

校園網路管理與維運

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網路名詞解釋



DNS

- 什麼是DNS？ – DNS 簡介 – AWS
- 新北市政府教育局校園 DNS 管理平台
- DNS，也就是網域名稱系統，它將人們可讀取的網域名稱 (例如，`www.bhes.ntpc.edu.tw`) 轉換為機器可讀取的 IP 地址 (例如，`2001:288:2200:234::234:9`、`120.102.234.9`)。

DHCP

- DHCP(動態主機設定協定)- 維基百科
- 用於內部網路或網路服務供應商自動分配 IP位址 給使用者。
- 用於內部網路管理員對所有電腦作中央管理。

IPv4

- IPv4的IP位址是由32位元所組成，原始的表示方式是8個位元為一個單位，分4個部分。每個部分以2進位表示，並以「.」做區隔。
- 10100011.00010100.10101001.11111110
- 10進位：163.20.169.254

IPv6

- IPv6的IP位址則是128位元組成，表示方式是使用8組數字，每組為4個字元的16進位方法表示。而區隔每個部分的方式，是以「:」表示。
- 2001:288:2213:5:4370:1138:1535:81c0
- 規則1：每組數字的第一個0可以省略，若整組皆為0，則以0表示。譬如，「0DB8」可以省略為「DB8」，「0000」則為「0」。
- 規則2：連續出現的0000可以省略成「::」。譬如：「:0000:0000:0000:0000:」可以省略成「:0000:0000:0000::」、「:0:0:0:0:」、「:0::0:」或「::」。但，對於一個IPv6位址，只能出現一次「::」來省略0。

IPv4與IPv6的差異

- IPv4- 維基百科
- IPv6- 維基百科
- 認識IPv4與IPv6的差異

- 新北市資訊業務入口網

- 連線單位IPv4分配

- 連線單位IPv6分配

- 光纖連線單位

VLAN

- [VLAN- 維基百科，自由的百科全書](#)
- 不同VLAN之間或VLAN與LAN / WAN的數據通訊必須通過第3層（[網路層](#)）完成。否則，即便是同一交換器上的連接埠，假如它們不處於同一個VLAN，正常情況下也無法進行數據通訊。

TCP/UDP

- [TCP/UDP埠列表 - 維基百科](#)

LACP

- [LACP\(鏈路聚合\)- 維基百科](#)
- [建立Port Channel\(LACP&PAgP\)](#)

網路管理



測網速

- TANet – SpeedTest
- 政治大學校園網路測速

網路流量

- 新北市教網網路流量分析表
- TANet網路即時流量圖

VPN

- 新北市教育局SSL VPN服務
- 使用 Pulse Secure 連線新北市SSL VPN
安裝與設定

校園無線網路

- NTPC WiFi管理系統
- 校園無線網路連線 Eduroam 使用方式

網路交換器

Dlink DGS-3620-28TC

- L2 Features → VLAN → 802.1Q VLAN Settings

VID	VLAN Name	Advertisement	Tagged Ports	Untagged Ports	Forbidden Ports		
1	default	Enabled		16-22,25-28		Edit	Delete
2	wan	Disabled		24		Edit	Delete
3	MGMT	Disabled	1,16-22,25-28			Edit	Delete
4	wan_2	Disabled		23		Edit	Delete
5	lan	Disabled	16-22,25-28	1-2,5-15		Edit	Delete
8	dsa_wan	Disabled		3		Edit	Delete
10	Intra-1	Disabled	16-22,25-28			Edit	Delete
15	MGMT2	Disabled	16-22,25-28			Edit	Delete
20	Intra-2	Disabled	16-22,25-28			Edit	Delete
25	voip	Disabled	16-22,25-28			Edit	Delete
30	wlan	Disabled	16-22,25-28	4		Edit	Delete
31	TANetRoa...	Disabled	1,16-22,25-28			Edit	Delete
32	NTPC-Mob...	Disabled	1,16-22,25-28			Edit	Delete
33	eduroam	Disabled	1,16-22,25-28			Edit	Delete
34	class	Disabled	1,16-22,25-28			Edit	Delete
35	wpa2	Disabled	16-22,25-28			Edit	Delete
36	mac_auth	Disabled	16-22,25-28			Edit	Delete
70	Intra-7	Disabled	20-22,25-28			Edit	Delete

