



# H3C WA538 Anchor-AC設置ベストプラクティスガイド

## 想定ネットワーク構成(以下は設定例で設定の参考にしてください)

この資料はWA538-JPをAnchor-ACとして使う場合の操作をGUIで行います。

APの管理はVLAN1を使い、VLAN1に設定されているAnchor-ACのデフォルトのIPアドレス192.168.0.50/24が管理用IPアドレスとなります。

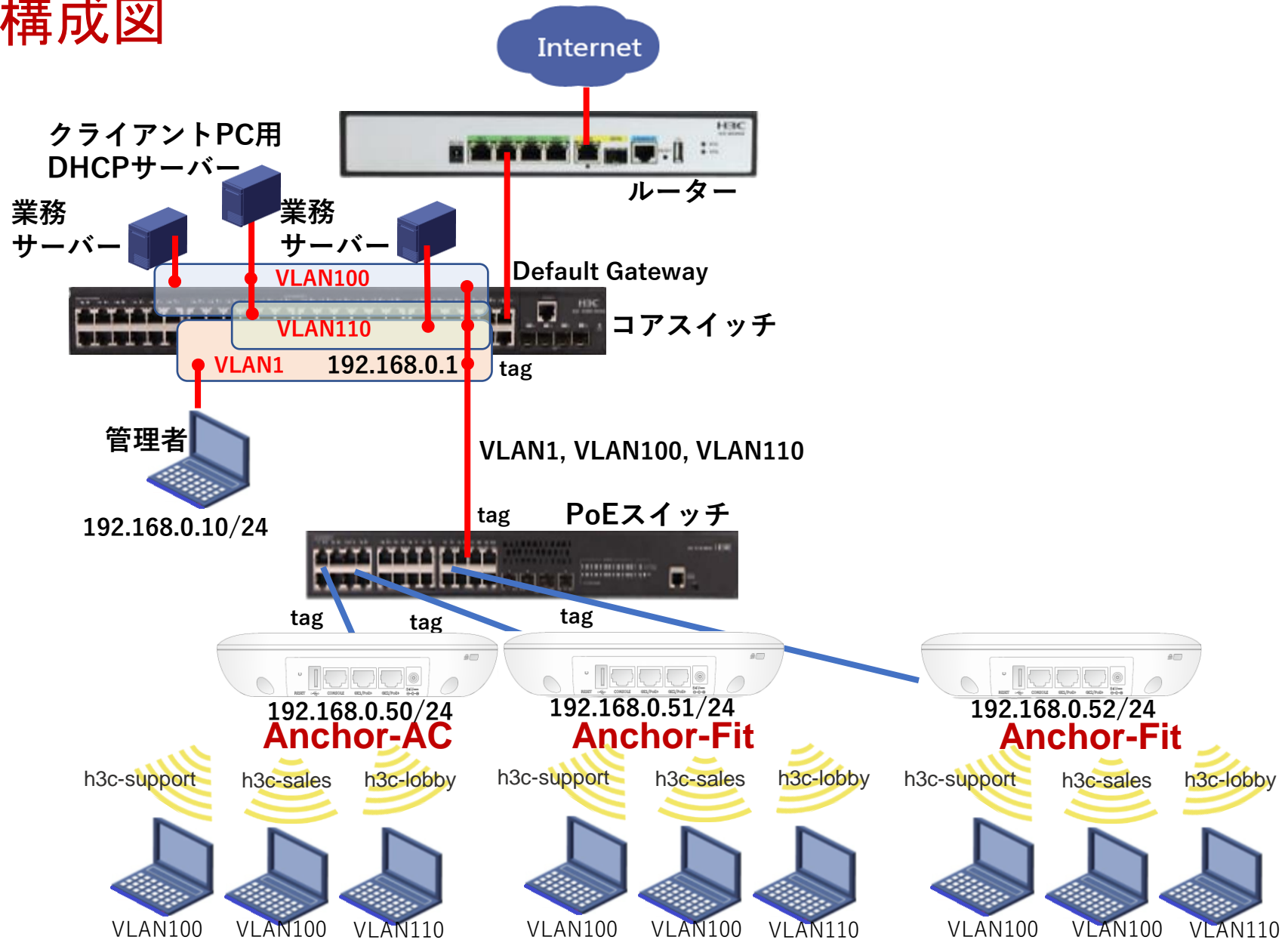
このセグメントにAnchor-FitのIPアドレスが揃うように、Anchor-ACをDHCPサーバー(最大49AP)として設定します。

このようにAncho-Fitに何も設定せず、工場出荷時の状態でネットワークに接続するだけでAnchor-ACの管理下に入る使い方を**ゼロタッチ設置**と呼びます。また、APが故障した時の交換も同様に**ゼロタッチ交換**、AP全体のバージョンアップはAnchor-ACからの**セントラルバージョンアップ**方式となります。

送出する電波とSSID、パスワード、VLAN、hiddenモードなどは以下の通りとします。

SSID	Password	VLAN	Hidden	Radio
h3c-support	@helpdesk99	100	yes	radio1 5GHz
h3c-sales	@bigsale	100	yes	Radio2 5GHz
h3c-lobby	thankyou	110	no	Raido3 2.4GHz

# ネットワーク構成図





- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて



# アクセスポイントの動作モードの違い

アクセスポイントの動作モードには **FAT**、**FIT**、**oasis**、**Anchor-AC**、**Anchor-Fit**の5通りがあります。

## FAT(自律)モード

FATは個々に管理します



Coreスイッチ

PoE

FAT FAT FAT

## FITモード

FITはACに管理されます

ルーター



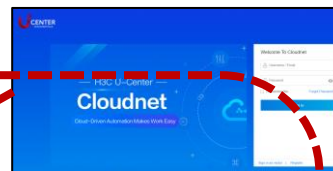
AC  
(Cloud管理可)

PoE

FIT FIT FIT

## oasisモード

Internet



CloudモードはCloudnetによりクラウドで管理される使い方とクラウドに接続しない自律的な使い方があります。



Coreスイッチ

PoE

oasis oasis

## Anchor-AC/Anchor-Fitモード

Anchor-ACは簡易的なACの機能を持ち複数のAnchor-Fitを管理することができます。Anchor-ACは複数台設定すると1台がmasterとなり、他のAPはバックアップとしてmasterが正常なうちはAnchor-Fitとして働き、masterに障害が発生するとAnchor-ACとなります。



Anchor-AC (Cloud管理不可)

PoE

Anchor-Fit Anchor-Fit Anchor-Fit

# 動作モード変更はブートメニューで行います

- RS-232規格のコンソールケーブルを用意し、図のようにWA538の左端のRJ-45のジャックに挿入します。使用するボーレートは次ページを参照ください。
- WA538はDC電源またはPoEスイッチで稼働しますので、PoEスイッチを用意して頂き、PoEスイッチを介してPCのLANポートに接続します。WA538の2つのRJ-45ポートは100M/1Gの自動認識になります。



Tera Term: シリアルポート 設定

ポート(P):	COM6	OK
ボー・レート(B):	9600	キャンセル
データ(D):	8 bit	ヘルプ(H)
パリティ(A):	none	
ストップ(S):	1 bit	
フロー制御(F):	none	

送信遅延

0 ミリ秒/字(C) 0 ミリ秒/行(L)

コンソール接続の通信設定は、9600ボー、データ8ビット、パリティなし、ストップビット1、フロー制御なし

# 動作モード変更はブートメニューで行います(続き)

手順：起動中に**Ctrl+B**を入力してBOOTWARE MENUにアクセスし、**Ctrl+Y**でモード変更メニュー

```
BootWare Validating...
Press Ctrl+B to access EXTENDED-BOOTWARE MENU...
Password recovery capability is enabled.
Note: The current operating device is flash
Enter < Storage Device Operation > to select device.
=====<EXTENDED-BOOTWARE MENU>=====
|<1> Boot System
|<2> Enter Serial SubMenu
|<3> Enter Ethernet SubMenu
|<4> File Control
|<5> Restore to Factory Default Configuration
|<6> Skip Current System Configuration
|<7> BootWare Operation Menu
|<8> Skip Authentication for Console Login
|<9> Storage Device Operation
|<0> Reboot
=====
Ctrl+Z: Access EXTENDED ASSISTANT MENU
Ctrl+F: Format File System
Ctrl+C: Display Copyright
Ctrl+Y: Change AP Mode
Enter your choice(0-9):
```



```
Please select the new mode
Current mode is Fit Mode
=====
|NO. Mode
|1 Fat Mode
|2 Fit Mode
|3 Anchor-AC (Virtual AC Mode)
|4 Anchor-Fit
|5 Oasis Mode
|0 Exit
=====
Enter your choice(0-5):3
```

Changed to **anchor-ac mode** successfully!

**注意：上記メニューでモードを選択しても、インストールしているファームウェアが対応していないモードであれば、reboot後、ファイルが存在しないというエラーが表示され、rebootが中断します。**

## アクセスポイントのファームウェアの種類

ダウンロードできるファームウェアは以下の3種類があります。ただし、ダウンロード先のFlashには容量の制限があり、すべてのファームウェアを保存することはできません。

- Oasis  
oasisモードをサポートします
- Anchor  
Anchor-acとAnchor-Fitモードをサポートします
- FAT  
FATモードをサポートします

FITモードのファームウェアはWX3840HやWX1840HなどのACにFITモードで接続すると自動的にダウンロードされます。



# FITモードのファームウェアダウンロードの手順

# WA538-JPでAnchorのファームウェアのみ保存

# されている状態

# FITモードのファームウェアは保存されていません

<WA538>dir

Directory of flash:

```
0 drw-      - Oct 29 2020 03:48:32  anchor-ac
1 drw-      - Oct 29 2020 03:46:55  anchor-fit
2 -rw-     261472 Jan 01 1970 00:00:24
defaultfile.zip
3 drw-      - Oct 29 2020 03:44:34  diagfile
4 -rw-      735 Nov 02 2020 13:03:21  hostkey
5 -rw-      156 Mar 23 2022 05:39:00  ifindex.dat
6 drw-      - Dec 31 2020 02:57:57  logfile
7 drw-      - Jan 01 1970 00:00:22  lost+found
8 drw-      - Oct 29 2020 03:45:09  pki
9 drw-      - Oct 29 2020 03:44:34  seclog
10 -rw-     591 Nov 02 2020 13:03:21  serverkey
11 -rw-     2326 Mar 23 2022 05:39:01  startup.cfg
12 -rw-    55766 Mar 23 2022 05:39:01  startup.mdb
13 -rw-    450752 Dec 31 2020 02:56:22  wa5300-
anchor-boot.bin
14 -rw-    34840576 Dec 31 2020 02:56:44  wa5300-
anchor-system.bin
131072 KB total (90156 KB free)
```

# WA538-JPをリブートして動作モードをFITにします

<WA538>reboot

Start to check configuration with next startup configuration file, please wait.....DONE!

Current configuration may be lost after the reboot, save current configuration? [Y/N]:n

This command will reboot the device. Continue? [Y/N]:y

Now rebooting, please wait...

System is starting...

BootWare Validating...

Press **Ctrl+B** to access EXTENDED-BOOTWARE MENU...

Password recovery capability is enabled.

Note: The current operating device is flash

Enter < Storage Device Operation > to select device.

==<EXTENDED-BOOTWARE MENU>=====

```
|<1> Boot System |
|<2> Enter Serial SubMenu |
|<3> Enter Ethernet SubMenu |
|<4> File Control |
|<5> Restore to Factory Default Configuration |
|<6> Skip Current System Configuration |
|<7> BootWare Operation Menu |
|<8> Skip Authentication for Console Login |
|<9> Storage Device Operation |
|<0> Reboot |
```

=====

Ctrl+Z: Access EXTENDED ASSISTANT MENU

Ctrl+F: Format File System

Ctrl+C: Display Copyright

**Ctrl+Y: Change AP Mode**

Enter your choice(0-9):

Please select the new mode

Current mode is **Anchor-Fit Mode**

# FITモードのファームウェアダウンロードの手順(続き)

# APモードの設定メニューでFit Modeを選択してリポート

```
=====
|NO. Mode
|1  Fat Mode
|2  Fit Mode
|3  Anchor-AC (Virtual AC Mode)
|4  Anchor-Fit
|5  Oasis Mode
|0  Exit
=====
```

Enter your choice(0-5):**2**

Changed to fit mode successfully!

System is starting...

Press Ctrl+D to access BASIC-BOOTWARE MENU

Booting Normal Extended BootWare

The Extended BootWare is self-decompressing.....Done.

BootWare Validating...

Press Ctrl+B to access EXTENDED-BOOTWARE MENU...

Loading the main image files...

The image does not exist!

Loading the backup image files...

The image does not exist!

Loading images fails.

**Trying to get the IP address from the DHCP server...**

**DHCP server's IP address is 192.168.0.1**

**Client's assigned address is 192.168.0.52**

**DNS domain name got from DHCP server is**

**DNS server's IP address is 0.0.0.0**

**Default Gateway's IP address is 192.168.0.1**

**This client's subnet mask is 255.255.255.0**

The length of option 43 is: 0

Change State : Idle to Broadcast Discovery

Change State : Broadcast Discovery to Join

Change State : Join to JoinAck

Change State : JoinCfm to Image Download

# ACからFITモードのファームウェアがダウンロードされます

Image file wa5300-boot.bin is self-decompressing...

Saving file flash:/wa5300-boot.bin .....Done.

Image file wa5300-system.bin is self-decompressing...

Saving file flash:/wa5300-system.bin .....Done.

[State : ImageLoad] Image download successful

[State : Idle] Reset request, rebooting the AP

Rebooting.....

BootWare Validating...

Press Ctrl+B to access EXTENDED-BOOTWARE MENU...

Loading the main image files...

Loading file flash:/wa5300-system.bin.....Done.

Loading file flash:/wa5300-boot.bin.....Done.

Extended BootWare Version is not equal,updating? [Y/N]Y

Updating Extended BootWare.....Done.

Basic BootWare Version is not equal,updating? [Y/N]Y

Updating Basic BootWare.....Done.

BootWare updated, System is rebooting now.

System is starting...

Press Ctrl+D to access BASIC-BOOTWARE MENU

Booting Normal Extended BootWare

The Extended BootWare is self-decompressing.....Done.

The Extended BootWare is self-decompressing.....Done.

BootWare Validating...

Press Ctrl+B to access EXTENDED-BOOTWARE MENU...

Loading the main image files...

Loading file flash:/wa5300-system.bin.....Done.

Loading file flash:/wa5300-boot.bin.....Done.

Image file flash:/wa5300-boot.bin is self-decompressing.....Done.

System image is starting...

Startup configuration file doesn't exist or is invalid.

Line con0 is available.

Press ENTER to get started.

# FITモードのファームウェアダウンロードの手順(続き)

# FITモードのファームウェアが保存されWA538-JPが

# FITモードで起動

<WA538>display wlan ap all

Current running mode: **FIT AP**.

%Mar 23 07:32:54:590 2022 f474-880b-5420 CWC/6/CWC\_AP\_UP:

Master CAPWAP tunnel to AC 192.168.0.1 went up.

