



123 Flash Chat Server Software User Manual Version 5

<http://www.123flashchat.com>
powered by [TOPCMM](http://www.topcmm.com)

Table Of Contents

1	. Introduction.....	4
2	Requirements.....	4
2.1	Server Requirements	4
2.1.1	Supported Platforms	4
2.1.2	Hardware requirements	4
2.1.3	Java Virtual Machine(JVM) Requirements.....	5
2.1.4	Port requirements	5
2.2	Client Requirements.....	6
2.2.1	Hardware Requirements	6
2.2.2	Flash Player Requirements	6
3	. Installation.....	6
3.1	Overview of files.....	6
3.2	Installing the Chat Server	7
3.2.1	Windows NT/2k/XP/2003	7
3.2.2	Linux.....	11
3.2.3	Other Unix Operating System	14
3.3	Web server	16
3.4	Insert code	16
4	. Configuration.....	18
4.1	Server Configuration.....	18
4.1.1	fcserver.xml	18
4.1.2	Default.xml	22
4.1.3	<room_id>.xml.....	27
4.2	Client Configuration	29
4.2.1	client.xml.....	30
4.2.2	Skin configuration	37
4.2.3	Client Administrator	38
4.3	Integrate database configuration	40
5	Chat Modules.....	44
5.1	Moderated chat module	44
5.2	Invisible admin chat module.....	44
5.3	Change nickname module	45
5.4	Pocket-pc & banner chat module.....	45
6	How to customize chat skin.....	45
7	. Programmer's tools	46

7.1	Server API.....	47
7.1.1	Get Server Running Status from the files.....	47
7.1.2	Send command to server to operate or get real-time data	47
7.2	Client Parameters.....	50
7.2.1	init_user and init_password.....	51
7.2.2	init_nickname	51
7.2.3	init_root	51
7.2.4	init_room and init_room_pwd.....	52
7.2.5	init_lang.....	53
7.2.6	init_skin.....	53
7.2.7	admin_mode	54
7.2.8	init_ad.....	54
7.2.9	loading_bkground	54
7.2.10	init_private and init_private_message.....	54
7.2.11	Init_listroom.....	55

1 . Introduction

123 Flash Chat Server Software is a real-time, powerful, high performance chat server produced by TopCMM Computing Inc. (<http://www.topcmm.com/>) . This user manual contains clearly labeled diagrams and instructions for how to install, use, and administrate 123 Flash Chat Server Software for your own use. The demonstration version of 123 Flash Chat Server Software is a free way to test the paid version. The demonstration includes every feature of the full version, however, the user's connection will be lost every ten minutes.

The latest information concerning 123 Flash Chat Server Software can be found by visiting <http://www.123flashchat.com>.

If you are interested in purchasing this software online, please go to <http://www.123flashchat.com/buy.html>. Thank you!

2 Requirements

2.1 Server Requirements

2.1.1 Supported Platforms

- Windows 95/98/NT/ME/2000/XP
- Solaris/Sparc 2.6, 7,8,9
- Solaris/Intel 2.6,7,8,9
- Compaq Tru64
- IRIX
- HP-UX 10.20, 11
- AIX 4.3.x
- Linux Redhat 6.2, 7.1, 7.2, 7.3, 9
- Linux Caldera
- TurboLinux
- Mac OS Classic 8.1 - 9.X
- Mac OS X 10.0 - 10.1
- Mac OS X Server

2.1.2 Hardware requirements

123 Flash Chat Server Software will be compatible with most server hardware.

The minimum hardware requirements are as follows:

- 586/200 MHz or faster processor
- 64 MB of RAM or more
- 100 MB free hard disk space or more

Dedicated PII/400 MHz with 256 MB RAM is eligible to handle 500 or more concurrent users.

Adding extra RAM and processors will improve the performance of 123 Flash Chat.

2.1.3 Java Virtual Machine(JVM) Requirements

A Java Virtual Machine (JVM), or a Java Developer Kit (JDK), fully compliant with the Sun J2SDK 1.4.x is required to run the 123 Flash Chat server. We recommend J2SDK 1.4.2 or a higher version.

For the current version of JDK, visit <http://java.sun.com/>.

Note: The Windows and Linux versions of 123 Flash Chat Server Software now include the Sun J2SDK 1.4.2 so it won't be necessary to install JDK again.

2.1.4 Port requirements

123 Flash Chat Server Software needs at least one free port.

The default port is: 51127

123 Flash Chat Server Software can listen to two ports simultaneously: a low one (<1024) and a high one(1024~65535).

To ensure your users don't have to configure a firewall before accessing 123 Flash Chat, the low port can be set to 80 or 443, since this will be allowed by most users' firewalls.

But remember, ports below 1024 can only be accessed using flash player 7 or a newer version. That's why you may set a high port (1024~65535) to serve lower version flash player.

Ever since version 4.0, 123 Flash Chat Server Software has a web server built into it for testing purposes. The default port value for this built-in web server is 35555.

For more detailed instructions, please refer to the: [Server Configuration Section](#) of this guide.

2.2 Client Requirements

2.2.1 Hardware Requirements

- 586/166 MHz or faster processor
- 64 MB of RAM or more.

2.2.2 Flash Player Requirements

The client will need Macromedia Flash Player 6 or above.

If users do not have flash player 6 or higher installed, they will be notified of these requirements and automatically directed to [Macromedia Download Center](#) to download Macromedia Flash Player for free.

3 . Installation

There are mainly two versions of 123 Flash Chat Server Software available. One is for Windows and the other for Linux. Both include J2SDK1.4.2.

For operating systems that are not Windows or Linux, before installing 123 Flash Chat Server, J2SDK1.4.x must be downloaded by visiting <http://java.sun.com> and installed.

The installation will include two parts:

1. Install chat server
2. Install chat client

3.1 Overview of files

It contains the following folders:

- /client
 - banner
 - help
 - lang
 - skin
- /doc
- /server
 - data
 - default
 - ◆ logs
 - ◆ members

- ◆ message
- ◆ rooms
- etc
 - groups
 - database
- lib
- logs
- wrapper_win32
- /readme.txt

3.2 Installing the Chat Server

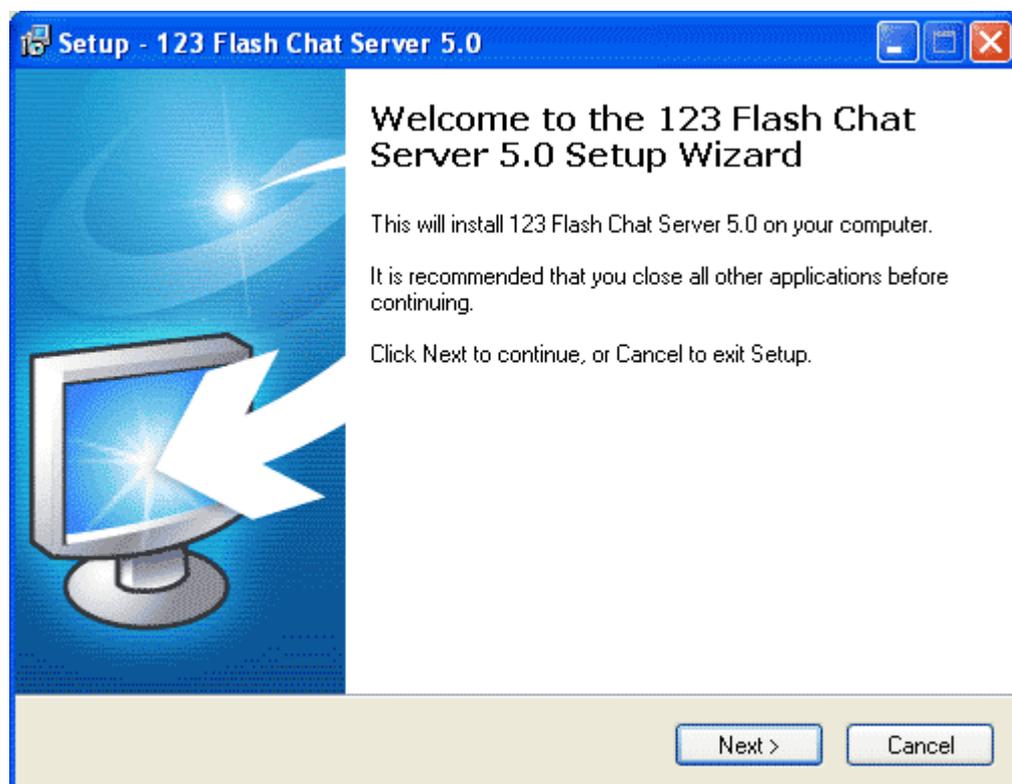
3.2.1 Windows NT/2k/XP/2003

Follow the steps below to install the latest Windows version of 123 Flash Chat Server

1. Download the latest Windows version of 123 Flash Chat Server Software at:
<http://www.123flashchat.com/download.html>, get the file :

