

# Useful SNMP OIDs (VSX)

## Check Point and SNMP

Monitoring for a Firewall is important, you need to make sure that you see the baseline of your environment and that you can see when some value will go up too high.

The following guide is showing some of the most used SNMP OID for monitoring generic HW Appliances and VSX Clusters.

To Browse the Check Point MIBS use: <https://mibs.observium.org/mib/CHECKPOINT-MIB/> or <http://oidref.com/1.3.6.1.4.1.2620>

## Activate SNMP

To enable SNMP on a Check Point FW checkout the [sk90860](#)

## Check Point MIB Files

MIB Files can be found in [sk90470](#)

## SNMP OIDs

## OIDs: Hardware Status

Hardware sensors (fans, power supplies, temperatures and raid state)

Fan status	fanSpeedSensorStatus	.1.3.6.1.4.1.2620.1.6.7.8.2.1.6
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Power Supply status	powerSupplyStatus	.1.3.6.1.4.1.2620.1.6.7.9.1.1.2
Raid status	raidDiskState	.1.3.6.1.4.1.2620.1.6.7.7.2.1.9
Temperature status	tempertureSensorTable	.1.3.6.1.4.1.2620.1.6.7.8.1

```
snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 CHECKPOINT-MIB::fanSpeedSensorStatus
CHECKPOINT-MIB::fanSpeedSensorStatus.1.0 = INTEGER: 0
CHECKPOINT-MIB::fanSpeedSensorStatus.2.0 = INTEGER: 0
CHECKPOINT-MIB::fanSpeedSensorStatus.3.0 = INTEGER: 0
CHECKPOINT-MIB::fanSpeedSensorStatus.4.0 = INTEGER: 0
```

```
snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 CHECKPOINT-MIB::powerSupplyStatus
CHECKPOINT-MIB::powerSupplyStatus.1.0 = STRING: Up
CHECKPOINT-MIB::powerSupplyStatus.2.0 = STRING: Up
```

```
snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 CHECKPOINT-MIB::tempertureSensorTable
CHECKPOINT-MIB::tempertureSensorIndex.1.0 = INTEGER: 1
CHECKPOINT-MIB::tempertureSensorIndex.2.0 = INTEGER: 2
CHECKPOINT-MIB::tempertureSensorIndex.3.0 = INTEGER: 3
CHECKPOINT-MIB::tempertureSensorIndex.4.0 = INTEGER: 4
CHECKPOINT-MIB::tempertureSensorName.1.0 = STRING: CPU0 Temp
CHECKPOINT-MIB::tempertureSensorName.2.0 = STRING: CPU1 Temp
CHECKPOINT-MIB::tempertureSensorName.3.0 = STRING: Intake Temp
CHECKPOINT-MIB::tempertureSensorName.4.0 = STRING: Outlet Temp
CHECKPOINT-MIB::tempertureSensorValue.1.0 = STRING: 65.50
CHECKPOINT-MIB::tempertureSensorValue.2.0 = STRING: 65.00
CHECKPOINT-MIB::tempertureSensorValue.3.0 = STRING: 30.38
CHECKPOINT-MIB::tempertureSensorValue.4.0 = STRING: 31.50
CHECKPOINT-MIB::tempertureSensorUnit.1.0 = STRING: Celsius
CHECKPOINT-MIB::tempertureSensorUnit.2.0 = STRING: Celsius
CHECKPOINT-MIB::tempertureSensorUnit.3.0 = STRING: Celsius
CHECKPOINT-MIB::tempertureSensorUnit.4.0 = STRING: Celsius
CHECKPOINT-MIB::tempertureSensorType.1.0 = STRING: Temperature
CHECKPOINT-MIB::tempertureSensorType.2.0 = STRING: Temperature
CHECKPOINT-MIB::tempertureSensorType.3.0 = STRING: Temperature
CHECKPOINT-MIB::tempertureSensorType.4.0 = STRING: Temperature
CHECKPOINT-MIB::tempertureSensorStatus.1.0 = INTEGER: 0
CHECKPOINT-MIB::tempertureSensorStatus.2.0 = INTEGER: 0
CHECKPOINT-MIB::tempertureSensorStatus.3.0 = INTEGER: 0
CHECKPOINT-MIB::tempertureSensorStatus.4.0 = INTEGER: 0
```

```
snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 CHECKPOINT-MIB::raidDiskState
CHECKPOINT-MIB::raidDiskState.1.0 = INTEGER: 0
CHECKPOINT-MIB::raidDiskState.2.0 = INTEGER: 0
```

# OIDs: Connections

Current connections in certain virtual system and the configured limit.

