



Fanvil_Metaswitch Config Guide

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1 Introduction

1.1 Overview

This document mainly describes how the fanvil phone works with the Metaswitch server.

1.2 Product Model

This document is suitable for Fanvil X1/X1P, X2C, X2/X2P, X3S/X3SP/X3G, X4/X4G, X3U, X4U, X5C, X5U, X6U, X5S, X6, X7, X7C, X7V, X7A, X210, X210i, i10, i10V, i52T, H1,H2S,H3, H5, H6, i10, i10V, i11, i12, i16, i18S, i22V, i25V,i25T,i20S, i30, i31S,i23S, i32V, i33V, PA2, PA3, iW30, C400, C600,etc..

1.3 Target Audience

This document is targeting people who want to use Fanvil Phones registered on Metaswitch server.

2 How to use

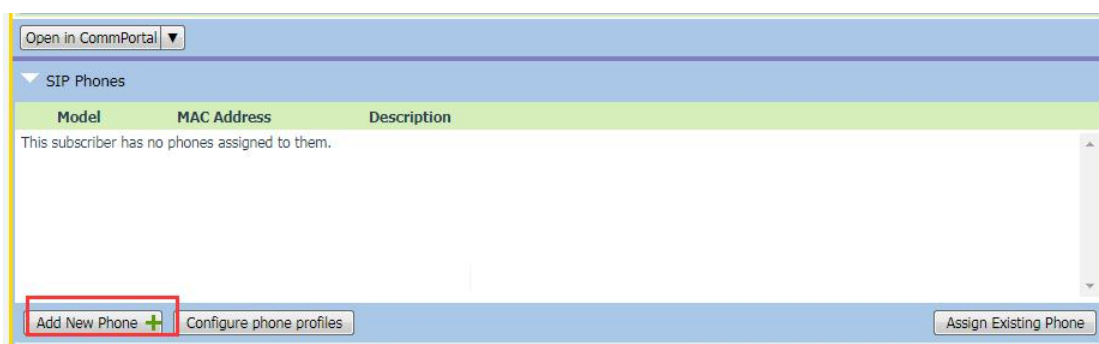
2.1 Provision

2.1.1 Configure on Metaswitch server

- 1) Logon your MetaView Web.
- 2) In the upper right corner, enter the number you want to upgrade, such as 1234, and click Search.



- 3) Click **SIP Phones** at the bottom of the page, and then click **Add New Phone**.



- 4) Enter the phone **MAC Address** in the pop-up box, configure **Description**, set **authenticate until** date, etc., click **Apply**.

A screenshot of the "Add New Phone" pop-up form. It contains the following fields:

- MAC Address: 0c:38:3e:1b:e0:06
- Description: Fanvil X4
- Phone Model: Determined by Endpoint Pack
- Assigned to Line?: (760) 290 9643
- Phone authenticated at: [] [] []
- Authenticate until: 00 [] 10/17/2018

At the bottom, there is a link "Allow authentication for an hour from now" and "Apply" and "Cancel" buttons.

- 5) Click **Configure phone profiles** and configure the phone.



6) Creat New Profile.



7) Select the phone of the corresponding model and change the configuration.



2.1.2 Provision

You can choose a different method to provision. Here are two examples, one for a large number of phones phone and one for a single phone.

2.1.2.1 Redirect Provision (Quantity in batches)

- 1) Logon your Redirect Server (Take Fanvil FDPS as an example).
- 2) Go to **Group** page, add a group.
- 3) Set the Metaswitch provision configuration. In the **Phone Flash** module, set **Server Address** to your Metaswitch provision URL, and set **Protocol Type** to corresponding protocol, then set **Update Mode** to Update After Reboot, as shown in the following picture. Save the changes.

Phone Flash	
Server Address	<input type="text" value="http://matterhorn.metaswitch.com/sip-ps"/>
Configuration File Name	<input type="text"/>
Protocol Type	HTTP ▾
Update Interval	<input type="text" value="1"/>
Update Mode	Update After Reboot ▾

- 4) Go to **Device** page, import your phone mac list on Device.
- 5) Reset phone. After the phone boot up, it will redirect to server to ask your phone configuration named use phone MAC address.

2.1.2.2 Provision from Phone (Single)

- 1) Logon webpage of phone, go to System>>Auto Provision>>Static Provisioning Server.
- 2) Set **Server Address** to your Metaswitch provision URL, and set **Protocol Type** to corresponding protocol, then set **Update Mode** to Update After Reboot, as shown in the following picture. Save the changes.