Dlink DGS-3620-28TC

- L2 Features → VLAN → 802.1Q VLAN Settings

802.1Q VLAN Settings Safeguard

VLAN List | Add/Edit VLAN | Find VLAN | VLAN Batch Settings | Total Entries: 18

VID: VLAN Name: (Max: 32 characters)

Advertisement: ▼

Port	Select All	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tagged	<input type="text" value="All"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Untagged	<input type="text" value="All"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Forbidden	<input type="text" value="All"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Not Member	<input type="text" value="All"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Tagged Ports: 16-22,25-28
Untagged Ports: 1-2,5-15
Forbidden Ports:

Dlink DGS-3620-28TC

- Management → IP Interface → System IP Address Settings

System IP Address Settings

Static DHCP BOOTP

Interface Name: System

Management VLAN Name: default

Interface Admin State: Enabled ▾

IP Address: 10 . 226 . 17 . 254

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 163 . 20 . 220 . 142

Interface Name: mgmt_ipif

IP Address: 192 . 168 . 0 . 1

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 0 . 0 . 0 . 0

Status: **Enabled**

Link Status: **Link Down**

Dlink DGS-3620-28TC

- Management → ARP → ARP Table

ARP Table Safeguard

Interface Name IP Address MAC Address

Total Entries: 983

Interface Name	IP Address	MAC Address	Type
System	10.226.17.0	FF-FF-FF-FF-FF-FF	Local/Broadcast
System	10.226.17.1	54-B8-0A-CF-EC-C0	Dynamic
System	10.226.17.2	54-B8-0A-C9-79-C0	Dynamic
System	10.226.17.3	54-B8-0A-D2-C5-40	Dynamic
System	10.226.17.4	54-B8-0A-C9-85-E0	Dynamic
System	10.226.17.5	90-8D-78-3D-B1-60	Dynamic
System	10.226.17.6	54-B8-0A-D2-CD-00	Dynamic
System	10.226.17.7	54-B8-0A-D2-C3-40	Dynamic
System	10.226.17.9	54-B8-0A-D2-C6-00	Dynamic
System	10.226.17.10	F4-8C-EB-69-CF-E0	Dynamic

1/99 **1** 2 3 4 5 > >> Go

Dlink DGS-3620-28TC

- Management → IP Interface → System IP Address Settings

Interface Name	VLAN Name	Interface Admin State	Secondary			
dsa	dsa_wan	Enabled	Yes	IPv4 Edit	IPv6 Edit	Delete
lan	lan	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
wan	wan	Disabled	No	IPv4 Edit	IPv6 Edit	Delete
MGMT	MGMT	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
voip	voip	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
wpa2	wpa2	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
MGMT2	MGMT2	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
class	class	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
wan_2	wan_2	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
System	default	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
Intra-1	Intra-1	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
Intra-2	Intra-2	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
Intra-7	Intra-7	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
dsa_wan	dsa_wan	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
eduroam	eduroam	Enabled	No	IPv4 Edit	IPv6 Edit	Delete
Sysetm_3	default	Enabled	Yes	IPv4 Edit	IPv6 Edit	Delete
mac_auth	mac_auth	Enabled	No	IPv4 Edit	IPv6 Edit	Delete

Dlink DGS-3620-28TC

- Link Aggregation → Port Trunking Settings

Port Trunking Settings Safeguard

Algorithm

Total Entries: 1

Group ID	Type	Master Port	Member Ports	Active Ports	Status	Flooding Port	Trap		
2	LACP	12	9-12	9-12	Enabled	9	Disabled	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

Edit Trunking Information

Group ID (1-32) Type Master Port State Trap

Port	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Ports

Note: Maximum 8 ports in a static trunk or LACP group.

