

Gestão de Redes

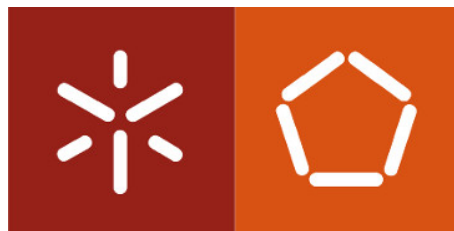
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Trabalho Prático 1

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Conteúdo

1	Questões	2
1.1	Questão 1	2
1.2	Questão 2	4
1.3	Questão 3	5
2	Conclusão	10

1 Questões

1.1 Questão 1

Qual o valor e significado da instância do objeto com o OID lexicograficamente a seguir *mib-2.2.2.1.1* da sua estação de trabalho?

O uso do comando *snmpgetnext* é utilizado quando queremos saber o valor da instância de um objeto do OID inserido como input. O significado do objeto obtido é o index da coluna da interface 1 como podemos observar na figura 1

```
→ ~ snmpgetnext localhost mib-2.2.2.1.1  
IF-MIB::ifIndex.1 = INTEGER: 1
```

Figura 1

Com o comando *snmpwalk* e utilizando a mesma *mib*, obtemos todas as interfaces do nosso sistema (Figura 2)

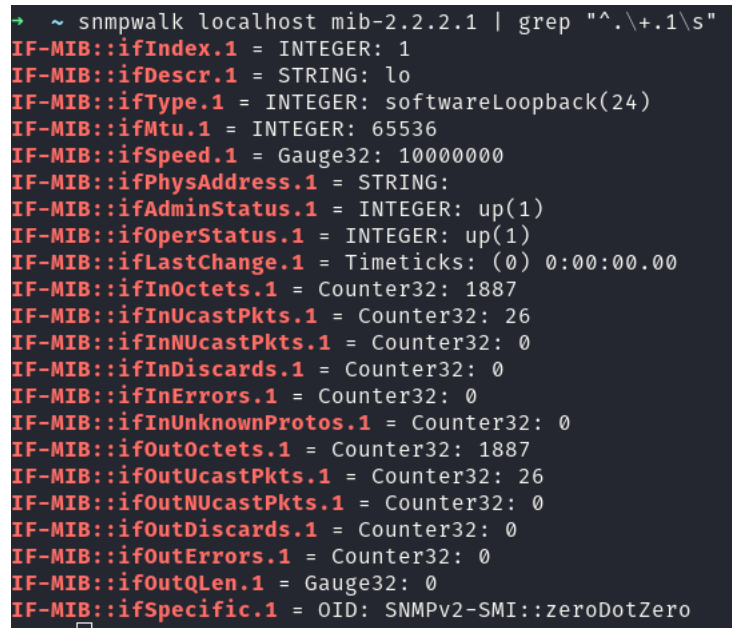
```
→ ~ snmpwalk localhost mib-2.2.2.1.1  
IF-MIB::ifIndex.1 = INTEGER: 1  
IF-MIB::ifIndex.2 = INTEGER: 2  
IF-MIB::ifIndex.3 = INTEGER: 3  
→ ~ □
```

Figura 2

A título de curiosidade, se usarmos o comando :

```
snmpwalk localhost mib-2.2.2.1 | grep "^.\+.1\s"
```

captamos todas as características da tabela da interface 1 (Figura 3)

