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| **DOCUMENT RULES:** | |
| **Task Number / Name:** | **Crossplane** |
| **Task name & column name should be written:** | **Bold (CTRL+B)** |
| **Commands should be written in the after # sign:** | *Italic (CTRL+I) #hostname* |
| **Output photo should be cropped or compressed:**  **Photo could be more than one:**  **If you need extra lines, add the line next after it:** | ***Description photo should be with title bar (CTRL + I + B)*** |
| **All other text should be written:** | Standard |
| **Font name and text size:** | Calibri and 9 |
| **Group name:** | Dev\_ops\_ |
| **Student name and surname:** | Murad Abbaszade |
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| 1.Interactive crossplane workshop |  |
| apt install -y python3-pip && mkdir -p /opt/kata-materials && cd /opt/kata-materials && git clone --depth 1 <https://github.com/irixjp/katacoda-scenarios.git> . && pip install virtualenv && virtualenv ansible && source /opt/kata-materials/ansible/bin/activate && cd tools && bash ./kata\_setup.sh && cd ~/ |  |
| Check the cluster setup kubectl get pods –A |  |
|  |  |
| Check Kuberentes cluster info and version kubectl cluster-info && echo && kubectl version –short |  |
| Composed app in action |  |
| kubectl apply -f definition.yaml  kubectl apply -f composition.yaml |  |
| kubectl get xrd |  |
| kubectl get compositions |  |
| kubectl create ns devops-team |  |
| kubectl apply -f app-claim.yaml  kubectl wait deployment.apps/acmeplatform --namespace devops-team --for condition=AVAILABLE=True --timeout 1m |  |
| kubectl get managed |  |
| kubectl port-forward deployment/acmeplatform -n devops-team --address 0.0.0.0 8080:80 |  |
| Application lifecycle |  |
| kubectl apply -f app-claim-blue.yaml  kubectl wait deployment.apps/acmeplatform --namespace devops-team --for condition=AVAILABLE=True --timeout 1m |  |
| kubectl port-forward deployment/acmeplatform -n devops-team --address 0.0.0.0 8080:80  kubectl delete -f app-claim.yaml |  |
| Validate crossplane compositions with Datree |  |
| kubectl get pods –A  kubectl cluster-info && echo && kubectl version –short |  |
| Prepare the resources   * kubectl apply -f definition.yaml * kubectl apply -f composition.yaml * kubectl create ns devops-team   kubectl apply -f app-claim.yaml |  |
| kubectl get crossplane |  |
| kubectl describe service acmeplatform -n devops-team | grep ^Labels -A2  kubectl describe deployment acmeplatform -n devops-team | grep ^Labels -A2  kubectl describe hpa acmeplatform -n devops-team | grep ^Labels -A2 |  |