Dlink DGS-3620-28TC

L3 Features → IPv4 Static/Default Route Settings

IPv4 Static/Default Route Settings

Safeguard

IPv4 Static/Default Route Settings

IP Address Default

Netmask (e.g.: 255.255.255.254 or 0-32)

IP Tunnel Name IP Tunnel

Gateway (e.g.: 172.18.211.10)

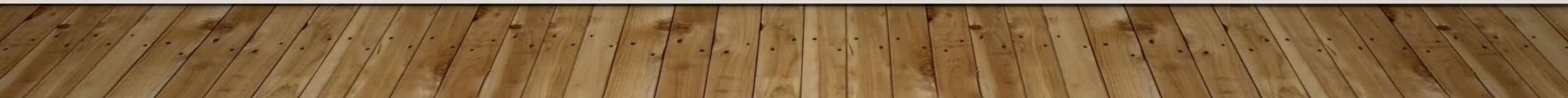
Metric (1-65535)

Backup State ▼

Null Interface ▼

Total Entries: 2

IP Address/Netmask	Gateway	IP Tunnel Name	Cost	Protocol	Backup	Weight	Status	
0.0.0.0/0	163.20.220.142		1	Default	Backup	None	Active	Delete
10.251.17.0/24	10.253.17.1		1	Static	Primary	None	Active	Delete



Dlink DGS-3620-28TC

L3 Features → IPv4 Route Table

IP Address	Netmask	Gateway	Interface Name	Cost	Protocol
0.0.0.0	0.0.0.0	163.20.220.142	wan_2	1	Default
10.251.17.0	255.255.255.0	10.253.17.1	dsa_wan	1	Static
10.90.90.0	255.255.255.0	0.0.0.0	Sysetm_3	1	Local
10.181.68.0	255.255.252.0	0.0.0.0	class	1	Local
10.194.68.0	255.255.252.0	0.0.0.0	Intra-2	1	Local
10.199.36.0	255.255.252.0	0.0.0.0	mac_auth	1	Local
10.201.68.0	255.255.252.0	0.0.0.0	NTPC-Mobile	1	Local
10.211.17.0	255.255.255.0	0.0.0.0	TANetRoaming	1	Local
10.213.17.0	255.255.255.0	0.0.0.0	MGMT2	1	Local
10.215.17.0	255.255.255.0	0.0.0.0	eduroam	1	Local
10.226.17.0	255.255.255.0	0.0.0.0	System	1	Local
10.228.17.0	255.255.255.0	0.0.0.0	MGMT	1	Local
10.231.17.0	255.255.255.0	0.0.0.0	Intra-1	1	Local
10.239.17.0	255.255.255.0	0.0.0.0	Intra-7	1	Local
10.241.17.0	255.255.255.0	0.0.0.0	Intra-2_2	1	Local
10.243.17.0	255.255.255.0	0.0.0.0	voip	1	Local
10.245.17.0	255.255.255.0	0.0.0.0	wpa2	1	Local
10.247.17.0	255.255.255.0	0.0.0.0	mac_auth_2	1	Local
10.253.17.0	255.255.255.0	0.0.0.0	dsa_wan	1	Local
163.20.169.0	255.255.255.0	0.0.0.0	lan	1	Local
163.20.220.136	255.255.255.248	0.0.0.0	wan_2	1	Local
192.168.10.0	255.255.255.0	0.0.0.0	dsa	1	Local

Dlink DGS-1250-52X

- L2 Features → VLAN → 802.1Q VLAN

VID	VLAN 名稱	說明	標籤成員埠	未標記的成員端口	VLAN類型		
1	default			eth1/0/47-1/0/52		<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
3	MGMT		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
5	lan					<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
10	Intra-1		eth1/0/47-1/0/52	eth1/0/1-1/0/46		<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
20	intra-2					<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
25	voip		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
30	wlan		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
31	TANetRoaming...		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
32	NTPC-Mobile		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
33	eduroam		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
34	class		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
35	wpa2		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>
36	mac_auth		eth1/0/47-1/0/52			<input type="button" value="編輯"/>	<input type="button" value="刪除"/>

Dlink DGS-1250-52X

- L2 Features → VLAN → VLAN介面

配置VLAN介面

配置VLAN介面

埠	eth1/0/1	<input type="checkbox"/> 複製	
VLAN模式	Access	從埠	到埠
可接受的訊框	僅無標籤	eth1/0/1	eth1/0/1
入口檢查	<input checked="" type="radio"/> 啟用 <input type="radio"/> 停用		
VID (1-4094)	10		