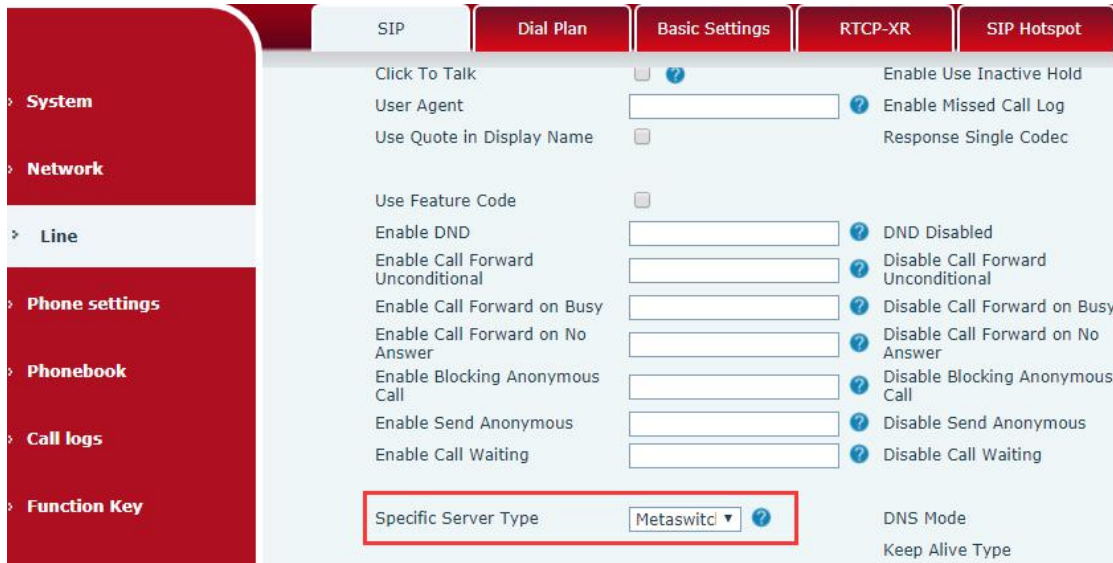
SIP Plug and Play (PnP) >>	
Static Provisioning Server >>	
Server Address	<input type="text" value="http://matterhorn.metasw"/> ?
Configuration File Name	<input type="text" value="http://matterhorn.metaswitch.com/sip-ps"/>
Protocol Type	HTTP ▾ ?
Update Interval	<input type="text" value="1"/> Hour ?
Update Mode	Update After Reboot ▾ ?

- 3) Reboot the phone. After reboot, phone will get the configuration on the server.

2.2 Intercom

2.2.1 Configure Server Type Configuration on the phone.

- 1) Configure on phone web page: Log on phone web page, navigate to **Line >> SIP >> Advanced Settings** page, Set **Specific Server Type** to Metaswitch, like the picture.



2) Configure in Configuration template file:

```

<SIP_CONFIG_MODULE>
<SIP_Line_List>
<SIP_Line_List_Entry>
<ID>SIP1</ID>
<Server_Type>37</Server_Type>
</SIP_Line_List_Entry>
</SIP_Line_List>
</SIP_CONFIG_MODULE>

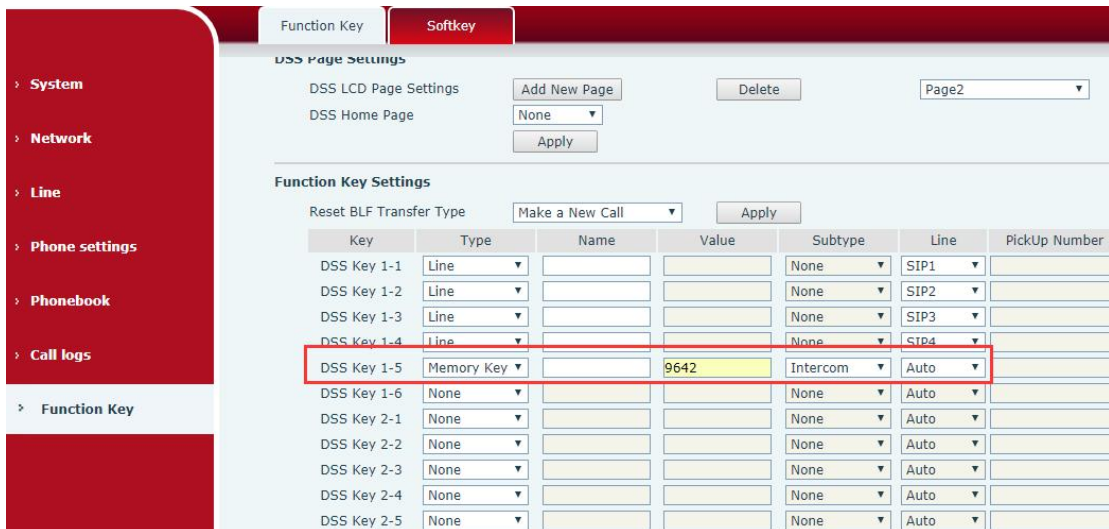
```

