**#22857** - <https://redmine.vnc.biz/issues/22857>

# VNCTalk Softphone - JiGaSi

Jitsi Gateway to SIP : a server-side application that links allows regular SIP clients to join Jitsi Meet conferences hosted by Jitsi Videobridge.

This documentation is based on the official doc (<https://github.com/jitsi/jigasi>) and Phuong Vu work.

# Set up

### Checkout latest source:

|  |
| --- |
| git clone https://github.com/jitsi/jigasi.git |

Checkout the release 84 and build

|  |
| --- |
| cd jigasi git checkout b231ff38da7135878fef89dd90eb99e871c3e779 (release 84 is same version with package install) ant make |

# Configuration

### Configure in Jitsi Meet for enable SIP calls

### Enable this line in vnctalk-jitsi-meet/config.js

|  |
| --- |
| var config = {  hosts: {  ...  call\_control: 'callcontrol.prosody-dev4.vnctalk.zimbra-vnc.de',  ...  }, |

### 

### 

### Enabled external component Jigasi in XMPP Prosody server add following line in bottom of /etc/prosody/prosody.cfg.lua (assuming that subdomain is 'callcontrol' and domain 'prosody-softphone-dev1.vnctalk.zimbra-vnc.de')

### Add this lines as the end of the prosody config. Where the other components (conference, auth, jicofo, etc.) are.

### 

|  |
| --- |
| Component "callcontrol.prosody-dev4.vnctalk.zimbra-vnc.de"  component\_secret = "vnctalk " |

### 

### Add DNS records

|  |
| --- |
| #################################################################### # prosody-dev4.vnctalk.zimbra-vnc.de #################################################################### ... address=/callcontrol.prosody-dev4.vnctalk.zimbra-vnc.de/10.20.20.44 ... |

Then restart dnsmasq

|  |
| --- |
| sudo service dnsmasq restart |

### Setup SIP account

Go to jigasi/jigasi-home and edit sip-communicator.properties file. (/etc/jitsi/jigasi/sip-communicator.properties)

|  |
| --- |
| #Sample config with one XMPP and one SIP account configured # Replace {sip-pass-hash} with SIP user password hash # as well as other account properties  # Name of default JVB room that will be joined if no special header is included # in SIP invite org.jitsi.jigasi.DEFAULT\_JVB\_ROOM\_NAME=siptest  net.java.sip.communicator.impl.protocol.SingleCallInProgressPolicy.enabled=false  # Adjust opus encoder complexity net.java.sip.communicator.impl.neomedia.codec.audio.opus.encoder.COMPLEXITY=10 net.java.sip.communicator.impl.neomedia.codec.audio.opus.encoder.FEC=true  # Disables packet logging net.java.sip.communicator.packetlogging.PACKET\_LOGGING\_ENABLED=true  net.java.sip.communicator.impl.protocol.sip.acc1403273890647=acc1403273890647  # Assuming sip user is 'phuongvu@sip2sip.info' net.java.sip.communicator.impl.protocol.sip.acc1403273890647.ACCOUNT\_UID=SIP\:phuongvu@sip2sip.info  # Base64 encoded password of sip user net.java.sip.communicator.impl.protocol.sip.acc1403273890647.PASSWORD=MTIzNDU2NzhAWA== net.java.sip.communicator.impl.protocol.sip.acc1403273890647.PROTOCOL\_NAME=SIP  # Server of sip user is 'proxy.sipthor.net' net.java.sip.communicator.impl.protocol.sip.acc1403273890647.SERVER\_ADDRESS=proxy.sipthor.net net.java.sip.communicator.impl.protocol.sip.acc1403273890647.USER\_ID=phuongvu@sip2sip.info net.java.sip.communicator.impl.protocol.sip.acc1403273890647.KEEP\_ALIVE\_INTERVAL=25 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.KEEP\_ALIVE\_METHOD=OPTIONS net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.AMR-WB/16000=750 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.G722/8000=700 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.GSM/8000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.H263-1998/90000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.H264/90000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.PCMA/8000=600 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.PCMU/8000=650 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.SILK/12000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.SILK/16000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.SILK/24000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.SILK/8000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.VP8/90000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.iLBC/8000=10 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.opus/48000=1000 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.red/90000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.speex/16000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.speex/32000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.speex/8000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.telephone-event/8000=1 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.Encodings.ulpfec/90000=0 net.java.sip.communicator.impl.protocol.sip.acc1403273890647.OVERRIDE\_ENCODINGS=true  # We can use the prefix org.jitsi.jigasi.xmpp.acc to override any of the # properties that will be used for creating xmpp account for communication.  # The following two props assume we are using jigasi on the same machine as # the xmpp server. org.jitsi.jigasi.xmpp.acc.IS\_SERVER\_OVERRIDDEN=true org.jitsi.jigasi.xmpp.acc.SERVER\_ADDRESS=127.0.0.1  # If you want jigasi to perform authenticated login instead of anonymous login # to the XMPP server, you can set the following properties. org.jitsi.jigasi.xmpp.acc.USER\_ID=jigasi@prosody-dev4.vnctalk.zimbra-vnc.de org.jitsi.jigasi.xmpp.acc.PASS=123qwe org.jitsi.jigasi.xmpp.acc.ANONYMOUS\_AUTH=false  # If you want to use the SIP user part of the incoming/outgoing call SIP URI # you can set the following property to true. org.jitsi.jigasi.USE\_SIP\_USER\_AS\_XMPP\_RESOURCE=true |