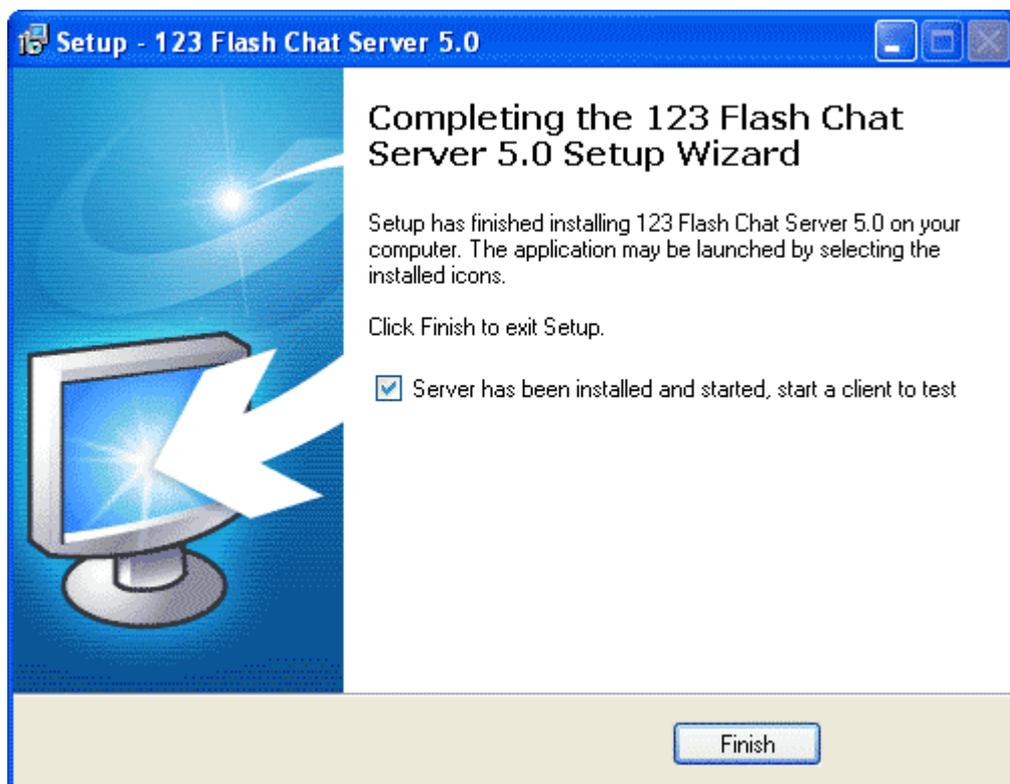
123flashchatserver.exe

2. Double click on "123flashchatserver.exe". This will take a few minutes to install following the simple instructions of it.



3. After 123 Flash Chat Server has been installed, wait a few seconds while 123 Flash Chat Server as a Windows NT service is automatically started (you don't have to start it manually).

123 Flash Chat Server as a Windows NT service will automatically load and start each time you reboot your server computer.



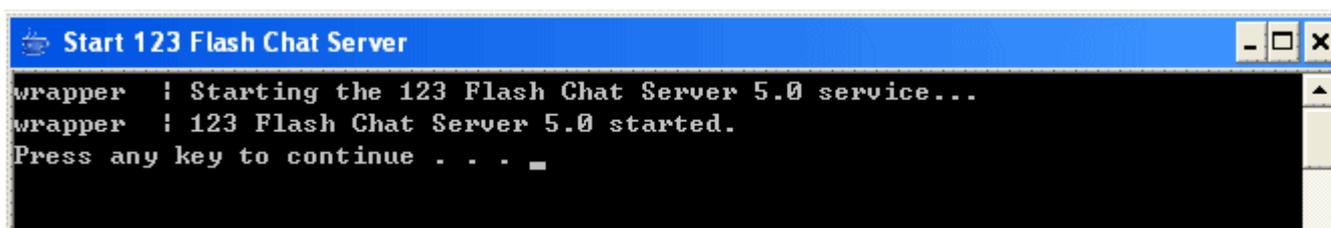
4. Start the chat server.

This can be done by starting the server in service mode or console mode, if it was stopped before. These modes are explained below:

a) Starting in service mode:

(In the Windows system)

start->program->123 flash chat server 5.0 -> Server->start 123 flash chat server.



If an error occurs, it may be because the chat server has already been started before or

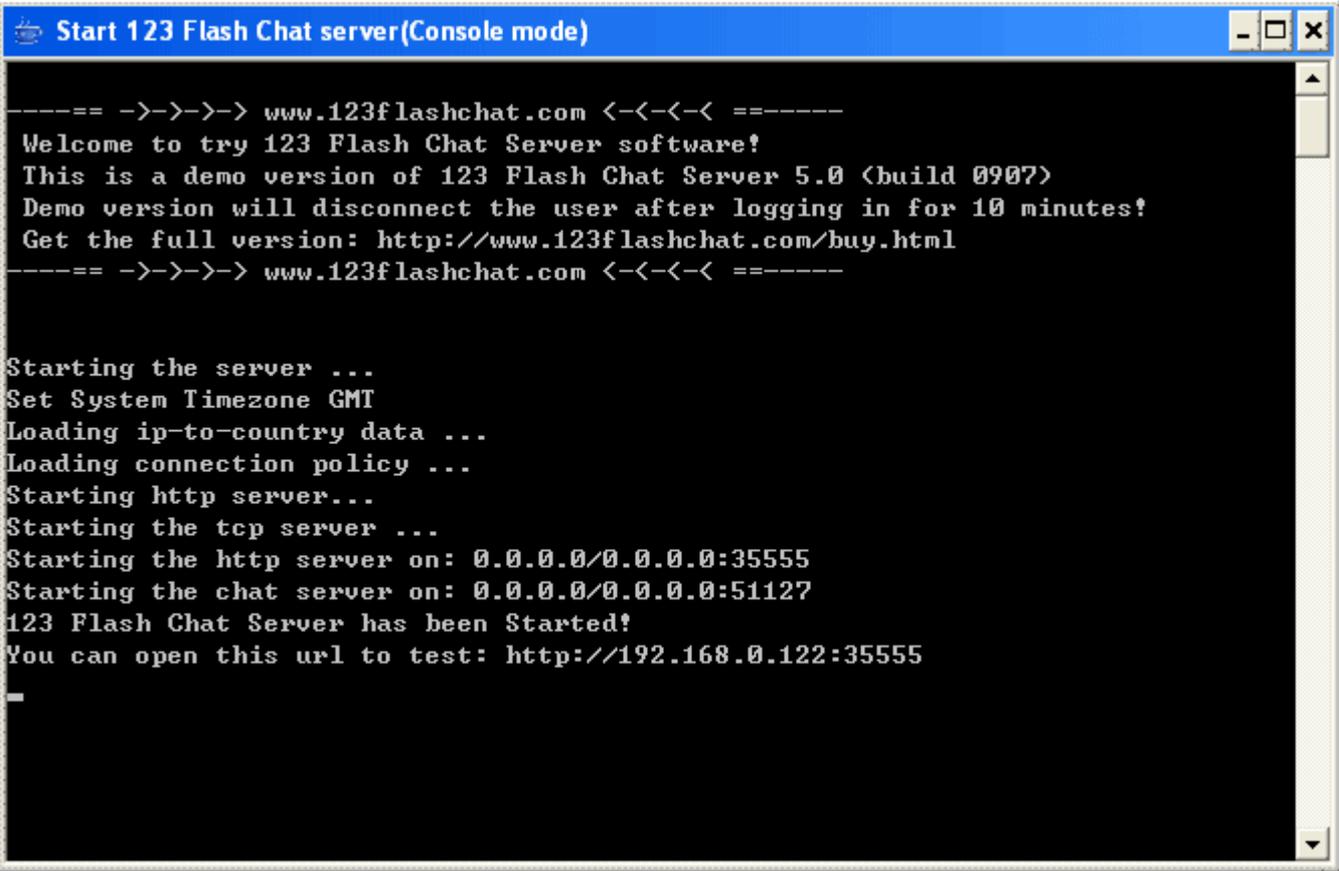
there is a problem with the server configuration. To check the type of error, please start in console mode.

b) Starting in console mode:

(In the Windows system)

start->program->123 flash chat server 5.0->control->start 123 flash chat server (console mode).

Usually you will see something similar to the screen below:



```
-----== ->->->-> www.123flashchat.com <-<-<-<-< =====
Welcome to try 123 Flash Chat Server software!
This is a demo version of 123 Flash Chat Server 5.0 (build 0907)
Demo version will disconnect the user after logging in for 10 minutes!
Get the full version: http://www.123flashchat.com/buy.html
-----== ->->->-> www.123flashchat.com <-<-<-<-< =====

Starting the server ...
Set System Timezone GMT
Loading ip-to-country data ...
Loading connection policy ...
Starting http server...
Starting the tcp server ...
Starting the http server on: 0.0.0.0/0.0.0.0:35555
Starting the chat server on: 0.0.0.0/0.0.0.0:51127
123 Flash Chat Server has been Started!
You can open this url to test: http://192.168.0.122:35555
-
```

Console mode is helpful when finding details of a specific error.

Console mode does not need to be used unless there is a problem with the process of starting the chat server. After the problem has been fixed, it is recommended to stop chat server and start again in service mode.

