

# **Smart Handover Configuration**

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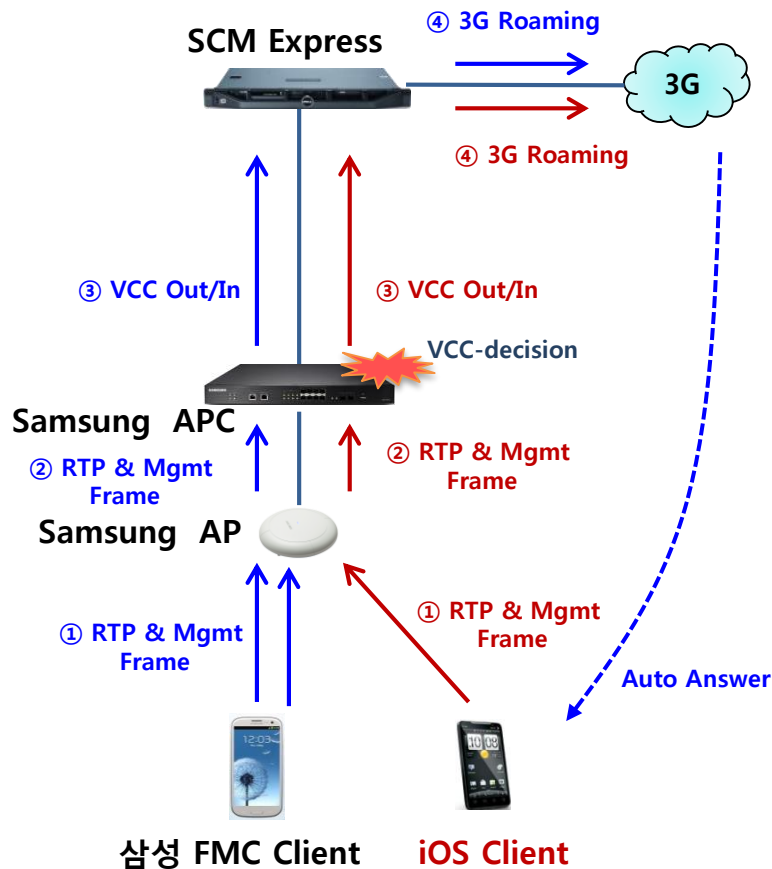
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# Smart Handover Operation Flow

- Automatic VCC functionality is supported to all Samsung FMC Clients.



- 1) All RTP packets reach to APC and Management Frames such as (Re)assoc arrive as well.
- 2) VCC-Out(VCC-In) decision occurs in APC using RSSI from RTP and management frames.
- 3) 3G/4G Roaming Call Setup from SCME  
- CID information transmitted for client Auto Answer.
- 4) WIFI call is disconnected and 3G/4G call is connected newly as soon as answer arrives from Client.

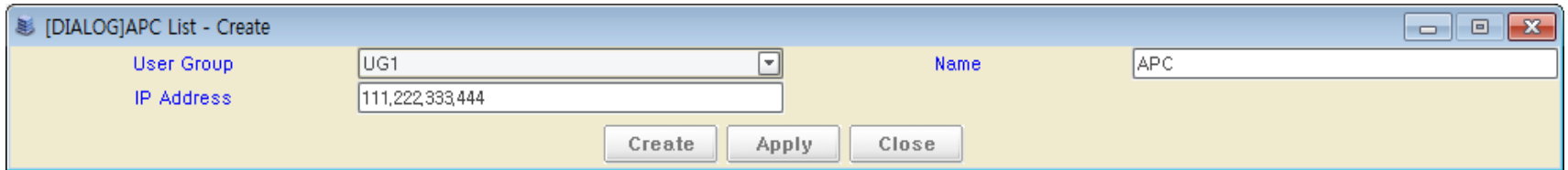
# **SCME Configuration Guide**

Smart Handover

# VCC Configuration - SCME

## APC IP Configuration

- Maximum 24 APC can be configured and can be confirmed the current connection status of APC in the [CONFIGURATION > Wireless Enterprise > APC List] menu