A terminal window with a dark background and light-colored text. The command prompt shows a user at a shell running the command 'snmpwalk localhost mib-2.2.2.1 | grep '^.\+.1\s'. The output lists various SNMP MIB objects for interface 1, including ifIndex, ifDescr, ifType, ifMtu, ifSpeed, ifPhysAddress, ifAdminStatus, ifOperStatus, ifLastChange, ifInOctets, ifInUcastPkts, ifInNUcastPkts, ifInDiscards, ifInErrors, ifInUnknownProtos, ifOutOctets, ifOutUcastPkts, ifOutNUcastPkts, ifOutDiscards, ifOutErrors, ifOutQLen, and ifSpecific. Each line shows the object name, its value, and its data type (e.g., INTEGER, STRING, Counter32, Gauge32, Timeticks, or OID).

```
+ ~ snmpwalk localhost mib-2.2.2.1 | grep "^.\+.1\s"
IF-MIB::ifIndex.1 = INTEGER: 1
IF-MIB::ifDescr.1 = STRING: lo
IF-MIB::ifType.1 = INTEGER: softwareLoopback(24)
IF-MIB::ifMtu.1 = INTEGER: 65536
IF-MIB::ifSpeed.1 = Gauge32: 10000000
IF-MIB::ifPhysAddress.1 = STRING:
IF-MIB::ifAdminStatus.1 = INTEGER: up(1)
IF-MIB::ifOperStatus.1 = INTEGER: up(1)
IF-MIB::ifLastChange.1 = Timeticks: (0) 0:00:00.00
IF-MIB::ifInOctets.1 = Counter32: 1887
IF-MIB::ifInUcastPkts.1 = Counter32: 26
IF-MIB::ifInNUcastPkts.1 = Counter32: 0
IF-MIB::ifInDiscards.1 = Counter32: 0
IF-MIB::ifInErrors.1 = Counter32: 0
IF-MIB::ifInUnknownProtos.1 = Counter32: 0
IF-MIB::ifOutOctets.1 = Counter32: 1887
IF-MIB::ifOutUcastPkts.1 = Counter32: 26
IF-MIB::ifOutNUcastPkts.1 = Counter32: 0
IF-MIB::ifOutDiscards.1 = Counter32: 0
IF-MIB::ifOutErrors.1 = Counter32: 0
IF-MIB::ifOutQLen.1 = Gauge32: 0
IF-MIB::ifSpecific.1 = OID: SNMPv2-SMI::zeroDotZero
```

Figura 3

ifIndex OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

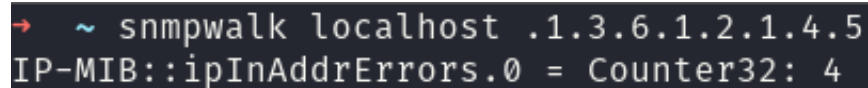
"A unique value for each interface. Its value ranges between 1 and the value of ifNumber. The value for each interface must remain constant at least from one re-initialization of the entity's network management system to the next re-initialization."

::= { ifEntry 1 }

1.2 Questão 2

Usando o SNMP é possível calcular o número de pacotes IP com algum tipo de erro e que eram destinados ao seu sistema

Sim. Como podemos verificar na Figura 4, usando o comando *snmpwalk*, obtive 4 pacotes IP com erros que eram destinados ao meu sistema. Estes erros incluem datagramas que foram eliminados porque o destino final não era o local address.



```
→ ~ snmpwalk localhost .1.3.6.1.2.1.4.5
IP-MIB::ipInAddrErrors.0 = Counter32: 4
```

Figura 4

```
ipInAddrErrors OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of input datagrams discarded because
        the IP address in their IP header's destination
        field was not a valid address to be received at
        this entity. This count includes invalid
        addresses (e.g., 0.0.0.0) and addresses of
        unsupported Classes (e.g., Class E). For entities
        which are not IP Gateways and therefore do not
        forward datagrams, this counter includes datagrams
        discarded because the destination address was not
        a local address."
    ::= { ip 5 }
```

1.3 Questão 3

Quais os processos que estão a correr no seu sistema (Utilize o SNMP para obter a resposta)?

