# JTalker – an instant messaging system

User manual for Version 0.7

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# **1** Getting Jtalker

You can download the latest version of Jtalker from: <u>http://sourceforge.net/projects/jtalker-system/</u> The software is distributed as a tar.gz archive. This archive includes both components – the server and the client.

You can extract the tar.gz archive on MS Windows using 7zip (<u>http://www.7-zip.org/</u>) or Winzip. On other platforms use the tar-command:

#### \$ tar xfvz jtalker-0.7.0-bin.tar.gz

You will find there two subdirectories - Jtalker Server and Jtalker Client.

# 2 License

The complete Jtalker-System (client, server and plugins) is free software. You can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

→ <u>http://www.gnu.org/licenses/gpl-2.0.html</u>

# **3 Technology**

Jtalker (server and client) is written in Java, so you need the **Java Runtime Environment** installed on your system. You can download the latest version for your OS from <u>http://www.java.com/</u>

On Debian-Linux (and Ubuntu) you can install the needed package using the following command (as root):

#### # apt-get install sun-java6-jre

The JTalker-Software was tested on MS Windows XP, Vista and Linux Debian 5.0 and Suse 11.1 with Sun-Java 6.0.

# 4 The Jtalker server

The Server is responsible for all the client connections and message dispatching. You should install it on a machine, which has a stable network connection to the client computers.

### 4.1 Starting the server

The Jtalker-Server is a command-line application. Open a command shell (on MS Windows: cmd.exe or the "Powershell") and go to the directory where the server is installed (**jtalkerserver.jar**).

Now start the server:

#### \$ java -jar jtalkerserver.jar

The output should be similar to:

```
----- Welcome to JTalker-Server (0.7.0) -----
----- (c)2003-2009 by ChrM (http://chrm.info) -----
+ Start Logging at [2009-09-04 20:08:33].
+ Write logs to STDOUT.
[2009-09-04 20:08:33] *** [ERROR]: Can't load global user file
(./users.xml). No user defined.
[2009-09-04 20:08:33]: + Using following PlugIns:
[2009-09-04 20:08:33]: PlugInONE
[2009-09-04 20:08:33]: + Creating socket on port 4444
```

You can ignore the error message – there are no users defined at this time.

As you can see, the default TCP port number used by the server is 4444. If this port number is already in use, you can define another port number by setting the "-p" option:

#### \$ java -jar jtalkerserver.jar -p 4445

There are more parameters you can use to configure the server. Use the "--help" parameter to see the complete list:

#### \$ java -jar jtalkerserver.jar --help

#### 4.2 Logging

By default the server writes all runtime information to the standard output. You can redirect the output to a file by using the "-l" parameter:

```
$ java -jar jtalkerserver.jar -l /var/log/jtalker.log
```

#### 4.3 Using SSL

For secure communication you can enable SSL encryption between client and server. Firstly you need to generate a keystore:

#### \$ keytool -genkey -keystore <keystore-file>

The command "keytool" is part of the SUN Java SE package. You will be asked for some values and a keystore password, which you need for the Jtalker-server command line.

After creating a keystore you can now start the server and enabling SSL:

```
$ java -Djavax.net.ssl.keyStore=<keystore-file>
-Djavax.net.ssl.keyStorePassword=<keystore-password> -jar
jtalkerserver.jar -ssl [OTHER SERVER PARAMS...]
```

You will see now the following output:

```
----- Welcome to JTalker-Server (0.7.0) ------
----- (c)2003-2009 by ChrM (http://chrm.info) ------
--ssl
+ Start Logging at [2009-09-04 20:53:37].
+ Write logs to STDOUT.
[2009-09-04 20:53:37]: + Number of global users: 10
[2009-09-04 20:53:37]: + Using following PlugIns:
[2009-09-04 20:53:37]: + Using following PlugIns:
[2009-09-04 20:53:37]: PlugInONE
[2009-09-04 20:53:37]: + Creating <u>secure</u> socket on port 4444
[2009-09-04 20:53:38]: + OK. Waiting for clients...
```

# 5 The Jtalker client

### 5.1 Starting the client

Starting the client depends on the operating system you are using. In general you can also use the command line on every system:

#### \$ java -jar jtalkerclient.jar

But there will be simpler ways to start the client on Windows and Linux.