You can login another sip user of sip2sip.info and call to sip user 'phuongvu'.

You can pick any one here we pick 'phuongvu' to register jigasi to sip2sip.info server.

### Run Jigasi by command

|  |
| --- |
| sudo ./jigasi.sh --domain=prosody-dev4.vnctalk.zimbra-vnc.de --host=localhost --port=5347 --min-port=26001 --max-port=26500 --subdomain=callcontrol --secret=vnctalk |

\*\*\*NOTE : We need to create new user for Jigasi on XMPP server:

Username: jigasi@prosody-dev4.vnctalk.zimbra-vnc.de  
 Password: 123qwe

# Usage and example

At the moment, we can test with case:

- Login a user to prosody-dev4 server.

- Create video conference siptest@conference.prosody-dev4.vnctalk.zimbra-vnc.de

- When video conference started, click 'sip call' icon on tab properties and input 'quydang'. Sip user 'quydang' will receive call from user 'phuongvu'.

- Otherwise, user 'quydang' call to user 'phuongvu', the call will route to 'siptest' video conference room.

# FQA

### When run Jigasi, you can't see SIP user register on SIP server:

### You need to verify setting on jigasi-home/sip-communicator.properties. The "PASSWORD" field must be encode by BASE64. You can encode the password on link: [https://www.base64encode.org](https://www.base64encode.org/)

Example: "vnctalk" -- Base64 encoded --> "dm5jdGFsaw=="

Start Jigasi with specifies arguments:

--domain: specifies the XMPP domain to use.  
--host: the IP address or the name of the XMPP host to connect to(localhost by default).  
--port: the port of the XMPP host to connect on(5347 by default).  
--subdomain: subdomain name for SIP gateway component.  
--secret: the secret key for the sub-domain of the Jabber component implemented by this application with which it is to authenticate to the XMPP server to connect to.  
--min-port: the minimum port number that we'd like our RTP managers to bind upon.  
--max-port: the maximum port number that we'd like our RTP managers to bind upon.

Example:sudo ./jigasi.sh --domain=prosody-dev4.vnctalk.zimbra-vnc.de --host=localhost --port=5347 --min-port=26001 --max-port=26500 --subdomain=callcontrol --secret=vnctalk

### Some Error logs, when start Jigasi:

1)

|  |
| --- |
| SEVERE: [1] org.jitsi.jigasi.Main.main() java.net.ConnectException: Connection refused org.xmpp.component.ComponentException: java.net.ConnectException: Connection refused  at org.jivesoftware.whack.ExternalComponent.connect(ExternalComponent.java:272)  at org.jivesoftware.whack.ExternalComponentManager.addComponent(ExternalComponentManager.java:221)  at org.jivesoftware.whack.ExternalComponentManager.addComponent(ExternalComponentManager.java:201)  at org.jitsi.jigasi.Main.main(Main.java:318) Caused by: java.net.ConnectException: Connection refused  at java.net.PlainSocketImpl.socketConnect(Native Method)  at java.net.AbstractPlainSocketImpl.doConnect(AbstractPlainSocketImpl.java:339)  at java.net.AbstractPlainSocketImpl.connectToAddress(AbstractPlainSocketImpl.java:200)  at java.net.AbstractPlainSocketImpl.connect(AbstractPlainSocketImpl.java:182)  at java.net.SocksSocketImpl.connect(SocksSocketImpl.java:392)  at java.net.Socket.connect(Socket.java:579)  at org.jivesoftware.whack.ExternalComponent.connect(ExternalComponent.java:151) |