<f474-880b-5420>dir

Directory of flash:

0 drw-		- Oct 29 2020 03:48:32	anchor-ac
1 drw-		- Oct 29 2020 03:46:55	anchor-fit
2 -rw-	261472	Jan 01 1970 00:00:24	defaultfile.zip
3 drw-		- Oct 29 2020 03:44:34	diagfile
4 -rw-	735	Nov 02 2020 13:03:21	hostkey
5 -rw-	156	Mar 23 2022 05:39:00	ifindex.dat
6 drw-		- Dec 31 2020 02:57:57	logfile
7 drw-		- Oct 29 2020 03:45:09	pki
8 drw-		- Oct 29 2020 03:44:34	seclog
9 -rw-	591	Nov 02 2020 13:03:21	serverkey
10 -rw-	5450752	Dec 31 2020 02:56:22	wa5300-anchor-
boot.bin			
11 -rw-	34840576	Dec 31 2020 02:56:44	wa5300-anchor-
system.bin			
<b>12 -rw-</b>	<b>5899264</b>	<b>Jan 01 2016 00:00:00</b>	<b>wa5300-boot.bin</b>
<b>13 -rw-</b>	<b>17982464</b>	<b>Jan 01 2016 00:00:00</b>	<b>wa5300-system.bin</b>

131072 KB total (66892 KB free)

# WA538-JPがWX1840Hに管理された状態

<WA538>display wlan ap all

Total number of APs: 1

Total number of connected APs: 0

Total number of connected manual APs: 0

Total number of connected auto APs: 0

Total number of connected common APs: 0

Total number of connected WTUs: 0

Total number of inside APs: 0

Maximum supported APs: 128

Remaining APs: 128

Total AP licenses: 20

Local AP licenses: 20

Server AP licenses: 0

Remaining local AP licenses: 20

Sync AP licenses: 0

AP information

State : I = Idle, J = Join, JA = JoinAck, IL = ImageLoad  
C = Config, DC = DataCheck, R = Run, M = Master, B = Backup

AP name	APID	State	Model	Serial ID
<b>f474-880b-5420</b>	<b>4</b>	<b>I</b>	<b>WA538-JP</b>	<b>219801A2959199G0001J</b>



- 01 アクセスポイントをAnchor-acに設定する
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- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
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- 08 マニュアルについて

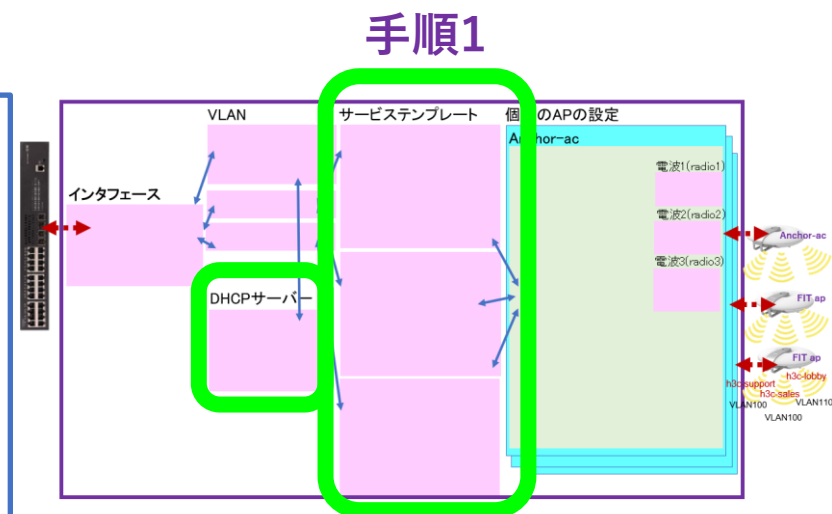
# GUIでの設定手順例

## 手順1：サービス(service-template)を作成する（SSID）

- ・ サービス名
- ・ SSIDの文字列
- ・ サービスを有効にする(service-template enable)
- ・ デフォルトVLAN番号
- ・ SSIDのhidden mode設定(ON/OFF)
- ・ forwarding type(AC経由もしくはローカル)
- ・ 認証タイプ(Open, PSK, 802.1x, MAC, Portal)
- ・ 認証場所(AC, AP)
- ・ セキュリティモード(WPA, WPA2, WPA3(現在はコマンドからのみ))
- ・ 管理フレーム保護(ON/OFF)
- ・ PSK文字列の入力
- ・ SSIDを送出する電波の選択(radio1 5G, radio2 2.4G)
- ・ サービス(service-template)の有効/無効

## 手順2：Anchor-ACをAPのためのDHCPサーバーとする

- ・ IPプール名： For AP Management
- ・ gateway-list 192.168.0.1
- ・ network 192.168.0.0 mask 255.255.255.0
- ・ address range 192.168.0.51 192.168.0.100





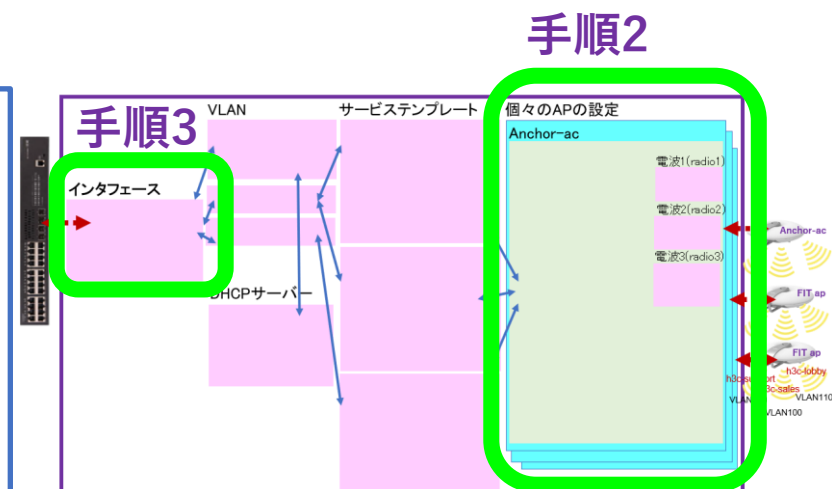
# GUIでの設定手順例(続き)

## 手順3：電波送受信ON/OFF(radio1, radio2, radio3)

- ・リージョンコード(JP)
- ・LEDモード
- ・CAPWAPトンネル暗号化(Enable/Disable)
- ・5GHz(1) ON/OFF
- ・2.4GHz(2) ON/OFF

## 手順4：1G/10Gポートのインタフェースに関する設定

- ・enable/shutdown
- ・link-type(Access, Trunk, Hybrid)
- ・PVID(デフォルトは1):タグ無しフレームを受信した際にPVIDで指定したタグが付いていると想定する
- ・受け入れ許可VLANリスト(デフォルトは1-4094)
- ・スピード(デフォルトはauto)
- ・二重化方式(デフォルトはauto)



# GUIでの設定手順例(続き)

## 手順5: VLANを作成

- VLAN番号を設定
- タグ付きかタグ無し(10Gのポートからタグ付きでアクセス)
- IPアドレスを設定する

## 手順6: ネットワークにAnchor-Fitが接続されると自動的に設定を作成するモードにする

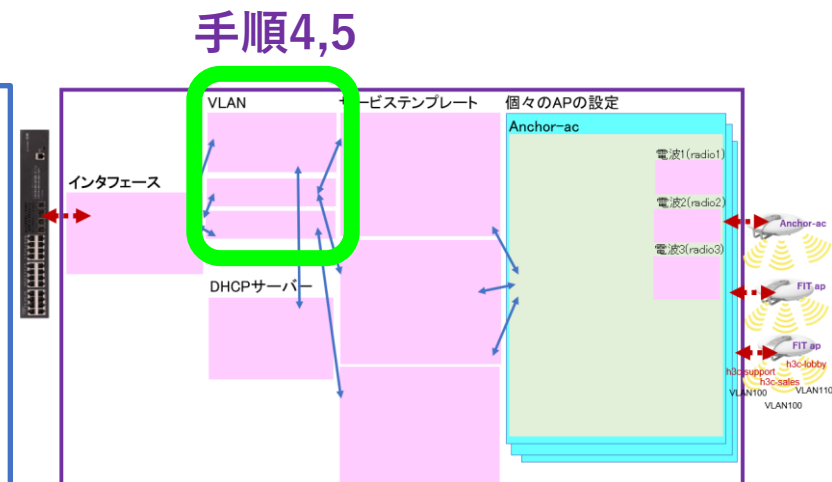
- **wlan auto-ap enable**
- **wlan auto-persistent enable**

## 手順7: Anchor-ACのバックアップのAPを設定する

- 宛先IPアドレス、マスク長

## 手順7: Anchor-ACのAPとしての設定は自動的に作成される

- その他のAPは上記手順6の設定により、Anchor-ACと同一セグメントで起動すると、Anchor-ACによって自動的にAPの設定が作成される

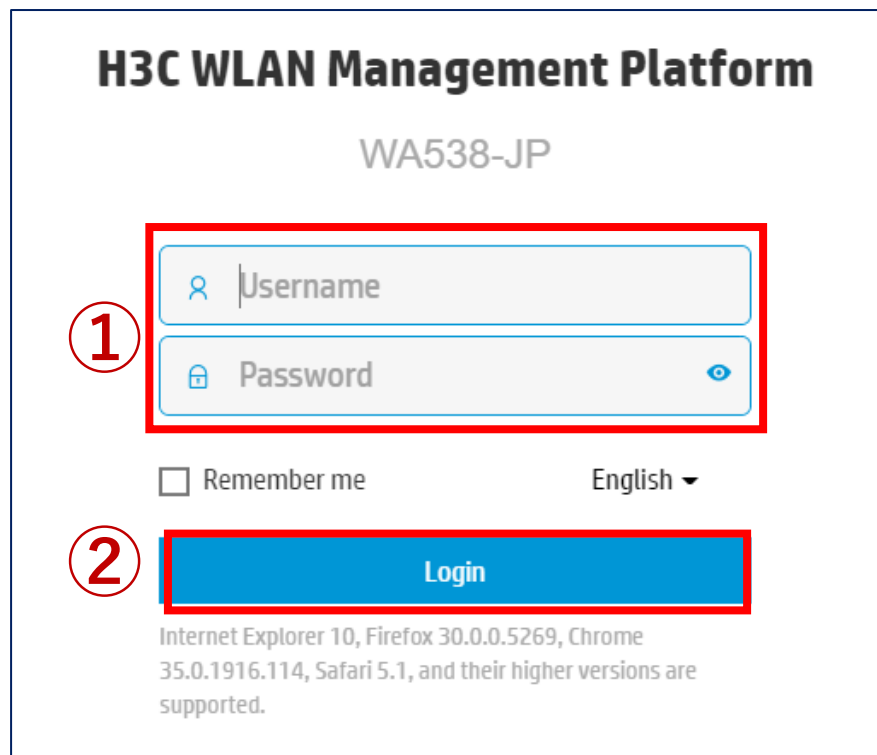


# Anchor-acのGUIにログインする方法

PCのブラウザを起動し以下のURLを入力します。

<http://192.168.0.50/>

デフォルトのユーザー名: admin、パスワード: h3capadmin



**H3C WLAN Management Platform**

WA538-JP

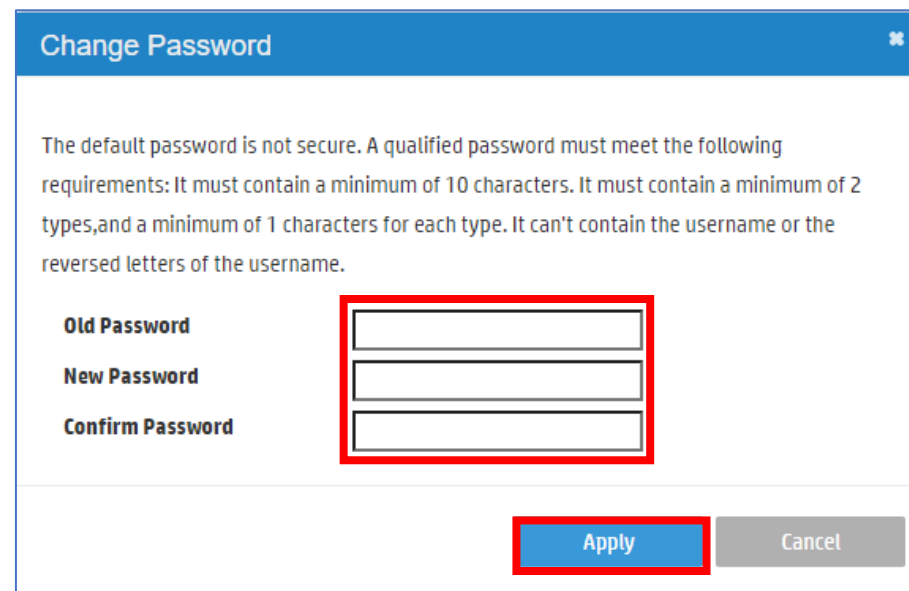
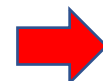
① Username

① Password

Remember me      English ▾

② Login

Internet Explorer 10, Firefox 30.0.0.5269, Chrome 35.0.1916.114, Safari 5.1, and their higher versions are supported.



Change Password

The default password is not secure. A qualified password must meet the following requirements: It must contain a minimum of 10 characters. It must contain a minimum of 2 types, and a minimum of 1 characters for each type. It can't contain the username or the reversed letters of the username.

Old Password

New Password

Confirm Password

Apply      Cancel

パスワードは10文字以上で、英数字記号などの2種類を含み、登録されているユーザー、adminなどの文字を含まないこと。

Region codeを設定します。

- JAPAN(JP)を選択します

Please select a region code

Region Code JAPAN(JP) ✕ ▾

OK

ログインするとDashboardが表示されます

H3C WA538-JP admin

Actions All Networks > Dashboard

Dashboard  
Quick Start >  
Monitoring >  
Wireless Configuration >  
Network Security >  
System >  
Tools >  
Reporting >

System Logs

Emergency 0  
Critical 5  
Warning 15  
Informational 7

APs

System usage

0% CPU  
51% Memory

Serial ID: 219801A2959199G0001J  
Hardware: Ver.A  
Boot ROM: 7.23  
Software: 7.1.064, Release 2436

Clients

Quantity 0

Interface traffic

System View Network View

Access Points 1 0 0 0  
Clients 0  
Event Logs 1 0 5 15 1 7

メニュー

ビューの切換え [System View | Network View]



# GUIのメニュー一覧

## • Network view

Actions
Dashboard
Quick Start >
Monitoring >
Wireless Configuration >
Network Security >
System >
Tools >
Reporting >

### Dashboard

#### Quick Start

Add Wireless Service

Add New User

#### Monitoring

Wireless Network

Clients

Wireless Security

Client Proximity Sensor

Application Monitoring

#### Wireless Configuration

Wireless Networks

AP Management

Wireless QoS

#### Wireless Security

WIPS

Allowlist and denylist

#### Radio Management

802.11n/802.11ax settings ,transmission distance

#### Applications

Mesh, Multicast

### Network Security

Packet Filter

#### Traffic Policy

Qos Policies, Priority Mapping

#### Access Control

802.1x

#### Authentication

RADIUS

User Management

#### Access Control

MAC Authentication

Port Security

Portal

### System

#### Resource

ACL, Time Range

Cloud Platform

### Tools

Debug

### Reporting

Client Statistics

Wireless Service Statistics

System View

Network View

# GUIのメニュー一覧

- System view

Actions
Dashboard
Network Configuration >
Network Security >
System >
Tools >

## Dashboard

### Network Configuration

Network Interfaces

VLAN

### Network Routing

Routing table

Static Routing

### Network Services

IP services

DHCP/DNS

Multicast

ARP

ND(Neighbor Discovery)

NAT

### Network Security

Packet Filter

Traffic Policy

### Access Control

802.1x

### Authentication

RADIUS

### User Management

Local users

## System

Event Logs

### Resource

ACL

Administrators

### Management

Configuration save, import

Upgrade

Reboot

### Tools

Debug

System View

Network View

# SSID(h3c-support)を作成する

The screenshot shows the H3C WA538-JP web interface for configuring wireless services. The interface is annotated with red boxes and circled numbers 1 through 11, indicating the steps to create an SSID named 'h3c-support'.