Note: The value of “37” is for Metaswitch server type and it is 37 in template by default.

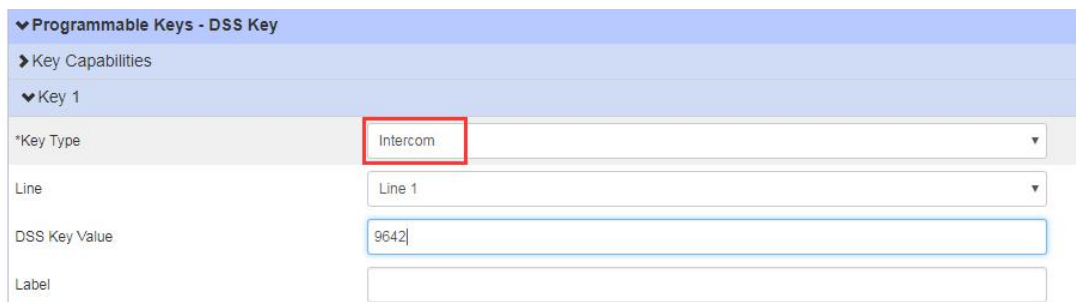
2.2.2 Configure Function Key to Intercom Key

There are three ways to configure Function Key to Intercom Key.

- 1) Configure on phone web page: Log on phone web page, navigate to **Function Key** >> **Function Key** page, set key **Type** to **Memory Key** and set **Subtype** to **Intercom**, set intercom number in **Value**.



- 2) Configure on MetaView Web page: navigate to **SIP Phones>> Configure phone profiles>> Programmable Keys - DSS Key**, set **Key Type** to **Intercom Key**, set **Dss Key Value** to intercom number.



- 3) Configure in Configuration template file:

```

<PHONE_CONFIG_MODULE>
<Function_Key>
<Function_Key_Entry>
<ID>Fkey1</ID>
<Type>1</Type>
<Value>$number@$line/i</Value>
<Title></Title>
</Function_Key>
</Function_Key_Entry>

```

Note: set \$number to intercom number, set \$line to sip line, such as "1" for SIP 1. "i" is intercom type.

2.2.3 How to use

Press the function key you configured to make an intercom call and press again to cancel the call When phone is in idle.

2.3 Feature Key Synchronization (Feature Sync)

To use Feature Sync feature, you need Enable Feature Sync on phone or MetaView Web page.

There are three ways to configure Feature Sync Configuration:

- 1) Configure on phone web page: Log on phone web page, navigate to **Line >> SIP >> Advanced Settings page**, tick **Enable Feature Sync**.

The screenshot shows the SIP Advanced Settings page. The 'Enable Feature Sync' checkbox is checked and highlighted with a red box. Other settings include: Keep Alive Type: UDP, Keep Authentication: unchecked, User Agent: empty, SIP Version: RFC3261, Local Port: 5060, Enable user=phone: unchecked, Auto TCP: unchecked, Enable Rport: checked, DNS Mode: A, Enable Strict Proxy: checked, Use Quote in Display Name: unchecked, Sync Clock Time: unchecked, Caller ID Header: PAI-RPID-F, CallPark Number: empty, TLS Version: TLS 1.0, Enable Click To Talk: unchecked, Keep Alive Interval: 30, Blocking Anonymous Call: unchecked, Specific Server Type: COMMON, Anonymous Call Standard: None, Ring Type: Default, Use Tel Call: unchecked, Enable PRACK: unchecked, Enable Long Contact: unchecked, Convert URI: checked, Enable GRUU: unchecked, Enable Use Inactive Hold: unchecked, Use 182 Response for Call waiting: unchecked, Enable SCA: unchecked, Server Expire: checked, uaCSTA Number: empty, Enable Chaport: unchecked.