Maybe your run Jigasi command missing "--host=localhost --port=5347" or you need to check on Prosody XMPP server:

sudo netstat -tupln  
  
tcp 0 0 127.0.0.1:5347 0.0.0.0:\* LISTEN 18731/lua5.1

2)

|  |
| --- |
| SEVERE: [1] org.jitsi.jigasi.Main.main() conflict org.xmpp.component.ComponentException: conflict  at org.jivesoftware.whack.ExternalComponent.connect(ExternalComponent.java:219)  at org.jivesoftware.whack.ExternalComponentManager.addComponent(ExternalComponentManager.java:221)  at org.jivesoftware.whack.ExternalComponentManager.addComponent(ExternalComponentManager.java:201)  at org.jitsi.jigasi.Main.main(Main.java:318) WARNING: [27] impl.protocol.sip.SipLogger.logWarning().185 Warning from the JAIN-SIP stackusing default tls security policy INFO: [27] impl.protocol.sip.SipLogger.logInfo().196 Info from the JAIN-SIP stack: the sip stack timer gov.nist.javax.sip.stack.timers.DefaultSipTimer has been started SEVERE: [34] impl.protocol.sip.SipLogger.logError().133 Error from the JAIN-SIP stack: Invalid argument address = ::0 port = 5060 transport = UDP SEVERE: [34] impl.protocol.sip.SipLogger.logError().133 Error from the JAIN-SIP stack: Invalid argument address = ::0 port = 5061 transport = TLS |

The old Jigasi proccess isn't stopped, need to stop it and run Jigasi again.

3)

When you make outgoing call and you receive the error log on Jigasi below:

|  |
| --- |
| SEVERE: [83] impl.protocol.jabber.ProtocolProviderServiceJabberImpl.register().473 Error registering SASL authentication PLAIN failed: text:   at org.jivesoftware.smack.SASLAuthentication.authenticate(SASLAuthentication.java:341)  at org.jivesoftware.smack.XMPPConnection.login(XMPPConnection.java:208)  at net.java.sip.communicator.impl.protocol.jabber.LoginByPasswordStrategy.login(LoginByPasswordStrategy.java:154)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.connectAndLogin(ProtocolProviderServiceJabberImpl.java:1296)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.connectAndLogin(ProtocolProviderServiceJabberImpl.java:944)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.initializeConnectAndLogin(ProtocolProviderServiceJabberImpl.java:755)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.register(ProtocolProviderServiceJabberImpl.java:468)  at org.jitsi.jigasi.RegisterThread.run(RegisterThread.java:58) 2015-09-22 06:27:10.326 SEVERE: [83] util.UtilActivator.uncaughtException().119 An uncaught exception occurred in thread=Thread[Thread-48,5,main] and message was: No previous records found for account ID: Jabber:quydang@prosody-dev4.vnctalk.zimbra-vnc.de/quydang in packagenet.java.sip.communicator.impl.protocol.jabber java.lang.IllegalArgumentException: No previous records found for account ID: Jabber:quydang@prosody-dev4.vnctalk.zimbra-vnc.de/quydang in packagenet.java.sip.communicator.impl.protocol.jabber  at net.java.sip.communicator.service.protocol.ProtocolProviderFactory.storePassword(ProtocolProviderFactory.java:883)  at net.java.sip.communicator.service.protocol.ProtocolProviderFactory.storePassword(ProtocolProviderFactory.java:836)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.fireRegistrationStateChanged(ProtocolProviderServiceJabberImpl.java:2093)  at net.java.sip.communicator.impl.protocol.jabber.ProtocolProviderServiceJabberImpl.register(ProtocolProviderServiceJabberImpl.java:477)  at org.jitsi.jigasi.RegisterThread.run(RegisterThread.java:58) |

The XMPP user - which you set up on jigasi-home/sip-communicator.properties - log in to Prosody XMPP server failed.

org.jitsi.jigasi.xmpp.acc.USER\_ID=jigasi@prosody-dev4.vnctalk.zimbra-vnc.de  
org.jitsi.jigasi.xmpp.acc.PASS=123qwe  
org.jitsi.jigasi.xmpp.acc.ANONYMOUS\_AUTH=false

### On video-conference, when we dial and see on console log:

|  |
| --- |
| Dial error <iq xmlns=​"jabber:​client" type=​"error" to=​"alice@prosody-dev4.vnctalk.zimbra-vnc.de/​00bc7757-c5bf-4d4c-9044-629ddd5fc8a6" from=​"siptest@conference.prosody-dev4.vnctalk.zimbra-vnc.de/​focus" id=​"7:​sendIQ">​…​</iq>​ VM122:9881 JSJaCPresence {name: "presence", doc: document} |

The reason is that: the service Jigasi isn't started.