- 1**: Network View (bottom navigation)
- 2**: Quick Start (left sidebar)
- 3**: Add Services (left sidebar)
- 4**: Wireless service name: h3c-support
- 5**: SSID: h3c-support
- 6**: Wireless Service: ON
- 7**: Hide SSID: Yes, User Isolation: No, Forwarding type: Local (client forwarding-location ap)
- 8**: Authentication mode: Static PSK
- 9**: Security mode: WPA or WPA2
- 10**: PSK key: Passphrase
- 11**: Apply and Configure Advanced Settings (bottom right)

# 5GHZ(1)radioにSSID(h3c-support)を含める

H3C WA538-JP admin

All Networks > Quick Start > Add Services > Add Services > Advanced Settings(h3c-support)

WLAN Authentication Authorization Intrusion Protection Key Management **Binding** Access control

Bind to APs

Candidate

Search for

f474-880b-5420 (Radio2 5G)  
f474-880b-5420 (Radio3 2.4G)  
f474-880b-5420 (Radio1 5G)

Selected

Search for

Apply Cancel

System View **Network View**

Access Points 1 0 0 Clients 0 Event Logs 0 5 15 7

# SSID(h3c-sales)を作成する

**1** Add Services

**2** Wireless service name \* h3c-sales (1-63 chars)

**3** SSID \* h3c-sales (1-32 chars)

Description (1-64 chars)

**4** Wireless Service  ON  OFF

Default VLAN 100 (1-4094, 1 by default)

**5** Hide SSID  Yes  No  
User Isolation  Yes  No  
Forwarding type  
 Centralized  
 Local ※client forwarding-location ap  
Forward VLAN 100 (0-4094, e.g. 1,3,5-7)  
 Policy-based

**6** Authentication settings  
Authentication mode  
 Open (no authentication)  
 Static PSK  
 802.1X  
 802.1X (clear)  
 Static WEP  
 MAC Authentication  
 IPv4 Portal Authentication  
 IPv6 Portal Authentication  
Authenticator  
 Local AC  
 Central AC  
 AP

Security mode  
 WPA  WPA2  WPA or WPA2  WPA3-Personal  WPA3-Enterprise

Management Frame Protection  ON  OFF

PSK key \*  
**7** ..... (8-63 alphanumeric chars)  
**8** ..... Confirm password

**9** Apply and Configure Advanced Settings Apply

System View **Network View**

Access Points 1 0 1 0 0  
Clients 0  
Event Logs 1 0 5 15 14



# 5GHZ(2)radioにSSID (h3c-sales)を含める

The screenshot shows the H3C WA538-JP web interface. The top navigation bar includes 'All Networks > Quick Start > Add Services > Add Services > Advanced Settings(h3c-sales)'. The 'Binding' tab is selected and highlighted with a red box and a circled '1'. The 'Add Services' menu item in the left sidebar is also highlighted with a red box. The main content area is divided into 'Bind to APs', 'Candidate', and 'Selected' sections. The 'Candidate' list contains three entries: 'f474-880b-5420 (Radio1 5G)', 'f474-880b-5420 (Radio3 2.4G)', and 'f474-880b-5420 (Radio2 5G)'. The 'Radio3 2.4G' entry is highlighted with a red box and a circled '2', and a red arrow points from it to an empty box in the 'Selected' list. The 'Apply' button is highlighted with a red box and a circled '3'. The bottom status bar shows 'System View' and 'Network View' tabs, with 'Network View' selected. The status bar also displays 'Access Points' (1 green, 0 blue, 0 red), 'Clients' (0), and 'Event Logs' (0 red, 5 blue, 15 yellow, 8 blue).

# SSID(h3c-lobby)を作成する

The screenshot shows the H3C WA538-JP web interface for adding a wireless service. The interface is annotated with red boxes and numbers 1 through 9, indicating the steps to create an SSID named 'h3c-lobby' with Static PSK authentication and WPA or WPA2 security mode.

**1** Add Services (in the left sidebar)

**2** Wireless service name: h3c-lobby

**3** SSID: h3c-lobby

**4** Wireless Service: ON

**5** Forwarding type: Local (client forwarding-location ap)

**6** Authentication mode: Static PSK

**7** Security mode: WPA or WPA2

**8** PSK key: (password field)

**9** Apply and Configure Advanced Settings (button)

Additional visible settings include: Description (empty), Default VLAN (110), Hide SSID (No), User Isolation (No), and Forwarding type (Local).

Bottom status bar: System View, Network View, Access Points (1 green, 0 grey, 0 red), Clients (0), Event Logs (0 red, 5 yellow, 15 blue).

# 2.4GHZ(3)radioにSSID(h3c-lobby)を含める

The screenshot shows the H3C WA538-JP web interface. The left sidebar contains a menu with 'Add Services' highlighted in red. The main content area is titled 'All Networks > Quick Start > Add Services > Add Services > Advanced Settings(h3c-lobby)'. The 'Binding' tab is selected and highlighted in red. The 'Candidate' list contains three entries: 'f474-880b-5420 (Radio1 5G)', 'f474-880b-5420 (Radio2 5G)', and 'f474-880b-5420 (Radio3 2.4G)'. The 'Radio3 2.4G' entry is highlighted in red, and a red arrow points from it to an empty box in the 'Selected' list. The 'Apply' button is also highlighted in red. The bottom status bar shows 'System View' and 'Network View' tabs, with 'Network View' selected. The status bar also displays 'Access Points' (1 green, 0 grey, 1 red), 'Clients' (0), and 'Event Logs' (0 red, 5 grey, 15 yellow, 15 blue).

# Anchor-acを他のAPのDHCPサーバーとして設定する

画面中央の真下でSystem Viewを選択

System View

Network View

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb navigation path is System > Network Configuration > Network Services > DHCP/DNS > DHCP. The left sidebar contains a menu with the following items: Dashboard, Network Configuration (circled with 2), Network Interfaces, VLAN, Network Routing, Network Services (circled with 3), IP Services, DHCP/DNS (circled with 4), Multicast, ARP, ND, Management Protocols, Network Security, System, and Tools. The main content area shows the DHCP configuration page with tabs for DHCP, IPv4 DNS, and IPv6 DNS. A red box highlights the 'Enable DHCP' button, which is circled with 5. At the bottom of the page, there are two view toggle buttons: 'System View' (circled with 1) and 'Network View'. The bottom right corner features a status bar with 'Access Points' (1 green, 0 grey, 0 red), 'Clients' (0), and 'Event Logs' (0 red, 5 grey, 15 yellow, 24 blue).

# Anchor-acを他のAPのDHCPサーバーとして設定する（続き）

The screenshot shows the H3C WA538-JP web interface for DHCP configuration. The breadcrumb path is System > Network Configuration > Network Services > DHCP/DNS > DHCP. The page title is DHCP, with a subtitle: "The Dynamic Host Configuration Protocol(DHCP) provides a framework to assign configuration information to network devices." The left sidebar shows the navigation menu with "DHCP/DNS" selected. The main content area has a dropdown menu with "Add Address Pool" highlighted in red and circled with a "3". Above this, a toolbar contains "Service" (circled with a "2"), "Address pool" (highlighted in red), "Relay agent", and power, settings, and help icons. At the bottom, there is an "Apply" button. The footer contains a "System View" button (circled with a "1"), "Network View", and status indicators for Access Points (1 green, 0 grey, 0 red), Clients (0), and Event Logs (0 red, 5 yellow, 15 blue, 24 grey).

H3C WA538-JP

admin

System > Network Configuration > Network Services > DHCP/DNS > DHCP

DHCP

The Dynamic Host Configuration Protocol(DHCP) provides a framework to assign configuration information to network devices.

Service Address pool Relay agent

Add Address Pool

Assigned Address DHCP Options IP In Use

Apply

System View Network View

Access Points 1 0 0 Clients 0 Event Logs 0 5 15 24



# Anchor-acを他のAPのDHCPサーバーとして設定する（続き）

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb navigation path is System > Network Configuration > Network Services > DHCP/DNS > DHCP. The main content area is titled 'DHCP' and includes a description: 'The Dynamic Host Configuration Protocol(DHCP) provides a framework to assign configuration information to network devices.' A sidebar on the left lists various network configuration options, with 'DHCP/DNS' currently selected. A modal dialog box titled 'New DHCP Server Address Pool' is open in the center. It contains a text input field for 'Address pool name' with the value 'For AP Management' and a character count '(1-63 chars)'. A red circle with the number '1' highlights the input field. Below the input field, there are two buttons: 'Apply' and 'Cancel'. A red circle with the number '2' highlights the 'Apply' button. At the bottom of the interface, there are status indicators for 'Access Points' (1 green, 0 blue, 0 red), 'Clients' (0), and 'Event Logs' (0 red, 5 yellow, 20 green, 26 blue). The 'System View' button at the bottom center is also highlighted with a red box.

# Anchor-acを他のAPのDHCPサーバーとして設定する（続き）

H3C WA538-JP admin

System > Network Configuration > Network Services > DHCP/DNS > DHCP

## DHCP

The Dynamic Host Configuration Protocol(DHCP) provides a framework to assign configuration information to network devices.

Service Address pool Relay agent

For AP Management Delete Add Address Pool

Assigned Address DHCP Options IP In Use

Dynamic assignment

1 192.168.0.0 / 255.255.255.0 (Network address/mask)

IPv4 address Range

192.168.0.51 - 192.168.0.100

Static assignment

IP Address	Mask	Type	Hardware Address/Client ID
X.X.X.X		Ethernet	

Mask length must be in the range of 1 to 30.  
Hardware Address should be a string of 4-39 characters.

Apply 2

System View Network View

Access Points Clients Event Logs

1 0 0 0 0 5 20 26

# Anchor-acを他のAPのDHCPサーバーとして設定する（続き）

## VLAN1のDefault gatewayを設定

**H3C WA538-JP** admin

System > Network Configuration > Network Services > DHCP/DNS > DHCP

**DHCP** Service Address pool Relay agent

The Dynamic Host Configuration Protocol(DHCP) provides a framework to assign configuration information to network devices.

For AP Management Delete Add Address Pool

Assign APs DHCP Options AP In Use

Lease duration  Unlimited  1 days 0 hours 0 minutes 0 seconds

Client domain name (1-50 chars)

Gateways 192.168.0.1

DNS servers 8.8.8.8

WINS servers X.X.X.X

NetBIOS node type Select...

Option Code	Type	Option Content
2-254	Hex	1-256 chars.

DHCP Option should be a number of 2-254, but 50-54, 56, 58, 59, 61 and 82.  
When the DHCP option type is Hex, the option content must be a hexadecimal string with a length of an even number in the range of 2 to 256.

Apply

System View Network View

Access Points 1 0 0 Clients 0 Event Logs 0 5 20 29

# GE1/0/1ポートをtrunkポートに変更する(手順1)

画面中央の真下でSystem Viewを選択

System View

Network View

H3C WA538-JP

admin

Actions

System > Network Configuration > Network Interfaces > Interfaces

Dashboard

Interfaces Link Aggregation

Network Configuration

Interfaces

Statistics

Network Interfaces



All interfaces

Search



VLAN

Network Routing

Network Services

IP Services

DHCP/DNS

Multicast

ARP

ND

Management Protocols

Network Security

System

Tools

Interface	Status	IP Address	Speed(Kbps)	Duplex	Description	Actions
<input type="checkbox"/> GE1/0/1	Up	-- --	1000000	Full	GigabitEthernet1/0/1 Interface	
<input type="checkbox"/> GE1/0/2	Down	-- --	0	Auto	GigabitEthernet1/0/2 Interface	
<input type="checkbox"/> InLoop0	Up	127.0.0.1/255.0.0.0 --			InLoopBack0 Interface	
<input type="checkbox"/> NULL0	Up	-- --			NULL0 Interface	
<input type="checkbox"/> Vlan1	Up	192.168.0.50/255.255.255.0 --			Vlan-interface1 Interface	
<input type="checkbox"/> WLAN-Radio1/0/1	Up	-- --			WLAN-Radio1/0/1 Interface	
<input type="checkbox"/> WLAN-Radio1/0/2	Up	-- --			WLAN-Radio1/0/2 Interface	
<input type="checkbox"/> WLAN-Radio1/0/3	Up	-- --			WLAN-Radio1/0/3 Interface	

Total 8 entries, 8 matched, 0 selected. Page 1 / 1.



1

System View

Network View

Access Points

Clients

Event Logs

1 0 0 0 0 5 20 29

# GE1/0/1ポートをtrunkポートに変更する(手順2)

**1** Network Configuration

**2** Network Interfaces

**3** Trunk

**4** 1-4094

**System View**

System > Network Configuration > Network Interfaces > Interfaces > Edit Interface

Interface: GigabitEthernet1/0/1 (GE1/0/1)

Status:  up  Shut down

Description: GigabitEthernet1/0/1 Interface (1-255 chars)

MAC address: F4-74-88-0B-54-20 (HH-HH-HH-HH-HH-HH)

VLAN

Link type: Trunk

PVID: 1

Permit VLAN List: 1-4094 (1-4094, e.g. 3,5,10-100)

Link speed: (Current: 1000000Kbps)

Duplex: (Current: Full)

Bandwidth: (Current: 1000000kbit/s)

Link mode:  Bridge  Route

Jumbo frame:  Disable

Access Points: 1 0 0 0

Clients: 0

Event Logs: 0 5 20 29

# GE1/0/1ポートをtrunkポートに変更する(手順2)

The screenshot shows the H3C WA538-JP web interface for editing a network interface. The breadcrumb path is System > Network Configuration > Network Interfaces > Interfaces > Edit Interface. The left sidebar contains various configuration categories, with 'Network Interfaces' highlighted. The main content area displays configuration options for Duplex (Auto), Bandwidth (1000000kbit/s), Link mode (Bridge selected), Jumbo frame (1600 selected), BPDU interception (disabled), Flow control (Disable), and Traffic suppression (Broadcast, Multicast, and Unknown unicast suppression all set to ratio 100). At the bottom left, the 'Apply' button is circled with a red '2'. At the bottom right, a red arrow points downwards with a circled '1' at its base, indicating a scroll down action. The bottom status bar shows 'System View' selected and various system metrics.

画面の最下までスクロールダウン

# VLAN100を作成する

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb path is System > Network Configuration > VLAN > VLAN. The left sidebar contains the following menu items: Dashboard, Network Configuration (highlighted with a red box and circled 1), Network Interfaces, VLAN (highlighted with a red box and circled 2), Network Routing, Network Services, Management Protocols, Network Security, System, and Tools. The main content area shows a table of VLANs with columns: VLAN, Untagged Port List, Tagged Port List, IP address of the VLAN interface, and Description. A table with one entry is visible: VLAN 1, Untagged Port List 2, Tagged Port List 0, IP address 192.168.0.50/255.255.255.0, and Description VLAN 0001. A 'Create VLAN list' dialog box is open, showing a 'VLAN list' field (circled 4) containing '100' and an 'Apply' button (circled 5). The dialog also includes a 'Cancel' button and a note '(2-4094, e.g. 3,5,10-100)'. At the bottom of the interface, there are 'System View' and 'Network View' tabs, and a status bar showing 'Access Points' (1 green, 0 red, 0 yellow), 'Clients' (0), and 'Event Logs' (1 red, 0 yellow, 5 blue, 22 green, 30 blue).



# VLAN100をGE1/0/1のtrunk vlanにする

The screenshot shows the H3C WA538-JP network management interface. The left sidebar contains navigation menus for Actions, Dashboard, Network Configuration, Network Interfaces, VLAN, Network Routing, Network Services, Management Protocols, Network Security, System, and Tools. The main content area is titled 'VLAN' and shows a table of VLAN configurations. The table has columns for VLAN ID, Untagged Port List, Tagged Port List, IP address of the VLAN interface, and Description. Two entries are visible: VLAN 1 and VLAN 100. The 'Actions' column for VLAN 100 contains a red circle with the number '1' and a red square highlighting the edit icon. At the bottom of the interface, there are status indicators for Access Points, Clients, and Event Logs, and a 'System View' button highlighted with a red square.

