



# خلاصة أوامر استخدام سويتشات



aruba®

Switching

By

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# Show Interface Commands

الأمر

الاختصار

## show interface brief

sh int b

Port	Type	Intrusion Alert	Enabled	Status	Mode	MDI Mode	Flow Ctrl	Bcast Limit
1	100/1000T	No	Yes	Up	100FDx	MDI	off	0
2	100/1000T	No	Yes	Down	1000FDx	NA	off	0
3	100/1000T	No	Yes	Up	1000FDx	MDIX	off	0
4	100/1000T	No	Yes	Down	1000FDx	Auto	off	0
5	100/1000T	No	Yes	Up	1000FDx	MDIX	off	0

## show interface config

sh int con

Port	Type	Enabled	Mode	Flow Ctrl	MDI
1	100/1000T	Yes	Auto	Disable	Auto
2	100/1000T	Yes	Auto	Disable	Auto
3	100/1000T	Yes	Auto	Disable	Auto
4	100/1000T	Yes	Auto	Disable	Auto
5	100/1000T	Yes	Auto	Disable	Auto

## show interface status

sh int st

Port	Name	Status	Config-mode	Speed	Type	Tagged	Untagged
1		Up	Auto	100FDx	100/1000T	200	9
2		Up	Auto	100FDx	100/1000T	200	4
3		Up	Auto	100FDx	100/1000T	200	9
4		Down	Auto	1000FDx	100/1000T	200	9
5		Up	Auto	100FDx	100/1000T	200	9
6		Down	Auto	1000FDx	100/1000T	200	9
7		Up	Auto	1000FDx	100/1000T	200	9

## show interface status

sh int st

Port	Total Bytes	Total Frames	Errors Rx	Drops Tx	Flow Ctrl	Bcast Limit
1	987,789,845	1,827,880	0	0	off	0
2	1,654,043,791	46,046,460	0	0	off	0
3	303,337,407	1,259,721	0	287	off	0
4	0	0	0	0	off	0
5	222,652,419	1,083,948	0	0	off	0
6	0	0	0	0	off	0
7	1,140,225,408	2,068,685	5330	0	off	0
8	3,503,093,519	55,823,962	1	0	off	0
9	230,493,684	1,120,740	0	0	off	0
10	3,452,672,411	59,264,345	0	0	off	0
11	0	0	0	0	off	0

Actions-> [Back](#) [Show details](#) [Reset](#) [Help](#)

Use up/down arrow keys to scroll to other entries, left/right arrow keys to change action selection, and <Enter> to execute action.

## show interface

sh int

Port	Total Bytes	Total Frames	Errors Rx	Drops Tx	Flow Ctrl	Bcast Limit
1	989,990,328	1,834,776	0	0	off	0
2	1,698,985,641	46,115,339	0	0	off	0
3	305,514,790	1,266,507	0	287	off	0
4	0	0	0	0	off	0
5	224,829,507	1,090,733	0	0	off	0
6	0	0	0	0	off	0
7	1,237,024,538	2,203,311	5330	0	off	0
8	3,564,345,486	55,908,217	1	0	off	0
9	233,226,016	1,130,047	0	0	off	0
10	3,536,608,554	59,365,254	0	0	off	0
11	0	0	0	0	off	0
12	0	0	0	0	off	0

## show interface custum 40

choose:

(port, type, status, speed, mode, mdi, flow, name, vlan, enabled, intrusion, bcast)

Ex: sh int cu 40 port status speed

```
A-2-21# sh int cu 40 port status speed
Status and Counters - Custom Port Status
```

Port	Status	Speed
40	Up	1000FDx

## show running-config interface 1

sh run int 1

Running configuration:

```
interface 1
  tagged vlan 200
  untagged vlan 12
exit
```

## show interface 1

shint 1

```
A-2-21# sh int 1
```

```
Status and Counters - Port Counters for port 1
```