Existe um objeto tabela **hrSWRunTable** (OID 1.3.6.1.2.1.25.4.2) que apresenta todos os dados sobre os processos ativos no meu sistema. Para a listagem apenas do nome destes, eu usei o **OID .1.3.6.1.2.1.25.4.2.1.2** como se pode verificar nas imagens seguintes.

```
+ ~ snmpwalk localhost .1.3.6.1.2.1.25.4.2.1.2
HOST-RESOURCES-MIB::hrSWRunName.1 = STRING: "systemd"
HOST-RESOURCES-MIB::hrSWRunName.2 = STRING: "kthreadd"
HOST-RESOURCES-MIB::hrSWRunName.3 = STRING: "rcu_gp"
HOST-RESOURCES-MIB::hrSWRunName.4 = STRING: "rcu_par_gp"
HOST-RESOURCES-MIB::hrSWRunName.5 = STRING: "kworker/0:0-events"
HOST-RESOURCES-MIB::hrSWRunName.6 = STRING: "kworker/0:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.7 = STRING: "kworker/u24:0-events_unbound"
HOST-RESOURCES-MIB::hrSWRunName.8 = STRING: "mm_percpu_wq"
HOST-RESOURCES-MIB::hrSWRunName.9 = STRING: "ksoftirqd/0"
HOST-RESOURCES-MIB::hrSWRunName.10 = STRING: "rcuc/0"
HOST-RESOURCES-MIB::hrSWRunName.11 = STRING: "rcu_preempt"
HOST-RESOURCES-MIB::hrSWRunName.12 = STRING: "rcub/0"
HOST-RESOURCES-MIB::hrSWRunName.13 = STRING: "migration/0"
HOST-RESOURCES-MIB::hrSWRunName.14 = STRING: "idle_inject/0"
HOST-RESOURCES-MIB::hrSWRunName.15 = STRING: "kworker/0:1-events"
HOST-RESOURCES-MIB::hrSWRunName.16 = STRING: "cpuhp/0"
HOST-RESOURCES-MIB::hrSWRunName.17 = STRING: "cpuhp/1"
HOST-RESOURCES-MIB::hrSWRunName.18 = STRING: "idle_inject/1"
HOST-RESOURCES-MIB::hrSWRunName.19 = STRING: "migration/1"
HOST-RESOURCES-MIB::hrSWRunName.20 = STRING: "rcuc/1"
HOST-RESOURCES-MIB::hrSWRunName.21 = STRING: "ksoftirqd/1"
HOST-RESOURCES-MIB::hrSWRunName.23 = STRING: "kworker/1:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.24 = STRING: "cpuhp/2"