System > Network Configuration > VLAN > VLAN

VLAN MAC STP

VLAN

VLAN	Untagged Port List	Tagged Port List	IP address of the VLAN interface	Description	Actions
1	↑ 2	0	192.168.0.50/255.255.255.0	VLAN 0001	✎
100	0	↑ 1	--	VLAN 0100	✎ ✖

Total 5 entries, 2 matched. Page 1 / 1.

System View Network View

Access Points: 1 0 0 0 Clients: 0 Event Logs: 1 0 5 22 30

# VLAN100をGE1/0/1のtrunk vlanにする(続き)

The screenshot displays the H3C WA538-JP web management interface for configuring a VLAN. The breadcrumb navigation is System > Network Configuration > VLAN > Edit VLAN. The interface is divided into several sections:

- Left Sidebar:** Contains navigation menus. The 'VLAN' menu item is highlighted with a red box and a circled '2'.
- Tagged port list:** A section on the left with a red box around its title.
- Candidate/Selected Port Lists:** Two columns for selecting ports. The 'Candidate' list contains GE1/0/1 and GE1/0/2. A red box and circled '3' highlight the 'GE1/0/1' entry, with an arrow pointing to the 'Selected' list.
- Bottom Left:** An 'Apply' button is highlighted with a red box and a circled '4'.
- Bottom Center:** 'System View' and 'Network View' tabs are visible, with 'System View' highlighted by a red box.
- Bottom Right:** Status indicators for Access Points, Clients, and Event Logs are shown.

Red annotations include a vertical arrow on the right side pointing downwards, labeled with a circled '1', and the text '画面の最下までスクロールダウン' (Scroll down to the bottom of the screen).

# VLAN110を作成する

The screenshot shows the H3C WA538-JP web management interface. The breadcrumb path is System > Network Configuration > VLAN > VLAN. The left sidebar has 'VLAN' selected. The main area displays a table of existing VLANs:

VLAN	Untagged Port List	Tagged Port List	IP address of the VLAN interface	Description	Actions
1	↑ 2	0	192.168.0.50/255.255.255.0	VLAN 0001	[Edit]
100	0			VLAN 0100	[Edit] [Delete]

A 'Create VLAN list' dialog box is open, showing the 'VLAN list' field with the value '110' entered. The 'Apply' button is highlighted. The dialog also includes a 'Cancel' button and a close button (X).

At the bottom of the interface, there are status indicators for 'Access Points' (1 green, 0 blue, 0 red), 'Clients' (0), and 'Event Logs' (0 red, 5 blue, 24 yellow, 31 blue).

# VLAN110をGE1/0/1のtrunk vlanにする

System > Network Configuration > VLAN > VLAN

VLAN MAC STP

VLAN

VLAN	Untagged Port List	Tagged Port List	IP address of the VLAN interface	Description	Actions
1	↑ 2	0	192.168.0.50/255.255.255.0	VLAN 0001	✎
100	0	↑ 1	--	VLAN 0100	✎ ✖
110	0	↑ 1	--	VLAN 0110	✎ ✖

Total 7 entries, 3 matched. Page 1 / 1.

System View Network View

Access Points 1 0 0 Clients 0 Event Logs 0 5 24 31

# VLAN110をGE1/0/1のtrunk vlanにする(続き)

The screenshot displays the H3C WA538-JP web management interface for configuring a VLAN. The breadcrumb navigation shows the path: System > Network Configuration > VLAN > VLAN > Edit VLAN. The interface is divided into several sections:

- Left Sidebar:** Contains navigation menus. The 'VLAN' menu item is highlighted with a red box and a circled '2'. Other items include Dashboard, Network Configuration, Network Interfaces, Network Routing, Network Services, Management Protocols, Network Security, System, and Tools.
- Tagged port list:** A section on the left with a red box around the label 'Tagged port list'.
- Port Selection:** Two main panels for moving ports between 'Candidate' and 'Selected' lists. In the lower 'Candidate' panel, the port 'GE1/0/1' is highlighted with a red box and a circled '3', with a red arrow pointing to the 'Selected' panel.
- Bottom Left:** An 'Apply' button is highlighted with a red box and a circled '4'. There is also an 'Cancel' button.
- Bottom Center:** 'System View' and 'Network View' tabs are present, with 'System View' highlighted.
- Bottom Right:** A status bar shows 'Access Points' (1 green, 0 blue, 0 red), 'Clients' (0), and 'Event Logs' (0 red, 5 yellow, 24 blue, 31 info).

Red annotations include:

- A vertical arrow on the right side pointing downwards, labeled with a circled '1' at the bottom.
- Text on the right side: '画面の最下までスクロールダウン' (Scroll down to the bottom of the screen).

# VLANが完成

1

System > Network Configuration > VLAN > VLAN

VLAN MAC STP

### VLAN

VLAN	Untagged Port List	Tagged Port List	IP address of the VLAN interface	Description	Actions
1	↑ 2	0	192.168.0.50/255.255.255.0	VLAN 0001	✎
100	0	↑ 1	--	VLAN 0100	✎ 🗑
110	0	↑ 1	--	VLAN 0110	✎ 🗑

Total 7 entries, 3 matched. Page 1 / 1.

System View Network View

Access Points: 1 0 0 0 Clients: 0 Event Logs: 0 5 24 32


# ネットワークにFIT APが接続されると自動的に設定を作成するモード (wlan auto-ap enable設定)

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb navigation path is: All Networks > Wireless Configuration > AP Management > AP Global Settings. The left sidebar contains a menu with the following items: Actions, Dashboard, Quick Start, Monitoring, Wireless Configuration (highlighted with a red box and circled '2'), Wireless Networks, AP Management (highlighted with a red box and circled '3'), Wireless QoS, Wireless Security, Radio Management, Applications, Network Security, System, Tools, and Reporting. The main content area shows the 'Basic Settings' for 'AP Global Settings' (highlighted with a red box and circled '4'). The settings include: Region code (JAPAN(JP)), Region code lock (OFF), Software upgrade (ON), Auto AP (OFF, with a red box and circled '5' and a red arrow pointing to an ON toggle), and Auto AP conversion (OFF, with a red box and circled '5' and a red arrow pointing to an ON toggle). The text '※wlan auto-ap enable設定' is placed next to the Auto AP setting, and '※wlan auto-persistent enable設定' is placed next to the Auto AP conversion setting. At the bottom of the interface, there are tabs for 'System View' and 'Network View' (highlighted with a red box and circled '1'). The bottom right corner shows system status: Access Points (1 green, 0 grey, 1 red, 0 blue), Clients (0), and Event Logs (1 red, 0 grey, 5 yellow, 24 blue, 32 white).



# APのデフォルトグループを設定します

The screenshot displays the H3C WAS38-JP web management interface. The left sidebar contains a navigation menu with the following items: Dashboard, Quick Start, Monitoring, **Wireless Configuration** (highlighted with a red box and circled '1'), Wireless Networks, **AP Management** (highlighted with a red box and circled '2'), Wireless QoS, Wireless Security, Radio Management, Applications, Network Security, System, Tools, and Reporting. The main content area shows the breadcrumb path: All Networks > Wireless Configuration > AP Management > AP Groups. The 'AP Groups' link is highlighted with a red box and circled '3'. Below the breadcrumb, there is a search bar and a table with the following structure:

Name	APs	Actions
default-group	1	 (circled '4')

At the bottom of the page, there is a status bar with the following information: Total 1 entries, 1 matched, 0 selected. Page 1 / 1. The footer contains 'System View' and 'Network View' tabs, and a summary of system metrics: Access Points (1 green, 0 grey, 0 red), Clients (0), and Event Logs (0 red, 5 grey, 25 yellow, 34 blue).

# APのデフォルトグループを設定します

**H3C WA538-JP** admin

Actions: All Networks > Wireless Configuration > AP Management > AP Groups > Edit AP Group(default-group)

Dashboard  
Quick Start >  
Monitoring >  
Wireless Configuration >  
Wireless Networks  
**AP Management**  
Wireless QoS  
Wireless Security  
Radio Management  
Applications  
Network Security >  
System >  
Tools >  
Reporting >

General | AC Backup | WLAN Service | Map Files

Group name \*  (1-31 chars)

Region code  \* ▾

LED mode  \* ▾

AP model 1  \* ▾

AP connection priority  (0-7, 4 by default)

CAPWAP tunnel keepalive  
Echo interval  seconds (0,5-255, 10 by default)

Request retransmission Interval  seconds (3-8, 5 by default)

Retransmission attempts  (2-5, 3 by default)

Statistics report interval  seconds (0-240, 50 by default)

CAPWAP tunnel encryption  Enable  Disable

Firmware upgrade  Enable  Disable  Inherit (Enabled)

AP model

AP Model	Radio	Enable
WA538-JP	5GHz(1)	<input checked="" type="checkbox"/>
WA538-JP	5GHz(2)	<input checked="" type="checkbox"/>
WA538-JP	2.4GHz(3)	<input checked="" type="checkbox"/>

2

3

System View **Network View**

Access Points: ● 1 ● 0 ● 0 ● 0  
 Clients: ● 0 ✖ 5 ▲ 25 i 34  
 Event Logs

# デフォルトグループのradio 1(5GHz)を設定します

The screenshot displays the H3C WA538-JP web interface for configuring the default group's radio 1 (5GHz). The interface is divided into a sidebar and a main content area. The sidebar on the left contains navigation options such as Dashboard, Quick Start, Monitoring, Wireless Configuration, AP Management, and Network Security. The main content area shows the configuration for the 'default-group' AP group, with the 'WLAN Service' tab selected. A modal window titled 'Add binding' is open, showing the configuration details for binding a WLAN service to a radio. The modal includes fields for AP Group Name (default-group), AP Type (WA538-JP), Radio (5GHz(1)), Bind WLAN Service (h3c-sales), and Bound VLAN (100). The 'VLAN' binding type is selected. The 'Apply' button is highlighted, indicating the final step in the configuration process.

1. Select 'WLAN Service' in the top navigation.

2. Click the 'Add' button.

3. Select the 'h3c-sales' service and 'VLAN' binding type.

4. Click the 'Apply' button.

# デフォルトグループのradio 2(5GHz)を設定します

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb navigation path is: All Networks > Wireless Configuration > AP Management > AP Groups > Edit AP Group(default-group). The main content area shows the configuration for the 'default-group' AP group, specifically for the 'radio 5GHz(2)'. A modal dialog titled 'Add binding' is open, showing the following configuration:

- AP Group Name: default-group
- AP Type: WA538-JP
- Radio: 5GHz(2)
- Bind WLAN Service: h3c-support
- Bound VLAN: 100
- Radio Type:  VLAN
- Radio Type:  VLAN Group

Three red circles with numbers 1, 2, and 3 are overlaid on the image to indicate the steps:

- 1: Points to the 'Add' button in the 'Bind wireless service to radio 5GHz(2)' section.
- 2: Points to the 'h3c-support' dropdown menu in the 'Bind WLAN Service' field.
- 3: Points to the 'Apply' button at the bottom of the 'Add binding' dialog.

The bottom status bar shows: System View | Network View | Access Points: 1 (green), 0 (blue), 1 (red), 0 (orange) | Clients: 0 | Event Logs: 1 (red), 0 (orange), 5 (yellow), 25 (green), 1 (blue), 35 (purple).

# デフォルトグループのradio 3(2.4GHz)を設定します

The screenshot displays the H3C WA538-JP web management interface. The breadcrumb path is: All Networks > Wireless Configuration > AP Management > AP Groups > Edit AP Group(default-group). The interface is divided into a left sidebar and a main content area. The sidebar includes sections for Actions, Dashboard, Quick Start, Monitoring, Wireless Configuration, Wireless Networks, AP Management (highlighted), Wireless QoS, Wireless Security, Radio Management, Applications, Network Security, System, Tools, and Reporting. The main content area shows the configuration for 'Bind wireless service to radio 5GHz(2)' and 'Bind wireless service to radio 2.4GHz(3)'. A modal dialog titled 'Add binding' is open, showing the following configuration:

- AP Group Name: default-group
- AP Type: WA538-JP
- Radio: 2.4GHz(3)
- Bind WLAN Service: h3c-lobby
- Bound VLAN: 110

Red annotations highlight the following elements:

- 1: The 'Add' button in the 'Bind wireless service to radio 2.4GHz(3)' section.
- 2: The 'h3c-lobby' service name in the 'Bind WLAN Service' field.
- 3: The 'Apply' button in the 'Add binding' dialog.

The bottom status bar shows 'System View' and 'Network View' tabs, and a summary of system metrics: Access Points (1 green, 0 blue, 1 red), Clients (0), and Event Logs (1 red, 0 blue, 5 red, 25 yellow, 35 blue).

# Ap-groupのdefault-group(全てのAPのテンプレート)を設定します

## GUIで設定できるのはここまで

```
#
wlan ap-group default-group
  region-code JP
  vlan 1
  ap-model WA538-JP
  radio 1
    radio enable
    service-template h3c-sales vlan
100
  radio 2
    radio enable
    service-template h3c-support
vlan 110
  radio 3
    radio enable
    service-template h3c-lobby vlan
110
  gigabitethernet 1
  gigabitethernet 2
#
```

## CLIでTen-gigabitethernet 1をtagポートに設定します

```
[H3C]wlan ap-group default-group
[H3C-wlan-ap-group-default-group]ap-model WA538-JP
[H3C-wlan-ap-group-default-group-ap-model-WA538-JP]gigabitethernet 2
[H3C-wlan-ap-group-default-group-ap-model-WA538-JP-Ten-gigabitethernet-1]port
link-type trunk
For the configuration to take effect, specify a PVID for the port and configure the port to
allow traffic from the PVID.
[H3C-wlan-ap-group-default-group-ap-model-WA538-JP-Ten-gigabitethernet-1]port
trunk permit vlan all
[H3C-wlan-ap-group-default-group-ap-model-WA58-JP-Ten-gigabitethernet-1]port
trunk pvid vlan 1
[H3C-wlan-ap-group-default-group-ap-model-WA538-JP-gigabitethernet-1]quit
[H3C-wlan-ap-group-default-group-ap-model-WA538-JP]quit
[H3C-wlan-ap-group-default-group]quit
```

## CLIでの設定後

```
[H3C] display current-configuration
wlan ap-group default-group
  region-code JP
  vlan 1
  ap-model WA538-JP
  radio 1
    radio enable
    service-template h3c-sales vlan 100
  radio 2
    radio enable
    service-template h3c-support vlan 110
  radio 3
    radio enable
    service-template h3c-lobby vlan 100
  gigabitethernet 1
  port link-type trunk
  port trunk permit vlan all
  port trunk pvid vlan 1
  gigabitethernet 2
[H3C]
```

