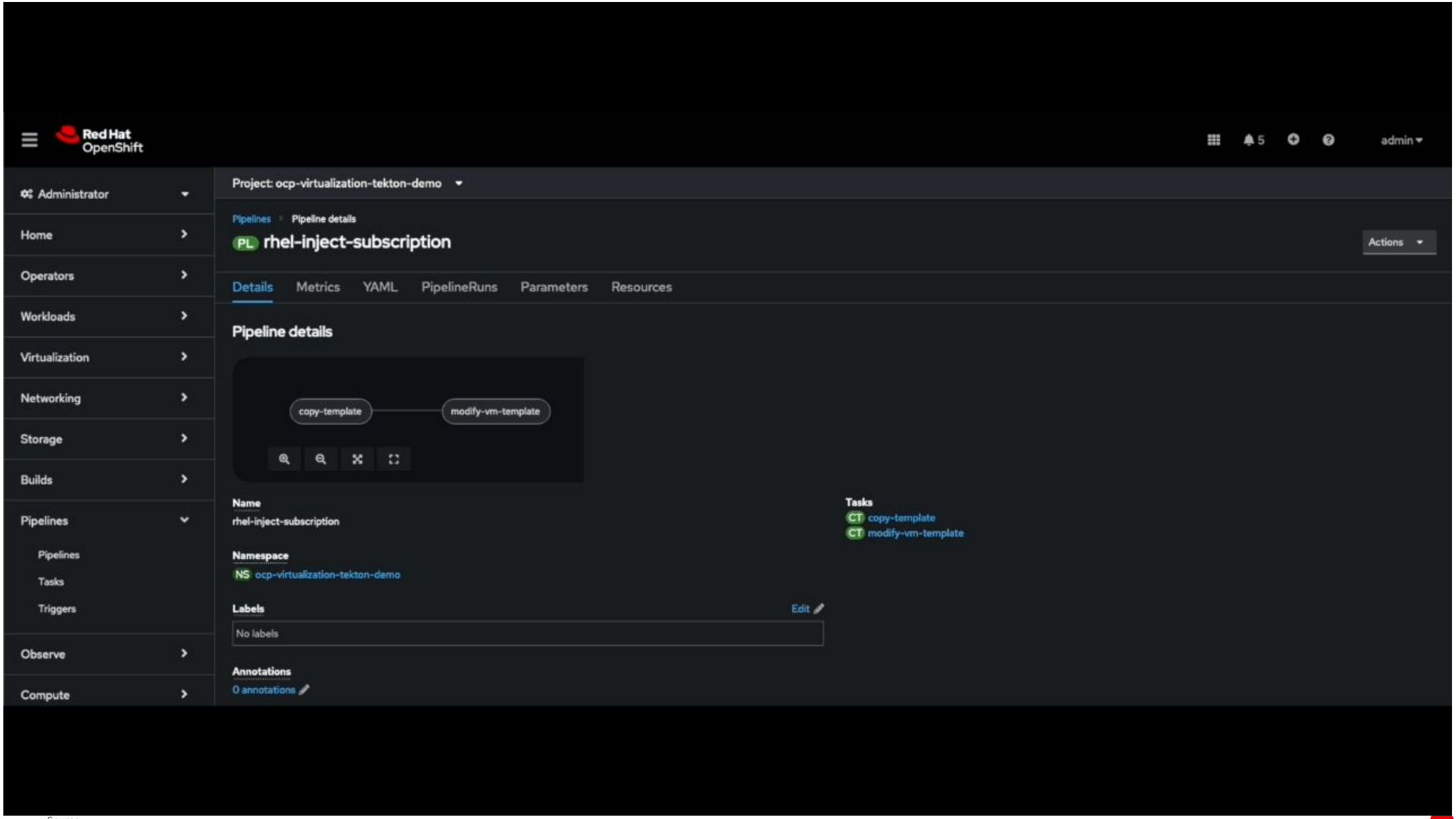
In the Project Already Created. Let's Check both Pipelines and Execute the one to Generate Multiple Templates



Source:

https://cloud.redhat.com/blog/subscribing-rhel-vms-in-openshift-virtualization

https://cloud.redhat.com/blog/how-to-automatically-subscribe-rhel-vms-with-openshift-pipelines