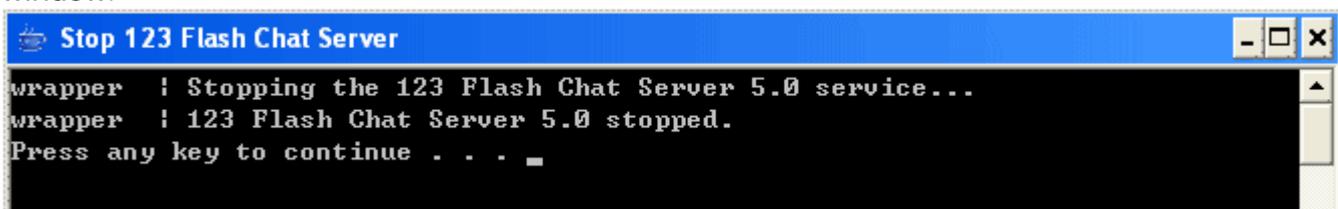
5. To stop chat server:

a) If you are in service mode, please stop the server in the following way:

start->program->123flash chat server 5.0->server->stop 123 flash chat server.

b) If you are in console mode, please stop the server by simply closing the pop-up DOS

window.



```

Stop 123 Flash Chat Server
wrapper | Stopping the 123 Flash Chat Server 5.0 service...
wrapper | 123 Flash Chat Server 5.0 stopped.
Press any key to continue . . . █
  
```

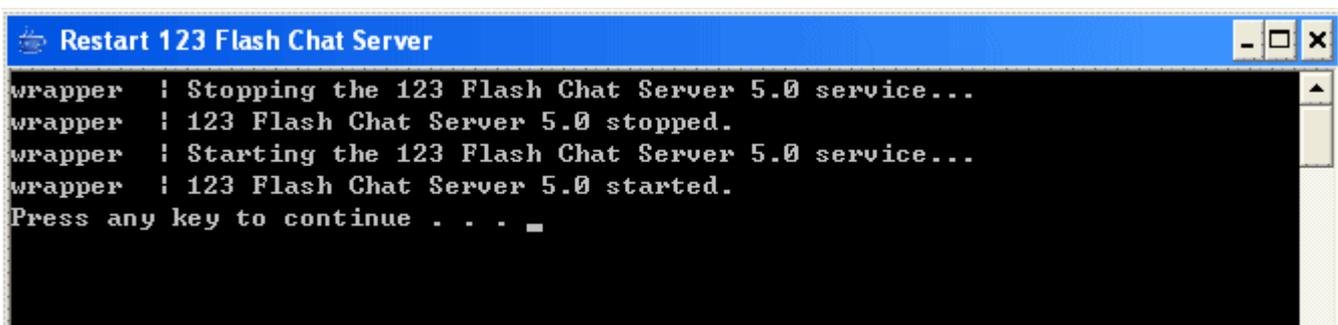
6. To restart chat server:

a) If you are in service mode, please restart the server in the following way:

Start->program->123 flash chat server 5.0->server->restart 123 flash chat server.

b) If you are in console mode, please close the DOS window first, then restart the server in the following way:

start->program->123 flash chat server 5.0->server-> restart 123 flash chat server



```

Restart 123 Flash Chat Server
wrapper | Stopping the 123 Flash Chat Server 5.0 service...
wrapper | 123 Flash Chat Server 5.0 stopped.
wrapper | Starting the 123 Flash Chat Server 5.0 service...
wrapper | 123 Flash Chat Server 5.0 started.
Press any key to continue . . . █
  
```

Note: After configuring the server parameter manually, you have to restart the chat server to make the changes effective.

Note: Windows 98 and Windows ME do not support NT service. If you need to run the chat server on a Windows 98 or Windows ME server you can open Notepad to create a file with following code (in one single line):

```

jre\bin\java -classpath
"jre\lib\sunrsasign.jar;jre\lib\rt.jar;jre\lib\plugin.jar;jre\lib\jsse.jar;jre\lib\jce.jar;jre\lib\ch
arsets.jar;lib\fcserver.jar;lib\moderator.jar;lib\log4j.jar;lib\xerces.jar;lib\jdom.jar;lib\mysql
.jar" com.topcmm.jchat.FCServer
  
```

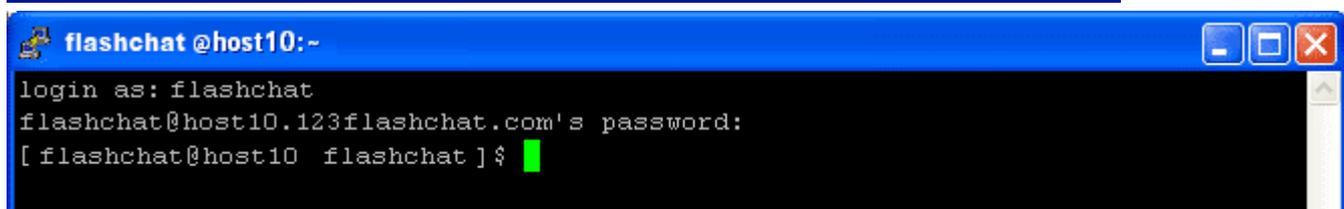
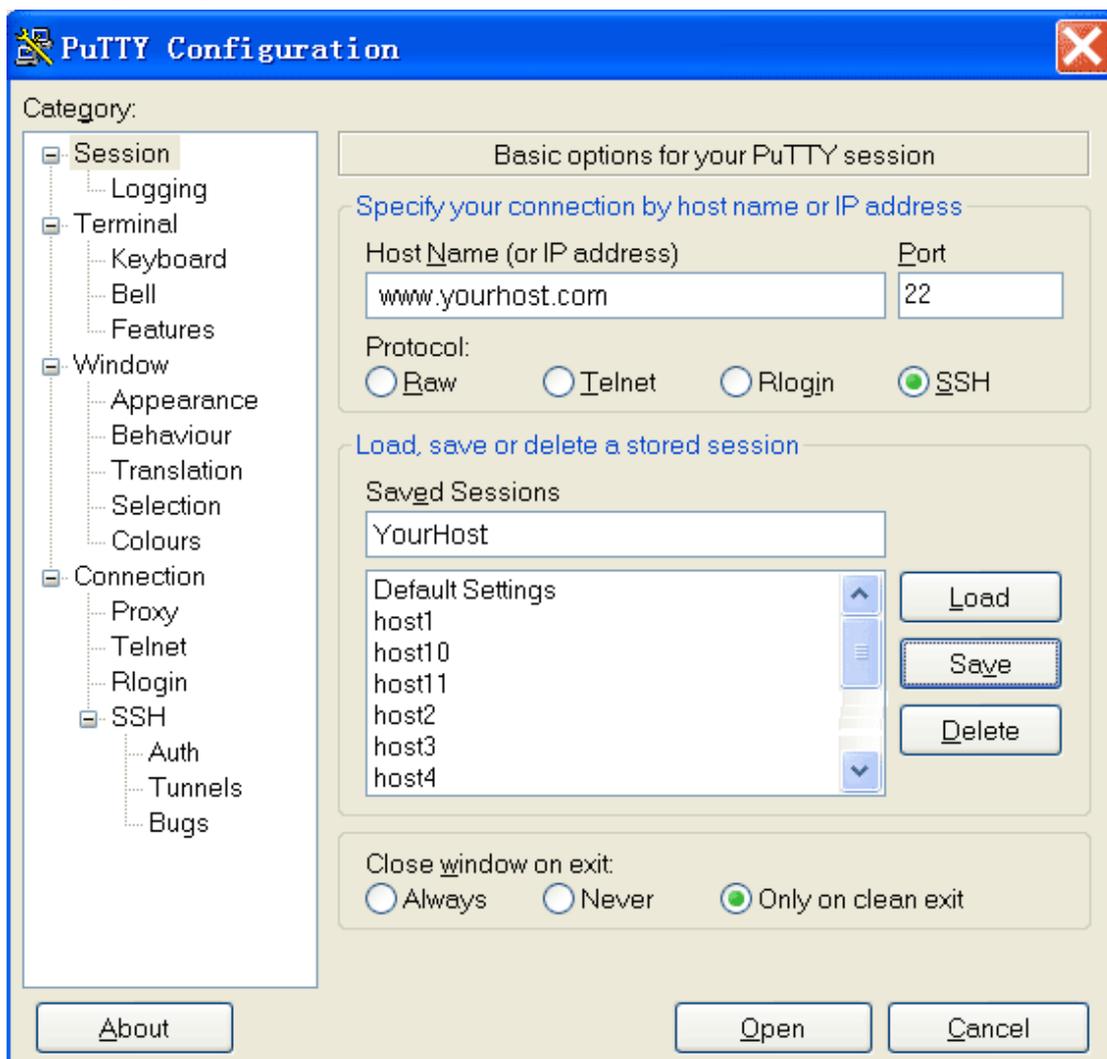
Save it as a *.bat file to 123flashchat installed directory, For example, start98.bat, then open DOS window:

```

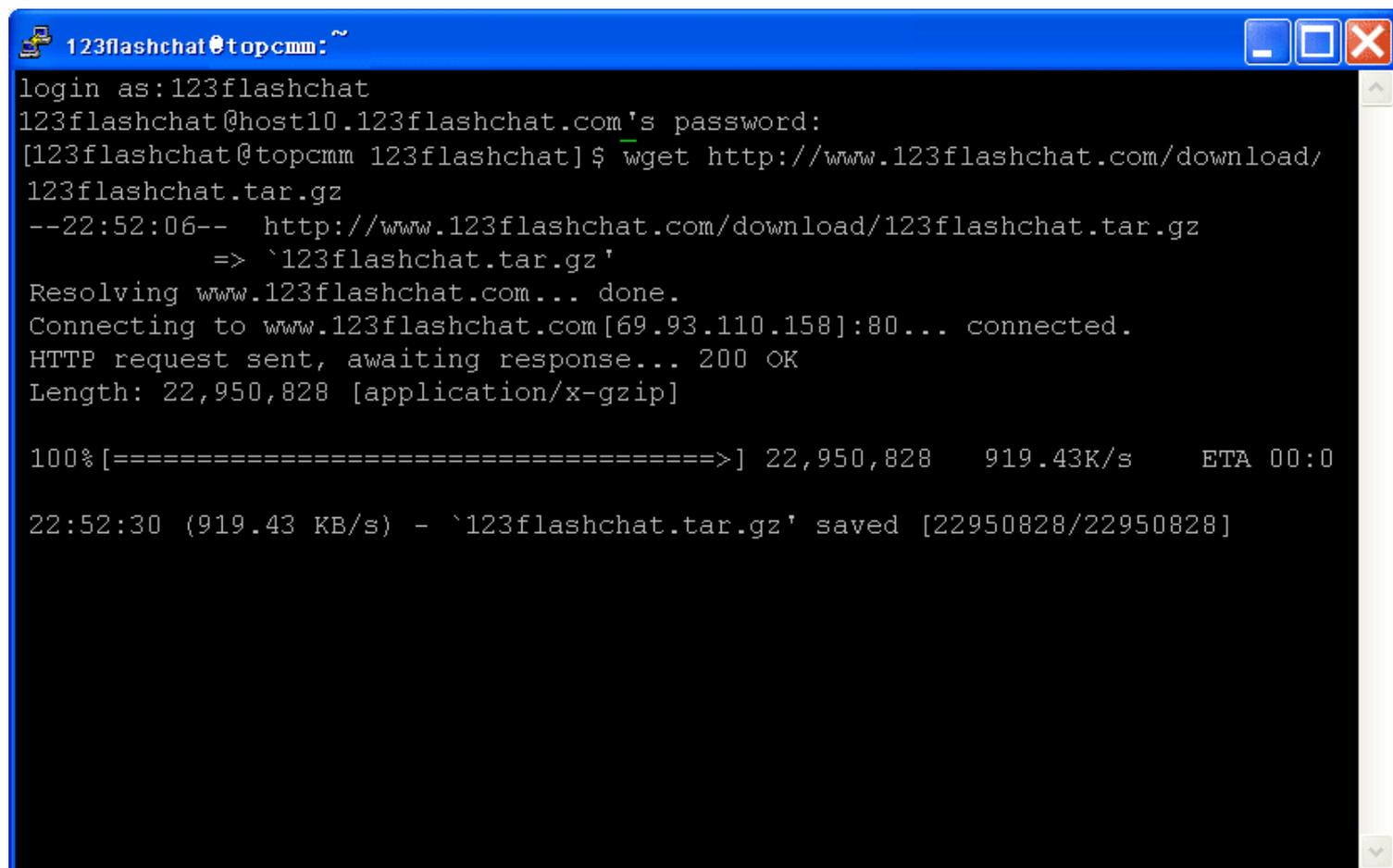
cd <123flashchat_installed_directory>\server
start98.bat
  