- 2) Configure on MetaView Web page: navigate to **SIP Phones>> Configure phone profiles>>Line N>>Advanced Settings**, select **Enable Feature Sync**. (It enables Feature Sync by default on MetaView Web).

The screenshot shows the MetaView Web configuration page for a SIP phone profile. The 'Enable Feature Sync' radio button is selected and highlighted with a red box. Other fields include: VQ name, VQ address, VQ Port (5060), VQ Http/Https server, and radio buttons for Disabled and Enable.

- 3) Configure in Configuration template file:

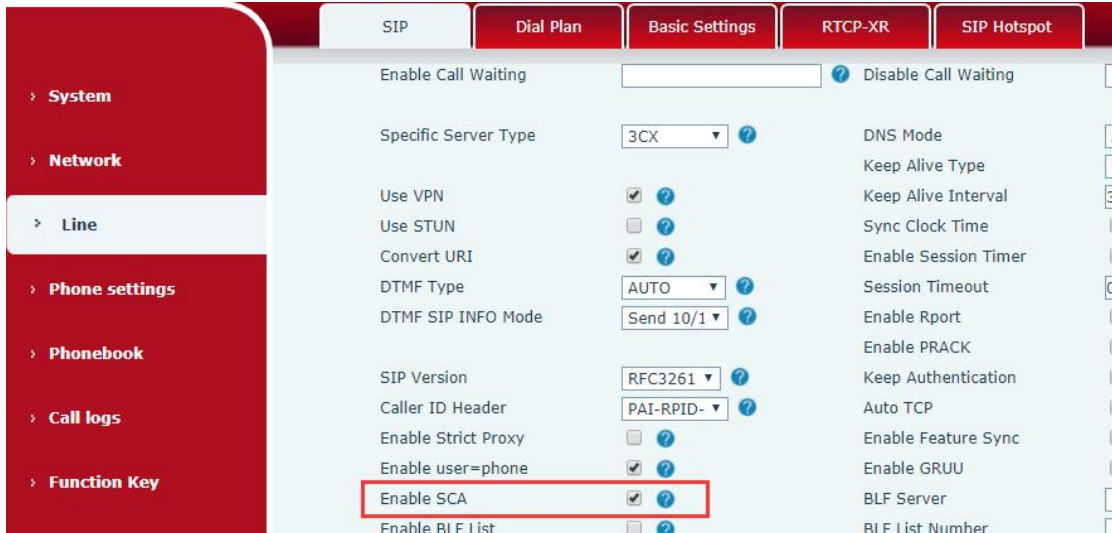
```
<SIP_CONFIG_MODULE>
<SIP_Line_List>
<SIP_Line_List_Entry>
<ID>SIP1</ID>
<Feature_Sync>1</Feature_Sync>
</SIP_Line_List_Entry>
</SIP_Line_List>
</SIP_CONFIG_MODULE>
```

2.4 Shared Call Appearance

To use Shared Call Appearance feature, you need Enable SCA on phone.

There are three ways to configure Feature Sync Configuration:

- 1) Configure on phone web page: Log on phone web page, navigate to **Line >> SIP >> Advanced Settings** page, tick **Enable SCA**.



- 2) Configure on MetaView Web page: Set all below items to true.

Each of the following 3 settings must be true. Each pair is the same setting accessed from different interfaces.

1. This setting must be > 1

MVWeb

Subscriber > Connection > Maximum simultaneous registrations

MVE

Line > Maximum simultaneous registrations (1 - 32)

2. This must be enabled

MVWeb

Subscriber > Connection > User phone number for SIP user name (CFS)

MVE

Subscriber Line > Use DN for identification

3. This must be enabled

MVWeb

Subscriber > Services > Line State Monitoring

MVE

Subscriber Line > Multi Party Call Services > Line State Monitoring

- 3) Configure in Configuration template file:

```
<SIP_CONFIG_MODULE>
<SIP_Line_List>
<SIP_Line_List_Entry>
<ID>SIP1</ID>
<Enable_SCA>1</Enable_SCA>
</SIP_Line_List_Entry>
</SIP_Line_List>
</SIP_CONFIG_MODULE>
```

2.4.1 DSSKEY—Private hold

- 1) Configure on phone web page: navigate to **Function Key**>> **Function Key**, Set **Key Type** to **Keyevent**, set **Subtype** to **Private Hold**.