# 最後に今まで設定したコンフィグを保存(save)してログアウト

admin > Save そして Logout

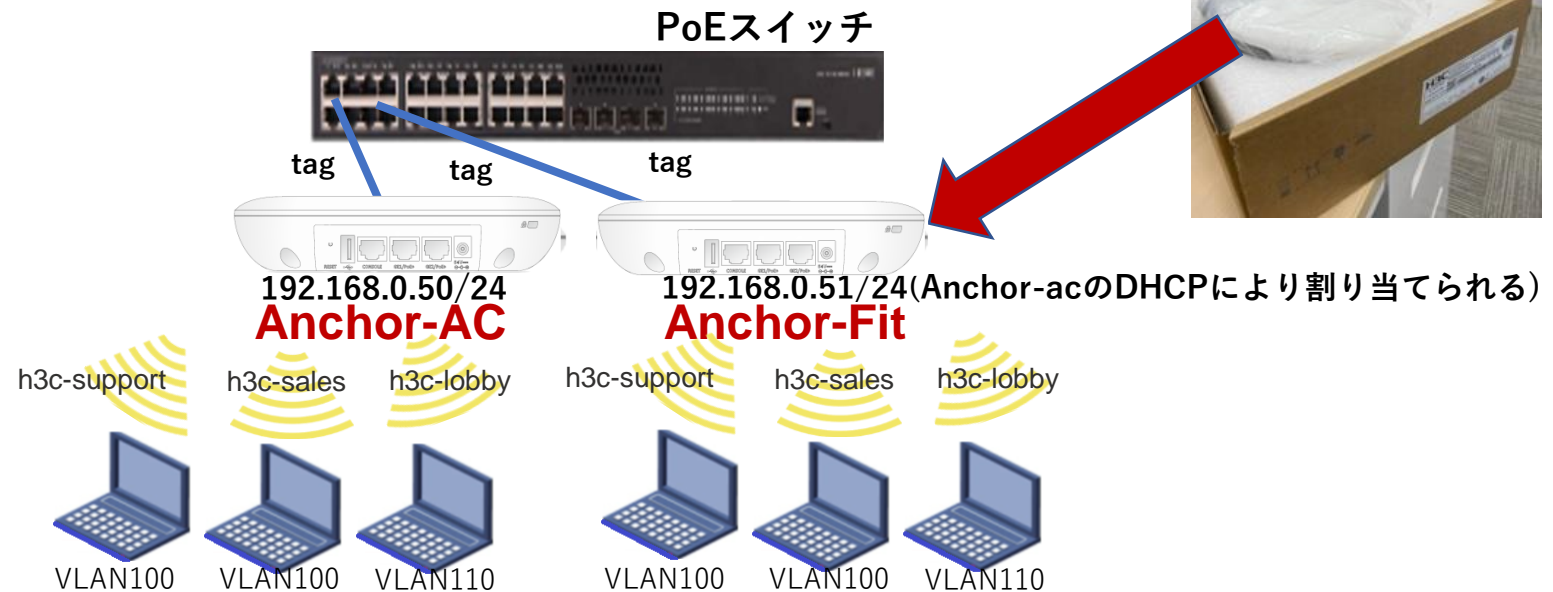
The screenshot displays the H3C WA538-JP web management interface. The top navigation bar is blue and contains the H3C logo and model number. On the right side of the navigation bar, the user 'admin' is logged in, indicated by a red box labeled '1'. A dropdown menu is open, showing options: Language (English), Save (highlighted with a red box labeled '2'), Logout (highlighted with a red box labeled '3'), Change Password, Roadmap, Scan and Look Me, and Standard Mode. The main content area shows a 'System Logs' section with a status bar indicating 0 Emergency, 5 Critical, and 25 Warning events. Below this are several monitoring charts: 'APs' showing 1 Online (100.00%), 'System usage' showing 0% CPU and 52% Memory, 'Wireless services' showing SSID distribution, and 'Clients' showing 0 clients. The bottom status bar shows 'Access Points' (1 Online, 0 Offline, 0 Error), 'Clients' (0), and 'Event Logs' (0 Critical, 5 Warning, 26 Info, 39 Debug).



# Anchor-ACのバックアップとなるAPをVLAN1のネットワークへ接続

## 工場出荷状態のAPをネットワークへ接続する

- ①APがCAPWAPをブロードキャストしてAnchor-ACとつながる
- ②多くの場合、APのファームウェアがAnchor-ACより古い（工場出荷時のバージョン）ので、Anchor-ACがバージョンを検知して自動的にAnchor-ACの持っている最新バージョンをAPにダウンロードしてリブートさせる（**セントラルバージョンアップ**）。
- ③Anchor-ACよりSSID, VLAN, 電波を出す設定などの設定がAPにダウンロードされる。バックアップ用のAnchor-ACの設定が終われば、残りも同様に箱から出してネットワークに接続するだけ（**ゼロタッチ設置**）で設定が完了。APが故障した場合も同様に予備のAPを箱から出して交換するだけ（**ゼロタッチ交換**）。





- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて

# 完成したコンフィグをコマンドで表示(telnetでログイン)

```
C:¥Users¥H3C>telnet 192.168.0.50
*****
* Copyright (c) 2004-2021 New H3C
Technologies Co., Ltd. All rights reserved.*
* Without the owner's prior written consent,
*
* no decompiling or reverse-engineering shall
be allowed.          *
*****
login: admin
Password: xxxxxxx
<AC> display current-configuration
  version 7.1.064, ESS 2442
  sysname WA538-JP
#
wlan global-configuration
#
telnet server enable
#
port-security enable
#
lldp global enable
lldp hold-multiplier 8
```

```
password-recovery enable
#
vlan 1
#
vlan 100
#
vlan 110
#
dhcp server ip-pool "For AP Management"
gateway-list 192.168.0.254
network 192.168.0.0 mask 255.255.255.0
address range 192.168.0.51 192.168.0.100
#
wlan service-template h3c-lobby
  ssid h3c-lobby
  vlan 110
  user-isolation enable
  akm mode psk
  preshared-key pass-phrase simple thankyou
  cipher-suite ccmp
  cipher-suite tkip
  security-ie rsn
  security-ie wpa
  service-template enable
```

```
wlan service-template h3c-sales
  ssid h3c-sales
  vlan 100
  user-isolation enable
  beacon ssid-hide
  akm mode psk
  preshared-key pass-phrase simple @bigsale
  cipher-suite ccmp
  cipher-suite tkip
  security-ie rsn
  security-ie wpa
  service-template enable
# wlan service-template h3c-support
  ssid h3c-support
  vlan 100
  user-isolation enable
  beacon ssid-hide
  akm mode psk
  preshared-key pass-phrase simple
@helpdesk99
  cipher-suite ccmp
  cipher-suite tkip
  security-ie rsn
  security-ie wpa
  service-template enable
```

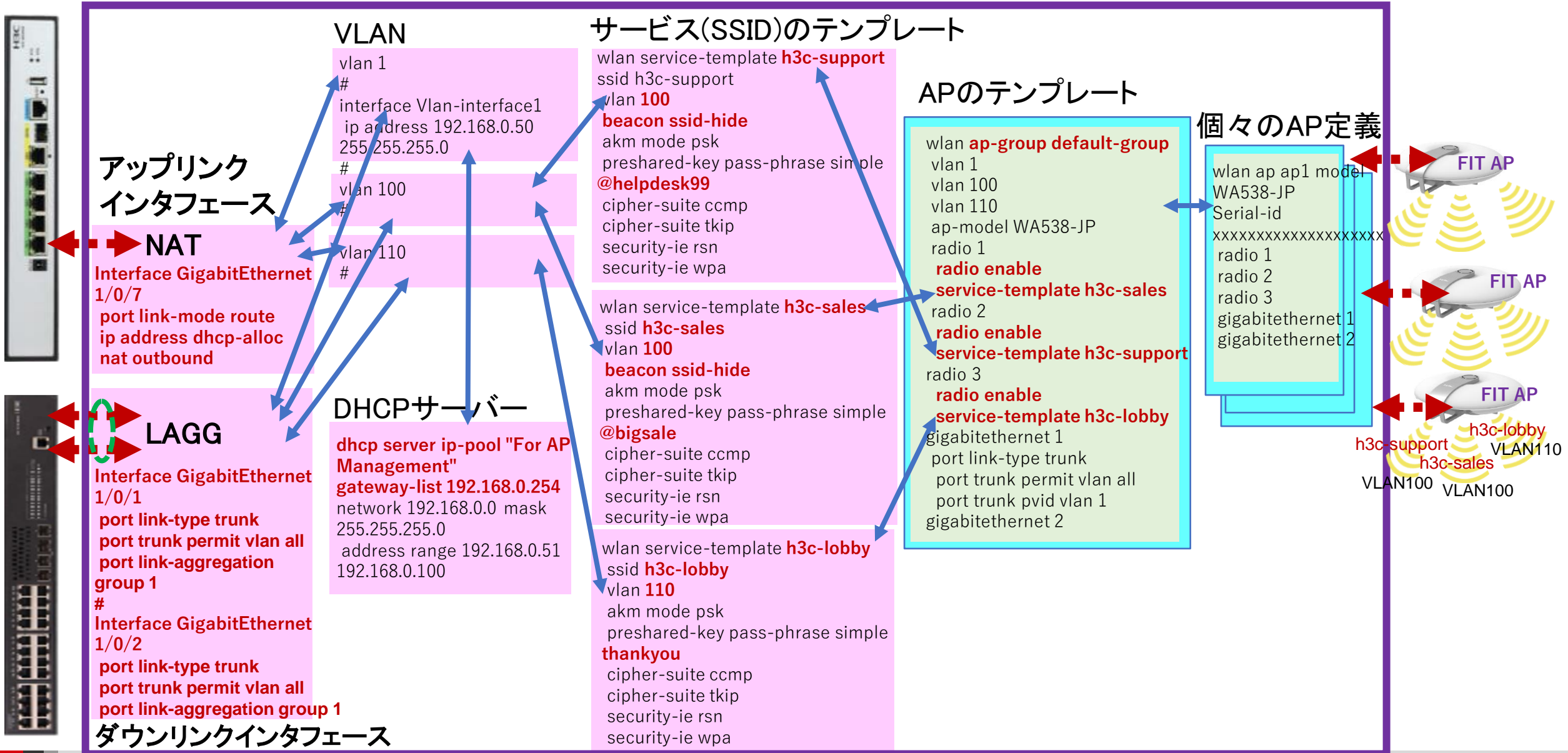
# 完成したコンフィグをコマンドで表示(続き)

```
interface NULL0
#
interface Vlan-interface1
 ip address 192.168.0.50 255.255.255.0
#
interface GigabitEthernet1/0/1
#
interface Ten-GigabitEthernet1/0/1
port link-type trunk
port trunk permit vlan all
#
interface WLAN-Radio1/0/1
#
interface WLAN-Radio1/0/2
#
interface WLAN-Radio1/0/3
#
途中省略
user-group system
local-user admin class manage
 password hash
 $h$6$zPcywA2ZH3oIIIRGP$nRSwA+vSOyz4/+w
 8K49qKPyJ+H8q9q3uGHcHImrTcSoSyKGjwyO6
 onv5m5jMf+xGG66X5yBL+N4fMx34nwhdAQ==
 service-type telnet http https
 authorization-attribute user-role network-
 admin
```

```
#
 ip http enable
 ip https enable
#
 undo attack-defense tcp fragment enable
#
wlan auto-ap enable
wlan auto-persistent enable
wlan anchor-ap persistent-mode ac
#
wlan ap-group default-group
vlan 1
 radio 1
 radio enable
 service-template h3c-sales vlan 100
 radio 2
 radio enable
 service-template h3c-support vlan 100
 radio 3
 radio enable
 service-template h3c-lobby vlan 110
gigabitethernet 1
 port link-type trunk
 port trunk permit vlan all
 port trunk pvid vlan 1
gigabitethernet 2
#
途中省略
```

```
wlan ap 1019-65c2-3ee0 model WA538-JP
serial-id 219801A2KF8209E00068
mac-address 1019-65c2-3ee0
anchor-ap enable #デフォルトではdisbleだがenable
# にすると障害復旧後のmaster選挙に参加する
radio 1
radio 2
radio 3
gigabitethernet 1
gigabitethernet 2
#
wlan ap f010-903e-f7e0 model WA538-JP
serial-id 219801A24F8201E0000J
auto-ap enable
Anchor-ap(FIT)の
設定例
vlan 1
radio 1
radio 2
radio 3
gigabitethernet 1
gigabitethernet 2
return
#
```

# 完成したACの設定内容







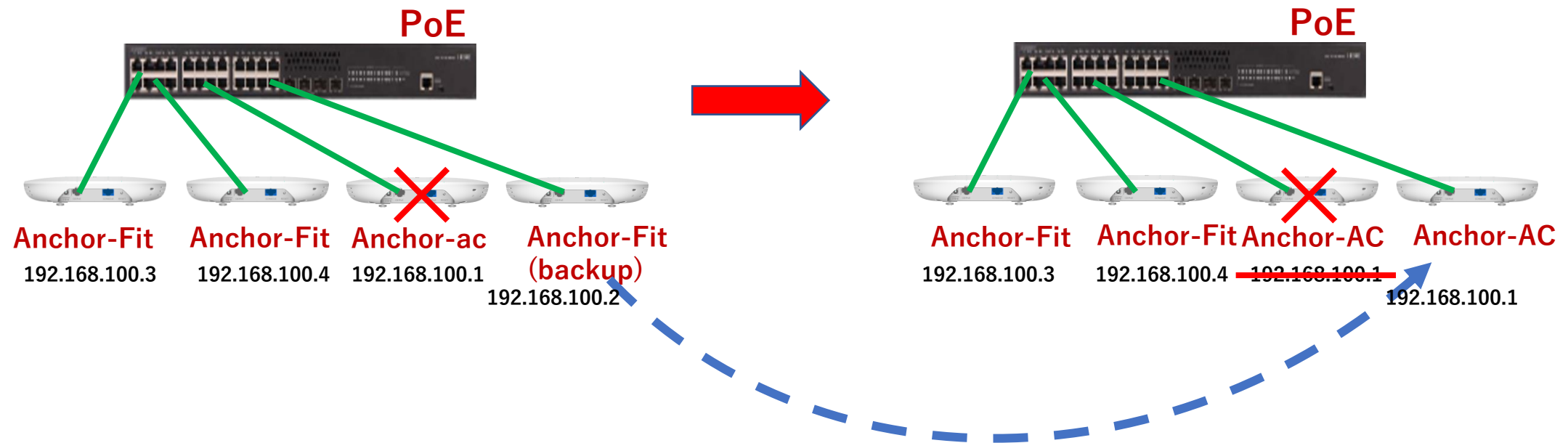
- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
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# Anchor-ACの障害時の新たなAnchor-ACへの切換え動作

## Anchor-AC障害発生時の挙動

1. Anchor-ACに障害が発生 -> Anchor-FitがAnchor-ACとのCAPWAPトンネルのダウンを検知
2. Anchor-Fitがリブート -> Anchor-ACモードに切り替わって起動

注) Anchor-ACの障害発生からあらたなAnchor-ACが機能するまで約4分程度  
その間、クライアントの通信は継続しますが、新たな接続はできません。



# 障害時のAnchor-FitからAnchor-ACへの切り替わり時間

## # Anchor-ACに障害発生

```
%Aug 25 13:23:07:839 2021 office CWC/4/CWC_AP_DOWN: Master CAPWAP tunnel to AC 192.168.1.1 went down. Reason: Neighbor dead timer expired.
```

```
%Aug 25 13:23:07:876 2021 office STAMGR/6/SERVICE_OFF: BSS f010-903e-f7e0 was deleted after service template officeuse with SSID h3cofficeuser was unbound from radio 1 on AP FitAP. Reason: AP down.
```

```
%Aug 25 13:23:07:876 2021 office STAMGR/6/SERVICE_OFF: BSS f010-903e-f7f0 was deleted after service template officeuse with SSID h3cofficeuser was unbound from radio 2 on AP FitAP. Reason: AP down.
```

```
%Aug 25 13:23:07:877 2021 office STAMGR/6/SERVICE_OFF: BSS f010-903e-f800 was deleted after service template officeuse with SSID h3cofficeuser was unbound from radio 3 on AP FitAP. Reason: AP down.
```