[DIALOG]APC List - Create

User Group: UG1

IP Address: 111,222,333,444

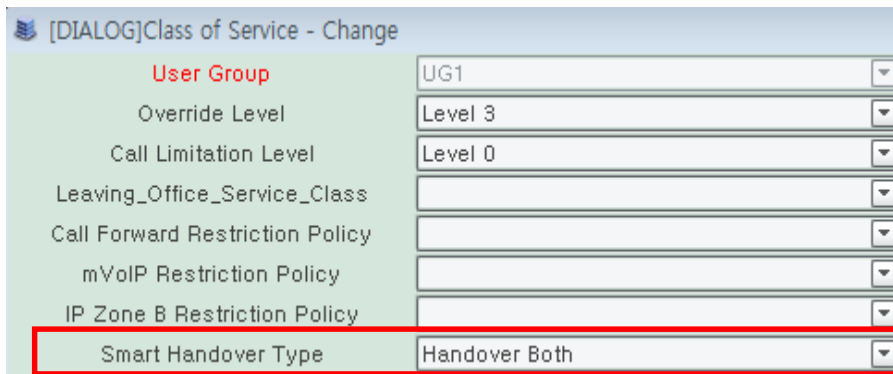
Name: APC

Buttons: Create, Apply, Close

| Item       | Description  |
|------------|--|
| User Group | Select a user group for which APC will be configured |
| Name       | Specify the APC name                                 |
| IP Address | Specify the APC IP Address                           |

## Class of Service Creating

- Class of Service can be set in the [CONFIGURATION > Service > Feature Service > Class of Service] menu. When create a Class of Service, Smart Handover Type should be set to Handover Both



[DIALOG]Class of Service - Change

User Group: UG1

Override Level: Level 3

Call Limitation Level: Level 0

Leaving\_Office\_Service\_Class: [Dropdown]

Call Forward Restriction Policy: [Dropdown]

mVoIP Restriction Policy: [Dropdown]

IP Zone B Restriction Policy: [Dropdown]

Smart Handover Type: Handover Both

| Item          | Description                           |
|---------------|---------------------------------------|
| Blank         | Handover services are not allowed.    |
| Handover Out  | Handover Out service is only allowed. |
| Handover Both | Handover Out/In service is allowed.   |

# VCC Configuration - SCME

## □ Class of Service Configuration

- Class of Service created is allocated per user in the [CONFIGURATION > User > Single Phone User/Multi-Phone User] menu.

|                            |                      |
|----------------------------|----------------------|
| Department                 | <input type="text"/> |
| Send CLI Number            | <input type="text"/> |
| Service Group Local Number | <input type="text"/> |
| Class of Service           | <input type="text"/> |
| Extension Lock             | None                 |

## □ Mobile Phone Configuration

- WE VoIP subscriber's available mobile number must be configured to each user. Mobile number can be set in the [CONFIGURATION > User > Single Phone User/Multi-Phone User] menu.

|                      |                      |
|----------------------|----------------------|
| Phone Type           | Samsung-Mobile-Phone |
| License Phone Type   | Samsung-Mobile-Phone |
| Mobile Phone Number  | 01012341234          |
| Protocol             | UDP                  |
| TLS Connection       | Reuse                |
| A-A Primary Node     | NODE 0               |
| VMS Extension Number | <input type="text"/> |

# VCC Configuration - SCME

## □ Service Call Access Code Configuration

- To use Smart Handover-Out, it is needed the access code for Smart Handover-Out.
- The access code can be configured in the [CONFIGURATION > User Group > Change User Group > Information > Service Call Access Code] menu.

|                          |  |
|--------------------------|--|
| CLI Number               | <input type="text"/>                     |
| Realm                    | <input type="text" value="ug1,scm.com"/> |
| LDAP Root Directory      | <input type="text"/>                     |
| Default Access Code      | <input type="text"/>                     |
| Service Call Access Code | <input type="text" value="9"/>           |
| SRTP Mline offer Option  | <input type="text"/>                     |

# **APC Configuration Guide**

Smart Handover

# Smart Handover – Inserting SCME IP Address(CLI)

- configure terminal smart-handover scme-if <index> <IP address>

```
WEC8500/configure/smart-handover# scme-if 1 165.213.177.244
```

# Smart Handover – Inserting SCME IP Address(WEC)

- Controller
- Access Points
- AP Groups
- Security
- WLANs
- Radio
- QoS
- Mobility Management**
- Handover
- Clustering
- Smart Handover

## Mobility Management > Smart Handover

VCC SERVICE  Enable  Disable

3 Apply

| NO. | SCME IP ADDRESS       | CONN STATUS |
|-----|-----------------------|-------------|
| 1   | 165 . 213 . 177 . 244 | CONNECT     |
| 2   | 165 . 213 . 89 . 65   | CONNECT     |
| 3   | 0 . 0 . 0 . 0         |             |
| 4   | 0 . 0 . 0 . 0         |             |