Dlink DGS-1250-52X

- L2 Features → VLAN → VLAN介面

配置VLAN介面

配置VLAN介面

埠	eth1/0/47	<input type="checkbox"/> 複製	
VLAN模式	Hybrid	從埠	到埠
可接受的訊框	准許所有	eth1/0/1	eth1/0/1
入口檢查	<input checked="" type="radio"/> 啟用 <input type="radio"/> 停用		
Native VLAN	<input checked="" type="checkbox"/> Native VLAN		
VID (1-4094)	1		
動作	新增		
添加模式	<input checked="" type="radio"/> 無標籤 <input type="radio"/> 有標籤		
允許透過的VLAN範圍			
目前混合未標記的VLAN範圍	1		
目前混合標記的VLAN範圍	3,10,25,30-36		

Dlink DGS-1510-28XMP

VID	VLAN 名稱	標籤成員埠	未標記的成員埠	VLAN類型		
1	default		1/0/20-1/0/21,1/0/23...		編輯	刪除
3	MGMT	1/0/1-1/0/28			編輯	刪除
5	lan	1/0/20-1/0/28	1/0/6-1/0/19		編輯	刪除
10	Intra-1	1/0/20-1/0/28			編輯	刪除
20	Intra-2	1/0/20-1/0/28	1/0/1-1/0/5		編輯	刪除
25	voip	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
30	wlan	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
31	TANetRoaming	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
32	NTPC-Moblie	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
33	eduroam	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
35	wpa2	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
36	mac_auth	1/0/1-1/0/4,1/0/20-1...			編輯	刪除
70	Intra-7	1/0/20-1/0/21,1/0/23...	1/0/22		編輯	刪除

Dlink DGS-1510-28XMP

配置VLAN介面

配置VLAN介面

埠

eth1/0/1

複製

VLAN模式

Hybrid

從埠

到埠

可接受的訊框

准許所有

eth1/0/1

eth1/0/1

入口檢查

啟用 停用

Native VLAN

Native VLAN

VID (1-4094)

20

動作

新增

添加模式

無標籤 有標籤

允許透過的VLAN範圍

目前混合未標記的VLAN範圍

20

目前混合標記的VLAN範圍

3,25,30-36

返回

套用

Dlink DGS-1510-28XMP

配置VLAN介面

配置VLAN介面

埠	eth1/0/28	<input type="checkbox"/> 複製	
VLAN模式	Hybrid	從埠	到埠
可接受的訊框	准許所有	eth1/0/1	eth1/0/1
入口檢查	<input checked="" type="radio"/> 啟用 <input type="radio"/> 停用		
Native VLAN	<input checked="" type="checkbox"/> Native VLAN		
VID (1-4094)	1		
動作	新增		
添加模式	<input checked="" type="radio"/> 無標籤 <input type="radio"/> 有標籤		
允許透過的VLAN範圍			
目前混合未標記的VLAN範圍	1		
目前混合標記的VLAN範圍	3,5,10,20,25,30-36,70		

Dlink DGS-1210-10P

System Settings Safeguard

IPv4 Information

Static DHCP BOOTP

Interface Name	<input type="text" value="System"/>
VLAN Name	<input type="text" value="MGMT"/>
Interface Admin State	<input type="text" value="Enabled"/> ▼
IPv4 Address	<input type="text" value="10.228.17.100"/>
Netmask	<input type="text" value="24 (255.255.255.0)"/> ▼
Gateway	<input type="text" value="10.228.17.254"/>
DHCP Option 12 State:	<input type="text" value="Disabled"/> ▼
DHCP Option 12 Host Name	<input type="text" value="DGS-1210-10P"/>
DHCP Retry Times (0-120)	<input type="text" value="7"/>

System Information

System Name	<input type="text" value="7518PC404"/>
System Location	<input type="text"/>
Login Timeout (3-30 minutes)	<input type="text" value="5"/>

Dlink DGS-1210-10P

802.1Q VLAN Settings Safeguard

Asymmetric VLAN [\[Example \]](#) Enabled Disabled Apply

Total static VLAN entries: 13 Add
🔪 Maximum 256 entries.