```

3.2.2 Linux

- If you are in a local Linux console window, please skip this step.
If you need to remote control Linux server, then please telnet or ssh to your Linux server first with ssh/telnet client software like Putty. Putty can be downloaded for free from: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>
Then login to your server as shown below:

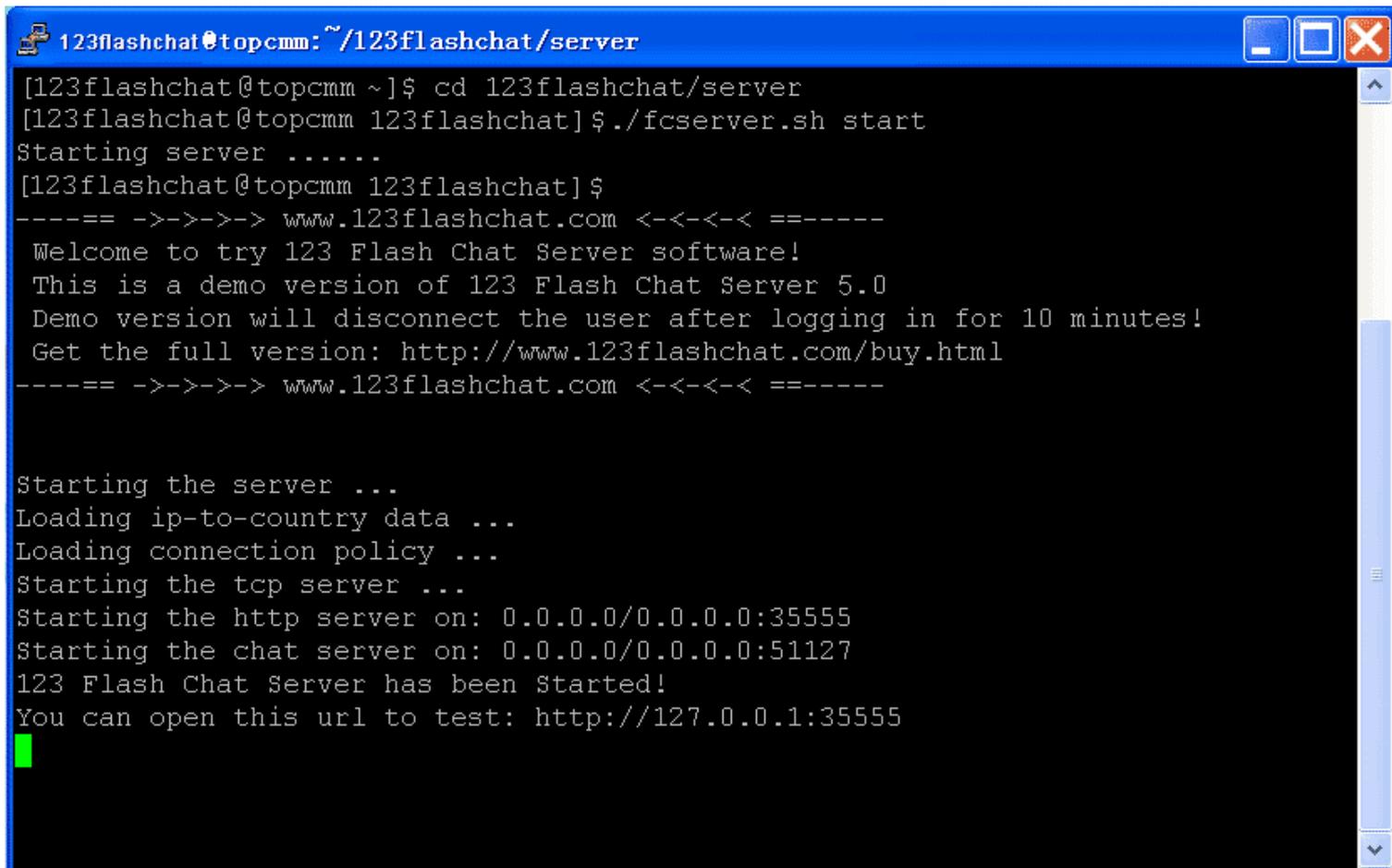


- Download the latest Linux version of 123 Flash Chat Server software at: <http://www.123flashchat.com/download.html>,
Select the file: **123flashchat.tar.gz**
You can download it by using this command:
\$ wget http://www.123flashchat.com/download/123flashchat.tar.gz



```
123flashchat@topcmm:~  
login as:123flashchat  
123flashchat@host10.123flashchat.com's password:  
[123flashchat@topcmm 123flashchat]$ wget http://www.123flashchat.com/download/  
123flashchat.tar.gz  
--22:52:06-- http://www.123flashchat.com/download/123flashchat.tar.gz  
=> `123flashchat.tar.gz'  
Resolving www.123flashchat.com... done.  
Connecting to www.123flashchat.com[69.93.110.158]:80... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 22,950,828 [application/x-gzip]  
  
100%[=====>] 22,950,828 919.43K/s ETA 00:0  
  
22:52:30 (919.43 KB/s) - `123flashchat.tar.gz' saved [22950828/22950828]
```

3. Uncompress the 123flashchat.tar.gz
\$ tar xzf 123flashchat.tar.gz
4. Start the server manually:
\$ cd 123flashchat/server
\$./fcserver.sh start