## # Anchor-FitがAnchor-ACになるためにリブート開始

```
%Aug 25 13:26:21:346 2021 office APMGR/6/APMGR_LOG_SETROLE_SUCCESS: [Anchor Fit] Reboot to AC, Reason: Have Not Recv Query Resp.
```

```
%Aug 25 13:26:21:488 2021 office APMGR/6/APMGR_LOG_REBOOTCAUSE: Set Wlan Reboot Cause, SubSlot = 65535, DevRebootCause = 0, WlanRebootCause = 24, ulRet = 0.
```

```
%Aug 25 13:26:21:604 2021 office DEV/5/BOARD_REBOOT: Board is rebooting on.
```

## # 新たなAnchor-ACが動作開始(約3分30秒後)

```
%Aug 25 13:26:39:991 2021 H3C SHELL/5/SHELL_LOGIN: Console logged in from con0.  
<office>
```



# FITの1台をAnchor-acのバックアップに設定する

バックアップを設定するGUIはサポートされておきませんので、Anchor-acにtelnetして設定します。

例えば、Anchor-acのIPアドレスが192.168.1.1の場合を例示します。

Anchor-Fitの設定はAnchor-acのコンフィグの最後の方に列記されておきますので、バックアップに設定するAnchor-Fitに**Anchor-ap enable**の設定を入れます。

## ・操作手順

```
Microsoft Windows [Version 10.0.22000.556]
(c) Microsoft Corporation. All rights reserved.
C:¥Users¥H3C>telnet 192.168.1.1
login: admin
Password: xxxxxx
<WA538> system-view
System View: return to User View with Ctrl+Z.
[WA538] wlan ap f474-880b-53c0 model WA538-JP
[WA538- f474-880b-53c0] anchor-ap enable
[WA538- f474-880b-53c0] quit
[WA538] save force
Validating file. Please wait...
Configuration is saved to device successfully.
[WA538] quit
<WA538>quit
```

## #変更前

```
wlan ap f474-880b-53c0 model WA538-JP
serial-id 219801A2959199G0001G
mac-address f474-880b-53c0
radio 1
radio 2
gigabitethernet 1
gigabitethernet 2
```



## #変更後

```
wlan ap f474-880b-53c0 model WA538-JP
serial-id 219801A2959199G0001G
mac-address f474-880b-53c0
anchor-ap enable
radio 1
radio 2
gigabitethernet 1
gigabitethernet 2
```

## FITの1台をAnchor-acのバックアップに設定する

#Anchor-ACのコンフィグを変更してsaveすると、バックアップのAnchor-Fitにもコピーされます

[H3C]**save force**

Validating file. Please wait...

Configuration is saved to device successfully.

%Mar 18 05:45:51:772 2022 H3C CWS/6/CWS\_RUN\_DOWNLOAD\_START: AP f474-880b-5540 started to download the file startup.cfg.

%Mar 18 05:45:51:811 2022 H3C CWS/6/CWS\_RUN\_DOWNLOAD\_COMPLETE: **Downloading the file startup.cfg for AP f474-880b-5540 through the CAPWAP tunnel is complete.**



- 01 アクセスポイントをAnchor-acに設定する
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- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 ブロードキャスト/マルチキャスト制限
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて

# Anchor-acのDashboardを表示

Network view > Dashboardを選択します。

The screenshot displays the H3C WA6638-JP network management interface. The top navigation bar includes the H3C logo and the model number WA6638-JP. The user is logged in as 'admin'. The left sidebar contains a menu with 'Dashboard' highlighted by a red box and a circled '2'. The main content area shows the 'Dashboard' view with the following components:

- System Logs:** A summary bar showing 0 Emergency, 5 Critical, 8 Warning, and 1 Information events.
- APs:** A pie chart showing 1 AP online, 0 offline, and 0 unhealthy. A line graph shows the status over time from 02:40:58 to 02:41:13.
- System usage:** Two donut charts showing 0% CPU usage and 68% Memory usage. A table lists system details: Serial ID (Z19801A2KF8209E00068), Hardware (Ver.A), Boot ROM (7.12), and Software (7.1.064, ESS 2442).
- Wireless services:** A bar chart showing client numbers for different SSIDs (f-kyoi..., fukuro..., f-kyo...) across 2.4GHz and 5GHz bands.
- Clients:** A large grey circle indicating 'N/A' and a quantity of 0.
- Interface traffic:** A section partially visible at the bottom.

The bottom navigation bar shows 'System View' and 'Network View' (highlighted with a red box and a circled '1'). The status bar at the bottom right displays: Access Points (1 green, 0 grey, 1 red), Clients (0), and Event Logs (1 red, 0 grey, 5 red, 8 yellow, 12 blue).

# Access Pointの状態を表示

Monitoring > Access Pointsを選択します。

The screenshot displays the H3C WA6638-JP network management interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and the user 'admin'. The breadcrumb trail is 'All Networks > Monitoring > Access Points > APs'. The left sidebar contains a menu with 'Monitoring' (circled 2) and 'Access Points' (circled 3) highlighted. The main content area shows 'AP quantity' with 4 Online APs, 0 Offline APs, and 0 Unhealthy APs. Below this are two charts: 'By AP model' showing 4 WA6638-JP units, and 'By AP type' showing 100.00% Online manual APs. The bottom status bar shows 'Network View' (circled 1) and summary statistics for Access Points (100% Online, 0% Offline, 0% Unhealthy), Clients (4), and Event Logs (796 warnings, 228 info).

Category	Value
Online APs	4
Offline APs	0
Unhealthy APs	0

AP Model	Count
WA6638-JP	4

AP Type	Percentage
Online manual APs	100.00%
Auto APs	0%
Offline manual APs	0%
Unauthenticated APs	0%

Access Points	Clients	Event Logs
100% Online, 0% Offline, 0% Unhealthy	4	796 Warnings, 228 Info

# Clientの状態を表示

Monitoring > Clientsを選択します。

The screenshot displays the H3C WA6638-JP network management interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and the user 'admin'. The breadcrumb trail is 'All Networks > Monitoring > Clients > Clients'. The left sidebar contains a menu with 'Monitoring' (circled with a red '2') and 'Clients' (circled with a red '3') highlighted. The main content area shows the 'Clients' page with two empty data tables and two charts: 'By Authentication Mode' (a pie chart showing 100% for PSK + WEP) and 'By radio type' (a donut chart showing 25% for 802.11gax(2.4GHz) and 75% for 802.11gac(2.4GHz)). The bottom status bar shows 'System View' and 'Network View' (circled with a red '1'), along with summary statistics for Access Points (100% green, 0% grey, 0% red) and Clients (4 total, 0 red, 0 grey, 796 yellow, 228 blue).

Actions

Dashboard

Quick Start >

Monitoring

Wireless Networks

Access Points

Clients

Wireless Security

RF Monitoring

Client Proximity Sensor

DPI

Application Monitoring

All Networks > Monitoring > Clients > Clients

Roadmap

Clients

1/1

1/1

By Authentication Mode

- Open
- 802.1X
- MAC
- Portal
- MAC + Portal
- PSK + WEP

100%

By radio type

- 802.11a(5GHz)
- 802.11an(5GHz)
- 802.11ac(5GHz)
- 802.11ax(5GHz)
- 802.11b(2.4GHz)
- 802.11g(2.4GHz)
- 802.11gn(2.4GHz)
- 802.11gac(2.4GHz)
- 802.11gax(2.4GHz)

25%

75%

System View Network View

1

Access Points 100% 0% 0%

Clients 4

Event Logs 0 0 796 228

# Clientの状態を表示

Reporting > Client Statisticsを選択します。

The screenshot displays the H3C WA6638-JP management interface. The left sidebar contains a navigation menu with the following items: Actions, Dashboard, Quick Start, Monitoring, Wireless Configuration, Network Security, System, Tools, Reporting, AP Statistics, and Wireless Service Statistics. The 'Reporting' item is circled with a red '2', and the 'Client Statistics' sub-item is circled with a red '3'. The main content area shows the breadcrumb 'All Networks > Reporting > Client Statistics > Access Category Frames' and a 'Roadmap' link. Below the breadcrumb are tabs for 'Access Category Frames', 'Access Category Bytes', 'Total Frames', and 'Total Bytes'. The 'Access Category Frames' tab is active. A search bar is present. The main table displays client statistics with the following columns: MAC Address, VO(Tx/Rx/Dropped), VI(Tx/Rx/Dropped), BE(Tx/Rx/Dropped), and BK(Tx/Rx/Dropped). The table contains four rows of data. At the bottom of the page, there are 'System View' and 'Network View' buttons, with 'Network View' circled with a red '1'. On the right, there are status indicators for 'Access Points' (100% green, 0% grey, 0% red), 'Clients' (4), and 'Event Logs' (0 red, 0 grey, 796 yellow, 228 blue).

MAC Address	VO(Tx/Rx/Dropped)	VI(Tx/Rx/Dropped)	BE(Tx/Rx/Dropped)	BK(Tx/Rx/Dropped)
10-98-C3-E4-9D-A0	68/0/0	0/0/0	1,473,734/1,175,642/0	0/0/0
8C-45-00-DD-BB-8D	71/0/0	0/0/0	83,929/104,072/0	0/0/0
DC-85-DE-FE-64-D8	64/0/0	0/0/0	104,469/129,130/0	0/0/0
F8-5E-A0-9A-82-D3	2/0/0	0/0/0	117/275/0	0/0/0

Total 4 entries, 4 matched. Page 1 / 1.

System View **Network View**

Access Points: 100% (green), 0% (grey), 0% (red)  
Clients: 4  
Event Logs: 0 (red), 0 (grey), 796 (yellow), 228 (blue)

# APの状態を表示

Reporting > AP Statisticsを選択します。

The screenshot displays the H3C WA6638-JP management interface. The left sidebar contains a navigation menu with the following items: Actions, Dashboard, Quick Start, Monitoring, Wireless Configuration, Network Security, System, Tools, Reporting, Client Statistics, AP Statistics, and Wireless Service Statistics. The 'Reporting' menu item is circled with a red '2', and the 'AP Statistics' menu item is circled with a red '3'. The main content area shows the breadcrumb 'All Networks > Reporting > AP Statistics > APs' and a 'Roadmap' link. Below the breadcrumb is a 'Refresh' button and a search bar. A table lists four APs with columns for AP Name, AP Model, Serial ID, MAC Address, Radio Type, and Status. All listed APs are in an 'Online' status. At the bottom of the page, there are 'System View' and 'Network View' buttons, with 'Network View' circled with a red '1'. The bottom right corner features a status bar with 'Access Points' (100% green, 0% grey, 0% red), 'Clients' (4), and 'Event Logs' (0 red, 0 grey, 796 yellow, 228 blue).

AP Name	AP Model	Serial ID	MAC Address	Radio Type	Status
AP01	WA6638-JP	219801A2KF8209E0006R	10-19-65-C2-41-B0	802.11ax(5GHz)(1), 802.11ax(5GHz)(2), 802.11ax(2.4GHz)(3)	Online
AP04	WA6638-JP	219801A2KF8209E0006W	10-19-65-C2-42-70	802.11ax(5GHz)(1), 802.11ax(5GHz)(2), 802.11ax(2.4GHz)(3)	Online
AP03	WA6638-JP	219801A2KF8209E0007F	10-19-65-C2-45-A0	802.11ax(5GHz)(1), 802.11ax(5GHz)(2), 802.11ax(2.4GHz)(3)	Online
AP02	WA6638-JP	219801A2KF8209E0007G	10-19-65-C2-45-D0	802.11ax(5GHz)(1), 802.11ax(5GHz)(2), 802.11ax(2.4GHz)(3)	Online

Total 4 entries, 4 matched. Page 1 / 1.

System View **Network View** 1

Access Points: 100% (green), 0% (grey), 0% (red) | Clients: 4 | Event Logs: 0 (red), 0 (grey), 796 (yellow), 228 (blue)



# Wireless Servicesの状態を表示

Reporting > Wireless Service Statisticsを選択します。

The screenshot displays the H3C WA6638-JP management interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and the user name 'admin'. The breadcrumb trail is 'All Networks > Reporting > Wireless Service Statistics > Wireless Services'. The left sidebar contains a menu with 'Reporting' (circled in red with a '2') and 'Wireless Service Statistics' (circled in red with a '3'). The main content area shows a table of wireless service statistics with columns for service ID, AP name, radio ID, frames, bytes, data frames, data frame bytes, and association frames. A search bar and a refresh button are located above the table. At the bottom, there are view toggles for 'System View' and 'Network View' (circled in red with a '1'), and status indicators for Access Points (100% green, 0% grey, 0% red), Clients (4), and Event Logs (0 red, 0 grey, 796 yellow, 228 blue).

Wireless Servic...	AP Name...	Radio...	Frames(Tx/Rx)	Frame Bytes(Tx/Rx) ▼	Data Frames(Tx/Rx)	Data Frame Bytes(Tx/Rx)	Association Frames(Tx/Rx)
2	AP04	2	24,867,814/13,430,792	18,733,699,909/5,973,486,019	24,867,210/13,429,315	18,733,633,822/5,973,384,900	122/122
1	AP01	1	25,349,612/11,034,928	17,108,597,369/3,583,184,788	25,345,902/11,025,012	17,108,199,559/3,582,424,123	248/248
1	AP02	1	26,505,281/10,328,811	16,576,891,888/3,730,647,504	26,503,959/10,324,133	16,576,755,684/3,730,355,130	116/116
2	AP01	3	15,599,827/8,157,474	9,999,828,366/2,388,465,465	15,599,324/8,155,998	9,999,786,386/2,388,382,717	57/57
2	AP01	2	19,675,919/10,434,697	9,706,379,270/4,445,352,979	19,675,373/10,433,056	9,706,319,529/4,445,242,478	44/44
2	AP01	1	10,804,696/6,375,032	6,473,589,963/2,094,957,715	10,804,210/6,373,045	6,473,538,159/2,094,844,665	41/41
1	AP02	2	9,565,508/3,907,045	5,410,128,415/1,016,979,523	9,563,463/3,900,419	5,409,914,757/1,016,519,918	114/114
2	AP02	1	6,625,308/3,262,791	3,829,215,322/1,324,332,252	6,625,146/3,261,633	3,829,198,648/1,324,282,042	14/14
2	AP02	2	4,782,785/2,484,396	2,917,326,484/730,632,191	4,782,637/2,483,696	2,917,310,643/730,593,825	13/13

Total 28 entries, 28 matched. Page 1 / 1.

System View **Network View** 1

Access Points: 100% (green), 0% (grey), 0% (red)  
Clients: 4  
Event Logs: 0 (red), 0 (grey), 796 (yellow), 228 (blue)

# ARPエントリーを表示

Network Services > ARPを選択します。

H3C WA6638-JP admin

Network Routing | System > Network Configuration > Network Services > ARP > ARP | Roadmap

2 Network Services

IP Services

DHCP/DNS

Multicast

3 ARP

ND

NAT

Management Protocols

Network Security >

System >

Tools >

ARP

Address Resolution Protocol resolves IP addresses into MAC addresses on Ethernet networks.