VID	VLAN Name	Untagged	Tagged	Delete
1	default			Delete
3	MGMT		01-10	Delete
5	LAN		01-10	Delete
10	Intra-1		01-10	Delete
20	Intra-2	01-10		Delete
25	Voip		01-10	Delete
30	wlan		01-10	Delete
31	TANetRoaming		01-10	Delete
32	NTPC-Mobile		01-10	Delete
33	eduroam		01-10	Delete
34	class		01-10	Delete
35	wpa2		01-10	Delete
36	mac_auth		01-10	Delete

Dlink DGS-1210-10P

- L3 Functions → IP Interface

IP Interface Settings Safeguard


Interface Name

VLAN Name

IPv4 Address

Netmask 24 (255.255.255.0) ▼

Interface Admin State Enabled ▼

 Maximum 4 entries.

Interface Name	VLAN Name	IPv4 Address	Netmask	Admin State	Link State	Edit	IPv6	Delete
System	MGMT	10.228.17.100	255.255.255.0	Enabled	Link Up	<input type="button" value="Edit"/>	<input type="button" value="IPv6"/>	<input type="button" value="Delete"/>

LevelOne GEP-530

System Configuration

System Description	GEP-0530 3.8.2	
System Object ID	1.3.6.1.4.1.12284.1	
System Version	GEP-0530 3.8.2	
Num Network Interfaces	5	
Serial Number	123	
MAC Address	[REDACTED]	
IP Address	0.0.0.0	
System Start Time	51-Days 18-Hours 37-Minutes 22-Seconds	
System Date Time	<input type="text" value="2023/08/21 09:55:58"/>	(Format: Year/Month/Day Hour:Minute:Second)
System Name	[REDACTED]	

LevelOne GEP-530

SNTP Configuration	
Server IP Address 1	163.20.254.254
Server IP Address 2	
Server IP Address 3	
Time Interval (second)	1800
Time Zone	+8.00
Enable Status	Enable ▾
Last Update Time	2023/08/21 09:48:48
System Date Time	2023/08/21 10:00:21
<input type="button" value="Refresh"/> <input type="button" value="Apply"/>	

LevelOne GEP-530

SNTP Configuration	
Server IP Address 1	163.20.254.254
Server IP Address 2	
Server IP Address 3	
Time Interval (second)	1800
Time Zone	+8.00
Enable Status	Enable ▾
Last Update Time	2023/08/21 09:48:48
System Date Time	2023/08/21 10:00:21
<input type="button" value="Refresh"/> <input type="button" value="Apply"/>	

LevelOne GEP-530

VID	VLAN Name	State	Port Member
1	default	active	[t]ge1/1
3	Management	active	[t]ge1/1
20	Intra-2	active	[u]ge1/1 [u]ge1/2 [u]ge1/3 [u]ge1/4 [u]ge1/5
25	voip	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
30	wlan	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
31	TANetRoaming	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
32	NTPC-Mobile	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
33	eduroam	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
34	class	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
35	wpa2	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5
36	mac_auth	active	[t]ge1/1 [t]ge1/2 [t]ge1/3 [t]ge1/4 [t]ge1/5

LevelOne GEP-530

Static VLAN Configuration

VID	VLAN Name
1	default

- vlan1 ▲
- vlan3
- vlan20
- vlan25
- vlan30
- vlan31
- vlan32
- vlan33
- vlan34
- vlan35
- vlan36 ▼

Refresh

Apply

Delete

Help

LevelOne GEP-530

VLAN Port Configuration

(p=default VLAN member, t=tagged member, u=untagged member)

Port	Mode	Current VLAN	Port Members
ge1/1	Trunk	vlan1	[t]vlan1
ge1/2		vlan3	[t]vlan3
ge1/3		vlan20	[p][u]vlan20
ge1/4		vlan25	[t]vlan25
ge1/5		vlan30	[t]vlan30
		vlan31	[t]vlan31
	vlan32	[t]vlan32	
	vlan33	[t]vlan33	
	vlan34	[t]vlan34	
	vlan35	[t]vlan35	
	vlan36	[t]vlan36	

Default VLAN =>

Tagged =>

Untagged =>

UnMember <=

LevelOne GEP-530

VLAN Port Configuration

(p=default VLAN member, t=tagged member, u=untagged member)