HOST-RESOURCES-MIB::hrSWRunName.25 = STRING: "idle_inject/2"
HOST-RESOURCES-MIB::hrSWRunName.26 = STRING: "migration/2"
HOST-RESOURCES-MIB::hrSWRunName.27 = STRING: "rcuc/2"
HOST-RESOURCES-MIB::hrSWRunName.28 = STRING: "ksoftirqd/2"
HOST-RESOURCES-MIB::hrSWRunName.30 = STRING: "kworker/2:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.31 = STRING: "cpuhp/3"
HOST-RESOURCES-MIB::hrSWRunName.32 = STRING: "idle_inject/3"
HOST-RESOURCES-MIB::hrSWRunName.33 = STRING: "migration/3"
HOST-RESOURCES-MIB::hrSWRunName.34 = STRING: "rcuc/3"
HOST-RESOURCES-MIB::hrSWRunName.35 = STRING: "ksoftirqd/3"
HOST-RESOURCES-MIB::hrSWRunName.37 = STRING: "kworker/3:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.38 = STRING: "cpuhp/4"
HOST-RESOURCES-MIB::hrSWRunName.39 = STRING: "idle_inject/4"
HOST-RESOURCES-MIB::hrSWRunName.40 = STRING: "migration/4"
HOST-RESOURCES-MIB::hrSWRunName.41 = STRING: "rcuc/4"
HOST-RESOURCES-MIB::hrSWRunName.42 = STRING: "ksoftirqd/4"
HOST-RESOURCES-MIB::hrSWRunName.44 = STRING: "kworker/4:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.45 = STRING: "cpuhp/5"
HOST-RESOURCES-MIB::hrSWRunName.46 = STRING: "idle_inject/5"
HOST-RESOURCES-MIB::hrSWRunName.47 = STRING: "migration/5"
HOST-RESOURCES-MIB::hrSWRunName.48 = STRING: "rcuc/5"
HOST-RESOURCES-MIB::hrSWRunName.49 = STRING: "ksoftirqd/5"
HOST-RESOURCES-MIB::hrSWRunName.50 = STRING: "kworker/5:0-pm"
HOST-RESOURCES-MIB::hrSWRunName.51 = STRING: "kworker/5:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.52 = STRING: "cpuhp/6"
HOST-RESOURCES-MIB::hrSWRunName.53 = STRING: "idle_inject/6"
HOST-RESOURCES-MIB::hrSWRunName.54 = STRING: "migration/6"
```