### 5.1.1 MS Windows

If you have installed Sun-Java correctly, the MIME-Type \*.jar is assigned to the Java-Software. Simple double-click the **jtalkerclient.jar** file to start the client.

### 5.1.2 Linux

If you are using a graphical file manager like Konqueror, right-click on the **jtalkerclient.jar**, select "Open with..." and type "**java** –**jar**".



## 5.2 Configuration and account generation

When you start the client for the first time you will see the following message:



Click "*OK*". Now the main window appears:



You should first configure the server. Go to "*Client*  $\rightarrow$  *Settings*..." or click the config-icon to open the configuration dialog:

		JTalker	Configuration	×
•	Server	Server Name:	localhost	
	Notification	Server Port:	4444	]
	, Plugins		Use SSL	
		ОК	Cancel	

Go to the server settings, enter the hostname or the IP address of the machine where your server is running on. Enter the correct TCP-port-number and the connection type (SSL/No SSL) and click *"OK*".

Back in the main window select now *"Server*  $\rightarrow$  *Create Account...*". Enter a user **name** you want to use (Note: only letters and numbers are allowed!) and a **password**. You can select *"Default Account*" to save the name/password combination in your client settings, otherwise you must enter the data in the configuration dialog again.



Click *"Create"* to open a server connection and create the new account. You will see a confirmation message or a error message if something went wrong.

### 5.3 Connecting to the server

After successfully account creation, you can connect to the server by selecting *"Server*  $\rightarrow$  *Connect*" or by clicking the connector-icon:



### 5.4 Writing messages

You can open a chat window by double-clicking the user name, by right-clicking on the user name and selecting *"Open Chat Window"* or by clicking on the chat-window-icon:

	_	JTã	alker	_	×
Client	Server	Status	Plugins	?	
Ń	$\odot$				
🙂 chrn	n @ 127.	0.0.1			
0.7.1		🕒 Conn	ected to I	ocalho:	st:4445

If you want to write a message to more then one user, select the users first by Ctrl+Click and then click on the *"Message to selected users"* icon:

		JTa	alker		×
Client	Server	Status	Plugins	?	
Ń	$\odot$				
🙂 chrn	e 127.	0.0.1			33333333
0.7.1		🖰 Conn	ected to I	oca	lhost:4445

In the chat window you can write messages and send them by Ctrl+Enter or by clicking on the *"Send Msg."* icon:

Chrm	×
장 Send Msg. 🔝 Send File  🛓 🖹	
<b>chrm</b> (14:04:17)	
Hello 😂	
<b>chrm</b> (14:04:17)	
Hello 😅	
Hello ;-)	0
	O
Chat with chrm @ 127.0.0.1	

### 5.5 Creating chatrooms

You can create chatrooms by selecting ",Server  $\rightarrow$  Create Chatroom...":

3	Create a Chatroo	m 🔀
Mar and	Create	e Chatroom
	Room Name:	chrm-room
Chat	Users:	chrm,
Char		Create
and the second s		

Enter a name and the users you want to allow to enter the chatroom and Click "*Create*". If no error occurs you can close the window. The new created chatroom will appear immediately in the user list:



You can add or remove allowed users or close the chatroom at any time by right-click on the chatroom name:



### 5.6 Using plugins

Plugins extend the functionality of the client. You can create a directory where to store the plugin files. Then select it in the settings window:

		JTalker	Configuration	×
	Cogin	Plugin Dir:	/home/christoph/ Plugin Overview	
	s	ОК	Cancel	

As an example there is already a plugin shipped with Jtalker – the Tic-Tac-Toe game. Select as plugin directory the "plugins" directory in your Jtalker-Client installation path, which should include the **TicTacToe.jar** file.

Now start the game with "Plugins  $\rightarrow$  Tic-Tac-Toe  $\rightarrow$  Open Dialog":

JTa JTa	alker 🔀	
Client Server Status	Plugins ?	
X 💊 🔍	Tic-Tac-Toe	Open Dialog
	Dummy Plugin ONE 🕨	Plugin Settings
💛 chrm @ 127.0.0.1	Plugin Overview	
0.7.1 🤷 Conn	ected to localhost:4445	nline void fr

The Tic-Tac-Toe plugin allows a game against other users or against the computer:

	Tic-Tac-T	oe Plugin	×
🗚 Allrea	dy used - (	choose and	ther fi
x	0	X	chrm: O
x	0	0	
о			Al: 2
	Restart	Cancel	