

Gigaset pro

Interoperability Testing

SPITFIRE®



T300 pro mini PBX

Up to 15 employees at each location

Multiple sites can be seamlessly inter-connected with a common numbering scheme



T500 pro large PBX

Up to 100 employees at each location

InterOperation & Configuration Notes For Gigaset pro T300 & T500 PBX Interworking With The Spitfire SIP Trunking Service



Gigaset pro

Gigaset Communications UK Ltd • 2 White Friars, Chester CH1 1NZ, UK

www.Gigaset.com/pro • Telephone: +44 1244 567900



INSPIRING CONVERSATION

Contents

CHANGE HISTORY	2
1. OVERVIEW	3
1.1. INTRODUCTION.....	3
1.2. SESSION INITIATION PROTOCOL.....	3
2. TESTING CONFIGURATION	4
2.1. ARCHITECTURE OVERVIEW.....	4
2.2. REQUIREMENTS.....	4
2.3. SOFTWARE VERSIONS.....	4
3. CONFIGURATION	5
3.1. SPITFIRE.....	5
3.2. GIGASET.....	5
4. TEST RESULTS	10

Change History

Document Revision	Date	Authored By	Sections Affected	Reason for Change
Rev00	16 Aug 2012	Keith Saunders Spitfire	All	Initial release

1. Overview

1.1. Introduction

This document provides a summary of how the Spitfire SIP Trunking service can interoperate with the Gigaset pro T300 and T500 PBX Telephony Solution. This testing was conducted by Spitfire themselves.

1.2. Session Initiation Protocol

Session Initiation Protocol (SIP) is a simple protocol that facilitates peer-to-peer communication sessions. Users (or, in general, any addressable entities) in a SIP framework are identified by Universal Resource Identifiers (URI). Each such Internet-style address (for example, sip: johndoe@proximitycomms.com) maps into one or more Contacts, each of which typically represents a device or service at which the corresponding user may be reached. The SIP framework is responsible for routing a request for a peer-to-peer session addressed to a given URL to one or more appropriate contacts for that URL. The framework may utilise information about the preferences, presence and location of the user identified by the URL, to determine the most appropriate contacts. The protocol also provides mechanisms to specify the type of session that is requested as well as means to change session parameters.

It is important to understand that SIP is not a standardised protocol but in fact is an IETF RFC (**R**equ**e**st **F**or **C**omment). An RFC is a document that describes the specifications for a recommended technology. If the specification is ratified it becomes a standards document. At the time of producing this document SIP still remains a RFC. Not all RFCs become standards; some are designated indefinitely with Informational or Experimental status. Therefore interoperability of two SIP devices is not guaranteed; this is why Gigaset pro has produced this document to explain the configuration and features available when using its products with third-party providers' services.

Full details of the SIP IETF RFC can be found here: <http://www.ietf.org/rfc/rfc3261.txt>