The screenshot shows the 'Function Key' configuration page. On the left is a navigation menu with options like System, Network, Line, Phone settings, Phonebook, Call logs, and Function Key. The main area has 'DSS Page Settings' and 'Function Key Settings'. In 'Function Key Settings', there is a table of keys. The row for 'DSS Key 1-5' is highlighted with a red box, showing its 'Type' as 'Key Event' and 'Subtype' as 'Private Hold'.

Key	Type	Name	Value	Subtype	Line	PickUp Number
DSS Key 1-1	Line			None	SIP1	
DSS Key 1-2	Line			None	SIP2	
DSS Key 1-3	Line			None	SIP3	
DSS Key 1-4	Line			None	SIP4	
DSS Key 1-5	Key Event			Private Hold	Auto	
DSS Key 1-6	None			None	Auto	
DSS Key 2-1	None			None	Auto	

- 2) Configure on MetaView Web page: navigate to SIP Phones>> Configure phone profiles>> Programmable Keys - DSS Key, Set **Key Type** to **Private Hold**.

The screenshot shows the 'Programmable Keys - DSS Key' configuration page. Under 'Key 1', the '*Key Type' dropdown menu is set to 'Private Hold'.

2.4.2 DSSKEY—Public hold

The soft key-Hold is the Public hold key during the call.

2.4.3 LED Status Instructions for Metaswitch SCA

State	Local	Remote
Idle	off	off
Seized(dialing)	Green	Red
Progressing(trying/alerting)	Green	Red
Alerting(ring)	Blink Green(Fast)	Blink Green(Fast)
Active(talking)	Green	Red
Held(holding)	Blink Green(Slow)	Blink Red(Slow)
Private Held	Blink Yellow(Slow)	Red
Bridge active	Green	Red
Bridge Held	Blink Green(Slow)	Blink Red(Slow)

2.5 Call Park

This mainly explains how to configure the function keys to park and retrieve calls after the Fanvil phones are registered to the Metaswitch server.

- 1) First at all, you need know your park / retrieval code and park orbits number.
- 2) Configure
 - a) Logon webpage of the phone, go to **Function Key >> Function Key** page, set a dsskey's **Type** to **Memory Key**, and the **Subtype** to **Call Park**. Set the **Value** of the Function Key to your park orbits number (such as 100), like the picture. Called this dsskey to dsskey A.

Key	Type	Name	Value	Subtype	Line	Media	PickUp Number	Icon Color
DSS Key 4	Line			None	7602909642@	DEFAULT		Default Green
DSS Key 5	Memory Key		100	Call Park	7602909642@	DEFAULT		Default Green

- b) Logon webpage of the phone, go to **Function Key >> Function Key** page, set a dsskey's **Type** to **Memory Key**, and the **Subtype** to **Call Park**. Set the **Value** of the Function Key to "retrieval code + your park orbits number", as in the picture. Called this dsskey to dsskey B.

Function Key Settings

Dsskey Transfer Mode: Dsskey Home Page:

Page1 Page2 Page3 Page4 Page5

Key	Type	Name	Value	Subtype	Line	Media	PickUp Number	Icon Color
DSS Key 1	Line			None	12060000007	DEFAULT		Default Green
DSS Key 2	Line			None	+9916102429	DEFAULT		Default Green
DSS Key 3	Line			None	026@SIP3	DEFAULT		Default Green
DSS Key 4	Line			None	7602909642@	DEFAULT		Default Green
DSS Key 5	Memory Key		100	Call Park	7602909642@	DEFAULT		Default Green
DSS Key 6	Memory Key		*302100	Call Park	7602909642@	DEFAULT		Default Green
DSS Key 7	None			None	AUTO	DEFAULT		Default Green

- 3) How to use.
 - a) Action: Make a call from the Phone to Phone A.
---Confirm: There were two ways audio between Phone and Phone A.
 - b) Action: Press dsskey A on the Phone.
---Confirm: Phone A is parked on your parked number, and the phone now is on idle.
---Confirm: The LED of dsskey A changes from solid green to blink red.
 - c) Action: Press dsskey B on the Phone.
---Confirm: The phone retrieve the call with Phone A.
---Confirm: There were two ways audio between Phone and Phone A.

--- Confirm: The LED of dsskey A changes from blink red to solid green.