Search

<input type="checkbox"/>	IP Address ▲	MAC Address	Type	VLAN	Interface	Actions
<input type="checkbox"/>	10.10.11.11	4C-E9-E4-A6-61-0B	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.12	88-2A-5E-FF-22-63	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.14	0C-DA-41-1D-6F-68	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.16	14-51-7E-CA-93-A2	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.18	0C-DA-41-1D-A5-15	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.22	0C-3A-FA-4B-93-A0	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.25	5C-C9-99-B8-A0-8D	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.180	0C-DA-41-1D-19-6B	Dynamic	11	GE1/0/1	
<input type="checkbox"/>	10.10.11.182	0C-DA-41-1D-F7-E7	Dynamic	11	GE1/0/1	

System View | Network View

1

Access Points: 100% 0% 0% | Clients: 5 | Event Logs: 0 0 799 225

# イベントログを表示

System > Event Logsを選択します。

The screenshot displays the H3C WA6638-JP web interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and the user name 'admin'. The left sidebar contains a menu with items: Actions, Dashboard, Network Configuration, Network Security, System (circled with a red '2'), Event Logs (circled with a red '3'), Resource, File Systems, License Management, Administrators, Management, and Tools. The main content area shows the breadcrumb 'System > System > Event Logs > Event Logs' and the title 'Event Logs'. Below this is a 'System Logs' section with a search bar and a table of logs. The table has columns for Time, Level, and Description. The logs include entries for failed logins, system-view commands, and user logins/outs. At the bottom of the interface, there are status indicators for Access Points (100%), Clients (5), and Event Logs (799). The 'System View' button is circled with a red '1'.

Time	Level	Description	Actions
2022-02-04 02:25:18	Notification	h3c failed to log in from 10.10.11.180.	...
2022-02-04 02:28:04	Informational	-Line=vty0-IPAddr=10.10.11.182-User=admin; Command is system-view	...
2022-02-04 02:28:04	Notification	admin logged in from 10.10.11.182.	...
2022-02-04 02:28:05	Notification	admin logged out from 10.10.11.182.	...
2022-02-04 02:28:05	Informational	-Line=vty0-IPAddr=10.10.11.182-User=admin; Command is quit	...
2022-02-04 02:28:05	Informational	-Line=vty0-IPAddr=10.10.11.182-User=admin; Command is quit	...
2022-02-04 02:28:05	Informational	-Line=vty0-IPAddr=10.10.11.182-User=admin; Command is display radius scheme	...
2022-02-04 02:30:18	Notification	h3c failed to log in from 10.10.11.180.	...
2022-02-04 02:35:18	Notification	h3c failed to log in from 10.10.11.180.	...

# エラーログをダウンロード

System > File SystemでファイルにチェックマークをいれDownloadを選択します。

The screenshot displays the H3C WA6638-JP File System Management interface. The left sidebar contains a navigation menu with the following items: Actions, Dashboard, Network Configuration, Network Security, System (circled with a red '2'), Event Logs, Resource, File Systems (circled with a red '3'), License Management, Administrators, Management, and Tools. The main content area shows the 'File System Management' page for the 'flash:' storage. It displays a table of files with columns for Name, Size(bytes), Time, Directory, and Actions. The file 'flash:/logfile/logfile.log' is selected, indicated by a checked checkbox (circled with a red '4'). Below the table, there are buttons for 'Delete' and 'Download' (circled with a red '5'). The bottom status bar shows 'System View' (circled with a red '1') and various system metrics.

System > System > File Systems > File System Management

File System Management

flash:

Total: 1073741824 bytes, Used: 383623168 bytes, Free: 690118656 bytes

Name	Size(bytes)	Time	Directory	Actions
<input checked="" type="checkbox"/> flash:/logfile/logfile.log	10485731	2022-02-06 15:57:27	No	🗑️
<input type="checkbox"/> flash:/map_config.cfg	913	2021-03-18 12:12:25	No	🗑️
<input type="checkbox"/> flash:/pdt_reserve		2022-02-05 16:32:40	Yes	🗑️
<input type="checkbox"/> flash:/pdt_reserve/cplog.txt	14778277	2022-02-05 16:32:40	No	🗑️
<input type="checkbox"/> flash:/pdt_reserve/cplog_reboot.txt	1800197	2021-12-03 16:46:37	No	🗑️
<input type="checkbox"/> flash:/pdt_reserve/dplog.txt	10887615	2022-02-05 16:32:58	No	🗑️
<input type="checkbox"/> flash:/pdt_reserve/dplog_reboot.txt	1476442	2021-12-03 16:46:39	No	🗑️

Total 49 entries, 49 matched, 1 selected. Page 1 / 1.

Delete Download

System View Network View

Access Points: 100% OK, 0% Error, 0% Warning  
Clients: 5  
Event Logs: 0 Error, 0 Warning, 799 Info, 225 Debug

# コンフィギュレーションファイル(startup.cfg)のダウンロード

System > File Systemでflash:/startup.cfgにチェックマークをいれDownloadを選択します。

The screenshot shows the H3C WA6638-JP File System Management interface. The left sidebar contains navigation menus: Actions, Dashboard, Network Configuration, Network Security, System (circled 2), Event Logs, Resource, File Systems (circled 3), License Management, Administrators, and Management. The main content area is titled 'File System Management' and shows a file list for the 'flash:' directory. The file 'flash:/startup.cfg' is selected (checkbox circled 4). The 'Download' button is highlighted (circled 5). At the bottom, the 'System View' button is circled 1. A warning message at the bottom states: 'この種類のファイルはコンピュータに損害を与える可能性があります。flash\_startup.cfg のダウンロードを続けますか?' (This type of file may cause damage to your computer. Do you want to continue downloading flash\_startup.cfg?).

Name	Size(bytes)	Time	Directory	Actions
<input checked="" type="checkbox"/> flash:/startup.cfg	7598	2021-04-09 00:49:16	No	
<input type="checkbox"/> flash:/startup.mdb	196346	2021-04-09 00:49:16	No	
<input type="checkbox"/> flash:/startup2726641351479625.cfg	6191	2020-11-08 16:57:12	No	
<input type="checkbox"/> flash:/system.bin	91169792	2021-11-09 14:59:59	No	
<input type="checkbox"/> flash:/topology.db	0	2020-12-18 21:43:24	No	

Total 49 entries, 49 matched, 1 selected. Page 1 / 1.

Access Points: 100% (green), 0% (blue), 0% (red) | Clients: 5 | Event Logs: 0 (red), 0 (red), 799 (yellow), 225 (blue)

# 診断ログを収集(display diagnostic-information)

Tools > Debug > Collectを選択します。ログはflash:/diag\_AC\_yyyymmdd-hhmmss.tar.gzに出力

The screenshot shows the H3C WA6638-JP web management interface. The breadcrumb navigation path is System > Tools > Debug > Diagnostics. The 'Tools' menu item in the left sidebar is highlighted with a red box and a circled '2'. The 'Debug' sub-menu item is also highlighted with a red box and a circled '3'. The 'Collect' button in the main content area is highlighted with a red box and a circled '4'. A modal dialog box is displayed in the center, containing the text 'Please wait...' and 'Collecting diagnostic information...'. At the bottom of the interface, the 'System View' button is highlighted with a red box and a circled '1'. The bottom right corner displays system statistics: Access Points (100% green, 0% grey, 0% red), Clients (5), and Event Logs (0 red, 0 grey, 800 yellow, 224 blue).

H3C WA6638-JP admin

Actions System > Tools > Debug > Diagnostics Roadmap

Dashboard Diagnostics

Network Configuration >

Network Security >

System >

Tools >

Debug

Ping

Tracert

Collect

Please wait...

Collecting diagnostic information...

System View Network View

Access Points 100% 0% 0%

Clients 5

Event Logs 0 0 800 224

# 収集した診断ログをダウンロードする

System > File Systemsでflash:/diag\_AC\_yyyymmdd-hhmmss.tar.gzをチェックしDownloadを選択

The screenshot shows the H3C WA6638-JP File System Management interface. The left sidebar contains navigation options: Actions, Dashboard, Network Configuration, Network Security, System (highlighted with a red box and circled '2'), Event Logs, Resource, File Systems (highlighted with a red box and circled '3'), License Management, Administrators, and Management. The main content area displays 'File System Management' for the 'flash:' storage. It shows a table of files with columns for Name, Size(bytes), Time, Directory, and Actions. The file 'flash:/diag\_AC\_20220206-155614.tar.gz' is selected (checkbox checked, circled '4'). Below the table, there are buttons for 'Delete' and 'Download' (highlighted with a red box and circled '5'). At the bottom, there are tabs for 'System View' (highlighted with a red box and circled '1') and 'Network View'. The status bar at the bottom right shows 'Access Points' (100% green, 0% grey, 0% red), 'Clients' (5), and 'Event Logs' (0 red, 0 grey, 801 yellow, 223 blue).

Name	Size(bytes)	Time	Directory	Actions
<input checked="" type="checkbox"/> flash:/diag_AC_20220206-155614.tar.gz	208655	2022-02-06 15:57:31	No	
<input type="checkbox"/> flash:/diagfile		2019-11-05 22:01:41	Yes	
<input type="checkbox"/> flash:/facebook.zip	262878	2021-12-11 16:30:23	No	
<input type="checkbox"/> flash:/freeradius.bin	1463296	2021-04-08 23:45:29	No	
<input type="checkbox"/> flash:/h3cjapan.zip	190739	2021-09-08 11:34:54	No	

# (オプション)Anchor-acをリブートする

System > Management > Reboot > Reboot Deviceを選択します。

The screenshot displays the H3C WA6638-JP management interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and the user name 'admin'. The breadcrumb trail is 'System > System > Management > Reboot'. The main content area shows a 'Reboot' tab selected, with a 'Reboot Device' button highlighted. The left sidebar contains a menu with 'System' and 'Management' highlighted. The bottom status bar shows 'System View' selected, along with various system metrics.

① System View

② System

③ Management

④ Reboot

⑤ Reboot Device

Access Points: 100% (green), 0% (blue), 0% (red)  
Clients: 5  
Event Logs: 0 (red), 0 (red), 799 (yellow), 225 (blue)





- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて

# Anchor-acをバージョンアップする

System View > Network Configuration > System > Management > Upgrade > Upgradeを選択します。

The screenshot displays the H3C WA6638-JP management interface. The breadcrumb navigation path is System > System > Management > Upgrade. The left sidebar contains the following menu items: Dashboard, Network Configuration (2), Network Security, System (3), Event Logs, Resource, File Systems, Administrators, Management (4), and Tools. The main content area shows the Upgrade page with sub-menus: Settings, Configuration (5), Upgrade (6), Reboot, and About. A 'View Software Images' button is also visible. The bottom status bar shows 'System View' (1) and 'Network View' tabs, along with status indicators for Access Points (1 green, 1 blue, 1 red), Clients (0), and Event Logs (0 red, 5 yellow, 7 blue).

# Anchor-acをバージョンアップする（続き）

最新バージョンのファームウェアは予めH3CのWebサイトよりダウンロードしておきます

The screenshot displays the H3C WA6638-JP web management interface. The breadcrumb navigation path is System > System > Management > Upgrade. The 'Upgrade' tab is active, and a modal dialog titled 'Upgrade system software' is open. The dialog contains the following text:

1 ファイルを選択 選択されていません

Reboot now

Buttons: Apply, Cancel

At the bottom of the interface, there are status indicators for 'Access Points' (1 green, 1 blue, 1 red), 'Clients' (0), and 'Event Logs' (0 red, 5 yellow, 7 blue).

# Anchor-acをバージョンアップする（続き）

最新バージョンのファームウェアを選択します

The screenshot displays the H3C WA6638-JP management interface. The left sidebar shows the 'Management' menu. The main content area is titled 'System > System > Management > Upgrade' and includes tabs for 'Settings', 'Configuration', 'Upgrade', 'Reboot', and 'About'. The 'Upgrade' tab is active, showing a 'View Software Images' section with a 'Upgrade' button. A file explorer window is overlaid on the interface, showing the 'Downloads' folder. The file 'WA6600-CMW710-E2450P01.ipe' is selected and highlighted with a red box, with a red circle containing the number '1' next to it. The file explorer also shows a 'Reboot now' checkbox and a 'teraterm.log' file in the file name field.

名前	更新日時	種類
かなり前 (1)		
WA6600-CMW710-E2450P01.ipe	2021/12/28 14:18	IPE

Access Points: 1 (green), 1 (grey), 0 (red), 0 (red)  
Clients: 0  
Event Logs: 0 (red), 5 (red), 7 (yellow), 4 (blue)

# Anchor-acをバージョンアップする（続き）

ApplyをクリックするとファイルのUploadが始まります

The screenshot displays the H3C WA6638-JP management interface. The top navigation bar includes the H3C logo, the model number 'WA6638-JP', and a 'Save' button. The left sidebar contains a menu with categories: Actions, Dashboard, Network Configuration, Network Security, System, Event Logs, Resource, File Systems, Administrators, Management (highlighted), and Tools. The main content area shows a breadcrumb trail: System > System > Management > Upgrade. Below this, there are tabs for Settings, Configuration, Upgrade (selected), Reboot, and About. A 'View Software Images' section is visible. A modal dialog box titled 'Upgrade system software' is open in the center, containing the text 'Please wait...' and 'Uploading file...' with a progress indicator. At the bottom of the dialog, the 'Apply' button is highlighted with a red box and a red circle containing the number '1', indicating the next step. The 'Cancel' button is also visible. The bottom status bar shows 'System View' and 'Network View' tabs, along with status indicators for Access Points (1 green, 1 blue, 1 red, 0 white), Clients (0), and Event Logs (0 red, 5 yellow, 7 blue, 4 white).

# Anchor-acをバージョンアップする（続き）

## アップロードが終了するとリブートを始めます

The screenshot displays the H3C WA6638-JP management interface. The top navigation bar includes the H3C logo, the model number 'WA6638-JP', and a 'Save' button. The left sidebar contains a menu with categories like 'Actions', 'Dashboard', 'Network Configuration', 'Network Security', 'System', 'Event Logs', 'Resource', 'File Systems', 'Administrators', 'Management', and 'Tools'. The main content area shows a breadcrumb trail 'System > System > Management > Upgrade' and tabs for 'Settings', 'Configuration', 'Upgrade', 'Reboot', and 'About'. The 'Upgrade' tab is active, and a 'View Software Images' section is visible. A modal dialog box titled 'Upgrade system software' is open, containing a 'Please wait...' message and a 'Rebooting...' status with a circular progress indicator. The dialog has 'Apply' and 'Cancel' buttons at the bottom. The bottom status bar shows 'System View' and 'Network View' tabs, along with status indicators for 'Access Points' (1 green, 1 blue, 1 red), 'Clients' (0), and 'Event Logs' (0 red, 5 blue, 7 yellow, 4 blue).

# Anchor-acをバージョンアップする（続き）

リブートが終了しバージョンアップが完了しました。Closeをクリックして再びログインします。

The screenshot displays the H3C WA6638-JP management interface. The top navigation bar includes the H3C logo, the model number WA6638-JP, and a 'Save' button. The left sidebar contains a menu with categories: Actions, Dashboard, Network Configuration, Network Security, System, Event Logs, Resource, File Systems, Administrators, Management, and Tools. The main content area shows a breadcrumb trail: System > System > Management > Upgrade. Below this, there are tabs for Settings, Configuration, Upgrade (selected), Reboot, and About. A 'View Software Images' button is visible. A modal dialog box titled 'Upgrade system software' is open, displaying an 'Information' message: 'Device rebooted successfully. Please log in again.' A 'Close' button is highlighted with a red rectangle. At the bottom of the interface, there are 'System View' and 'Network View' buttons, and a status bar showing 'Access Points' (1 green, 1 blue, 1 red, 0 white), 'Clients' (0), and 'Event Logs' (1 red, 0 blue, 5 yellow, 7 green, 1 blue, 4 white).