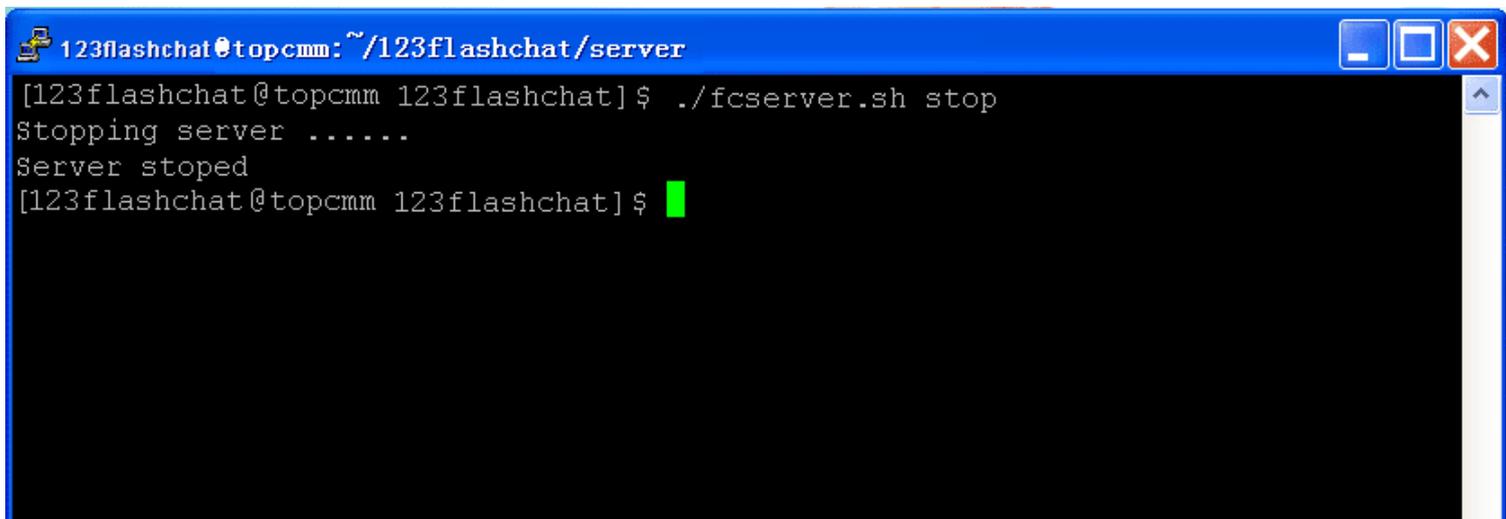


```
123flashchat@topcmm: ~/123flashchat/server
[123flashchat@topcmm ~]$ cd 123flashchat/server
[123flashchat@topcmm 123flashchat]$ ./fcserver.sh start
Starting server .....
[123flashchat@topcmm 123flashchat]$
-----=>-->-->--> www.123flashchat.com <--<--<--< =====
Welcome to try 123 Flash Chat Server software!
This is a demo version of 123 Flash Chat Server 5.0
Demo version will disconnect the user after logging in for 10 minutes!
Get the full version: http://www.123flashchat.com/buy.html
-----=>-->-->--> www.123flashchat.com <--<--<--< =====

Starting the server ...
Loading ip-to-country data ...
Loading connection policy ...
Starting the tcp server ...
Starting the http server on: 0.0.0.0/0.0.0.0:35555
Starting the chat server on: 0.0.0.0/0.0.0.0:51127
123 Flash Chat Server has been Started!
You can open this url to test: http://127.0.0.1:35555
█
```

5. Stop the server manually:

```
$ ./fcserver.sh stop
```



```
123flashchat@topcmm: ~/123flashchat/server
[123flashchat@topcmm 123flashchat]$ ./fcserver.sh stop
Stopping server .....
Server stoped
[123flashchat@topcmm 123flashchat]$ █
```

6. Restart the server manually:

```
$ ./fcserver.sh restart
```

```

123flashchat@topcmm:~/123flashchat/server
[123flashchat@topcmm 123flashchat]$ ./fcserver.sh restart
Stopping server .....
Server stoped
Starting server .....
[123flashchat@topcmm 123flashchat]$
-----=>->->-> www.123flashchat.com <-<-<-< =====
Welcome to try 123 Flash Chat Server software!
This is a demo version of 123 Flash Chat Server 5.0
Demo version will disconnect the user after logging in for 10 minutes!
Get the full version: http://www.123flashchat.com/buy.html
-----=>->->-> www.123flashchat.com <-<-<-< =====

Starting the server ...
Loading ip-to-country data ...
Loading connection policy ...
Starting the tcp server ...
Starting the http server on: 0.0.0.0/0.0.0.0:35555
Starting the chat server on: 0.0.0.0/0.0.0.0:51127
123 Flash Chat Server has been Started!
You can open this url to test: http://127.0.0.1:35555

[123flashchat@topcmm 123flashchat]$ █

```

7. How to auto start chat server after rebooting your server?

This can be done by following the steps below:

Step 1:

Modify "fcserver.sh", find the **FCSERVER_HOME** section, and configure the directory of "fcserver.sh".

For example, if you uncompress the 123flashchatserver.tar.gz into

/usr/local/123flashchat, make sure "fcserver.sh" is in the directory of

/usr/local/123flashchat, then remove the "#" before the two rows below in "fserver.sh":

```
FCSERVER_HOME=/usr/local/123flashchat/server
```

```
export FCSERVER_HOME
```

Step 2:

Modify /etc/rc.local file, add one row:

```
/usr/local/123flashchat/server/fserver.sh
```

Just replace "/usr/local/123flashchat/" with your FCSERVER_HOME value.

3.2.3 Other Unix Operating System

1. Download the latest version of 123 Flash Chat Server software (without JVM) from:

<http://www.123flashchat.com/download.html>,

Select the file: **123flashchatserver_s.tar.gz**

2. Uncompress the 123flashchatserver_s.tar.gz

```
$ gzip -d 123flashchatserver_s.tar.gz
```

```
$ tar xf 123flashchatserver_s.tar
```

3. Make sure Sun j2sdk 1.4.x or a newer version is already installed in your system. If it is not, it can be downloaded from: <http://java.sun.com/>
4. Set the Java variable and edit the system PATH variable in /etc/profile:

```
JAVA_HOME=/usr/local/j2sdk1.4.x;export JAVA_HOME  
CLASSPATH=$JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar  
PATH=$PATH:/usr/java/j2sdk1.4.x/bin;export PATH
```

5. Start 123 Flash Chat Server.

Remember to type all code below in a single line.

```
$ java -classpath
```

```
CLASSPATH:lib/fcserver.jar:lib/moderator.jar:lib/changenick.jar: lib/  
invisibleadmin.jar:lib/serverapi.jar:lib/robotmessage.jar:lib/fclib.jar:lib/log4j.jar  
:lib/jdom.jar:lib/xerces.jar com.topcmm.jchat.FCServer &
```

Note: For "Sun Solaris", we strongly recommend the patch for J2SDK to be installed before installing the 123 Flash Chat Server software. This will ensure the stability of the multi-thread Java application,
The patch can be obtained from: <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/J2SE>

Tip: If you are still experiencing problems and require help with installing the Java software, please contact your system administrator. Alternatively you can contact us via email at support@123flashchat.com
Please make sure you include the details of your operating system environment.

If you have purchased 123 Flash Chat Server Software, please also include your name, purchase email and user license, we'll provide a preferential support to buyer. Those who have purchased the unlimited user license version of 123 Flash Chat will get priority and will also receive a lifelong upgrade and technical support for free.

3.3 Web server

From version 4.0, 123 Flash Chat Server software includes a temporary web server to use while you are testing. But when you launch the 123 Flash Chat Server officially, we recommend a professional web server such as Apache, IIS or one similar.

To integrate the chat client to a web server other than the built-in web server, please follow the steps below:

a) copy the "client" folder

Copy the "client" folder to the web directory of your web server, but keep in mind:

Note: DO NOT copy the "server" folder to protect it from being downloaded by chatters, which is very insecure. The "server" folder should already be securely installed on the web server automatically so far in the installation process.

b) edit client.xml

Please leave the host value to "*" if the chat server and the web server (which hosts 123flashchat.swf file) are located on the same server.

If the SWF file is on another web server, then you should set the host value according to the chat server domain name or ip address.

The port value in client .xml should be identical with the one in fcserver.xml.

For advanced connection configuration, please refer to:

http://www.123flashchat.com/howto_configure_connection.html

3.4 Insert code

You can insert 123flashchat.swf (in your web directory) into your webpage (static or dynamic) with following flash object tag code:

```
<OBJECT classid="clsid: D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/
swflash.cab#version=6,0,19,0" WIDTH="634" HEIGHT="476">
  <PARAM NAME=movie VALUE="123flashchat.swf">
  <PARAM NAME=quality VALUE="high">
  <PARAM NAME="menu" value="false">
  <EMBED src="123flashchat.swf" quality=high menu=false WIDTH="634"
HEIGHT="476" TYPE="application/x-shockwave-flash"
PLUGINSPAGE="http://www.macromedia.com/go/getflashplayer"></EMBED>
</OBJECT>
```

In the code, if:

```
<PARAM NAME=movie VALUE="123flashchat.swf">
```

Then the webpage and 123flashchat.swf must be in the same folder.

If:

```
<PARAM NAME=movie VALUE="/another_directory/123flashchat.swf">
```

Then you have to add a parameter "init_root" after 123flashchat.swf to ensure 123flashchat.swf can find the relevant files to load.

The syntax is:

```
<PARAM NAME=movie VALUE="/another_directory  
/123flashchat.swf?init_root=/another_directory/">
```

If the 123flashchat.swf is on another domain, like:

```
<PARAM NAME=movie VALUE="http://www.another_domain.com/chat/123flashchat.swf">
```

The parameter "init_root" is also indispensable:

```
<PARAM NAME=movie  
VALUE="http://www.another_domain.com/chat/123flashchat.swf?init_root=http://www.a  
nother_domain.com/chat/">
```

123 Flash Chat flash client is resizable now!

Find: WIDTH="634" HEIGHT="476", replace the values with the expected width and height.

Technically the smallest size is 550*250, and for the width, we recommend it be no less than 400 pixels. You can if you prefer, remove the logo, buttons and other decorations to make it even smaller.

For Client Configuration details, please refer to:

[4.2 Client Configuration](#)

Note: in the code, another two parameters can be appended to **123flashchat.swf**.

1. init_lang

The initial language setting.

This parameter in html code has higher priority over language setting in client.xml.

If there's init_lang="*" in the code, the language setting in client.xml becomes invalid.

While without init_lang="*" in the code, then the language setting in client.xml is valid.

2. init_skin

The initial skin setting.

If you choose a skin here, the skin setting in client.xml will be invalid.

If you don't choose a skin here, the skin setting in client.xml will be valid.

