

使用SNMPWalk和交换机CLI配置不匹配的“消耗”电源内联值

目录

[简介](#)

[问题](#)

[解决方案](#)

[相关信息](#)

简介

本文档介绍了为了从网络管理系统(NMS)获取思科交换机接口上的使用功率而对 `pethMainPseConsumentPower` 对象标识符(OID)进行轮询的混淆。

问题

简单网络管理协议(SNMP)OID - 1.3.6.1.2.1.105.1.3.1.1.4(`pethMainPseConsumptionPower`) 在轮询以获得使用功率 (瓦) 时，返回的值与思科交换机上通常使用的CLI不匹配。

示例：

```
NMS>snmpwalk -c public -v2c 10.106.36.239 1.3.6.1.2.1.105.1.3.1.1.4
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.2.1 = Gauge32: 370
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.3.1 = INTEGER: 1
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.4.1 = Gauge32: 121
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.5.1 = INTEGER: 0
```

```
Switch#
```

```
Show power inline
```

```
Available:370.0(w)
```

```
Used:279.9(w) Remaining:90.1(w)
```

Interface	Admin	Oper	Power (Watts)	Device	Class	Max
Fa0/1	auto	off	0.0	n/a	n/a	15.4

Fa0/2	auto	off	0.0	n/a	n/a	15.4
Fa0/3	auto	off	0.0	n/a	n/a	15.4
Fa0/4	auto	off	0.0	n/a	n/a	15.4
Fa0/5	auto	on	3.3	IP Phone 7821	1	15.4
Fa0/6	auto	off	0.0	n/a	n/a	15.4
Fa0/7	auto	off	0.0	n/a	n/a	15.4
Fa0/8	auto	off	0.0	n/a	n/a	15.4
Fa0/9	auto	on	3.3	IP Phone 7821	1	15.4
Fa0/10	auto	off	0.0	n/a	n/a	15.4
Fa0/11	auto	off	0.0	n/a	n/a	15.4
Fa0/12	auto	off	0.0	n/a	n/a	15.4
Fa0/13	auto	on	3.3	IP Phone 7821	1	15.4
Fa0/14	auto	on	13.7	IP Phone DX650	4	15.4
Fa0/15	auto	on	3.3	IP Phone 7821	1	15.4

以前的行为在以下硬件和软件版本中出现：

```

Switch Ports Model          SW Version          SW Image
-----
*    1 52    WS-C2960+48PST-S  15.0(2)SE6         C2960-LANLITEK9-M
--

```

```

Switch Ports Model          SW Version          SW Image
-----
*    1 26    WS-C2960+24PC-S  15.0(2)SE6         C2960-LANLITEK9-M
--

```

```

Switch Ports Model          SW Version          SW Image
-----
*    1 52    WS-C2960S-48LPS-L 15.0(2)EX5         C2960S-UNIVERSALK9-M
    2 52    WS-C2960S-48LPS-L 15.0(2)EX5         C2960S-UNIVERSALK9-M

```

解决方案

OID `pethMainPseConsumptionPower` 返回接口的以太网供电(PoE)消耗的功率。对于像2960这样的交换机，该对象标识符具有功率感应和管制功能，它为PoE设备提供实际功耗。通过 `show power inline police` 命令可以看到这一点，该命令提供实际功耗，以及端口单个功耗（在“操作电源”下以及末尾的“总计”下）。

```
NMS> snmpwalk -v 2c -c public 10.106.36.239 1.3.6.1.2.1.105.1.3.1.1
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.2.1 = Gauge32: 462
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.3.1 = INTEGER: 1
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.4.1 = Gauge32: 23
```

```
SNMPv2-SMI::mib-2.105.1.3.1.1.5.1 = INTEGER: 0
```

```
Switch#
```

show power inline police

Available:

462.0 (w)

Used:43.6 (w) Remaining:418.4 (w)

Interface	Admin State	Oper State	Admin Police	Oper Police	Cutoff Power	Oper Power
Gi0/1	auto	on	none	n/a	n/a	5.7
Gi0/2	auto	on	none	n/a	n/a	3.9
Gi0/3	auto	on	none	n/a	n/a	5.2
Gi0/4	auto	on	none	n/a	n/a	8.7
Gi0/5	auto	off	none	n/a	n/a	n/a
Gi0/6	auto	off	none	n/a	n/a	n/a
Gi0/7	auto	off	none	n/a	n/a	n/a
Gi0/8	auto	off	none	n/a	n/a	n/a
Gi0/9	auto	off	none	n/a	n/a	n/a
Gi0/10	auto	off	none	n/a	n/a	n/a
Gi0/11	auto	off	none	n/a	n/a	n/a
Gi0/12	auto	off	none	n/a	n/a	n/a
Gi0/13	auto	off	none	n/a	n/a	n/a
Gi0/14	auto	off	none	n/a	n/a	n/a
Gi0/15	auto	off	none	n/a	n/a	n/a
Gi0/16	auto	off	none	n/a	n/a	n/a
Gi0/17	auto	off	none	n/a	n/a	n/a
Gi0/18	auto	off	none	n/a	n/a	n/a
Gi0/19	auto	off	none	n/a	n/a	n/a
Interface	Admin State	Oper State	Admin Police	Oper Police	Cutoff Power	Oper Power
Gi0/20	auto	off	none	n/a	n/a	n/a
Gi0/21	auto	off	none	n/a	n/a	n/a
Gi0/22	auto	off	none	n/a	n/a	n/a
Gi0/23	auto	off	none	n/a	n/a	n/a
Gi0/24	auto	off	none	n/a	n/a	n/a
Gi0/25	auto	off	none	n/a	n/a	n/a
Gi0/26	auto	off	none	n/a	n/a	n/a
Gi0/27	auto	off	none	n/a	n/a	n/a
Gi0/28	auto	off	none	n/a	n/a	n/a
Gi0/29	auto	off	none	n/a	n/a	n/a
Gi0/30	auto	off	none	n/a	n/a	n/a
Gi0/31	auto	off	none	n/a	n/a	n/a
Gi0/32	auto	off	none	n/a	n/a	n/a
Gi0/33	auto	off	none	n/a	n/a	n/a
Gi0/34	auto	off	none	n/a	n/a	n/a
Gi0/35	auto	off	none	n/a	n/a	n/a
Gi0/36	auto	off	none	n/a	n/a	n/a
Gi0/37	auto	off	none	n/a	n/a	n/a
Gi0/38	auto	off	none	n/a	n/a	n/a
Gi0/39	auto	off	none	n/a	n/a	n/a
Gi0/40	auto	off	none	n/a	n/a	n/a
Gi0/41	auto	off	none	n/a	n/a	n/a
Interface	Admin State	Oper State	Admin Police	Oper Police	Cutoff Power	Oper Power
Gi0/42	auto	off	none	n/a	n/a	n/a
Gi0/43	auto	off	none	n/a	n/a	n/a
Gi0/44	auto	off	none	n/a	n/a	n/a
Gi0/45	auto	off	none	n/a	n/a	n/a

Gi0/46	auto	off	none	n/a	n/a	n/a
Gi0/47	auto	off	none	n/a	n/a	n/a
Gi0/48	auto	off	none	n/a	n/a	n/a

Totals:

23.4

USED功率列表表示分配给端口的PoE量。

AVAILABLE电源列表表示系统中PoE的总量。

剩余**电源**列表表示 (可用 — 已用)

因此，用于比较pethMainPseConsumentPower的SNMPWALK输出的正确命令是show power inline police。

相关信息

[配置以太网供电](#)