

Create Pod with Sysctl Parameters

Objective

Create a new Pod named `sysctl-pod` with the image `nginx:1.23.1`. Set the sysctl parameters:

- `net.core.somaxconn` to 1024.

You may need to configure kubelet to allow the unsafe sysctl.

After creating the pod, check its status.

Configuration

- Pod Name: `sysctl-pod`
- Namespace: `default`
- Image: `nginx:1.23.1`
- Sysctl Parameters:
 - `net.core.somaxconn`: 1024

Solution

► Click to expand solution

1. Configure the kubelet to allow the unsafe sysctl by editing its config:

```
# Add or update allowedUnsafeSysctls in kubelet config
sudo echo 'allowedUnsafeSysctls: ["net.core.somaxconn"]' >>
/var/lib/kubelet/config.yaml
```${exec}``
```

Wait 60 seconds for the kubelet to restart (check with `systemctl status kubelet`)

2. Create a pod YAML file with the required sysctl parameters:

```
```bash
kubectl apply -f - <<EOF
apiVersion: v1
kind: Pod
metadata:
  name: sysctl-pod
spec:
  securityContext:
    sysctls:
      - name: net.core.somaxconn
        value: "1024"
  containers:
    - name: nginx
```
```

```
 image: nginx:1.23.1
```

```
EOF
```

```
```${exec}```
```

3. Verify the pod status:

```
```${bash}
```

```
kubectl get pod sysctl-pod
```

```
```${exec}```
```

4. Check the sysctl parameters inside the pod:

```
```${bash}
```

```
kubectl exec sysctl-pod -- apt-get update && apt-get install -y procps; sysctl
net.core.somaxconn
```

```
```${exec}```
```

```
</details>
```