Name :			
MAC Address :	98f2b3-646dbf		
Link Status :	Up		
Port Enabled :	Yes		
Totals (Since boot or last clear) :			
Bytes Rx :	3,827,760,167	Bytes Tx :	2,885,017,951
Unicast Rx :	37,738,802	Unicast Tx :	128,265,937
Bcast/Mcast Rx :	3,121,885	Bcast/Mcast Tx :	24,765,553
Errors (Since boot or last clear) :			
FCS Rx :	1705	Drops Tx :	447
Alignment Rx :	0	Collisions Tx :	0
Runts Rx :	0	Late Colln Tx :	0
Giants Rx :	5	Excessive Colln :	0
Total Rx Errors :	1710	Deferred Tx :	0
Others (Since boot or last clear) :		Out Queue Len :	0
Discard Rx :	0		
Unknown Protos :	0		
Rates (5 minute weighted average) :		Total Tx (bps) :	15,400
Total Rx (bps) :	0	Unicast Tx (Pkts/sec) :	0
Unicast Rx (Pkts/sec) :	0	B/Mcast Tx (Pkts/sec) :	1
B/Mcast Rx (Pkts/sec) :	0	Utilization Tx :	00.01 %
Utilization Rx :	0 %		

## show interface 1-3

sh int 1-3

```
Running configuration:
```

```
interface 1
  tagged vlan 200
  untagged vlan 12
  exit
interface 2
  tagged vlan 200
  untagged vlan 12
  exit
interface 3
  tagged vlan 200
  untagged vlan 12
  exit
```

## show interface 1-3

sh int 1-3

```
Running configuration:
```

```
interface 1
  tagged vlan 200
  untagged vlan 12
  exit
interface 2
  tagged vlan 200
  untagged vlan 12
  exit
interface 3
  tagged vlan 200
  untagged vlan 12
  exit
```

## show interface port-utilization

sh int p

A-2-21# sh int port-utilization  
Status and Counters - Port Utilization

Port	Mode	Rx			Tx		
		Kbits/sec	Pkts/sec	Util	Kbits/sec	Pkts/sec	Util
1	100FDX	0	0	0	16	2	00.01
2	1000FDX	0	0	0	0	0	0
3	1000FDX	88	30	0	984	74	00.09
4	1000FDX	0	0	0	0	0	0
5	1000FDX	24	23	0	232	37	00.02
6	1000FDX	0	0	0	8	2	0
7	1000FDX	0	0	0	0	0	0
8	1000FDX	456	152	00.04	2856	298	00.28
9	1000FDX	0	0	0	0	0	0

## show interface transceiver

sh int tra  
sh tec tra

Transceiver Technical Information:

Port	Type	Product Number	Serial Number	Part Number
49	SFP+SR	J9150A	CN76G6256Z	1990-4391

# Show VLAN Commands

الأمر

الإختصار

## show vlans

sh vl

Status and Counters - VLAN Information

Maximum VLANs to support : 256  
Primary VLAN : MGMT  
Management VLAN :

VLAN ID	Name	Status	Voice	Jumbo
1	MGMT	Port-based	No	No
2	Servers	Port-based	No	No
3	Bakcupsrvr	Port-based	No	No
4	IP_CAM	Port-based	No	No
5	Printers	Port-based	No	No
6	Finger_Print	Port-based	No	No
7	VDI	Port-based	No	No

## show running-config vlan

sh run vl

Running configuration:

```
vlan 1
  name "MGMT"
  no untagged 1-47
  untagged 48-52
  ip address 10.1.1.21 255.255.255.0
  spanning-tree instance 1
  exit
vlan 2
  name "Servers"
  tagged 49
  no ip address
  spanning-tree instance 1
  exit
```

## show vlans 12

sh vl 12

Status and Counters - VLAN Information - VLAN 12

VLAN ID : 12  
Name : 2nd Floor  
Status : Port-based  
Voice : No  
Jumbo : No

Port Information	Mode	Unknown VLAN	Status
1	Untagged	Learn	Up
2	Untagged	Learn	Down
3	Untagged	Learn	Up
4	Untagged	Learn	Down
5	Untagged	Learn	Up
6	Untagged	Learn	Up
9	Untagged	Learn	Down
10	Untagged	Learn	Down

show running-config vlan 12

sh run vl 12

### On Core Switch

Running configuration:

```
vlan 12
 name "2nd Floor"
 tagged A2-A8,B1-B8
 ip helper-address 10.1.2.3
 ip address 10.1.12.1 255.255.255.0
 spanning-tree instance 1
 exit
```