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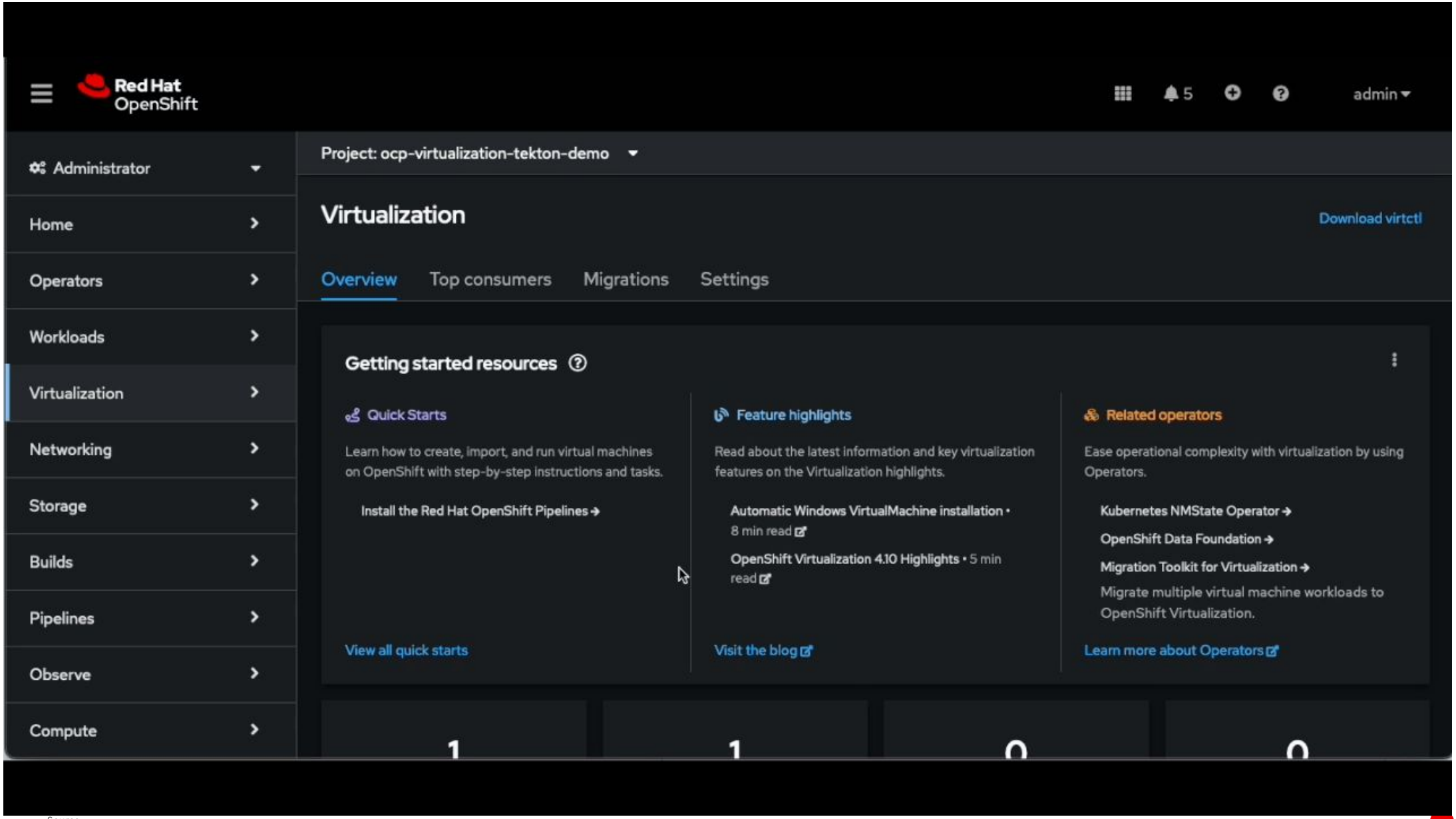
Now Let's Create a VM Using the Freshly Created Subscribed Template



Source:
https://docs.openshift.com/container-platform/4.12/virt/virtual_machines/virt-create-vms.html