For example: **123flashchat.swf?init_lang=en&init_skin=standard**

A full sample:

```
<OBJECT classid="clsid: D27CDB6E-AE6D-11cf-96B8-444553540000"  
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=6,0,19,0"  
WIDTH="634" HEIGHT="476">  
<PARAM NAME=movie VALUE="123flashchat.swf?init_lang=en&init_skin=standard">  
<PARAM NAME=quality VALUE="high">  
<PARAM NAME="menu" value="false">
```

```
<EMBED src="123flashchat.swf?init_lang=en&init_skin=standard" quality=high menu=false  
WIDTH="634" HEIGHT="476" TYPE="application/x-shockwave-flash"  
PLUGINSPAGE="http://www.macromedia.com/go/getflashplayer"></EMBED>  
</OBJECT>
```

4 . Configuration

4.1 Server Configuration

By default, all configuration for the chat server is controlled by two files:

1. fcserver.xml This is located at:

<123flashchat installed directory>/server/etc/fcserver.xml

2. default.xml It is located at:

<123flashchat installed directory>/server/etc/groups/default.xml

You can also access both files from Windows start menu if you're on Windows system.

4.1.1 fcserver.xml

4.1.1.1 Connection Configuration

Open the configuration file *fcserver.xml*

In the Connection Section, you can set two servers and listen to two ports.

[primary-server](#)

[secondary-server](#)

There are four reasons as to why there is a second server port option. These are listed below:

- 1) Any version before Flash Player 7 only allows access on a high port (1024-65535) due to security reasons, while a low port is forbidden. If you are okay with high port you will not need to set secondary-server. However if you need to set port lower than 1024, you will need a secondary-server.
- 2) If the port of your primary-server is lower than 1024 like 80, then only users with Flash Player 7 or newer versions will be able to access the chat while users with `flash player 6` can't. In this case a secondary-server will be necessary. The port for the secondary server should be greater than 1024, which will allow users with an earlier version of Flash Player to access chat.
- 3) If you are going to set a high port for your primary-server, then usually you will not need a secondary-server. You will be able to leave the option as default: `enable="off"`.

- 4) Using two servers with two ports is just a temporary solution while some users are still using Flash players earlier than version 7.
 When Flash player 7 or higher version becomes mainstream, we will take off the secondary-server for future versions of 123 Flash Chat.

To help understanding, please study two tables below:

	High port (1024-51127)	Low port (<1024)
>=Flash player 7	✓	✓
<Flash player 7	✓	✗
	secondary server	Primary server

Table1

	High port (1024-51127)	Low port (<1024)
>=Flash player 7	✓	✓
<Flash player 7	✓	✗
	Primary server (unnecessary)	

Table2

To modify the Parameters, please refer to the table below:

Parameter	Type	Default Value	Description
port	Number	51127	The server port must be identical with the port value in client.xml.
ip	String	*	Set the Server address. A default "*" means the chat server will bind to all IP addresses of your server. The host value in client.xml can be a random IP address or any domain name which points to this IP address. Either way, clients will be able to connect to the server. If you set IP address of the server to the specific IP address of your server, then the chat server will only bind to this IP. This will mean that in client.xml, to connect the chat server, you can only use this specific IP address or the domain name which points to this IP address.

cross-domain-policy

123 Flash Chat Server start using the cross-domain-policy to ensure security.

```
<cross-domain-policy>
  <allow-access-from domain="*" />
</cross-domain-policy>
```

By default it permits access to the connection originating from any domain.

To limit access from a specific domain name, you can configure your server in the following way:

```
<cross-domain-policy>
  <allow-access-from domain="www.mydomain.com" />
</cross-domain-policy>
```

To allow all URLs on mydomain.com to be accessible, you can configure your server in the following way:

```
<cross-domain-policy>
  <allow-access-from domain="*.mydomain.com" />
</cross-domain-policy>
```

To allow multiple domain names to be accessible you can configure your server in the following way:

```
<cross-domain-policy>
  <allow-access-from domain="www.myfriendsdomain.com" />
  <allow-access-from domain="*.mydomain.com" />
  <allow-access-from domain="11.22.33.44" />
</cross-domain-policy>
```

max-connections-per-ip

```
<!-- max-connections-per-ip
```

Connection limit of each IP. By default it is "10".

If configure it to "0", then one IP can login unlimited connections, this can be used for performance test. -->

```
<max-connections-per-ip>10</max-connections-per-ip>
```

In current version, the cross-domain-policy is now enhanced in this way: not only all connections originating from domain which is not in the allow-access list is forbidden, those connections originating from local computer by launching SWF file are now denied, too.

Only connections from allow-access list can access chat.

(Of course you can set it to permit access from any domain.)

4.1.1.2 Global Configuration

Open the configuration file *fcserver.xml*

In the Global Section:

To modify the Parameters, please refer to the table below:

Parameter	Type	Default Value	Description
message-handle-workers	Number	20	It deals with messages. To handle high frequency

			messages with over 1000 chat users in one room, please set it to a higher value. Normally you will not need to change it.
listen-workers	Number	20	If the maximum number of users is over 1000, please configure it with larger number. Normally you will not need to change this.
max-connection	Number	10000	The user maximum in all rooms will be limited by the license you've purchased.
user-timeout	numbers	300	If a still logged-in user does not send a request to the chat server for a predefined period of time, chat server will stop serve him and the connection will be cut. For example: If a user clicks another URL in their current browser instead of quitting 123 Flash Chat first, their connection will be cut by this setting. But if the 123 Flash Chat user is inactive inside their current browser their connection will still be kept as the flash client will send request to the chat server at intervals to keep the connection alive.
user-idle-timeout	numbers	300	A user will be identified as being in "idle" status when they have not sent a message for a defined period of time. The units of measure are seconds.
user-connection-timeout	numbers	22	A user will get "failed to log in" error message when it exceeds the predefined period of time to try to connect to the chat server.
data-path	String	data	Sets the folder name in which following data files are stored: member folder; ban-ip list; ban-user list, etc.
admin-logs-path	string	logs	Name of the folder of admin log data files.
max-connections-per-ip	Number	10	Connection limit of each IP. By default it is "10". If configure it to "0", then one IP can login unlimited connections, this can be used for performance test.
time-zone	Number	0	Set your local time zone. between -12 to 12.

			For example, -5: GMT-5 , 8: GMT+8 Default is 0: GMT
--	--	--	---

4.1.2 Default.xml

4.1.2.1 General Configuration

To modify the Parameters, please refer to the table below:

Parameter	Type	Default Value	Description
enable-guest-login	On/Off	On	Allow unregistered guest to log in or not.
enable-user-register	On/Off	On	Allow new user to register
save-message-history	On/Off	On	Save history of conversation on the chat server
max-connection	Numbers	10000	User Maximum in all rooms of current group simultaneously.
max-userid-length	Number	32	Maximum length of user id when registering
max-passwd-length	Number	32	Maximum length of password when registering
max-email-length	Number	128	Maximum length of email address when registering
max-message-length	Number	512	Maximum length of each message.
max-cached-message-entry	Number	5	Shows the last conversation in a newly opened room and defines how many latest messages will be displayed.
integrated-other-database-string	String	None	123 Flash Chat can integrate your existing user database, like that of your forum or portal system. 123 Flash Chat integrates phpBB, PHPNuke, PostNuke, AspNuke, etc. A forum which doesn't have a database can not be integrated. The modes of IntegratedOtherDatabases are: None - not using an integrated database to authorize a user Mysql - using a mysql database Oracle - using an oracle database ODBC - using ODBC DSN to connect a

			<p>database Common - using all kinds of databases, advanced setting URL - using a web URL to authorize a user's login information. eg: <IntegratedOtherDatabase mode="Mysql"> If it is set to "None", when a new user clicks "register", they will be registered in the chat room original register window If set to "Mysql", "Oracle" or "common", then when a new user clicks "register", a new window will pop up and they will be directed to another URL which is pre-set in client.xml.</p>
Auth-url	string	/	<p>You can just leave it blank or even delete this line. It is only necessary when "integrated-other-database" is set to URL.</p> <p>It means the URL you use to authorize your users must have two arguments. One is the %username%, the other is the %password%.</p> <p>eg:</p> <pre><auth-url>http://www.yourhost.com/login_chat.php?username=%username%&password=%password%</auth-url></pre> <p>In this URL, "&" means the character "&" in xml.</p> <p>That is to say, when the user logs into your website by inputting their username "myname" and their password "mypassword", and click "chat" link or button, the chat server will visit "http://www.yourhost.com/login_chat.php?username=myname&password=mypassword" in order to get the login information and will output numbers between 0 to 7, each with a different meaning.</p>

			<p>0 - login successfully; 1 - wrong password; 2 - the username can't be used; 3 - login error, e.g. error in connecting database; 4 - username does not exist; 5 - successfully login as the administrator; 6 - guest login not allowed; 7 - username banned .</p>
talk-interval	numbers	1000	<p>This is the shortest pause (in milliseconds) between two utterances. This prevents screen flooding. Eg: 1000 = 1 second.</p>
kick-ban-timeout	numbers	15	<p>Specifies a time period to ban a user's username and IP address after he has been 'kicked out'. unit: minute note: a user will only be banned from the current room but not from other rooms. If you set it to "0", there's no "ban" accompanied with "kick".</p>
site-key	string		<p>This is the code to validate your website. It must be the same as the siteKey value in client.xml, otherwise the client will not be able to connect to your chat server.</p>

4.1.2.2 User Configuration

Open the configuration file: *default.xml*

In the user section, you can configure <admin> and <ReservedUserName>.

