

Integration in DataCloud

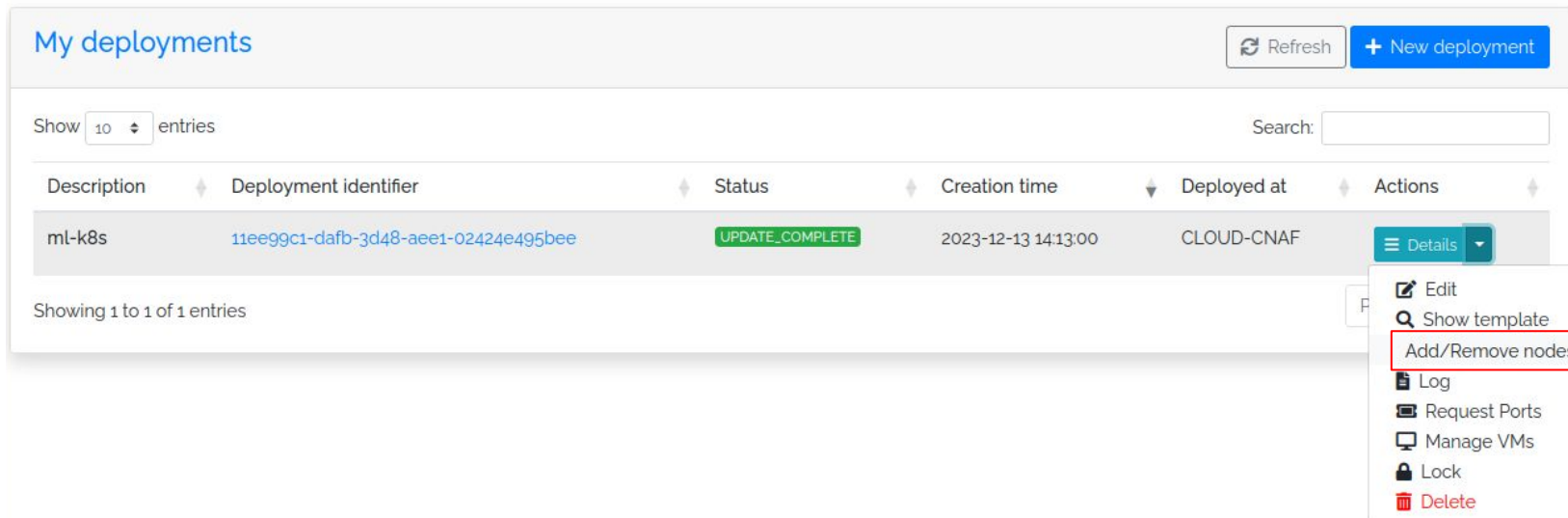
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On behalf of INFN-DataCloud

Available services:

- **Computational environment for Machine Learning INFN**
 - Deployment of a VM with:
 - JupyterHub
 - CVMFS
 - GPU Partitioning
- **Spark + Jupyter cluster**
- **Kubernetes cluster**
 - Node with and without GPUs can be selected during the initial phase.
 - Altering the number of nodes with heterogeneous flavors.

Kubernetes cluster:

- Altering the number of nodes with heterogeneous flavors



My deployments

Refresh + New deployment

Show 10 entries Search:

Description	Deployment identifier	Status	Creation time	Deployed at	Actions
ml-k8s	11ee99c1-dafb-3d48-aeel-02424e495bee	UPDATE_COMPLETE	2023-12-13 14:13:00	CLOUD-CNAF	<ul style="list-style-type: none">DetailsEditShow templateAdd/Remove nodesLogRequest PortsManage VMsLockDelete

Showing 1 to 1 of 1 entries

Kubernetes cluster

- Altering the

Update deployment 11ee99c1-dafb-3d48-ae1-02424e495bee

Deployment description

ml-k8s

Configuration [Advanced](#)

admin_token

Enter your password

Password token for accessing K8s dashboard

number_of_nodes

4

Number of K8s node VMs

ports

Ports to open on the K8s master VM

master_flavor

--Select--

Number of vCPUs and memory size of the K8s master VM

node_flavor

large: 4 VCPUs, 8 GB RAM

Number of vCPUs and Memory Size of each K8s node VM

Kubernetes cluster

- Step 0
 - **3 Medium Flavor nodes**
- Step 1
 - Added a **Large Flavor node**
- Step 2
 - Added a **Medium Flavor node**

Nodes						
Name ↑	CPU requests (cores)	CPU limits (cores)	CPU capacity (cores)	Memory requests (bytes)	Memory limits (bytes)	Memory capacity (bytes)
● vnode-0.localdomain	950.00m (47.50%)	0.00m (0.00%)	2.00	290.00Mi (7.59%)	340.00Mi (8.90%)	3.73Gi
● vnode-1.localdomain	100.00m (5.00%)	0.00m (0.00%)	2.00	50.00Mi (1.31%)	0.00 (0.00%)	3.73Gi
● vnode-2.localdomain	100.00m (5.00%)	0.00m (0.00%)	2.00	50.00Mi (1.31%)	0.00 (0.00%)	3.73Gi
● vnode-3.localdomain	400.00m (20.00%)	2.00 (100.00%)	2.00	540.00Mi (14.14%)	200.00Mi (5.24%)	3.73Gi
● vnode-4.localdomain	100.00m (2.50%)	0.00m (0.00%)	4.00	50.00Mi (0.64%)	0.00 (0.00%)	7.66Gi
● vnode-5.localdomain	100.00m (5.00%)	0.00m (0.00%)	2.00	50.00Mi (1.31%)	0.00 (0.00%)	3.73Gi

Kubernetes cluster

- Step 0
 - **3 Medium Flavor nodes**
- Step 1
 - Added **a Large Flavor node**
- Step 2
 - Added **a Medium Flavor node**
- Step 3
 - Removed **3 nodes**

Nodes						
Name ↑	CPU requests (cores)	CPU limits (cores)	CPU capacity (cores)	Memory requests (bytes)	Memory limits (bytes)	Memory capacity (bytes)
● vnode-0.localdomain	950.00m (47.50%)	0.00m (0.00%)	2.00	290.00Mi (7.59%)	340.00Mi (8.90%)	3.73Gi
● vnode-3.localdomain	400.00m (20.00%)	2.00 (100.00%)	2.00	540.00Mi (14.14%)	200.00Mi (5.24%)	3.73Gi
● vnode-5.localdomain	100.00m (5.00%)	0.00m (0.00%)	2.00	50.00Mi (1.31%)	0.00 (0.00%)	3.73Gi