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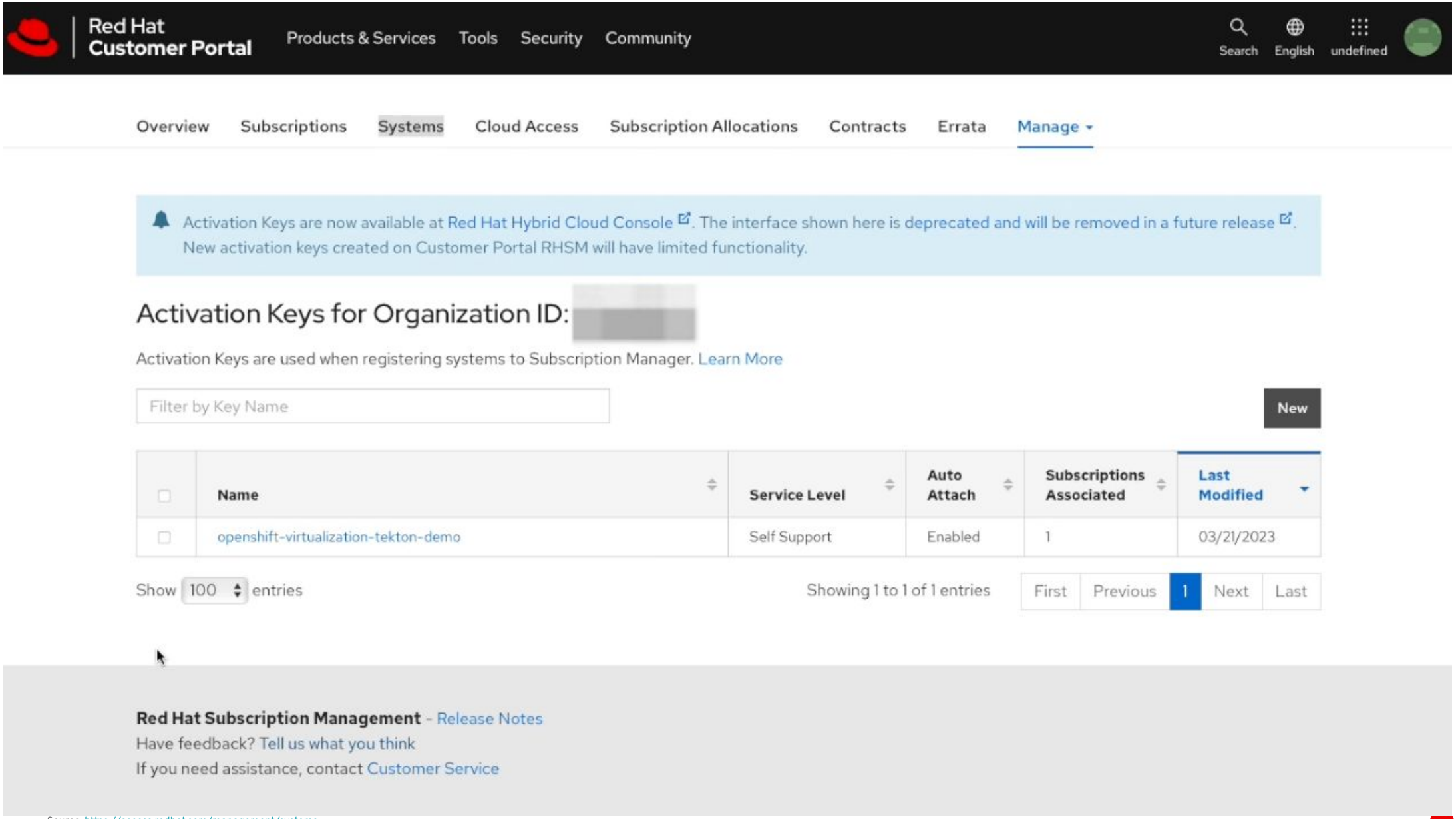
Final Check! Check for Registered Systems in https://access.redhat.com/management/systems



Source: https://access.redhat.com/management/systems

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Benefits of Integrating Tekton with Openshift:

integrating Tekton with Openshift Virtualization simplify the VM lifecycle with limitless automation possibilities.

Automated Activation and Security

By removing the need for manual activation and registration, we can streamline operations and ensure that our systems stay up to date and secure.

Faster Development and Administration Reduction with Openshift

With Openshift, organizations can enable faster development and reduce management overhead, accelerating their cloud transformation journey

Customizable Automation with Tekton and Openshift

Tekton and Openshift offer a flexible and customizable automation framework that can be tailored to meet the specific needs of our organization.

Source:

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Questions?

Email: shebi@redhat.com

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Thank you

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