### On Edge Switch

Running configuration:

```
vlan 12
 name "2nd Floor"
 tagged 49
 untagged 1-6,8-17,21,25-46
 no ip address
 spanning-tree instance 1
 exit
```

show vlan ports 1-5

sh vl p 1-5

Status and Counters - VLAN Information - for ports 1-5

VLAN ID	Name	Status	Voice	Jumbo
12	2nd Floor	Port-based	No	No
200	Voice	Port-based	Yes	No

show vlans custom name

sh vl p 1-5

choose:

(id, name, status, voice, jumbo,  
ipconfig, ipaddr, ipmask, proxyarp,  
localproxyarp, state)

Status and Counters - VLAN Information - Custom view

```
VLAN name
-----
MGMT
Servers
Bakcupsvr
IP_CAM
Printers
Finger_Print
VDI
EIS-Admin
```

# Show MAC-Address Commands

الأمر

الاختصار

## show mac-address

Status and Counters - Port Address Table

MAC Address	Port	VLAN
00fd45-624200	49	1
00fd45-6252de	49	1
000c29-08c279	49	2
000c29-371958	49	2
002155-fd861a	49	2
005056-8c19ba	49	2
005056-8c1a38	49	2
005056-8c31ff	49	2
005056-8c456f	49	2
005056-8c5d31	49	2
005056-8c7451	49	2

## sh mac-add

لرؤية جميع الـ  
Mac Address  
للأجهزة المتصلة على السويتش

## show mac-address vlan 10

Status and Counters - Address Table - VLAN 10

MAC Address	Port
002155-fd861a	49
005056-8ce287	49
00c0b7-838ac4	49
00c0b7-9006d4	49
5065f3-31140b	49
787b8a-abbce8	49
f83f51-0b679a	49
f83f51-0b6c4f	49

## sh mac-add vl 10

لرؤية جميع الـ  
Mac Address  
للأجهزة المتصلة على السويتش  
الخاصة بـ فيلان رقم 10

## show mac-address | include 94e1

94e1ac-1cfda1	49	4
94e1ac-1cfda2	49	4
94e1ac-1cfda6	49	4
94e1ac-1cfda8	49	4
94e1ac-1cfdaa	23	4
94e1ac-1cfdab	49	4
94e1ac-1cfdac	49	4
94e1ac-1cfdb2	49	4
94e1ac-1cfdb4	49	4

## sh mac-add | inc 94e1

للبحث عن الأجهزة بجزء من الـ  
Mac Address

## show mac-address 94e1ac-20ee68

Status and Counters - Address Table - 94e1ac-20ee68

Port	VLAN
31	4

## sh mac-a 94e1ac-20ee68

للبحث عن جهاز واحد بالـ  
Mac Address



## show mac-address 5

sh mac-add 5

Status and Counters - Port Address Table - 5

MAC Address	VLANS
f83f51-ee2f15	12

للبحث عن

Mac Address

الخاص بـ بورت رقم 5

## show mac-address 35-40

sh mac-add 1-5

Status and Counters - Port Address Table - 30

MAC Address	VLANS
f83f51-0b67ea	11

Status and Counters - Port Address Table - 31

MAC Address	VLANS
94e1ac-20ee68	4

Status and Counters - Port Address Table - 32

MAC Address	VLANS
f83f51-ee2fa4	11

Status and Counters - Port Address Table - 33

MAC Address	VLANS
-------------	-------

Status and Counters - Port Address Table - 34

MAC Address	VLANS
-------------	-------

Status and Counters - Port Address Table - 35

MAC Address	VLANS
-------------	-------

# Show Connected Devices with Switch

الأمر

الاعتصار

# To Show all Devices that connect on your switch  
(Another Switch, AccessPoint or IP Phone

لمعرفة الأجهزة المتصلة  
بالسويتش

Show CDP neighbors

sh cdp ne

CDP neighbors information

Port	Device ID	Platform	Capability
20	01 0a 01 c8 26		S
30	34 fc b9 cb b4 6e	ArubaOS (MODEL: 305), Ver...	S
37	01 0a 01 c8 10		S
43	34 fc b9 cb b4 32	ArubaOS (MODEL: 305), Ver...	S
45	01 0a 01 c8 1c		S
47	Switch	Cisco IOS Software, C3560...	S
48	Switch	Cisco IOS Software, C3560...	S
49	00 fd 45 62 42 00	HP J9850A Switch 5406Rz12...	R S

