

PowerC

Independent from
third party libraries

Powertools^{2.3}

Automation tools

For switches



New proprietary SNMP engine now!
Command line option like NetSNMP
Avaya phone detailed information

AVAYA
IP Phones
detailed information
with Unicode names

PowerPORTSv2

MAC/IP/VENDOR information about connected devices
New feature! ARP data from Cisco ASA by SSH

Valid values

- DES, AES
- Md5, SHA
- 2, 3

Switch information

Port Data

SNMP version

SNMP User

Auth protocol

Auth password

Encryption protocol

Encryption password

Switch IP address

Router IP address

avayadata lavaya liststation service URI

file output file name with xml extension

```
PS C:\lab>. \powerportsv2.exe -v 3 -u SNMPv3-U -a sha -A key123 -x aes -X key123 -as 192.168.0.253 -r 192.168.0.1 -avayadata http://10.0.2.2/api/liststation -file labswports.xml
```

```
Switch ip: 192.168.0.253 switch name: PowerC_SW3750 Switch location: PowerC_Lab
Cisco IOS Software, C3750 Software (C3750-IPSERVICESK9-M), Version 12.2(55)SE, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2010 by Cisco Systems, Inc.
Compiled Sat 07-Aug-10 22:45 by prod_rel_team
```

PORT	MAC	VLAN	IP	HOSTNAME	VENDOR	PHONE EXT	PHONE NAME
Fa1/0/6	0019.b985.8bbd	1	192.168.0.162	dell-pc.powerc.local.	Dell Inc.		
Fa1/0/15	c81f.eaa6.4c16	180	192.168.18.12		Avaya Inc	428	Tectr, WML

New feature:
get Avaya phone information
from special service
Phone extension and Unicode name

PowerPORTSv2 details

Mandatory parameters is bold:

- v** SNMP protocol version, specify 2 or 3
- c** SNMP community (mandatory parameter if SNMP protocol version 2, or option **-asv2** will be use)
- p** SNMP port - 161 by default
- as** The switches IP addresses divided by comas, and/or ranges Example: 192.168.0.1,192.168.0.7-10. in some cases, Moxa devices can stuck while sending MAC addresses table by SNMP, in this case you can specify ip addresses of these switches in the following format: **Login:Password@ip** then MAC addresses table will be retrieve by SSH (Please enable SSH and Login mode at switches)
- r** The routers IP addresses, divided by comas, and/or ranges, Example: 192.168.0.1,192.168.0.2
- r2** The SNMP v2 only routers IP addresses, divided by comas, and/or ranges, Example: 192.168.0.1,192.168.0.2
- file** File name with xml extension, file will be save in current directory, xml can be open in the MS Excel
- trunk** Show Access and Trunk ports
- asv2** IP addresses of the switches which can work only with SNMP version 2 (ip addresses must be specified as in the option **-as**) This parameter work only with the SNMP community option
- hv** Do not show ports which contain MAC addresses in specific VLAN xx, example: **-hv 176**
- dns** IP address of the DNS server
- voice** Specify the voice Vlan ID (only for D-Link and Extreme switches)
- profile** Use profile file instead of command line options (Only in commercial version)

For SNMPv3:

- u** Username
- a** Auth protocol, SHA or Md5
- A** Auth password
- x** Priv protocol, DES or AES
- X** Priv password

For Cisco ASA (as router):

- sshu** SSH username
- sshp** SSH password
- sshe** SSH enable level 3 password

If You use PowerAvaya service

- avayadata** avaya liststation service URI, example: http://192.168.17.7/api/liststation
- help** Print help

PowerPORTSv2 switches configuration

SNMP v3 cisco switch configuration example

```
ip access-list standard SNMPv3ACL
permit 192.168.0.0 0.0.0.255

snmp-server view CV1 iso included
snmp-server group SNMPv3-G v3 priv read CV1 access SNMPv3ACL
snmp-server group SNMPv3-G v3 auth context vlan- match prefix

snmp-server user UserV3 SNMPv3-G v3 auth sha key123 priv aes 128 key123
```