Figura 5

```
HOST-RESOURCES-MIB::hrSWRunName.55 = STRING: "rcuc/6"
HOST-RESOURCES-MIB::hrSWRunName.56 = STRING: "ksoftirqd/6"
HOST-RESOURCES-MIB::hrSWRunName.58 = STRING: "kworker/6:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.59 = STRING: "cpuhp/7"
HOST-RESOURCES-MIB::hrSWRunName.60 = STRING: "idle_inject/7"
HOST-RESOURCES-MIB::hrSWRunName.61 = STRING: "migration/7"
HOST-RESOURCES-MIB::hrSWRunName.62 = STRING: "rcuc/7"
HOST-RESOURCES-MIB::hrSWRunName.63 = STRING: "ksoftirqd/7"
HOST-RESOURCES-MIB::hrSWRunName.65 = STRING: "kworker/7:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.66 = STRING: "cpuhp/8"
HOST-RESOURCES-MIB::hrSWRunName.67 = STRING: "idle_inject/8"
HOST-RESOURCES-MIB::hrSWRunName.68 = STRING: "migration/8"
HOST-RESOURCES-MIB::hrSWRunName.69 = STRING: "rcuc/8"
HOST-RESOURCES-MIB::hrSWRunName.70 = STRING: "ksoftirqd/8"
HOST-RESOURCES-MIB::hrSWRunName.72 = STRING: "kworker/8:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.73 = STRING: "cpuhp/9"
HOST-RESOURCES-MIB::hrSWRunName.74 = STRING: "idle_inject/9"
HOST-RESOURCES-MIB::hrSWRunName.75 = STRING: "migration/9"
HOST-RESOURCES-MIB::hrSWRunName.76 = STRING: "rcuc/9"
HOST-RESOURCES-MIB::hrSWRunName.77 = STRING: "ksoftirqd/9"
HOST-RESOURCES-MIB::hrSWRunName.79 = STRING: "kworker/9:0H"
HOST-RESOURCES-MIB::hrSWRunName.80 = STRING: "cpuhp/10"
HOST-RESOURCES-MIB::hrSWRunName.81 = STRING: "idle_inject/10"
HOST-RESOURCES-MIB::hrSWRunName.82 = STRING: "migration/10"
HOST-RESOURCES-MIB::hrSWRunName.83 = STRING: "rcuc/10"
HOST-RESOURCES-MIB::hrSWRunName.84 = STRING: "ksoftirqd/10"
HOST-RESOURCES-MIB::hrSWRunName.86 = STRING: "kworker/10:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.87 = STRING: "cpuhp/11"
HOST-RESOURCES-MIB::hrSWRunName.88 = STRING: "idle_inject/11"
HOST-RESOURCES-MIB::hrSWRunName.89 = STRING: "migration/11"
HOST-RESOURCES-MIB::hrSWRunName.90 = STRING: "rcuc/11"
HOST-RESOURCES-MIB::hrSWRunName.91 = STRING: "ksoftirqd/11"
HOST-RESOURCES-MIB::hrSWRunName.93 = STRING: "kworker/11:0H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.94 = STRING: "kdevtmpfs"
HOST-RESOURCES-MIB::hrSWRunName.95 = STRING: "netns"
HOST-RESOURCES-MIB::hrSWRunName.96 = STRING: "rcu_tasks_kthre"
HOST-RESOURCES-MIB::hrSWRunName.97 = STRING: "kauditd"
HOST-RESOURCES-MIB::hrSWRunName.98 = STRING: "khungtaskd"
HOST-RESOURCES-MIB::hrSWRunName.99 = STRING: "oom_reaper"
HOST-RESOURCES-MIB::hrSWRunName.100 = STRING: "writeback"
HOST-RESOURCES-MIB::hrSWRunName.101 = STRING: "kcompactd0"
HOST-RESOURCES-MIB::hrSWRunName.102 = STRING: "ksmd"
HOST-RESOURCES-MIB::hrSWRunName.103 = STRING: "khugepaged"
HOST-RESOURCES-MIB::hrSWRunName.111 = STRING: "kworker/3:1-cgroup_destroy"
HOST-RESOURCES-MIB::hrSWRunName.112 = STRING: "kworker/1:1-events"
HOST-RESOURCES-MIB::hrSWRunName.193 = STRING: "kintegrityd"
HOST-RESOURCES-MIB::hrSWRunName.194 = STRING: "kblockd"
HOST-RESOURCES-MIB::hrSWRunName.195 = STRING: "blkcg_punt_bio"
HOST-RESOURCES-MIB::hrSWRunName.197 = STRING: "ata_sff"
HOST-RESOURCES-MIB::hrSWRunName.198 = STRING: "edac-poller"
```