Show lldp info remote-device

sh ll in r

LLDP Remote Devices Information

LocalPort	ChassisId	PortId	PortDescr	SysName
2	10.1.200.18	64 c3 54 9a 73 b8		AVX9A73B8
3	34fcb9-ca6e40	34 fc b9 ca 6e 40	bond0	A-101:b9:ca:6e:40
26	10.1.200.11	64 c3 54 9a 1d 38		AVX9A1D38
36	24f27f-c6e4fa	24 f2 7f c6 e4 fa	bond0	A-Clinic:c6:e4:fa
37	34fcb9-cbb33c	34 fc b9 cb b3 3c	bond0	A-104-Alex:cb:b...
41	34fcb9-cbb2fa	34 fc b9 cb b2 fa	bond0	A-109:cb:b2:fa
44	10.1.200.48	c8 1f ea 5d 37 7b		AVX5D377B
45	34fcb9-cbb338	34 fc b9 cb b3 38	bond0	A-118:cb:b3:38
46	10.1.200.39	64 c3 54 99 8d 2f		AVX998D2F
49	00fd45-624200	7	A7	LVNG-Core

دائماً لحفظ الأوامر بعد عمل أى تعديل يجب كتابة الأمر

wr me

## Show lldp info remote-device 3

sh ll in r 3

### LLDP Remote Device Information Detail

```
Local Port      : 3
ChassisType    : mac-address
ChassisId      : 34fcb9-ca6e40
PortType       : mac-address
PortId         : 34 fc b9 ca 6e 40
SysName        : A-101:b9:ca:6e:40
System Descr   : ArubaOS (MODEL: 305), Version Aruba IAP
PortDescr      : bond0
Pvid           :

System Capabilities Supported : bridge, wlan-access-point
System Capabilities Enabled   : wlan-access-point

Remote Management Address
  Type      : ipv4
  Address   : 10.1.100.216
```

لرؤية تفاصيل الجهاز المتصل بالسويتش  
على البورت رقم 3

### Poe Plus Information Detail

```
Poe Device Type      : Type2 PD
Power Source         : Only PSE
Power Priority        : Unknown
Requested Power Value : 19.5 Watts
Actual Power Value    : 19.5 Watts
```

# Show lldp info remote-device detail

لرؤية تفاصيل الأجهزة المتصلة بالسويتش

sh ll in r d

```
Remote Management Address
  Type      : ipv4
  Address   : 10.1.200.18
```

```
MED Information Detail
EndpointClass      :Class3
Media Policy vlan id :200
Media Policy Priority :6
Media Policy Dscp   :46
Media Policy Tagged :True
Poe Device Type     :PD
Power Requested     :3.7 W
Power Source        :Unknown
Power Priority       :High
```

```
-----
Local Port      : 3
ChassisType     : mac-address
ChassisId       : 34fcb9-ca6e40
PortType        : mac-address
PortId          : 34 fc b9 ca 6e 40
SysName         : A-101:b9:ca:6e:40
System Descr    : ArubaOS (MODEL: 305), Version Aruba IAP
PortDescr       : bond0
Pvid            :
```

```
System Capabilities Supported : bridge, wlan-access-point
System Capabilities Enabled   : wlan-access-point
```

```
Remote Management Address
  Type      : ipv4
  Address   : 10.1.100.216
```

```
Poe Plus Information Detail
```

```
Poe Device Type      : Type2 PD
Power Source         : Only PSE
Power Priority        : Unknown
Requested Power Value : 19.5 Watts
Actual Power Value   : 19.5 Watts
```

```
-----
Local Port      : 26
ChassisType     : network-address
ChassisId       : 10.1.200.11
PortType        : mac-address
PortId          : 64 c3 54 9a 1d 38
SysName         : AVX9A1D38
System Descr    :
PortDescr       :
Pvid            :
```

```
System Capabilities Supported : bridge, telephone
System Capabilities Enabled   : bridge, telephone
```

```
Remote Management Address
  Type      : ipv4
  Address   : 10.1.200.11
```

```
MED Information Detail
EndpointClass      :Class3
Media Policy vlan id :200
Media Policy Priority :6
Media Policy Dscp   :46
Media Policy Tagged :True
Poe Device Type     :PD
```

## {Rename Switch and Give it IP Address}

Tab لمعرفة الأمر كاملاً بدل الإختصار يمكنك الضغط على زر

لمعرفة باقي استكمال الأمر يمكنك الضغط على ?