This limit is configured in the virtual system properties, Optimization section (Capacity Optimization)

<https://somoit.net/wp-content/uploads/2019/05/checkpoint-useful-snmp-oids-to-monitor-1.png>

Connections	fwNumConn.0	.1.3.6.1.4.1.2620.1.1.25.3.0
Connections limit	fwConnTableLimit.0	.1.3.6.1.4.1.2620.1.1.25.10.0

```
snmpwalk -v 3 -l authNoPriv -u user -A pass -n ctxname_vsid2 vsx1 CHECKPOINT-  
MIB::fwNumConn.0  
CHECKPOINT-MIB::fwNumConn.0 = Gauge32: 64121
```

```
snmpwalk -v 3 -l authNoPriv -u user -A pass -n ctxname_vsid2 vsx1 CHECKPOINT-  
MIB::fwConnTableLimit.0  
CHECKPOINT-MIB::fwConnTableLimit.0 = Gauge32: 199900
```

# OIDs: ClusterXL state

If you manage a Checkpoint ClusterXL, I suppose you use quite a lot the “cphaprob state” command.

ClusterXLState	haState	.1.3.6.1.4.1.2620.1.5.6.0
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```
snmpwalk -v 3 -l authNoPriv -u user -A pass -n ctxname_vsid2 vsx1 CHECKPOINT-MIB::haState.0  
CHECKPOINT-MIB::haState.0 = STRING: standby
```

# OIDs: CPU

Monitor each of the CPUs

CPUCores	multiProcUsage	.1.3.6.1.4.1.2620.1.6.7.5.1.5
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```
/usr/bin/snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 CHECKPOINT-MIB::multiProcUsage  
CHECKPOINT-MIB::multiProcUsage.1.0 = Gauge32: 7  
CHECKPOINT-MIB::multiProcUsage.2.0 = Gauge32: 2  
CHECKPOINT-MIB::multiProcUsage.3.0 = Gauge32: 8
```

CHECKPOINT-MIB::multiProcUsage.4.0 = Gauge32: 8  
CHECKPOINT-MIB::multiProcUsage.5.0 = Gauge32: 7  
CHECKPOINT-MIB::multiProcUsage.6.0 = Gauge32: 7  
CHECKPOINT-MIB::multiProcUsage.7.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.8.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.9.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.10.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.11.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.12.0 = Gauge32: 6  
CHECKPOINT-MIB::multiProcUsage.13.0 = Gauge32: 5  
CHECKPOINT-MIB::multiProcUsage.14.0 = Gauge32: 5  
CHECKPOINT-MIB::multiProcUsage.15.0 = Gauge32: 5

# OIDs: Memory

## Counters

RAM - Real Total	memTotalReal64	.1.3.6.1.4.1.2620.1.6.7.4.3
RAM - Real Active	memActiveReal64	.1.3.6.1.4.1.2620.1.6.7.4.4
RAM - Real Free	memFreeReal64	.1.3.6.1.4.1.2620.1.6.7.4.5
RAM - Virtual Total	memTotalVirtual64	.1.3.6.1.4.1.2620.1.6.7.4.1
RAM - Virtual Active	memActiveVirtual64	.1.3.6.1.4.1.2620.1.6.7.4.2
Hmem fails	fwHmem-failed-alloc	.1.3.6.1.4.1.2620.1.1.26.1.21
System Kmem fails	fwKmem-failed-alloc	.1.3.6.1.4.1.2620.1.1.26.2.15

## Traps

Swap memory utilization alert	chkpntSwapMemoryTrap	.1.3.6.1.4.1.2620.1.2000.4.1
Real memory utilization alert	chkpntRealMemoryTrap	.1.3.6.1.4.1.2620.1.2000.4.2

# OIDs: Memory VSX

The following SNMP queries have to be done on the VSX Host.

RAM - Memory Usage VS ID	vsxStatusMemoryUsageVSId	.1.3.6.1.4.1.2620.1.16.22.3.1.1
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RAM - Memory Usage VS Name	vsxStatusMemoryUsageVSName	.1.3.6.1.4.1.2620.1.16.22.3.1.2
RAM - Memory Usage per VS	vsxStatusMemoryUsage	.1.3.6.1.4.1.2620.1.16.22.3.1.3

```
/usr/bin/snmpwalk -v 3 -l authNoPriv -u user -A pass vsx1 SNMPv2-SMI::enterprises.2620.1.16.22.3
```

```
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.1.0 = INTEGER: 0
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.2.0 = INTEGER: 1
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.3.0 = INTEGER: 2
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.4.0 = INTEGER: 3
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.5.0 = INTEGER: 4
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.6.0 = INTEGER: 5
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.1.7.0 = INTEGER: 6
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.1.0 = STRING: "fwvsx01"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.2.0 = STRING: "fw01"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.3.0 = STRING: "fw02"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.4.0 = STRING: "swi01"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.5.0 = STRING: "swi02"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.6.0 = STRING: "fw03"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.2.7.0 = STRING: "fw04"
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.1.0 = Gauge32: 1995131
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.2.0 = Gauge32: 335056
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.3.0 = Gauge32: 1126517
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.4.0 = Gauge32: 98547
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.5.0 = Gauge32: 64391
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.6.0 = Gauge32: 103978
SNMPv2-SMI::enterprises.2620.1.16.22.3.1.3.7.0 = Gauge32: 86436
```

# Links

Thank you for this BLOG entry [somoit.net](https://somoit.net):

<https://somoit.net/checkpoint-fw/useful-snmp-oids-monitor-vsx>

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