To add an administrator, just add one line in the Users -> admin Section:

```
<user name="admin" passwd="test" md5="off"/>
```

or:

```
<user name="admin" passwd="098f6bcd4621d373cade4e832627b4f6" md5="on"/>
```

Parameters of admin configuration:

Parameter	Type	Default Value	Description
name	string	username of the administrator	name
passwd	string	Password of the administrator can be encrypted by MD5 or not.	password
md5	string	If the password is not encrypted it needs to be set as: md5="off". If encrypted it needs to be set as: md5="on".	md5

Multiple administrator accounts can be set up, however for security reasons, it is recommended to appoint only one administrator and to designate multiple moderators for different rooms who have less 'power'.

To add a reserved username, just add one row in

<ReservedUserName> tag:

<word>Administrator</word>

4.1.2.3 Log Configuration

There are 3 kinds of logs:

1. access log
2. error log
3. message log.

One log file is generated for one day. The main log always records the current days logs. The history log automatically adds a postfix of the date.

For example: access.log, access.log.2004-9-8, access.log.2004-9-7,

Message logs are recorded in different folders named after the room id.

If the history log is set to "off", no logs will be recorded on the chat server.

Parameter	Type	Default Value	Description
logs-path	string	logs	Set the directory of data files
access-log	string	access.log	Set the filename of the access log
message-log	string	message.log	Set the filename of the message history log . If Save-message-history is set to 'off', the chat server will stop recording the message log.
error-log	string	error.log	Set the filename of the error log

4.1.2.4 FilterWords Configuration

Inappropriate Words may need to be filtered from a conversation.

If you want to substitute a word, please add one row in the tag below: `<FilterWords>` in `<123FlashChatServer5.0 installed dir>\server\etc\groups\default.xml`.

Then set the substitute in the following tag:

```
<FilterWords replace="your substitute">
```

For example:

```
<FilterWords replace="***">
```

```
<filter>fuck</filter>
```

```
<filter>shit</filter>
```

```
</FilterWords>
```

Parameter	Type	Default Value	Description
filter	string		Bad words needed to be filtered.
replace	string	**	Set the substitute to replace the filtered words.

4.1.2.5 robot-message

Scheduled automatic 'robot' message(s) can be defined, to be broadcast in certain room(s) within certain intervals. This can be used for Site News, Advertisements, etc.

[Check details](#)

Parameter	Type	Default Value	Description
enable	On/off	On	Enable or disable chat bot.
activerooms	string	*	Active rooms for all chat bot messages.
interval	number	10	The interval of rotate chat bot messages (seconds)

4.1.2.6 server-api

The 123 Flash Chat server can receive commands sent by third party applications and can send its data to the application or can operate on the chat server accordingly. By default it is set to be "On" - enabled.

[Check details](#)

Parameter	Default Value	Description
auth-password	3874-3459-9293-2194	Only command with the right key(password) will be authorized

		by the chat server and will be effective.
allow-access-from-ip	127.0.0.1	Only command from this IP is legitimate. If set to " *", then commands from all IP address are valid. which is insecure.

4.1.2.7 Modules

With following optional modules, the chat can be greatly enhanced.

These are included in the demonstration version for test but are not included in the standard full version by default.

Specific module(s) can be purchased if required.

Module name	Default Value	Introduction
moderated-chat	On	With the moderated-chat module enabled, questions submitted by participants will not be displayed publicly unless the Moderator or Administrator approves/passes it.
change-nick	On	With the change-nick module enabled, users have the ability to change their display nickname after they have logged in. This makes chat more flexible and fun.
invisible-admin	On	With the invisible-admin module enabled, the administrator can monitor the chat conversations in chat rooms invisibly. Without the "existence" of the administrator, chatters can freely talk but can also be stopped by the administrator if their language is inappropriate..
flashcom-audio-video	off	With flashcom-audio-video module enabled, you can add webcam and voice chat. Unlike the basic text chat, this module needs support of flash communication server.
encrypt-message	off	Message being encrypted will ensure the security of the chat server. 123flashchat can encrypt messages using RSA.

4.1.3 <room_id>.xml

In the directory:

<123flashchat installed directory>/server/data/default/rooms/

There are files named "<number>.xml".

For example: 1.xml, 1032.xml

Each one of these files represents a chat room.

The room change in admin panel will affects these xml files accordingly at real-time, ie: when adding a room in the admin panel, one file will be generated into this directory; when deleting one room, one file will be removed from this directory.