Figura 6

```

HOST-RESOURCES-MIB::hrSWRunName.199 = STRING: "devfreq_wq"
HOST-RESOURCES-MIB::hrSWRunName.200 = STRING: "watchdogd"
HOST-RESOURCES-MIB::hrSWRunName.201 = STRING: "kworker/4:1-events"
HOST-RESOURCES-MIB::hrSWRunName.203 = STRING: "kswapd0"
HOST-RESOURCES-MIB::hrSWRunName.206 = STRING: "kthrotld"
HOST-RESOURCES-MIB::hrSWRunName.207 = STRING: "irq/124-aerdrv"
HOST-RESOURCES-MIB::hrSWRunName.208 = STRING: "irq/124-pcie-dp"
HOST-RESOURCES-MIB::hrSWRunName.209 = STRING: "acpi_thermal_pm"
HOST-RESOURCES-MIB::hrSWRunName.210 = STRING: "nvme-wq"
HOST-RESOURCES-MIB::hrSWRunName.211 = STRING: "nvme-reset-wq"
HOST-RESOURCES-MIB::hrSWRunName.212 = STRING: "nvme-delete-wq"
HOST-RESOURCES-MIB::hrSWRunName.213 = STRING: "scsi_eh_0"
HOST-RESOURCES-MIB::hrSWRunName.214 = STRING: "scsi_tmf_0"
HOST-RESOURCES-MIB::hrSWRunName.215 = STRING: "scsi_eh_1"
HOST-RESOURCES-MIB::hrSWRunName.216 = STRING: "scsi_tmf_1"
HOST-RESOURCES-MIB::hrSWRunName.217 = STRING: "scsi_eh_2"
HOST-RESOURCES-MIB::hrSWRunName.218 = STRING: "scsi_tmf_2"
HOST-RESOURCES-MIB::hrSWRunName.219 = STRING: "scsi_eh_3"
HOST-RESOURCES-MIB::hrSWRunName.220 = STRING: "scsi_tmf_3"
HOST-RESOURCES-MIB::hrSWRunName.221 = STRING: "scsi_eh_4"
HOST-RESOURCES-MIB::hrSWRunName.222 = STRING: "scsi_tmf_4"
HOST-RESOURCES-MIB::hrSWRunName.223 = STRING: "scsi_eh_5"
HOST-RESOURCES-MIB::hrSWRunName.224 = STRING: "scsi_tmf_5"
HOST-RESOURCES-MIB::hrSWRunName.226 = STRING: "kworker/u24:3-events_unbound"
HOST-RESOURCES-MIB::hrSWRunName.227 = STRING: "kworker/u24:4-events_unbound"
HOST-RESOURCES-MIB::hrSWRunName.228 = STRING: "kworker/u24:5-events_unbound"
HOST-RESOURCES-MIB::hrSWRunName.230 = STRING: "kworker/7:1-events"
HOST-RESOURCES-MIB::hrSWRunName.231 = STRING: "ipv6_addrconf"
HOST-RESOURCES-MIB::hrSWRunName.232 = STRING: "kworker/8:1-events"
HOST-RESOURCES-MIB::hrSWRunName.244 = STRING: "kstrp"
HOST-RESOURCES-MIB::hrSWRunName.250 = STRING: "zswap-shrink"
HOST-RESOURCES-MIB::hrSWRunName.251 = STRING: "kworker/u25:0-rb_allocator"
HOST-RESOURCES-MIB::hrSWRunName.253 = STRING: "kworker/9:1-events"
HOST-RESOURCES-MIB::hrSWRunName.263 = STRING: "charger_manager"
HOST-RESOURCES-MIB::hrSWRunName.265 = STRING: "kworker/10:1-pm"
HOST-RESOURCES-MIB::hrSWRunName.266 = STRING: "kworker/11:1-mm_percpu_wq"
HOST-RESOURCES-MIB::hrSWRunName.267 = STRING: "kworker/8:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.268 = STRING: "kworker/6:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.307 = STRING: "kworker/9:2-events"
HOST-RESOURCES-MIB::hrSWRunName.308 = STRING: "kworker/8:2-cgroup_destroy"
HOST-RESOURCES-MIB::hrSWRunName.313 = STRING: "kworker/0:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.319 = STRING: "kworker/11:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.320 = STRING: "jbd2/sdb4-8"
HOST-RESOURCES-MIB::hrSWRunName.321 = STRING: "ext4-rsv-conver"
HOST-RESOURCES-MIB::hrSWRunName.322 = STRING: "kworker/5:1H-kblockd"
HOST-RESOURCES-MIB::hrSWRunName.327 = STRING: "kworker/10:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.329 = STRING: "kworker/10:2-cgroup_destroy"
HOST-RESOURCES-MIB::hrSWRunName.331 = STRING: "kworker/7:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.333 = STRING: "kworker/2:1H-events_highpri"
HOST-RESOURCES-MIB::hrSWRunName.351 = STRING: "systemd-journal"