---

الأمر

الإختصار

---

# Give Switch new name:

```
conf
hostname SW1
exit
```

---

# Give Switch IP Address:

```
conf
vlan 1
ip add 10.1.1.1 255.255.255.0
exit
```

# {Create Password for Switch}

الأمر

الاختصار

---

## # Create Admin Password (can do everything):

```
conf
password manager username admin password P@ssw0rd
```

الاختصار

```
conf
pas ma u admin p P@ssw0rd
```

---

## # Create Operator Password (for view only):

```
conf
password operator username omar password P@ssw0rd
```

الاختصار

```
conf
pas o u omar p P@ssw0rd
```

---

## # Recovering from a lost manager password:

If you cannot start a console session at the manager level because of a lost manager password, clear the password by following these steps:

Get physical access to the switch.

Press and hold the Clear button on the switch for a minimum of one second.

This deletes all passwords and usernames (manager and operator) used by the console and the WebAgent.

# Create VLANs

الأمر

الإختصار

---

## # Create VLANs on Core Switch with Interface IP Address:

```
conf
vlan 10 name LAN
tagged A2-A8,B1-B8
exit
vlan 10
ip add 10.1.10.1 255.255.255.0
exit
vlan 20 name wifi
tagged A2-A8,B1-B8
ip add 10.1.20.1 255.255.255.0
exit
vlan 30 name Voice
tagged A2-A8,B1-B8
exit
ip add 10.1.30.1 255.255.255.0
exit
```

حيث أن الـ **A2-A8,B1-B8**  
هي أرقام البورتات على الـ  
**Core Switch**

## # Create VLANs on Edge Switch:

```
conf
vlan 10 name LAN
tagged 49
exit
vlan 20 name wifi
tagged 49
exit
vlan 30 name Voice
tagged 49
exit
```

حيث أن الـ **49**  
هو رقم البورت المتصل بالـ  
**Core Switch**

---

# Assigning ports to VLANs

الأمر

---

## # Add one port to vlan:

```
conf
int 1
untagged vlan 10
exit
wrme
```

---

## # Add multiple ports to vlan:

```
conf
int 1-48
untagged vlan 10
exit
wrme
```

---

## # Shutdown one port:

```
conf
int 1
disable
exit
```

## # Shutdown Multiple Ports:

```
conf
int 1-5
disable
exit
```

---

## # Enable one port:

```
conf
int 1
enable
exit
```

## # Enable Multiple Ports:

```
conf
int 1-5
enable
exit
```

---



# # Create Port Trunk

ملحوظة هامة جدا : يجب عدم توصيل أي كابلات بالبورث المراد جعله ترانك إلا بعد عمل الإعدادات المطلوبة أو يجب إغلاق البورث أولا ثم عمل إعدادات الترانك لتجنب عمل

## **Broadcast Storm**

### # Create one port as Trunk:

```
conf
trunk 46 Trk1 trunk
exit
wrme
```

---

### # Create Multiple ports as Trunk:

```
conf
trunk 47-48 Trk1 trunk
exit
wrme
```

---

### # Assign vlan to trunk :

```
conf
vlan 10
untagged trk1
exit
vlan 11
tagged trk1
exit
wrme
```

---

### # Assign Multiple vlans to trunk :

```
conf
vlan 10-15,100,200
tagged trk1
exit
wrme
```

---

## # Remove Port Trunk

ملحوظة هامة جدا : إلغاء البورت من إعدادات الترانك قد تؤدي إلى عمل Loop يؤدي إلى Broadcast Strom ولهذا يجب فصل البورت أو إغلاقه أولاً

### # Remove vlan from trunk :

```
conf
vlan 10
no tagged trk1
exit
wrme
```

---

### # Remove Multiple vlan to trunk :

```
conf
vlan 10-15,100,200
no tagged trk1
exit
wrme
```

---

### # Remove trunk from port :

```
conf
no trunk 46
exit
wrme
```

---

### # Show trunk Command :

```
show trunk
```

Port	Name	Type	Group	Type
47	Connect Cisco SW	100/1000T	Trk1	LACP
48	Connect Cisco SW	100/1000T	Trk1	LACP