1

# Smart Handover – Enable/Disable(CLI)

---

- configure terminal smart-handover [no] enable

```
WEC8500/configure/smart-handover# enable
```

```
WEC8500/configure/smart-handover# no enable
```

# Smart Handover – Enable/Disable(WEC)

- Controller
- Access Points
- AP Groups
- Security
- WLANs
- Radio
- QoS
- Mobility Management**
- Handover
- Clustering
- Smart Handover**

## Mobility Management > Smart Handover

VCC SERVICE

Enable  Disable

Apply

| NO. | SCME IP ADDRESS       | CONN STATUS |
|-----|-----------------------|-------------|
| 1   | 165 . 213 . 177 . 244 | CONNECT     |
| 2   | 165 . 213 . 89 . 65   | CONNECT     |
| 3   | 0 . 0 . 0 . 0         |             |
| 4   | 0 . 0 . 0 . 0         |             |

# Smart Handover – Connect Status Inquiry(CLI)

---

- show smart-handover connect-status

```
WEC8500# show smart-handover connect-status
```

## SCME Connection Status

```
Mode ..... Enabled
```

```
SCME Index ..... 1
```

```
SCME IP Address .... 165.213.177.244
```

```
Connection State ... Connect
```

```
SCME Index ..... 2
```

```
SCME IP Address .... 165.213.89.65
```

```
Connection State ... Connect
```

```
SCME Index ..... 3
```

```
SCME IP Address .... 0.0.0.0
```

```
Connection State ... Idle
```

```
SCME Index ..... 4
```

```
SCME IP Address .... 0.0.0.0
```

```
Connection State ... Idle
```

# Smart Handover – Connect Status Inquiry(WEC)

- Controller
- Access Points
- AP Groups
- Security
- WLANs
- Radio
- QoS
- Mobility Management**
- Handover
- Clustering
- Smart Handover

## Mobility Management > Smart Handover

Apply

VCC SERVICE  Enable  Disable

| NO. | SCME IP ADDRESS       | CONN STATUS |
|-----|-----------------------|-------------|
| 1   | 165 . 213 . 177 . 244 | CONNECT     |
| 2   | 165 . 213 . 89 . 65   | CONNECT     |
| 3   | 0 . 0 . 0 . 0         |             |
| 4   | 0 . 0 . 0 . 0         |             |

1

2

# Smart Handover – Message Counts Inquiry(For Troubleshooting)

---

- show smart-handover msg-counts

```
WEC8500# show smart-handover msg-counts
SCME #(1)
SCME to AVCB Authentication Information Response ... 1
SCME to AVCB Add User ..... 0
SCME to AVCB Delete User ..... 0
SCME to AVCB User List Request ..... 0
SCME to AVCB Handover Response ..... 0
SCME to AVCB Link Test Response ..... 145
AVCB to SCME Authentication Information Request .... 1
AVCB to SCME User List Response ..... 0
AVCB to SCME Handover Request ..... 0
AVCB to SCME Link Test Request ..... 145
AWMB to AVCB Handover Request ..... 0
AWMB to AVCB User List Response ..... 0
AVCB to AWMB Add User ..... 0
AVCB to AWMB Delete User ..... 0
AVCB to AWMB User List Request ..... 0
AVCB to AWMB Handover Response ..... 0

SCME #(2)
SCME to AVCB Authentication Information Response ... 2
SCME to AVCB Add User ..... 0
SCME to AVCB Delete User ..... 0
SCME to AVCB User List Request ..... 0
SCME to AVCB Handover Response ..... 0
SCME to AVCB Link Test Response ..... 138
AVCB to SCME Authentication Information Request .... 2
AVCB to SCME User List Response ..... 0
AVCB to SCME Handover Request ..... 0
AVCB to SCME Link Test Request ..... 138
AWMB to AVCB Handover Request ..... 0
AWMB to AVCB User List Response ..... 0
AVCB to AWMB Add User ..... 0
AVCB to AWMB Delete User ..... 0
AVCB to AWMB User List Request ..... 0
AVCB to AWMB Handover Response ..... 0
```

# Smart Handover – Edge AP Configuration(CLI)

---

- configure terminal ap <ap profile name> [no] profile edge-ap

```
WEC8500# configure terminal
WEC8500/configure# ap ap_1
WEC8500/configure/ap ap_1/profile# edge-ap
WEC8500/configure/ap ap_1/profile# edge-ap-opmode [RSSI/FORCE]
WEC8500/configure/ap ap_1/profile# edge-ap-threshold [value]
WEC8500/configure/ap ap_1/profile# edge-ap-window [value]
```

```
WEC8500/configure# ap ap_1
apCfgName : ap_1
WEC8500/configure/ap ap_1# no profile edge-ap
```