Port	Mode	Current VLAN	Port Members
ge1/1		vlan1	[p][u]vlan20
ge1/2		vlan3	[t]vlan25
ge1/3		vlan20	[t]vlan30
ge1/4		vlan25	[t]vlan31
ge1/5	Trunk	vlan30	[t]vlan32
		vlan31	[t]vlan33
		vlan32	[t]vlan34
		vlan33	[t]vlan35
		vlan34	[t]vlan36
		vlan35	
		vlan36	

Default VLAN =>

Tagged =>

Untagged =>

UnMember <=

LevelOne GEP-530

- IP Basic Configuration → IP Address Configuration

IP Address Configuration

Line Item	VLAN ID	IP Address / Subnet Prefix	DHCP Client	MAC Address
1 ▾	1		Disable ▾	00cd.8860.2870
1	1		Disable	00CD.8860.2870
2	3	10.228.17.151/24	Disable	00CD.8860.2870

Refresh Create VLAN Interface Delete VLAN Interface

Set IP Address/DHCP Client Delete IP Address Help

LevelOne GEP-530

- IP Basic Configuration → Host Static Route Configuration

Host Static Route Configuration

Target Address/Subnet prefix	Next Hop
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>



Item	Target Address/Subnet prefix	Next Hop	Distance	State
1	0.0.0.0/0	10.228.17.254	1	active

Wireless LAN Controller

Cisco 3500 Series Wireless Controller

EoL Help: Please [Click here](#) to check if one or more Access Point(s) in your network are in End-of-Life phase.

NETWORK SUMMARY

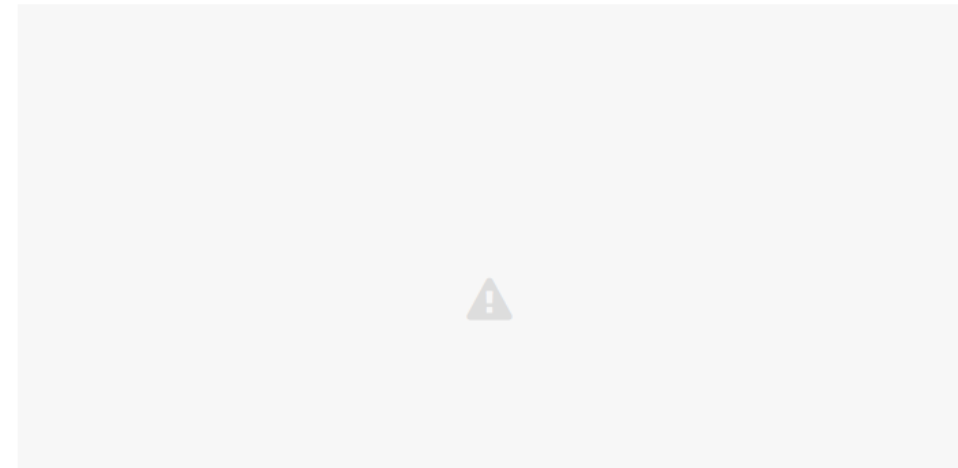
 Wireless Networks 4	 Access Points 66	Active Clients 0 2.4GHz 5GHz 73	Rogues 451 APs Clients 295	Interferers 0 2.4GHz 5GHz 0
--	---	---	--	---

ACCESS POINTS BY USAGE



- 758APG101
- 758APD401
- 758APD402
- 758APH102
- 758APB303
- 758APA404
- 758APH106
- 758APH303
- 758APB501
- 758APG502

OPERATING SYSTEMS



Cisco 3500 Series Wireless Controller

ACCESS POINTS

2.4GHz 5GHz

AP Name ↑	IP Address	Clients	Usage	Uptime	Chan...	Throug...	Channels	Interf...	Rogue
758APA401	10.228.17.28	30	234.8 MB	12 Hours 57 Min...	1	6304 bps	(116,120)	0	0
758APA402	10.228.17.29	0	44.0 B	12 Hours 57 Min...	1	0	(108,112)	0	0
758APA403	10.228.17.30	1	3.1 GB	59 Days 23 Hours	3	12 Kbps	(100,104)	2	0
758APA404	10.228.17.31	0	5.4 GB	59 Days 23 Hours	2	0	(128,124)	2	0
758APA501	10.228.17.24	0	1.2 GB	59 Days 23 Hours	1	0	(124,128)	1	0
758APA502	10.228.17.25	0	45.2 MB	59 Days 23 Hours	2	0	(100,104)	1	0
758APA503	10.228.17.26	0	51.1 MB	59 Days 23 Hours	3	0	(149,153) (116,120)	2	1
758APA504	10.228.17.27	0	1.6 GB	59 Days 23 Hours	3	0	(100,104)	2	0
758APB302	10.228.17.40	1	3.4 GB	59 Days 23 Hours	2	9 Kbps	(100,104)	1	0