## # Create LACP Link Aggregation

### # Configuration for a Two Ports LACP Trunk Group :

```
conf
int 47-48 lacp active
trunk 47-48 trk1 lacp
exit
vlan 6
untagged trk1
exit
vlan 7
tagged trk1
exit
wrme
```

---

### # Remove lacp trunk from port :

```
conf
no trunk
47-48
exit
wrme
```

# # LACP Link Aggregation Commands

## show lacp

LACP							
Port	LACP Enabled	Trunk Group	Port Status	Partner	LACP Status	Admin Key	Oper Key
47	Active	Trk1	Up	Yes	Success	0	532
48	Active	Trk1	Up	Yes	Success	0	532

## show run int 47-48

Running configuration:

```
interface 47
 name "Connect Cisco SW"
 untagged vlan 1
 trunk trk1 lacp
 exit
interface 48
 name "Connect Cisco SW"
 untagged vlan 1
 trunk trk1 lacp
 exit
```

## show run vlan 6

Running configuration:

```
vlan 6
 name "Finger_Print"
 tagged 49,Trk1
 no ip address
 spanning-tree instance 1
 exit
```

## show lacp peer

LACP Peer Information.

System ID: 00fd45-01df00

Local Port	Local Trunk	System ID	Port	Port Priority	Oper Key	LACP Mode	Tx Timer
47	Trk1	002155-fd8600	25	32768	1	Active	Slow
48	Trk1	002155-fd8600	26	32768	1	Active	Slow

## show lacp counter

LACP Port Counters.

Port	Trunk	LACP PDUs Tx	LACP PDUs Rx	Marker Req. Tx	Marker Req. Rx	Marker Resp. Tx	Marker Resp. Rx	Error
47	Trk1	68663	74232	0	0	0	0	0
48	Trk1	48165	52034	0	0	0	0	0

## show vlans ports trk1 detail

Status and Counters - VLAN Information - for ports Trk1

VLAN ID	Name	Status	Voice	Jumbo	Mode
1	MGMT	Port-based	No	No	Untagged
2	Servers	Port-based	No	No	Tagged
3	Bakcupsvr	Port-based	No	No	Tagged
4	IP_CAM	Port-based	No	No	Tagged
5	Printers	Port-based	No	No	Tagged
6	Finger_Print	Port-based	No	No	Tagged
7	VDI	Port-based	No	No	Tagged
8	Building_B	Port-based	No	No	Tagged
9	EIS	Port-based	No	No	Tagged
10	Basement	Port-based	No	No	Tagged

# # Spanning-Tree Configuration

## # On Core Switch

```
spanning-tree
spanning-tree config-name "LV"
spanning-tree config-revision 1
spanning-tree
instance 1 vlan 1-200 1003
spanning-tree root primary priority 0
```

---

## # On Edge Switch

```
spanning-tree
spanning-tree config-name "LV"
spanning-tree config-revision 1
spanning-tree instance 1 vlan 1-200
spanning-tree ethernet 1-48 auto-edge-port
wrme
```

---

## # Spanning-Tree Commands

### sh spanning-tree

Multiple Spanning Tree (MST) Information

```
STP Enabled      : Yes
Force Version    : MSTP-operation
IST Mapped VLANs : 201-4094
Switch MAC Address : 00fd45-01df00
Switch Priority   : 32768
Max Age          : 20
Max Hops         : 20
Forward Delay    : 15
```

```
Remove spanning-tree
conf
no spanning-tree
```

### sh spanning-tree mst-config

MST Configuration Identifier Information

```
MST Configuration Name : LV
MST Configuration Revision : 1
MST Configuration Digest : 0xADF9F66DCC3DAE48D84499FF88009B20
```

```
IST Mapped VLANs : 201-4094
```

```
Instance ID Mapped VLANs
```

```
-----
1           1-200
```

# # Spanning Tree Configuration

## # Configure DHCP from server 10.1.2.3

```
conf
vlan 10
ip helper-address 10.1.2.3
exit
vlan 20
ip helper-address 10.1.2.3
exit
```