# Anchor-acをバージョンアップした後すべてのAPをリブートすると全てのAPがAnchor-acのバージョンに自動的にバージョンアップされる

```
C:¥Users¥H3C>telnet 192.168.0.50
```

```
*****
```

```
* Copyright (c) 2004-2021 New H3C Technologies Co., Ltd. All rights reserved.*
```

```
* Without the owner's prior written consent, *
```

```
* no decompiling or reverse-engineering shall be allowed. *
```

```
*****
```

```
login: admin
```

```
Password:
```

```
<WA538>reset wlan ap all
```

```
Reset APs that have established or are to establish primary tunnels with the AC. Continue? [Y/N]:y
```

```
%Feb 09 07:40:05:952 2022 H3C CWS/4/CWS_AP_DOWN: CAPWAP tunnel to AP 00dd-b6b1-87a0 went down. Reason: AP was reset by admin.
```

```
%Feb 09 07:40:05:971 2022 H3C APMGR/6/APMGR_AP_OFFLINE: AP 00dd-b6b1-87a0 went offline. State changed to Idle.
```

```
%Feb 09 07:41:36:342 2022 H3C APMGR/6/APMGR_AP_ONLINE: AP 00dd-b6b1-87a0 came online. State changed to Run.
```

```
%Feb 09 07:41:36:343 2022 H3C CWS/6/CWS_AP_UP: Master CAPWAP tunnel to AP 00dd-b6b1-87a0 went up.
```

```
%Feb 09 07:41:36:664 2022 H3C APMGR/6/APMGR_AP_ONLINE: AP 00dd-b6b1-8f40 came online. State changed to Run.
```



# Anchor-acをバージョンアップした後すべてのAPをリブートすると全てのAPがAnchor-acのバージョンに自動的にバージョンアップされる

注意: WX3820H, WX1840Hはダウンロード用にflash:/にWA6300.ipeファイルを保存する必要があるが、Anchor-acは最初にboot.binとsystem.binからWA6300.ipeを作成するため、1台目では準備されていないためエラーとなり、作成後リトライして成功します。2台目以降はこのファイルを利用してスムーズにアップロードされます。

\*\*\*\*\*

\* Anchor-acでの最初の1台のバージョンアップは \*  
\* 1回目のみ失敗します \*

\*\*\*\*\*

%Feb 09 09:01:25:346 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_START: AP 00dd-b6b1-8f40 started to download the image file wa6300.ipe.  
%Feb 09 09:01:24:355 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_FAILED: Failed to download image file wa6300.ipe for AP 00dd-b6b1-8f40.

\*\*\*\*\*

\* 最初の1台のバージョンアップは2回目のリトライには成功します \*

\*\*\*\*\*

%Feb 09 09:03:22:336 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_START: AP 00dd-b6b1-8f40 started to download the image file wa6300.ipe.  
%Feb 09 09:04:21:498 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_COMPLETE: Downloading the image file wa6300.ipe for AP 00dd-b6b1-8f40 through the CAPWAP tunnel is complete.  
%Feb 09 09:06:12:810 2021 H3C APMGR/6/APMGR\_AP\_ONLINE: AP 00dd-b6b1-8f40 came online. State changed to Run.  
%Feb 09 09:06:12:810 2021 H3C CWS/6/CWS\_AP\_UP: Master CAPWAP tunnel to AP 00dd-b6b1-8f40 went up.

\*\*\*\*\*

\* 2台目以降のバージョンアップはすべて成功します \*

\*\*\*\*\*

%Feb 09 09:06:54:037 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_START: AP 00dd-b6b1-87a0 started to download the image file wa6300.ipe.  
%Feb 09 09:07:54:663 2021 H3C CWS/6/CWS\_IMG\_DOWNLOAD\_COMPLETE: Downloading the image file wa6300.ipe for AP 00dd-b6b1-87a0 through the CAPWAP tunnel is complete.  
%Feb 09 09:08:45:182 2021 H3C APMGR/6/APMGR\_AP\_ONLINE: AP 00dd-b6b1-87a0 came online. State changed to Run.  
%Feb 09 09:08:45:183 2021 H3C CWS/6/CWS\_AP\_UP: Master CAPWAP tunnel to AP 00dd-b6b1-87a0 went up.



- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて

# クライアントの電波受信状態確認

それぞれのクライアントの接続されているAPの無線ID、SSID、チャンネルでの受信強度を把握する

<AC>**display wlan client verbose**

MACアドレス	1098-c3e4-9da0
IPv4アドレス	10.66.209.37
IPv6アドレス	該当なし
ユーザー名	該当なし
AID	1
AP ID	6
AP名	AP02
無線ID	3
チャンネル	1
SSID	MTGroom
BSSID	1019-65c2-45f1
VLAN ID	10
サービスVLAN ID	該当なし
スリープ回数	24862
ワイヤレスモード	802.11 gn
チャンネル帯域幅	20 MHz (20MHz/40MHz/80MHz)
20/40 BSS共存管理	サポートされていません
SM省電力	無効
20 MHz用ショートGI	サポート対象
40 MHz用のショートGI	サポートされていません
STBC RX機能	サポートされていません
STBC TX機能	サポートされていません
LDPC RX能力	サポートされていません
ブロック肯定応答	TID 0インチ

サポートされるHT MCSセット	0、1、2、3、4、5、6、7
サポートされるレート	1、2、5.5、6、9、11、 12、18、24、36、48、54 Mbps
QoSモード	<
リスン間隔	1
RSSI(受信信号強度)	53
Rx/Txレート	72.2/65 Mbps
速度	0.160/0.312 Kbps
認証方式	オープンシステム
セキュリティモード	RSN
AKMモード	事前共有鍵
暗号スイート	CCMP
ユーザー認証モード	バイパス
WPA3ステータス	無効
許可CAR	該当なし
許可ACL ID	該当なし
許可ユーザープロファイル	該当なし
ローミングステータス	該当なし
キー暗号化タイプ	SHA1
PMFステータス	該当なし
転送ポリシー名	未構成
オンライン時間	3日15時間30分21秒
FTステータス	非アクティブ
BTMモード	非アクティブ

**RSSI=SNR(信号対雑音比: db) = Signal(dbm) - フロアノイズ(-95dbm)**

# クライアントの電波受信状態確認

$RSSI = SNR$  (信号対雑音比: db) =  $Signal(dbm) - \text{フロアノイズ}(-95dbm)$

RSSI(db)	dBm	評価
40以上	-55	非常に信頼性が高くリアルタイムの通信が可能な水準
25～40	-70～-55	信頼性が高くリアルタイムの通信の最低限の水準
15～25	-80～-70	遅いが信頼性の高い通信の最低限の水準
10～15	-85～-80	遅く信頼性の低い水準
10以下	-85	使用に耐えない

# クライアントの電波受信状態確認

APの無線の使用率を把握する(50%を超えるとパフォーマンスが落ちる)

<AC>**display wlan ap all radio**

Total number of APs: 4

Total number of connected APs: 4

Total number of connected manual APs: 4

Total number of connected auto APs: 0

Total number of connected common APs: 4

Total number of connected WTUs: 0

Total number of inside APs: 0

Maximum supported APs: 128

Remaining APs: 124

Total AP licenses: 20

Local AP licenses: 20

Server AP licenses: 0

Remaining Local AP licenses: 16

Sync AP licenses: 0

AP名	無線ID	状態	チャンネル	BW (MHz)	Usage (%)	TxPower (dBm)	クライアント
AP01	1	Up	52(auto)	80	3	8	2
AP01	2	Up	100(auto)	80	5	8	3
AP01	3	Up	6(auto)	20	35	6	3

# クライアントの電波受信状態確認

ACからAPにtelnetして、APに接続しているクライアントの電波状況を確認するコマンドを実行します

```
<AC>sys
[AC]probe
[AC-probe]wlan ap-execute all exec-console enable
[AC-probe]quit
[AC] display wlan ap all address
Total number of APs : 3
Total number of connected APs : 3
Total number of connected manual APs : 3
Total number of connected auto APs : 0
Total number of inside APs : 0
AP name                IP address            MAC address
ROOM-101                192.168.1.7           1019-65c2-3ee0
ROOM-102                192.168.1.8           1019-65c2-48a0
ROOM-103                192.168.1.9           1019-65c2-4840
<AC> telnet 192.168.1.7
Password:h3ca@admin
<ROOM-101>
```

# クライアントの電波受信状態確認

APの無線のチャンネル使用率を把握する

<ROOM-101> system-view

[ROOM-101]probe

[ROOM-101-probe] **display ar5drv 1 channelbusy**

ChannelBusy information

Ctl Channel: 52

BandWidth: 3

Record Interval(s): 9

CurrentTime: 15:05:23

注:チャンネルのビジー率は9分間隔で記録され

直近の20回分のデータが表示されます。

	Time (h/m/s):	CtlBusy(%)	TxBusy(%)	RxBusy(%)
1	15:05:14	3	0	2
2	15:05:05	2	0	1
3	15:04:56	2	0	2
4	15:04:47	2	0	1
5	15:04:38	2	0	1
6	15:04:29	3	0	2
7	15:04:20	2	0	1
8	15:04:11	2	0	1
9	15:04:02	3	0	2
10	15:03:53	2	0	2
11	15:03:44	3	0	2
12	15:03:35	3	0	2
13	15:03:26	2	0	1
14	15:03:17	3	0	2
15	15:03:08	2	0	1
16	15:02:59	2	0	2
17	15:02:50	4	0	3
18	15:02:41	2	0	1
19	15:02:32	2	0	1
20	15:02:23	2	0	1

# クライアントの障害情報の収集

## ダイアグ情報の収集

<ROOM-101> **display diagnostic-information**

Save or display diagnostic information (Y=save, N=display)? [Y/N]:y

Please input the file name(\*.tar.gz)[flash:/diag\_H3C\_20220422-183824.tar.gz]:

Diagnostic information is outputting to flash:/diag\_H3C\_20220422-183824.tar.gz.

Please wait...

Save successfully.

<ROOM-101>**ftp 192.168.1.10**

Press CTRL+C to abort.

Connected to 192.168.1.10 (192.168.1.10).

220 3Com 3CDaemon FTP Server Version 2.0

User (192.168.1.10 :(none)): anonymous

331 User name ok, need password

Password: xxxxx

230 User logged in

Remote system type is UNIX.

Using binary mode to transfer files.

ftp> **put diag\_H3C\_20220422-183824.tar.gz**

227 Entering passive mode (192,168,1,10,243,91)

125 Using existing data connection

226 Closing data connection; File transfer successful.

78869 bytes sent in 0.002 seconds (45.67 Mbytes/s)

ftp> quit

221 Service closing control connection

<ROOM-101>





- 01 アクセスポイントをAnchor-acに設定する
- 02 Anchor-acにSSID(サービス)を作成する
- 03 完成したコンフィグのコマンドでの確認
- 04 FITをバックアップ用のAnchor-acに設定
- 05 アクセスポイント/クライアントの状態表示
- 06 Anchor-ac(管理下のAPも含めて)のバージョンアップ
- 07 クライアントの電波受信状態確認
- 08 マニュアルについて

# マニュアルのダウンロードサイト

https://www.h3c.com/jp/



http://www.h3c.com/en/Support/Resource\_Center/Technical\_Documents/

ログイン 国/地域 検索

H3C 製品・技術 ソリューション サポート 研修・認定 パートナー企業 会社概要

## サポート

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### リソースセンター

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サービス・保証

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 Cloud Computing	 Routers	 Switches
 Wireless	 Security	 Network Management
 SDN	 License Server	 Transceiver Modules
 NFV	 Servers	 Oasis

# 個別製品の選択

## H3C WX1800H Series Access Controllers

H3C WX1800H Series Access Controllers

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## H3C WX5800H Series Access Controllers

H3C WX5800H Series Access Controllers

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## H3C 802.11ax Series Access Points

H3C WA6638 Access Point

[Learn More →](#)

## H3C WX3800H Series Access Controllers

H3C WX3800H Series Access Controllers

[Learn More →](#)

## H3C 802.11ac Wave2 Series Access Points

H3C WA510H Access Point

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H3C WA6636 Access Point

[Learn More →](#)

H3C WA530 Access Point

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H3C WA6630X Access Point

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H3C WA530X Access Point

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## Technical Documents

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**Command** →

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## Command References

Title	Date
<a href="#">H3C Access Controllers Command References(R5426P02)-6W103</a>	10-12-2020
→ <a href="#">00-About the H3C command references</a>	
→ <a href="#">01-License Management Command Reference</a>	
→ <a href="#">02-Fundamentals Command Reference</a>	
→ <a href="#">03-System Management Command Reference</a>	
→ <a href="#">04-Interface Command Reference</a>	
→ <a href="#">05-Network Connectivity</a>	
→ <a href="#">06-WLAN Access Command Reference</a>	
→ <a href="#">07-AP and WT Management Command Reference</a>	
→ <a href="#">08-WLAN Security Command Reference</a>	

# 日本語資料、FAQなど準備中

[https://h3cgroup-my.sharepoint.com/:f:/g/personal/gw\\_koshiromasahiro\\_h3c\\_com/EiBUlIdoWxFDnfFta80H7N4B6bQhI1dv263wp-SoMyJ36g?e=cmzjxu](https://h3cgroup-my.sharepoint.com/:f:/g/personal/gw_koshiromasahiro_h3c_com/EiBUlIdoWxFDnfFta80H7N4B6bQhI1dv263wp-SoMyJ36g?e=cmzjxu)

 名前 ▾	更新日時 ▾	更新者 ▾	ファイルサイズ ▾
 Certification	4 日前	koshiromasahiro gw35...	1 個のアイテム
 common	3月17日	koshiromasahiro gw35...	5 個のアイテム
 firewall	3月17日	koshiromasahiro gw35...	9 個のアイテム
 Oasis	3月19日	koshiromasahiro gw35...	5 個のアイテム
 Switch	3月19日	koshiromasahiro gw35...	4 個のアイテム
 wireless	3月17日	koshiromasahiro gw35...	3 個のアイテム

# Anchor-acモードのデフォルトのコンフィグ(telnet/http/httpsでのアクセスが可能)

```
#
version 7.1.064, Release 2451
#
sysname H3C
#
wlan global-configuration
#
telnet server enable
#
port-security enable
#
lldp global enable
lldp hold-multiplier 8
#
password-recovery enable
#
vlan 1
#
interface NULL0
#
interface Vlan-interface1
ip address 192.168.0.50 255.255.255.0
#
interface GigabitEthernet1/0/1
#
interface WLAN-Radio1/0/1
#
interface WLAN-Radio1/0/2
#
scheduler logfile size 16
#

line class console
user-role network-admin
#
line class vty
user-role network-operator
#
line con 0
user-role network-admin
#
line vty 0 31
authentication-mode scheme
user-role network-operator
#
line vty 32 63
user-role network-operator
#
domain system
#
domain default enable system
#
role name level-0
description Predefined level-0 role
#
role name level-1
description Predefined level-1 role
#
role name level-2
description Predefined level-2 role
#
role name level-3
description Predefined level-3 role
#
role name level-4
description Predefined level-4 role
#
role name level-5
description Predefined level-5 role
#
role name level-6
description Predefined level-6 role
#
role name level-7
description Predefined level-7 role
#
role name level-8
description Predefined level-8 role
#
role name level-9
description Predefined level-9 role
#
role name level-10
description Predefined level-10 role
#
role name level-11
description Predefined level-11 role
#
role name level-12
description Predefined level-12 role
#
role name level-13
description Predefined level-13 role
#
role name level-14
description Predefined level-14 role
#
user-group system
#
local-user admin class manage
password simple h3capadmin
service-type telnet http https
authorization-attribute user-role network-admin
#
ip http enable
ip https enable
#
undo attack-defense tcp fragment enable
#
wlan ap-group default-group
vlan 1
#
wlan ap xxxx-xxxx-xxxx model WA6320-JP
serial-id xxxxxxxxxxxxxxxxxxxxxx
mac-address xxxx-xxxx-xxxx
anchor-ap disable
radio 1
radio 2
gigabitethernet 1
#
return
```

**H3C**

[www.h3c.com](http://www.h3c.com)