ASA configuration example

```
enable password TestPassword level 3
username ArpUser password TestPasswordForUser privilege 3
aaa authorization command LOCAL
privilege cmd level 3 mode exec command terminal
privilege show level 3 mode exec command arp
privilege show level 3 mode exec command switch

snmp-server group SNMPv3-G v3 priv
snmp-server user UserV3 SNMPv3-G v3 auth sha key123 priv aes 128 key123
snmp-server host inside 192.168.0.48 version 3 UserV3
```

SNMP v3 Extreme EXOS configuration example

```
configure snmpv3 add user UserV3 authentication sha Key12345678 privacy aes 128 KeyPriv12345
configure snmpv3 add group SNMPv3-G user UserV3 sec-model usm
configure snmpv3 add access "SNMPv3-G" sec-model usm sec-level priv read-view "defaultAdminView" notify-view "defaultNotifyView"
enable snmp access snmpv3
```



```
create snmp view ReadView 1 1 view_type included
create snmp group SNMPv2-G v2c read_view ReadView notify_view ReadView
create snmp user UserSn SNMPv2-G v2c
create snmp community getportdata UserSn
```

Warning! on D-Link switch, when it use as inter VLAN router
you need configure IP interface name same as corresponding VLAN name



SNMP v3 huawei Sxxxx switch configuration example

```
snmp-agent
snmp-agent mib-view included isoview iso
snmp-agent group v3 SNMPv3-G privacy read-view isoview notify-view isoview
snmp-agent usm-user v3 UserV3 authentication-mode sha
enter and confirm password

snmp-agent usm-user v3 UserV3 privacy-mode aes128
enter and confirm password
```