Cisco 3500 Series Wireless Controller

CLIENTS

Clients		Total	72		Wireless		0		Apple		0	
					2.4GHz	72		Fastlane	Analytics		63	
IPv4 Address	AP Name	Protocol	Connectio...	Status	Signal ...	Signal ...	Usage ...	WLAN SSID				
10.181.69.106	758APA401	802.11ac	400	Online	29	-64	7.4 MB	class				
10.201.71.207	758APA401	802.11ac	360	Online	27	-66	11.8 MB	NTPC-Mobile2				
10.181.68.192	758APA401	802.11ac	360	Online	32	-61	6.9 MB	class				
10.201.70.186	758APA401	802.11ac	360	Online	31	-61	10.8 MB	NTPC-Mobile2				
10.201.70.103	758APA401	802.11ac	400	Online	29	-64	7.2 MB	NTPC-Mobile2				
10.181.69.25	758APA401	802.11ac	400	Online	27	-66	6.9 MB	class				

Cisco 3500 Series Wireless Controller

802.11a > RRM > Dynamic Channel Assignment (DCA)

Dynamic Channel Assignment Algorithm

- Channel Assignment Method Automatic Interval: 10 minutes AnchorTime: 0
 Freeze **Invoke Channel Update Once**
 OFF
- Avoid Foreign AP interference Enabled
Avoid Cisco AP load Enabled
Avoid non-802.11a noise Enabled
Avoid Persistent Non-WiFi Interference Enabled
- Channel Assignment Leader WLC758 (10.228.17.1)
Last Auto Channel Assignment 426 secs ago
- DCA Channel Sensitivity Medium (15 dB)
Channel Width 20 MHz 40 MHz 80 MHz 160 MHz 80+80 MHz Best
Avoid check for non-DFS channel Enabled

DCA Channel List

DCA Channels

56, 60, 100, 104, 108, 112, 116, 120, 124, 128,
132, 136, 140, 149, 153, 157, 161

Cisco 3500 Series Wireless Controller

WLANs > Edit 'NTPC-Mobile'

General Security QoS Policy-Mapping Advanced

Profile Name

Type WLAN

SSID

Status Enabled

Security Policies **MAC Filtering**
(Modifications done under security tab will appear after applying the changes.)

Radio Policy

Interface/Interface Group(G)

Multicast Vlan Feature Enabled

Broadcast SSID Enabled

NAS-ID

11ax Status Enabled

Cisco 3500 Series Wireless Controller

WLANs > Edit 'NTPC-Mobile'

General Security QoS Policy-Mapping Advanced

Layer 2 Layer 3 AAA Servers

Layer 2 Security [6](#)

MAC Filtering [9](#)

Reject Private MAC Clients

OWE Transition Mode

Fast Transition

Fast Transition

Cisco 3500 Series Wireless Controller

WLANs > Edit 'NTPC-Mobile'

General Security QoS Policy-Mapping Advanced

Layer 2 Layer 3 AAA Servers

Select AAA servers below to override use of default servers on this WLAN

RADIUS Servers

RADIUS Server Overwrite interface Enabled

Apply Cisco ISE Default Settings Enabled

	Authentication Servers	Accounting Servers
	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
Server 1	IP:203.72.154.101, Port:1812 ▼	IP:203.72.154.101, Port:1813 ▼
Server 2	IP:203.72.154.102, Port:1812 ▼	IP:203.72.154.102, Port:1813 ▼
Server 3	None ▼	None ▼
Server 4	None ▼	None ▼
Server 5	None ▼	None ▼
Server 6	None ▼	None ▼

Authorization ACA Server	Accounting ACA Server
<input type="checkbox"/> Enabled	<input type="checkbox"/> Enabled