```

Figura 7


```
HOST-RESOURCES-MIB:hrSWRunName.352 = STRING: "kworker/9:1H-kblockd"
HOST-RESOURCES-MIB:hrSWRunName.362 = STRING: "kworker/3:1H-events_highpri"
HOST-RESOURCES-MIB:hrSWRunName.365 = STRING: "kworker/1:1H-events_highpri"
HOST-RESOURCES-MIB:hrSWRunName.366 = STRING: "systemd-udevd"
HOST-RESOURCES-MIB:hrSWRunName.407 = STRING: "cryptd"
HOST-RESOURCES-MIB:hrSWRunName.412 = STRING: "tpm_dev_wq"
HOST-RESOURCES-MIB:hrSWRunName.441 = STRING: "kworker/6:2-events"
HOST-RESOURCES-MIB:hrSWRunName.444 = STRING: "kworker/4:1H-events_highpri"
HOST-RESOURCES-MIB:hrSWRunName.445 = STRING: "kworker/1:2-events"
HOST-RESOURCES-MIB:hrSWRunName.446 = STRING: "irq/127-mei_me"
HOST-RESOURCES-MIB:hrSWRunName.453 = STRING: "cfg80211"
HOST-RESOURCES-MIB:hrSWRunName.456 = STRING: "kworker/2:2-events"
HOST-RESOURCES-MIB:hrSWRunName.471 = STRING: "irq/128-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.472 = STRING: "irq/129-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.473 = STRING: "irq/130-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.474 = STRING: "irq/131-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.475 = STRING: "irq/132-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.476 = STRING: "irq/133-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.477 = STRING: "irq/134-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.478 = STRING: "irq/135-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.479 = STRING: "irq/136-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.480 = STRING: "irq/137-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.481 = STRING: "irq/138-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.482 = STRING: "irq/139-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.483 = STRING: "irq/140-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.484 = STRING: "irq/141-iwlwifi"
HOST-RESOURCES-MIB:hrSWRunName.518 = STRING: "kworker/11:4-events"
HOST-RESOURCES-MIB:hrSWRunName.519 = STRING: "kworker/3:2-events"
HOST-RESOURCES-MIB:hrSWRunName.531 = STRING: "nvkm-disp"
HOST-RESOURCES-MIB:hrSWRunName.538 = STRING: "ttm_swap"
HOST-RESOURCES-MIB:hrSWRunName.608 = STRING: "dbus-daemon"
HOST-RESOURCES-MIB:hrSWRunName.609 = STRING: "NetworkManager"
HOST-RESOURCES-MIB:hrSWRunName.620 = STRING: "systemd-logind"
HOST-RESOURCES-MIB:hrSWRunName.809 = STRING: "kmemstick"
HOST-RESOURCES-MIB:hrSWRunName.816 = STRING: "kworker/u25:2-rb_allocator"
HOST-RESOURCES-MIB:hrSWRunName.825 = STRING: "login"
HOST-RESOURCES-MIB:hrSWRunName.827 = STRING: "kworker/4:2-events"
HOST-RESOURCES-MIB:hrSWRunName.833 = STRING: "snmpd"
HOST-RESOURCES-MIB:hrSWRunName.958 = STRING: "wpa_supplicant"
HOST-RESOURCES-MIB:hrSWRunName.989 = STRING: "kworker/2:3-events"
HOST-RESOURCES-MIB:hrSWRunName.992 = STRING: "systemd"
HOST-RESOURCES-MIB:hrSWRunName.993 = STRING: "(sd-pam)"
HOST-RESOURCES-MIB:hrSWRunName.998 = STRING: "zsh"
HOST-RESOURCES-MIB:hrSWRunName.1005 = STRING: "startx"
HOST-RESOURCES-MIB:hrSWRunName.1027 = STRING: "xinit"
HOST-RESOURCES-MIB:hrSWRunName.1028 = STRING: "Xorg"
HOST-RESOURCES-MIB:hrSWRunName.1065 = STRING: "i3"
HOST-RESOURCES-MIB:hrSWRunName.1068 = STRING: "nm-applet"
HOST-RESOURCES-MIB:hrSWRunName.1076 = STRING: "xcompmgr"
HOST-RESOURCES-MIB:hrSWRunName.1094 = STRING: "firefox"
```