CDPLLD

Display CDP and LLDP data.
Useful tools for fast diagnostic



Switch information

CDP information

LLDP information

```
PS C:\lab\cdplldpv2> .\cdplldp.exe -v 3 -u SNMPv3-U -a sha -A key123 -x aes -X key123 -i 192.168.0.253 -file LabSwitchCLD.xml
Name: PowerC_SW3750 Location: PowerC_Lab
Cisco IOS Software, C3750 Software (C3750-IPSERVICESK9-M), Version 12.2(55)SE, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2010 by Cisco Systems, Inc.
Compiled Sat 07-Aug-10 22:45 by prod_rel_team

CDP data
+-----+-----+-----+-----+-----+
| LOCAL PORT | NAME | PORT | IP | PLATFORM |
+-----+-----+-----+-----+-----+
| Fa1/0/1 | APccef.4820.6346 | GigabitEthernet0.1 | 192.168.0.153 | cisco AIR-LAP1142N-E-K9 |
| Fa1/0/1 | WLCv | GigabitEthernet0/0/1 | 192.168.0.198 | AIR-CTVM-K9 |
| Fa1/0/24 | Floor2_new | GigabitEthernet0.1 | 192.168.0.160 | cisco AIR-CAP2702I-A-K9 |
+-----+-----+-----+-----+-----+

LLDP data
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| LOCAL PORT | CHASSIS ID | NAME | PORT | IP | MED CAP | VENDOR | MODEL | S/N | DESCR |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Fa1/0/1 | 64a0e726e9d7 | APccef.4820.6346.POWERC.LOCAL | Gi0 | 192.168.0.153 | Bridge, | Avaya | J179 | 19WZ17411DRT | Cisco IOS Software... |
| Fa1/0/15 | 01c0a8b40a | AVXA64C18 | c81feaa64c18 | 192.168.18.12 | Bridge,Phone, | Avaya | J179 | 19WZ17411DRT | Cisco IOS Software... |
| Fa1/0/24 | 88f03157b327 | Floor2_new.POWERC.LOCAL | Gi0 | 192.168.0.160 | Bridge, | Avaya | J179 | 19WZ17411DRT | Cisco IOS Software... |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

CDPLLDP details

Mandatory parameters is bold:

-v SNMP protocol version: 2 or 3
-c SNMP community (if protocol version 2)
-p port, 161 default
-i Switch IP address
-file output file name with xml extension

For SNMPv3:

-u Username
-a Auth protocol, SHA or Md5
-A Auth password
-x Priv protocol, DES or AES
-X Priv password

--help print help

Warning:

Current version for Cisco switches/routers only

Createprofile

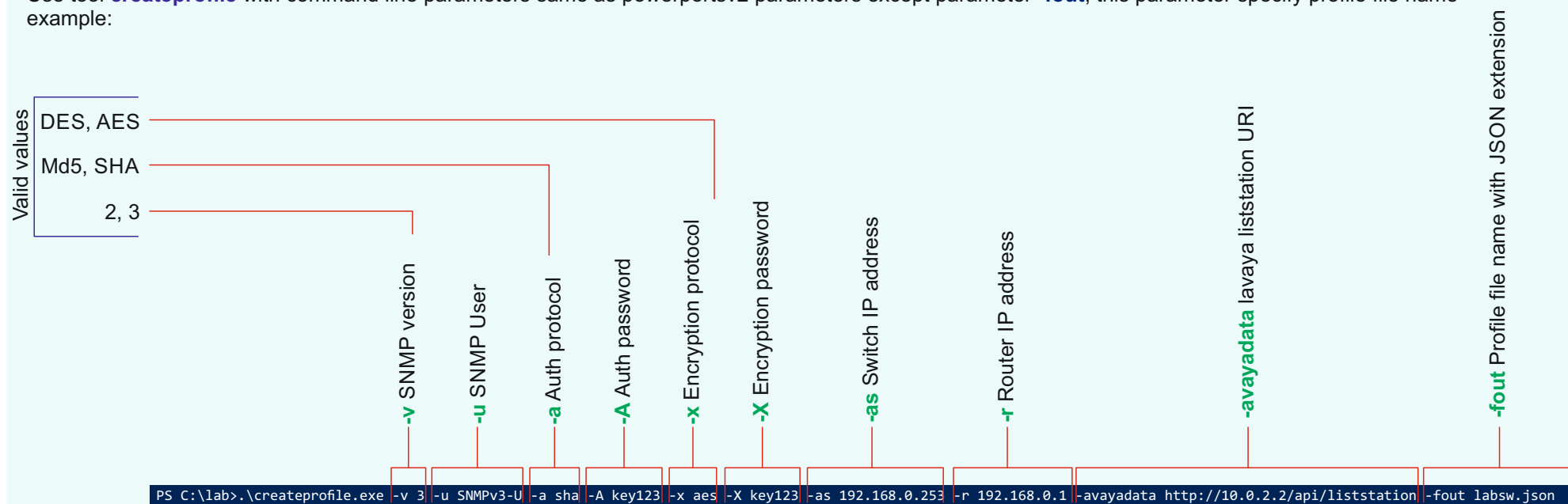
For use tool **powerportsv2** You need to specify many parameters as command line options, such as SNMP username auth and priv protocol and passwords. If You work with the large networks You can store command line parameters in text file but this files will contain unencrypted passwords. We recommended to use profiles, this is a JSON files which store all necessary data including passwords but as encrypted strings.

The advantage of using profiles :

1. Data for **powerportsv2** is stored securely
2. Profile protected by password
3. You can securely distribute profiles to colleagues

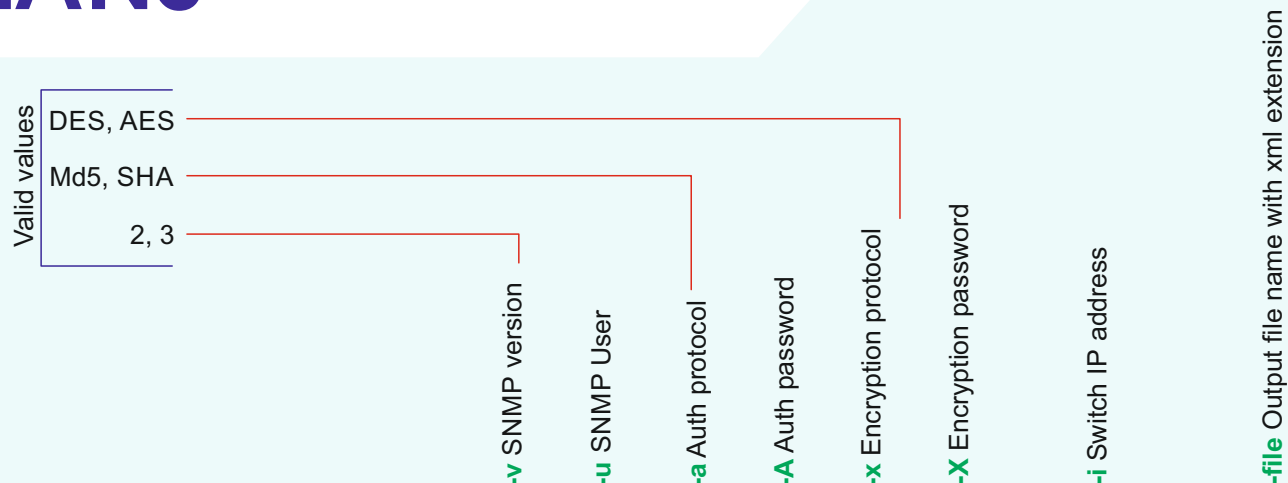
How to create a profile:

Use tool **createprofile** with command line parameters same as powerportsv2 parameters except parameter **-fout**, this parameter specify profile file name example:



LISTVLANS

Show VLANs and SVI interfaces



Switch information

VLAN information