# Smart Handover – Edge AP Configuration(WEC)

General

802.11a/n

802.11b/g/n

Advanced

Controller >

Access Points > Advanced

Access Points **1**

AP Groups

Remote AP Groups

Security >

Rogues >

WLANs >

Radio >

User QoS

Mobility Management >

DNS

NTP >

DHCP >

Back

Apply **3**

|   |  |
|---|--|
| AP PROFILE NAME                         | AP-7F01  |
| AP NAME                                 | AP-7F01  |
| ECHO INTERVAL (SEC) <b>1</b>            | 30   |
| MAX DISCOVERY INTERVAL (SEC) <b>2</b>   | 20   |
| REPORT INTERVAL (SEC) <b>3</b>          | 120  |
| STATISTICS TIMER (SEC) <b>4</b>         | 120  |
| RETRANSMIT INTERVAL (100MS) <b>5</b>    | 5  |
| MAX RETRANSMIT <b>6</b>                 | 5  |
| ECHO RETRANSMIT INTERVAL (SEC) <b>7</b> | 3  |
| MAX ECHO RETRANSMIT <b>8</b>            | 5  |
| TELNET <b>9</b>                         | <input checked="" type="radio"/> Enable <input type="radio"/> Disable 50023    |
| SSH <b>10</b>                           | <input type="radio"/> Enable <input checked="" type="radio"/> Disable 50022    |
| DTLS <b>11</b>                          | Disable  |
| LED                                     | On 00 : 00 ~ 00 : 00   |
| EDGE AP                                 | <input type="radio"/> Enable <input checked="" type="radio"/> Disable <b>2</b> |
| EDGE AP OPERATION MODE                  | RSSI   |
| SMHO THRESHOLD (DBM)                    | -80  |
| SMHO WINDOW SIZE (MS)                   | 300  |

# Smart Handover – Edge AP Inquiry(CLI)

---

- show ap detail <ap profile name>

```
WEC8500 # show ap detail ap_1
```

```
===== AP Config =====
```

```
AP name           : AP_0000aa353535
AP_ID             : 1
AP profile name   : ap_1
Group ID         : 2
MacAddr          : 00:00:aa:35:35:35
```

```
.....
```

```
Edge Ap          : Disable
Edge Ap OpMode   : RSSI
Edge Ap Threshold : -80
Edge Ap Window   : 300
```

```
.....
```

# Smart Handover – Edge AP Inquiry(WEC)

General

802.11a/n

802.11b/g/n

Advanced

Controller >

Access Points > Advanced

Access Points ①

AP Groups

Remote AP Groups

Security >

Rogues >

WLANs >

Radio >

User QoS

Mobility Management >

DNS

NTP >

DHCP >

Back

Apply

|   |   |
|---|---|
| AP PROFILE NAME                             | AP-7F01   |
| AP NAME                                     | AP-7F01   |
| ECHO INTERVAL (SEC) <sup>1</sup>            | 30  |
| MAX DISCOVERY INTERVAL (SEC) <sup>2</sup>   | 20  |
| REPORT INTERVAL (SEC) <sup>3</sup>          | 120   |
| STATISTICS TIMER (SEC) <sup>4</sup>         | 120   |
| RETRANSMIT INTERVAL (100MS) <sup>5</sup>    | 5   |
| MAX RETRANSMIT <sup>6</sup>                 | 5   |
| ECHO RETRANSMIT INTERVAL (SEC) <sup>7</sup> | 3   |
| MAX ECHO RETRANSMIT <sup>8</sup>            | 5   |
| TELNET <sup>9</sup>                         | <input checked="" type="radio"/> Enable <input type="radio"/> Disable 50023 |
| SSH <sup>10</sup>                           | <input type="radio"/> Enable <input checked="" type="radio"/> Disable 50022 |
| DTLS <sup>11</sup>                          | Disable   |
| LED   | On 00 : 00 ~ 00 : 00  |
| EDGE AP                                     | <input type="radio"/> Enable <input checked="" type="radio"/> Disable ②     |
| EDGE AP OPERATION MODE                      | RSSI  |
| SMHO THRESHOLD (DBM)                        | -80   |
| SMHO WINDOW SIZE (MS)                       | 300   |