---

## # Configure DHCP pool on Core Switch :

```
conf
dhcp-server disable
dhcp-server pool "AP"
default-router "10.1.100.1"
dns-server "10.1.2.3,8.8.8.8"
lease 08:00:00 OR lease infinite network
10.1.100.0 255.255.255.0 range
10.1.100.121 10.1.100.250
exit
dhcp-server enable vlan 100
dhcp-server
wr me
```

---

## # Configure DHCP pool on Core Switch :

```
conf
dhcp-server disable
dhcp-server pool "AP"
static-bind ip 10.1.100.100 255.255.255.0 mac 42:EC:ED:A3:B3:64
```

# # DHCP show commands

## show dhcp-server

Configuration and Status - DHCP Server

```
DHCP Server Enabled      : Yes
DHCPv4 Operational Status : Enabled
Traps Enabled           : Yes
Persistent Lease Database : No
Conflict Logging Enabled  : No
DHCP VLAN Interfaces     : 100,101
```

---

## show dhcp-server pool

Status and Counters - DHCP Server Pools

```
Pool      : AP
Lease Period : 1:00:00
Low Threshold : 26
High Threshold : 104
Free Leases : 88
```

---

## show dhcp-server binding

Status and Counters - DHCP Server Bindings

Pool : AP

IP Address	Hardware Address	Lease Expiration	Type
10.1.100.186	24f27f-c6e50e	Apr 25 2019 19:20:25	Dynamic
10.1.100.187	24f27f-c6e3cc	Apr 25 2019 19:20:26	Dynamic
10.1.100.188	24f27f-c6e490	Apr 25 2019 19:20:26	Dynamic
10.1.100.189	24f27f-c6e56a	Apr 25 2019 19:20:30	Dynamic
10.1.100.190	24f27f-c6e392	Apr 25 2019 19:20:32	Dynamic
10.1.100.191	24f27f-c6e4fa	Apr 25 2019 19:20:34	Dynamic
10.1.100.192	24f27f-cab224	Apr 25 2019 19:21:09	Dynamic
10.1.100.193	24f27f-cab262	Apr 25 2019 19:21:12	Dynamic
10.1.100.194	34fcb9-cbb46c	Apr 25 2019 19:23:21	Dynamic
10.1.100.195	34fcb9-cbb432	Apr 25 2019 19:23:21	Dynamic
10.1.100.196	34fcb9-ca6e52	Apr 25 2019 19:23:22	Dynamic
10.1.100.197	34fcb9-cbb33a	Apr 25 2019 19:23:21	Dynamic
10.1.100.198	34fcb9-ca69c6	Apr 25 2019 19:23:23	Dynamic
10.1.100.199	34fcb9-ca6e16	Apr 25 2019 19:23:22	Dynamic
10.1.100.200	34fcb9-cad962	Apr 25 2019 19:23:22	Dynamic
10.1.100.201	34fcb9-ca6e30	Apr 25 2019 19:23:24	Dynamic
10.1.100.202	34fcb9-cbb520	Apr 25 2019 19:23:25	Dynamic
10.1.100.203	34fcb9-ca6e22	Apr 25 2019 19:23:26	Dynamic
10.1.100.204	34fcb9-cbb4ac	Apr 25 2019 19:23:25	Dynamic
10.1.100.205	34fcb9-cbb3ec	Apr 25 2019 19:23:24	Dynamic

---

## # To clear dhcp IPs:

```
clear dhcp-ser bin
```

# # Device-Profile Configuration

## # Create Device-Profile for Access Point: :

```
conf
device-profile name "AP"
untagged-vlan 100
tagged-vlan 5,14-21,23-28
exit
device-profile type "aruba-ap"
associate "AP"
enable
exit
```

لتغيير البورت حسب الجهاز  
المتصل به  
بمعنى لو تم توصيل  
**Aruba Access Point**  
يتحول البورت إلى فيلان الـ AP  
ولو تم توصيل  
**Aruba Switch**  
يتحول البورت إلى ترذك  
ولو تم توصيل PC يتحول  
البورت إلى فيلان الأجهزة  
كل دا بدون تدخل منك

---

## # Create Device-Profile for Aruba Switch:

```
conf
device-profile name "SW"
tagged-vlan 2-21,23-28,100,200
exit
device-profile type "aruba-switch"
associate "SW"
enable
exit
```