```
PS C:\lab>.\listvlans.exe -v 3 -u SNMPv3-U -a sha -A key123 -x aes -X key123 -i 192.168.0.253 -file vlanlist.xml
Name: PowerC_SW3750 Location: PowerC_Lab
Cisco IOS Software, C3750 Software (C3750-IPSERVICESK9-M), Version 12.2(55)SE, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2010 by Cisco Systems, Inc.
Compiled Sat 07-Aug-10 22:45 by prod_rel_team
```

VLAN ID	VLAN NAME	SVI NAME	SVI IP'S
1	default	V11	192.168.0.253
2	VLAN0002		
10	VLAN0010		
17	VLAN0017	V117	192.168.20.3
35	VLAN0035	V135	192.168.10.1
100	VLAN0100	V1100	192.168.255.9
180	PhoneTest	V1180	192.168.18.1
999	VLAN0999		
1002	fddi-default		
1003	token-ring-default		
1004	fddinet-default		
1005	trnet-default		

cisctype7pass

Decrypt Type 7 password

15260E1F101C2E36310C392D1D00531300454A4F5C46083C1503554C5E435E501718420B05575B1755

Type 7 encrypted password

15260E1F101C2E36310C392D1D00531300454A4F5C46083C1503554C5E435E501718420B05575B1755

TestVery_long%passworf_multiple#symbols&

Password

Version



Supported OS:

Windows 7/8/10

Linux and MacOS (soon)

Free and commercial edition:

free version does not support profiles

You can unlock profile support by purchasing a license

Please send your contacts and registration ID (ID show in console when You run powerportsv2) [to info@powerc.ru](mailto:info@powerc.ru)

We will contact with You shortly. After payment we will send You **license.dat**

This file must be placed to PowerTOOL folder.

In 2022 year, list price of the PowerTOOLS is 28USD

Warning: License use unique computer ID and version of the PowerTOOLS. If You want to move PowerTOOLS to other computer You can contact with us for regenerate license

More information

Russia Saint-Petersburg
Tallinskaya 6V
Phone: +7 (812) 7034338
<http://www.powerc.ru>

info@powerc.ru