Gigaset pro

Gigaset Communications UK Ltd • 2 White Friars, Chester CH1 1NZ, UK

www.Gigaset.com/pro • Telephone: +44 1244 567900

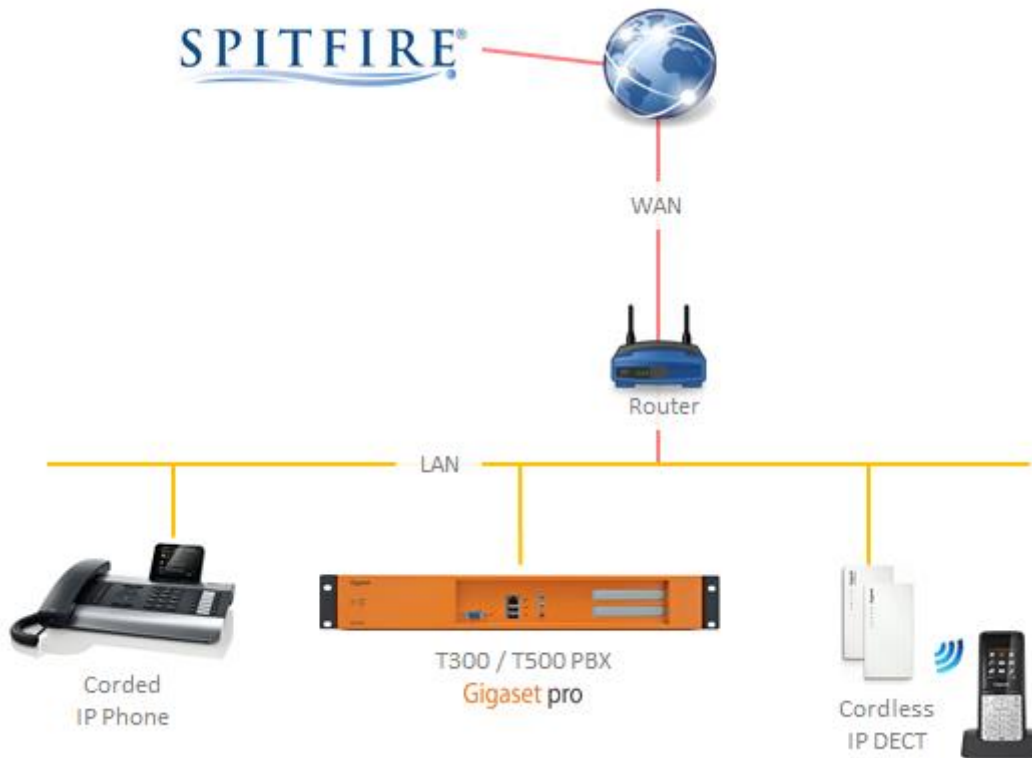


INSPIRING CONVERSATION

2. Testing Configuration

2.1. Architecture Overview

The following is a diagram of the solution architecture showing the components used during the test.



2.2. Requirements

Spitfire SIP Trunking service authenticates the User via SIP User/Pass therefore this must be previously provisioned on the Customer's Spitfire account.

2.3. Software versions

The following software versions were used during the testing by Proximity (Re-seller)

Device	Software version
Spitfire	Unknown but date tested 16 Aug 2012
Gigaset T300 / T500 PBX	5.2

3. Configuration

3.1. Spitfire

Configure Global SIP Settings

Spitfire SIP Trunking authentication via SIP Username/Password.

3.2. Gigaset

PLEASE MAKE PARTICULAR NOTE OF THE ADDITION OF EXTRA CODE. THIS IS NECESSARY TO ALLOW INBOUND DDI'S TO BE ROUTED TO THE CORRECT DESTINATIONS.

Provisioning of a SIP Trunk

Any settings not mentioned below can be left as default or determined by the installer
Configuration > Lines > Line Configuration > General

The screenshot shows the 'Line Configuration' interface with the 'General' tab selected. The fields are as follows:

- Country Code: 0044
- Area Code: 28
- Prefix: - none -
- Country: United Kingdom
- Deposit: None Internal Number: []
- Internal Numbers: Number Range: 200 to 299

- **Country Code:** 0044 (for UK based PBXs)
- **Area Code:** 28 (this will differ depending on the area you are located in)
- **Prefix:** - none - (can be determined by the installer)
- **Country:** United Kingdom (for UK based PBXs)
- **Deposit:** None (can be determined by the installer)
- **Number Range:** 200 to 299 (can be determined by the installer)

- **Line Name:** SpitfireTrunk (can be determined by the installer)
- **Provider:** Select Spitfire from the drop-down menu
- **Authentication:** Yes
- **Username:** 442891377985 (Provided by Spitfire)
- **Password:** password (Provided by Spitfire)

Next: Click the pencil icon next to Provider: Spitfire
Ensure the details match the following screenshot

Line Configuration	
type:	peer
dtmfmode:	rfc2833
auth mode:	Username/Passwd
auth:	md5
nat:	no
allow:	g711,alaw
insecure:	very
port:	5060
defaultip:	
rtpholdtimeout:	
fromdomain:	spitfiresp.net
host:	83.218.143.13
permit:	none
deny:	
canreinvite:	no
disallow:	all
Outbound Proxy:	83.218.143.13
progressinband:	
qualify:	no
rtptimeout:	
mask:	
fromuser:	442891377985
Number Display:	
type:	remoteparty
format incoming:	222 XXX
format outgoing:	222 XXX

General **Lines** Emergency Call

Line Allocation

Status	Line Name	Line Number	Line type:
✓	SpitfireTrunk	No.: 1	Provider Connection

Country Code: Area Code:

Number Type	Number	Number Area
Single Number	0044(28) 91377985	

Provider Number Area Extended

- **Country Code:** Blank
- **Area Code:** Blank
- **Number Type:** Single Number
- **Number:** Number minus the country and area codes (Provided by Spitfire)

IF USING A NUMBER RANGE, YOU MAY FIND IT SIMPLER TO FOLLOW THE NEXT EXAMPLE

Line Configuration

General **Lines** Emergency Call

Line Allocation

Status	Line Name	Line Number	Line type:
✓	SpitfireTrunk	No.: 1	Provider Connection

Country Code: Area Code:

Number Type	Number	Number Area
Number Block	0044(28) 91377	985 to 987

Provider Number Area Extended

- **Country Code:** Blank
- **Area Code:** Blank
- **Number Type:** Number Block
- **Number:** Number minus the country and area codes (Provided by Spitfire)
- **Number Area:** Changing part of number (Provided by Spitfire)

The screenshot shows the 'Line Configuration' window with the 'Lines' tab selected. The 'Line Allocation' section displays a table with one entry: 'SpitfireTrunk' (Line Number: No.: 1, Line type: Provider Connection). Below the table, the configuration details are shown:

- Line Prefix: **[]*
- Deposit: Default Internal Number: []
- No Screening: Phone Number Prefix: [+]
- Max Connection: [4]
- Manual Configuration: Active:

```
[SpitfireTrunk-incoming]
exten => _X.,1,Set(channelname= SpitfireTrunk-incoming)
exten => _X.,2,Set(var_to=${SIP_HEADER(To)})
exten => _X.,3,Set(firstcut=${CUT(var_to,;,2)})
exten => _X.,4,Set(secoundcut=${CUT(firstcut,@,1)})
exten => _X.,5,Set(CALLERID(all)=${CALLERID(number)})
exten => _X.,6,Goto(incoming,+${secoundcut},1)
exten => _X.,7,Hangup
```

At the bottom, there are tabs for 'Provider', 'Number Area', and 'Extended'.