Figura 8

```

HOST-RESOURCES-MIB::hrSWRunName.1099 = STRING: "polybar"
HOST-RESOURCES-MIB::hrSWRunName.1112 = STRING: "dbus-daemon"
HOST-RESOURCES-MIB::hrSWRunName.1114 = STRING: "pulseaudio"
HOST-RESOURCES-MIB::hrSWRunName.1115 = STRING: "at-spi-bus-laun"
HOST-RESOURCES-MIB::hrSWRunName.1121 = STRING: "dbus-daemon"
HOST-RESOURCES-MIB::hrSWRunName.1122 = STRING: "rtkit-daemon"
HOST-RESOURCES-MIB::hrSWRunName.1127 = STRING: "polkitd"
HOST-RESOURCES-MIB::hrSWRunName.1143 = STRING: "at-spi2-registr"
HOST-RESOURCES-MIB::hrSWRunName.1179 = STRING: "gsettings-helpe"
HOST-RESOURCES-MIB::hrSWRunName.1238 = STRING: "Web Content"
HOST-RESOURCES-MIB::hrSWRunName.1336 = STRING: "WebExtensions"
HOST-RESOURCES-MIB::hrSWRunName.1379 = STRING: "Web Content"
HOST-RESOURCES-MIB::hrSWRunName.1415 = STRING: "kworker/5:3-events_freezable"
HOST-RESOURCES-MIB::hrSWRunName.1444 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1447 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1449 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1469 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1486 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1522 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1551 = STRING: "Discord"
HOST-RESOURCES-MIB::hrSWRunName.1695 = STRING: "mbrowse"
HOST-RESOURCES-MIB::hrSWRunName.1752 = STRING: "kworker/6:0-memcg_kmem_cache"
HOST-RESOURCES-MIB::hrSWRunName.1836 = STRING: "kworker/1:0-events"
HOST-RESOURCES-MIB::hrSWRunName.1846 = STRING: "kworker/u24:2-events_unbound"
HOST-RESOURCES-MIB::hrSWRunName.1852 = STRING: "kworker/7:3-events"
HOST-RESOURCES-MIB::hrSWRunName.1866 = STRING: "kworker/0:2"
HOST-RESOURCES-MIB::hrSWRunName.1867 = STRING: "kworker/3:0-events"
HOST-RESOURCES-MIB::hrSWRunName.1885 = STRING: "Web Content"
HOST-RESOURCES-MIB::hrSWRunName.2042 = STRING: "kworker/1:3-events"
HOST-RESOURCES-MIB::hrSWRunName.2093 = STRING: "Web Content"
HOST-RESOURCES-MIB::hrSWRunName.2132 = STRING: "Web Content"
HOST-RESOURCES-MIB::hrSWRunName.2173 = STRING: "kworker/6:1-memcg_kmem_cache"
HOST-RESOURCES-MIB::hrSWRunName.2177 = STRING: "dconf-service"
HOST-RESOURCES-MIB::hrSWRunName.2192 = STRING: "kworker/8:0"
HOST-RESOURCES-MIB::hrSWRunName.2193 = STRING: "kworker/3:3-cgroup_destroy"
HOST-RESOURCES-MIB::hrSWRunName.2194 = STRING: "kworker/4:0-events"
HOST-RESOURCES-MIB::hrSWRunName.2197 = STRING: "xclip"
HOST-RESOURCES-MIB::hrSWRunName.2199 = STRING: "termite"
HOST-RESOURCES-MIB::hrSWRunName.2203 = STRING: "zsh"
HOST-RESOURCES-MIB::hrSWRunName.2217 = STRING: "snmpwalk"

```

Figura 9

Podemos também confirmar usando **hrSystemProcess** com OID .1.3.6.1.2.1.25.1.6

```

→ ~ snmpwalk localhost .1.3.6.1.2.1.25.1.6
HOST-RESOURCES-MIB::hrSystemProcesses.0 = Gauge32: 248

```

Figura 10

2 Conclusão

Com este trabalho, consegui entender e interpretar melhor os conhecimentos lecionados nas aulas práticas e teóricas, pois permitiu ter mais interação direta com o protocolo SNMP.

Por fim, é de salientar que foi importante uma pequena leitura no **Management Information Base for Network Management of TCP/IP-based internets: MIB-II**, referenciado no fim do relatório.

Referências

[1] <https://tools.ietf.org/html/rfc1213>