---

## show device-profile status

Device Profile Status

Port	Device-type	Applied device profile
3	aruba-ap	AP
4	aruba-ap	AP
6	aruba-ap	AP
8	aruba-ap	AP
10	aruba-ap	AP
12	aruba-ap	AP
13	aruba-ap	AP
14	aruba-ap	AP
16	aruba-ap	AP
18	aruba-ap	AP
20	aruba-ap	AP
21	aruba-ap	AP
25	aruba-switch	SW



## show device-profile config

### Device Profile Configuration

Configuration for device-profile : default-ap-profile

```
untagged-vlan : 1
tagged-vlan : None
ingress-bandwidth : 100%
egress-bandwidth : 100%
cos : None
speed-duplex : auto
poe-max-power : Class/LLDP
poe-priority : critical
allow-jumbo-frames: Disabled
```

Configuration for device-profile : AP

```
untagged-vlan : 101
tagged-vlan : 2,5,9,11,14-21,23-28
ingress-bandwidth : 100%
egress-bandwidth : 100%
cos : None
speed-duplex : auto
poe-max-power : Class/LLDP
poe-priority : critical
allow-jumbo-frames: Disabled
```

Configuration for device-profile : SW

```
untagged-vlan : 1
tagged-vlan : 2-28,100-101,200
ingress-bandwidth : 100%
egress-bandwidth : 100%
cos : None
speed-duplex : auto
poe-max-power : Class/LLDP
poe-priority : critical
allow-jumbo-frames: Disabled
```

---

## # Remove Device-Profile :

### # Remove Device-Profile for Access Point :

conf

```
no device-profile type "aruba-ap"
```

```
no device-profile name "AP"
```

---

### # Remove Device-Profile for Aruba Switch :

conf

```
no device-profile type "aruba-switch"
```

```
no device-profile name "SW"
```

# # SNMP-Server Configuration

# Create SNMP-Server with ICM server IP 10.1.2.9:

conf

snmp-server community "public" unrestricted

snmp-server community "LV" operator unrestricted

snmp-server host 10.1.2.9 community "LV" trap-level all

snmpv3 targetaddress "traphost.LV.10.1.2.9" params "traphost.LV.10.1.2.9"  
10.1.2.9 taglist "TrapHost"

snmpv3 params "traphost.LV.10.1.2.9" user "LV" sec-model ver2c message-  
processing ver2c

---

## Show snmp-server

### SNMP Communities

Community Name	MIB View	Write Access
public	Manager	Unrestricted
LV	Operator	Unrestricted

### Trap Receivers

Link-Change Traps Enabled on Ports [All] : All

Traps Category	Current Status
----------------	----------------

SNMP Authentication	: Enabled
Password change	: Enabled
Login failures	: Enabled
Port-Security	: Enabled
Authorization Server Contact	: Enabled
DHCP-Snooping	: Enabled
DHCPv6-Snooping Out of Resource	: Enabled
DHCPv6-Snooping Errant Replies	: Enabled
Dynamic ARP Protection	: Enabled
Dynamic IP Lockdown	: Enabled
Dynamic IPv6 Lockdown Out of Resource	: Enabled
Dynamic IPv6 Lockdown Violations	: Enabled
Startup Config change	: Disabled
Running Config Change	: Disabled
MAC address table changes	: Disabled
MAC Address Count	: Disabled
DHCP-Server	: Enabled
NTP-Client	: Disabled

ND Snooping Out of Resources Traps : Enabled

Address	Community	Events	Type	Retry	Timeout
10.1.2.9	LV	All	trap	3	15

# # Access-List Configuration

# Create access-list to allow specific vlan and specific hosts to access specific vlan and specific Host:

```
conf
```

```
ip access-list extended "NVR"
```

```
10 permit ip 10.1.14.0 0.0.0.255 10.1.4.0 0.0.0.255
```

```
11 permit ip 10.1.7.47 0.0.0.0 10.1.4.253 0.0.0.0
```

```
12 permit ip 10.1.12.83 0.0.0.0 10.1.4.0 0.0.0.255
```

```
13 deny ip 0.0.0.0 255.255.255.255 0.0.0.0 255.255.255.255
```

```
exit
```

```
vlan 4
```

```
ip access-group "NVR" out
```

---