- **Line Prefix:** Blank (can be determined by the installer)
- **Deposit:** Default (can be determined by the installer)
- **No Screening:** No
- **Max Connection:** 4 (Provided by Spitfire)

Next: Expand **Manual Configuration** and click **OK** when prompted
Copy and paste the following script into the **Manual Configuration**

[SpitfireTrunk-incoming]

```
exten => _X.,1,Set(channelname= SpitfireTrunk-incoming)
exten => _X.,2,Set(var_to=${SIP_HEADER(To)})
exten => _X.,3,Set(firstcut=${CUT(var_to,;,2)})
exten => _X.,4,Set(secoundcut=${CUT(firstcut,@,1)})
exten => _X.,5,Set(CALLERID(all)=${CALLERID(number)})
exten => _X.,6,Goto(incoming,+${secoundcut},1)
exten => _X.,7,Hangup
```

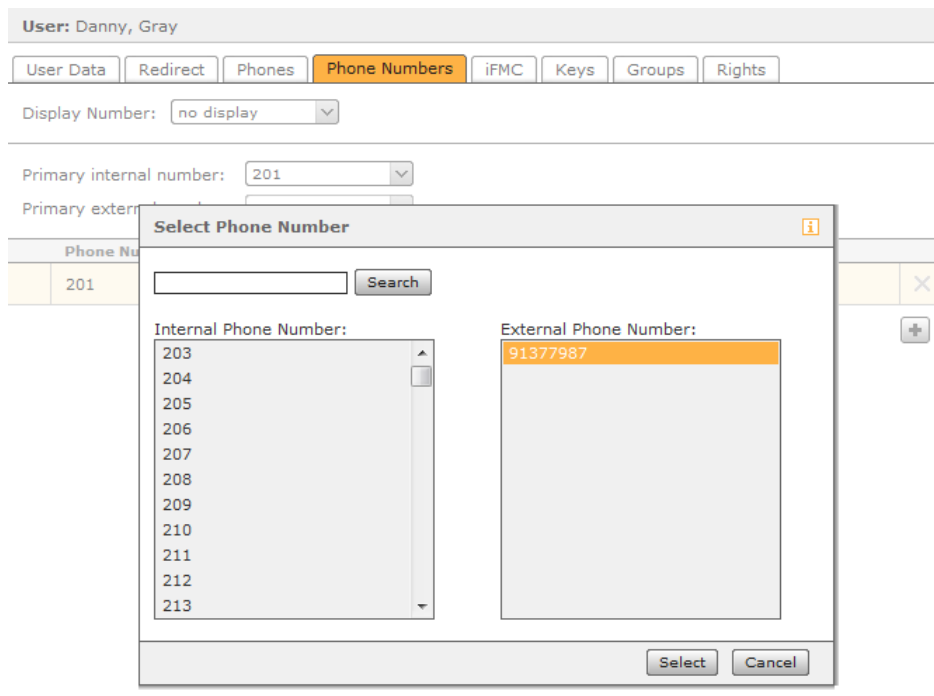
THIS IS NECESSARY TO ALLOW INBOUND DDI'S TO BE ROUTED TO THE CORRECT DESTINATIONS.

Outbound Routing – Reference Only

Configuration > Routing > Routing Properties

NO CHANGES NEED TO BE MADE TO FACILITATE OUTBOUND ROUTING

Inbound Routing – Reference Only



- Click the plus symbol on the right hand side under the user to open the **Select Phone Number** dialogue box
- Select an available external number from the **External Phone Number** list
- Click **Save**

4. Test Results

Issues deemed to require a resolution are displayed in BLUE

Feature	Success	Comments
Outgoing calls	✓	
Incoming calls	✓	DDI tested also
CLIP Outgoing	✓	
CLIP Incoming	✓	
DTMF	✓	
Anonymous calling	-	Untested.

Further configuration details can be found in the specific product Admin Guide which is available for download in the Support area of the pro website.

Comments or questions in relation to this document should be addressed to the originator:

James Linton
Technical Sales Manager Gigaset pro UK & Ireland

Gigaset pro

Office: +44 1244 567919

Cell: +44 7774 778855

eMail: James.Linton@Gigaset.com

Gigaset pro Portal: www.Gigaset.com/PRO



Gigaset pro

Gigaset Communications UK Ltd • 2 White Friars, Chester CH1 1NZ, UK

www.Gigaset.com/pro • Telephone: +44 1244 567900



INSPIRING CONVERSATION