



Configuring a Berofix Gateway with Spitfire SIP Trunks

This document is a guideline for configuring Spitzfire SIP trunks onto a Berofix Gateway, which includes the settings required for Inbound DDI routing and Outbound CLI presentation. The settings contained within have been tested and are known to work at the time of testing.

SIP trunk details such as account number and password will be provided separately.

Provisioning a SIP trunk:

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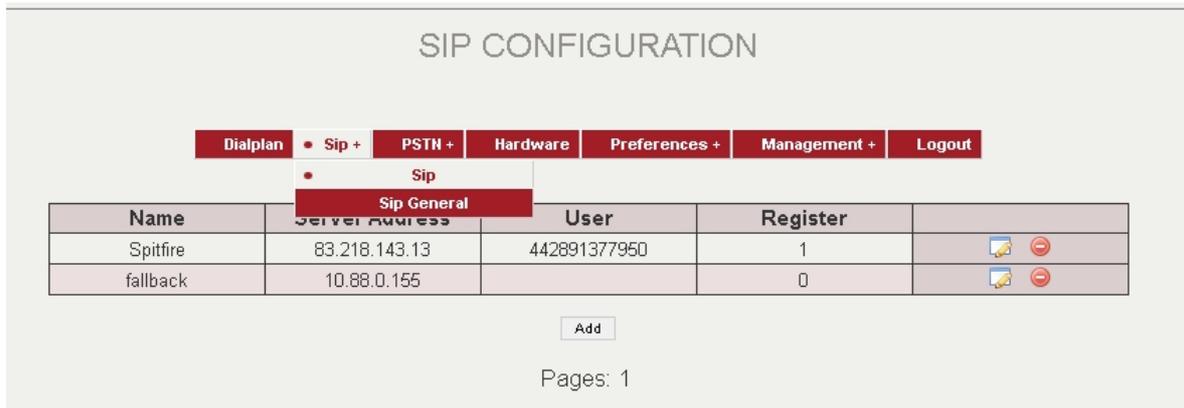
Inbound DDI's and Outbound CLI

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SIP Trunk Configuration:

Go to **Sip +** → **Sip**

The below screenshot shows 2 previously configured SIP trunks. To add a new SIP trunk click on the Add button at the bottom of the page. If the new trunk configuration page does not open check that you have pop-ups allowed for this site.



To add a new trunk:

1. **Name:** Enter a logical name for the trunk – this will be used in the dial plans
2. **Server Address:** Enter the Spitfire Server address of **83.218.143.16**
3. **Username:** Enter the account number as supplied by Spitfire, **without** the @spitfireisp.net
4. **Secret:** Enter the account password as supplied by Spitfire
5. **Register:** Check for yes
6. **Register interval:** Set for a minimum of 300, maximum of 3600
7. **Register option:** Validate
8. **Hard register:** leave unchecked

The screenshot shows the 'SIP' configuration form with the following fields:

- Name: Spitfire
- Server Address: 83.218.143.16
- User: 442891377950
- Secret: *****
- Register:
- Registration interval: 300
- Register option: validate (dropdown menu)
- Hard reregister:

A red circle highlights the 'more...' link at the bottom of the form. Below the form are 'Save' and 'Close' buttons.

9. Select “more” and you should see the advanced fields.
10. Apply the settings as in the screenshot.
11. Ensure you add the following string in the “Additional Configuration Options”

`sip_rpi_user_setting=${new_source}`

This allows the RPID to be sent for individual outbound CLI

Advanced Configuration

T.38 Support

DTMF Mode rfc2833

IE on SIP

Codecs

Allowed codecs: pcma, pcmu

Available codecs: gsm, g729, g723, g726-32

Wait for cancel

Call progress table

Failover account

Failover timeout 2

Dialplan Source pai_user

Caller ID Mapping

From: User Part account_username

From: Display Part none

Additional configuration options

```

sip_pai_user_setting=
sip_pai_display_setting=
sip_rpi_user_setting=${new_source}
sip_ppi_an_setting=
sip_ppi_user_setting=

```

Additional configuration options description

12. Save and activate

13. Go to **Management** → **State** you can see the registration status of the SIP trunk. A green icon indicates that the SIP trunk is registered.

The screenshot shows the 'STATE' page in the berofix management interface. At the top, there is a navigation menu with buttons for 'Dialplan', 'Sip +', 'PSTN +', 'Hardware', 'Preferences +', 'Management +', and 'Logout'. The 'Management +' button is highlighted. Below the navigation menu, there are two tables. The first table is titled 'ISDN status' and has columns for 'Port', 'Type', 'Prot.', 'L2Link', 'L1Link', and 'Restart'. It contains three rows: Port 1 (Type: TE, Prot.: PTP), Port 2 (Type: NT, Prot.: PTP), and Port 3 (Type: NT, Prot.: PTP). Each row has a green status icon in the 'L2Link' and 'L1Link' columns and a 'Restart' button. The second table is titled 'Registration status:' and has columns for 'Account name', 'Registrar', 'User', and 'Status'. It contains one row: Account name: Spitfire, Registrar: 83.218.143.13, User: 442891377950, and Status: a green status icon circled in red. At the bottom right, there is a 'Help' button and the berofix logo.

Inbound DDI and outbound CLI:

Inbound DDI's are sent to the berofix **WITH** the leading 44 i.e. 442891377950

Outbound CLI is received from the berofix in the RPID header **WITHOUT** the leading 44 i.e. 2891377950. The CLI being sent must be a valid number associated with the Spitfire SIP trunk.

The berofix gateway uses a dialplan based on regular expressions to route inbound and outbound calls based on the called or calling number. These numbers can also be manipulated as required to suit a particular implementation. This guide is not intended to provide detailed examples on the dialplan configuration required as it will change from installation to installation. The installation engineer will be required to understand the dialplan and be able to manipulate it accordingly.

A partial dialplan is shown below. In it the dialed number is being manipulated by a combination of Destination & New destination. The dialing (or calling) number is not being manipulated by the Source, New Source combination as it is already correct. In the case of dialplan entries 3 & 4 the PBX is already sending a correct CLI of 2891377970 (or 2891377971, 2891377972 etc)

DIALPLAN

• Dialplan Sip + PSTN + Hardware Preferences + Management + Logout

Direction: all		Search:		Entries per page: 15			
Direction	From ID	To ID	Destination	New destination	Source	New source	Position
sip-isdn	p:Spitfire	g:ISDN2	44289137(*)	\1	(*)	\1	1
isdn-isdn	g:ISDN	g:ISDN2	(*)	\1	(*)	\1	2
isdn-sip	g:ISDN2	p:Spitfire	((378)(*))	020\1	(*)	\1	3
isdn-sip	g:ISDN2	p:Spitfire	\1(*)	\1	(*)	\1	

Below is an example of a dialplan entry. In it the berofix is matching a called number presented over the Spitfire SIP trunk. If it matches a number beginning with 44289137 it removes those digits and passes the remainder to the device connected to the ISDN2 (a PBX in this case).

I.e. the number 442891377951 is presented to the breofix gateway via the SIP trunk “Spitfire”. The dialplan matches 44289137 in the Destination, and is told to remove those digits in the New destination. The remainder, 7951, is passed to the PBX which is configured to receive 4 digits via the ISDN2 group.

There was no need to modify the calling number so the entire number is passed using Source & New source.

DIALPLAN

From direction: SIP	To direction: ISDN
Match type: IP Address	To ID: g:ISDN2
From ID: Spitfire	
Destination: 44289137(*)	New destination: \1
Source: (*)	New source: \1
Comments:	
<input type="checkbox"/> Activ:	