KONTÉNERIZÁCIÓ (KUBERNETES)

6. forduló

NOKIA

A kategória támogatója: Nokia

RENDELKEZÉSRE ÁLLÓ IDŐ:

20:00

Ismertető a feladathoz

In this round you can test you knowlege about Resource management in the Kubernetes domain.

Felhasznált idő: 02:06/20:00 **Elért pontszám:** 0/60

1. feladat 0/5 pont

What may trigger a container restart?

Válaszok

- [ ] Reach of CPU limit
- [x] Reach of memory limit
- [ ] Not responding to readiness probe
- [x] Not responding to liveness probe

Magyarázat

Learn more about Resource management in kubernetes here:

https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2. feladat 0/5 pont

Is it possible to evacuate a pod that uses more memory than the request?

Válasz

- ◯ Yes
- ◯ No

Magyarázat

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3. feladat 0/5 pont

Is it possible to evacuate a pod that uses more CPU than the request?

Válasz

- ◯ Yes
- ◯ No

Magyarázat

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4. feladat 0/5 pont

How to list processes which were terminated by Linux due to out of memory event?

Válasz

- ◯ grep -i 'Killed process' /var/log/messages
- ◯ kubectl get po -kill OOM
- ◯ grep -i 'OOM' /var/log/messages

- grep -i 'OOM' /var/log/resource

Magyarázat

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5. feladat 0/5 pont

Docker container exited with error code 137. What is the root cause behind this error code?

Válasz

- Out of Memory
- Out of CPU
- Out of Disk Space
- Resource Quota exceeded
- Resource Quota drained
- Resource Quota depleted

Magyarázat

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6. feladat 0/5 pont

What happens if the aggregated SUM of pod resource limits exceeds the overall capacity of a node in a cluster?

Válasz

- It is called overcommit and nothing happens until running pods consume less resources than HW capacity of the node.
- The Node will set MemoryPressure and CPUPressure conditions.
- Pods with highest resource limits will be evicted
- Pods limits will be rounded automatically by Kubernetes to avoid failures.
- Kuberenet scheduler stops the whole cluster with error code.

- ◯ Overcommitted Node is a gamble and Kubernetes will taint this node.

Magyarázat

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7. feladat 0/5 pont

Kubernetes measures CPU resources in [*CPU*] units. The suffix m means milliCPU. What is the correct answer to the conversion?

Válasz

- ◯ 10000m = 10 CPU core
- ◯ 100m = 1 CPU Core
- ◯ 10m = 1 CPU Core
- ◯ 10m = 1 GPU Core
- ◯ 1000m = 10 GPU Core
- ◯ 10000m = 1 GPU Core

Magyarázat

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8. feladat 0/5 pont

What does CRD refers to in the Kubernetes terminology?

Válasz

- ◯ Custom Resource Definition
- ◯ Continuous Resource Data
- ◯ Controlled Resource Deletion
- ◯ Cloud Resource Definition

Magyarázat

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9. feladat 0/5 pont

On what level can a kubernetes operator work?

Válaszok

- [x] Cluster
- [x] Namespace
- [ ] Node
- [ ] Resource group

Magyarázat

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10. feladat 0/5 pont

Select valid persistent volume types

Válaszok

- [ ] CNNS - Cloud Native Network Storage
- [ ] HNCS – Hybrid Network Cluster Storage
- [ ] K8S – Kubernetes 8th Storage
- [ ] remote – Remote storage
- [x] nfs - Network File System (NFS) storage
- [ ] FFS – Fast File Storage
- [ ] HFS Plus - Hierarchical File System Plus
- [x] local - Local storage devices mounted on nodes

- [ ] ntfs - New Technology File System
- [ ] ext3 - third extended filesystem
- [ ] ext4 – fourth extended filesystem

Magyarázat

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11. feladat 0/5 pont

The reclaim policy for a PersistentVolume tells the cluster what to do with the volume after it has been released of its claim. What are the valid reclaim policy types?

Válasz

- ( ) Recycle, Reuse, Remove
- (•) Retain, Recycle, Delete
- ( ) Retail, Reduce, Undelete
- ( ) Reload, Provision, Claim
- ( ) Clear, Provide, Reposition
- ( ) Add, Del, Mov
- ( ) Apply, Clear

Magyarázat

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12. feladat 0/5 pont

Select all the correct statements related to NodePort?

Válaszok

- [x] A NodePort is an open port on every node of your cluster

- [ ] Nodeport is 100% equal to Ingress Network
- [ ] Nodeport is created to Kubelet Api server communication inside a node
- [x] The NodePort service is a way to attain external traffic to your service. It is used to open a particular port on all nodes and forward the network traffic to this port
- [ ] A NodePort is open on a single node of the cluster
- [ ] A dedicated port for pod internal connections.
- [ ] A dedicated port for container communication inside a particular pod

Magyarázat

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