For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<room>
  <name>Main Test</name>
  <max>200</max>
  <des>Tip: test register, enter, exit room, send, newline, etc</des>
  <owner>admin</owner>
  <speaker></speaker>
  <password></password>
  <member-only>Off</member-only>
</room>
```

Note: file name is room ID.

Parameter	Type	Description
name	String	Chat room name
max	Number	Max number of people in one room, which is limited by the user license you have.
des	String	Chat room description and introduction.
owner	String	Chat room owner= moderator who can kick any one causing a nuisance. To have two or more moderators, please enter the owner list in this tag separated by "," with no spaces between. eg: aaa,bbb,ccc. In admin panel, moderatators can be added, edited and

		deleted.
speaker	String	<p>When a room's status is set to 'moderated-chat', all the messages from ordinary users are not made public unless the moderator passes them. Another type of user is "speaker". A speaker is entitled to talk freely in public without the consent of the moderator.</p> <p>To have more than one speaker, the list of speakers can be entered into the tag, separated by "," with no spaces between. eg: aaa,bbb,ccc.</p> <p>A speaker can not kick someone from the chat room.</p> <p>Leave the field of speaker to be blank if you want.</p>
password	String	<p>Chat Room password. If you do not want a password to protect a chat room, leave this section blank.</p>
member-only	On/Off	<p>This determines whether a room is 'members only' or open to all including guests.</p>

4.2 Client Configuration

There are three client configuration files:

1. client.xml,
2. skin.xml,
3. color.xml

The modifications for these files will not be effective until the chat client is re-opened.

4.2.1 client.xml

Only values can be changed, not the names.

Parameter	Type	Default value	Description
Connection->host	String	*	Please leave the host value to "*" if the chat server and the web server (which hosts 123flashchat.swf file) are located on the same server. If the SWF file is on another web server, you should set the host value according to the chat server domain name or ip address. The port value must be identical with the one in fcserver.xml. For details, please refer to: http://www.123flashchat.com/howto_configure_connection.html
Connection->port	Number	51127	
HomeUrl	String	http://www.123flashchat.com	This is the URL you want the logo to link to. If this is set to 'null', there will be no link over the logo.
HelpUrl	String	help/index.html	This is the URL for the help file. This can be translated to any language locally, uploaded to your web server and the new help URL can be inserted here.
registerUrl	String	null	This parameter will not need to be configured if you are using 123 Flash Chat to store your user data. This parameter is only required if you are using an external database.
copyright	string	Copyright 2001-2005 TopCMM Computing Inc. All Rights Reserved.	This is your company copyright information. This will be displayed in the "about" panel.
loadRootPath	string	null	This is the directory where the language folder and skin folder are located. These should be left as 'null'. If however you put them on another server,

			<p>please set them to http://url/ For example: "http://www.123flashchat.com /chat/" Don't forget the slash at the end.</p>
language	string	*	<p>Choose the interface language from our collection. Current versions of 123 Flash Chat offer the following choices:</p> <ol style="list-style-type: none"> 1) en - English (default) 2) zh-CN - Simplified Chinese 3) zh-TW - Traditional Chinese 4) nl - Dutch 5) fr - French 6) ja - Japanese 7) es - Spanish 8) de - German 9) it - Italian 10) hu - Hungarian 11) ru - Russian 12) hr - Croatian 13) tr - Turkey 14) ar - Arabic 15) pt - Portugues 16) ko - Korean 17) serbian - Serbian 18) pl - Polish 19) no - Norwegian 20) farsi - Farsi 21) el - Greek 22) iceland - Iceland 23) cs - Czech 24) da - Danish 25) fi - Finnish 26) sv - Swedish 27) pt-br - Brazil Portugues <p>Note: the language files are located in the folder: <loadRootPath>/lang/ The interface can also be translated into other languages which are not included in this list. If this is the case, please save it as language_***.xml. Put it into the same folder and edit language setting in "client.xml". You will then get a local version of 123 Flash Chat.</p>
skin	string	standard	<p>We offer the following skins:</p> <ol style="list-style-type: none"> 1) standard - Aqua blue skin, scalable vector skin. 2) beige - Aqua beige skin, scalable vector skin.

			<p>3) angel - Black metallic bitmap skin.</p> <p>4) hawaii - Aqua black skin, scalable vector skin.</p> <p>5) classic - Blue bitmap skin.</p> <p>6) green - Green skin, scalable vector skin.</p> <p>7) red - Red& black skin, scalable vector skin.</p> <p>8) orange - Orange skin, scalable vector skin.</p> <p>9) clean - Aqua blue & gray skin, scalable vector skin.</p> <p>You can also design a new skin based on the existing skins.</p>
profileUrl	string	null	<p>You can either enable or disable the "profile" option by setting the value to "true" or "false".</p> <p>If it is enabled, enter the correct value after the "url=", eg: http://yourwebsite/profile.php?user=%USER% the "profile" link can be found when activating a user from the user list in the pop up menu.</p> <p>Click on the "profile" link to view the user's details in a new browser window.</p> <p>The URL value can be the profile link in your existing database or even the profile link of another website.</p> <p>Note: you can add multiple profile URLs.</p>
enableRoomSounds	boolean	true	<p>This is the default sound setting in the chat room. This can be enabled by selecting "true" or disabled by selecting "false".</p>
enableMonitorSounds	boolean	true	<p>This is the default sound setting in the monitor panel for the administrator. It can be disabled by selecting "false", however we strongly recommend it to be set to "true" in order to monitor a chat room with sound alerts.</p>
enterRoomSound	boolean	true	<p>This is where you can choose whether or not to play a sound alert when anyone enters the room you are in.</p>

			The default value for this is "true" which is also the default value for all your members. Your members can set their preferences in their option panel.
messageSound	boolean	true	This is where you can choose whether or not to play a sound alert when receiving a message. The default value for this is "true" which is also the default value for all your members. Your members can set their preferences in their option panel.
typingSound	boolean	true	This is where you can choose whether or not to play sound when typing messages. The default value for this is "false" which is also the default value for all your members. Your members can set their preferences in their option panel.
sendingSound	boolean	true	This is where you can choose whether or not to play a sound alert when sending a message. The default value for this is "true" which is also the default value for all your members. Your members can set their preferences in their option panel.
quitRoomSound	boolean	true	This is where you can choose whether or not to play a sound alert when someone exits a room. The default value for this is "true" which is also the default value for all your members. Your members can set their preferences in their option panel.
singleLineMode	boolean	false	This enables switching to a single-line or multi-line mode. Messages can be set next to the speaker by choosing "true". This will save chat space. For example: "Mr.A says: Hello." Messages can be displayed on a new line by choosing "false". For example:

			<p>"Mr.A says: Hello." "false" will then be the default value for all your members. Your members can set their preferences in their option panel.</p>
parseURI	boolean	true	<p>This is where you can make the URL address in messages clickable or not. If the value is set to "true", then the valid URL, (a string with "http://" or "www.*****" which is 9 characters at least) will become underlined and linked to the specified URL. Default value is "true", which is also default value for all your members. Your members can set their preferences in their option panel.</p>
autoSaveUsername	boolean	true	<p>When the value for this is set to "true" a chatter's username will automatically be saved in the cache. The default value for this is "true" for all of your members. Your members can set their preferences in their option panel.</p>
autoSavePassword	boolean	false	<p>When the value for this is set to "true" a member's username will automatically be saved in the cache. The default value for this is "false" for all your members. Your members can set their preferences in their option panel.</p>
autoSaveAvatarFonts	boolean	true	<p>When the value for this is set to "true" a chatter's avatar, font style and color will automatically be saved in the cache. The default value for this is "true" for all your members. Your members can set their preferences in their option panel.</p>
autoSaveBKGround	boolean	true	<p>When the value for this is set to "true" a user's chat space background will automatically be saved in the cache.</p>

			The default value for this is "true" for all your members.
visibleGuestCheckbox	boolean	true	If this is set to "true", the combination of "guest" and the checkbox before "guest" will be visible to all users.
visiblePasswordInput	boolean	true	If this is set to "true" , the password input field will be visible to all users.
visibleLogoutButton	boolean	true	If this is set to "true", the logout button will be visible to all users.
defaultSelectGuest	boolean	false	This can be set to be "true" if the guest is checked as default.
enablePrivateChat	boolean	true	This enables or disables the private chat mode for ordinary users. Remember: the administrator can always activate a 'private chat' with ordinary.
acceptPrivateMessage	boolean	true	The user can accept all private message invitations or deny them by default with this setting.
lockAdminIcon	boolean	true	This is set to "true" if the administrator has a unique reserved icon (a small person with coffee) before their messages. It is not referring to the icon before the administrator in the user list.
messageSpacing	Number	0	You can set the spacing between two messages here.
messageHistorySize	Number	100	To allocate space to record chat history. Please set the default space size here for all your members. unit: kb
showGuestMemberOnlyRoom	boolean	true	To define if the member-only room is viewable to guests in a room list.
visibleWelcomeMessage	boolean	true	To define whether or not to display the admin auto-welcome message when anyone enters the chat room.
visibleExitMessage	boolean	true	To define whether or not to display the admin auto message when anyone leaves the chatroom.
visibleRoomList	boolean	true	To display room list or hide it.
siteKey	String		The code to validate your

			website. You can change this value to anything you want, but keep in mind it must be identical with the site-key value in "fcserver.xml", otherwise connection attempts will be refused by the chat server.
advertisingBanner	boolean	false	To insert one or more advertisement banners onto the chat client. Set enable to "true" to activate this.
banner->src	string		This is where you can make the URL of an advertisement banner source a JPG or swf. The URL could be a relative path or an absolute.
banner->href	string		The URL linked with the advertisement banner.
banner-> duration	Number		Advertisement duration time.
visibleChangeRoomComboBox	boolean	true	This indicates whether the pull-down room menu for users to switch rooms in a chat window is visible or not.
visibleExitRoomButton	boolean	true	Add or remove an exit room button at the top right.
adminAutoGreet	boolean	false	The 'robot' greetings administrator automatically gives to visitors can be displayed one by one. You can add as many lines as you want to make it look like a real person. This feature can be disabled by setting it to "false".
visibleHelpButton	boolean	true	Add or remove the 'Help button' from the top menu.
visibleOptionButton	boolean	true	Add or remove the 'Option button' from the top menu.
visibleAvatarButton	boolean	true	Add or remove the 'Smiley button' from the middle menu above the input area.
visibleBButton	boolean	true	Add or remove the 'B button' from the middle menu above the input area to enable or disable the bold font feature.
visibleIButton	boolean	true	Add or remove the 'I button' from the middle menu above the input area to enable or disable the italic font feature.
visibleUButton	boolean	true	Add or remove the 'U button' from the middle menu above the input area to enable or

			disable the underline font feature.
visibleColorButton	boolean	true	Add or remove the 'Color picker button' from the middle menu above the input area to enable or disable the font color feature.
visibleSelectSmiley Button	boolean	true	Add or remove the 'smiley button' from the middle menu above the input area to enable or disable the emotion feature.
visibleSelectBgButton	boolean	true	Add or remove the 'BG button' from the middle menu above the input area to enable or disable the change chat background feature.
idleDisconnectTime	number	0	When a user is "idle" in chat room for a predefined time, his connection will be automatically cut and he will be kicked out of the room. This time period can be defined here by admin, "0" means to disable this feature, and the users won't be kicked no matter how long he stays without saying or doing anything. Measurement units: minute.
visibleTimeStamp	boolean	false	Display the timestamp in all users' chat windows. Users can enable or disable this feature by themselves in the option panel.

4.2.2 Skin configuration

123 Flash Chat is skinnable. The skins are stored in the folder: <123FlashChatServer5.0 installed directory>/client/skin

To assign a default skin from the available skin collection to all the users in a chat room, 123 Flash Chat administration has two choices:

1. configuring client.xml, or
2. editing html code

[Check details](#)

4.2.3 Client Administrator

Log in the flash client as administrator and click the "admin" button at the top of the menu to enter admin panel. The top buttons have the following functions respectively:

4.2.3.1 Monitor

In the "monitor" panel, the administrator can monitor every action of all logged in users. For example: connect to server, login, enter room, exit room, change room, logout chat server, etc.

Other information shown here includes: logged in user IP, country and time stamp.

Note: Once a user logs in with a username and password they have a unique user-id, that's the username he used to log in. Despite any nickname they may choose to change to afterwards, their user-id will remain the same and will be displayed in the monitor window until they log out.

4.2.3.2 Settings

In the "settings" panel, you can change the following variables:

Parameter	Type	Description
Enable user registertion	CheckBox	Check to enable user registration
Enable guest login	CheckBox	Check to enable guest login
Save messages history	CheckBox	Check it to save the message history on the chat server

4.2.3.3 Rooms

In the "room" panel, you can add, delete or edit rooms, controlled by the middle buttons. There is a title below the middle buttons to show the status of the room section.

By default it is the 'add room' section. Choose a room first before clicking the "delete" or "edit" button.

You will be notified if the action of "add", "delete" or "edit" is successful or if it fails.

Rooms you add will appear in real-time in the list of rooms.

In the room details section, an asterisk (*) indicates a required field.

Room name: name of current room.

moderator: he can kick a nuisance person from using the current chat room and set a room to 'Moderated-chat'. In such a room, all messages from ordinary users will be disabled from being displayed publicly unless the moderator or admin passed them.

("Moderated-chat" is a plug-in module which is not included in the standard full version by default.)

Max users: This value is limited to the license you have purchased.

Password: :Leave this blank if you want this to be a public room.

Member only: This defines whether guests can access a particular room.

Speaker: Is another user type used in 'Moderated-chat'. The speaker can freely chat and their words will be displayed publicly without the consent of the moderator or admin. Leave this as 'null' if you do not need a speaker.

Description: Chat room introduction.

4.2.3.4 Users

In the "User Panel" admin can control the users' connections.

- Ban or unban a username.
Note: This applies to the user's original username, not their currently displayed nickname. If you ban someone but it fails, please find out their real username in the monitor window and try again.
- Ban or unban a user using a specific IP address

4.2.3.5 Announcement

In the "Announce Panel" you can broadcast messages to every logged in user, whether in specific chat rooms or just in the room list page.

4.2.3.6 Password

In the "Password Panel", you can update the administrator password. Due to security reasons it is very important to change the default admin password after you have set up the chat server for the first time.

The new password will be stored in default.xml as MD5 encrypted.

Tip: If you forget the admin password, you can manually edit admin tag in "default.xml", do not forget to change the admin tag md5="off".

For example:

```
<user name="admin" passwd="mypassword" md5="Off" />
```

Now you can log into chat with the new password: "mypassword".

Then admin panel-> password panel, edit password again.

In this way your final password will be stored in fcserver.xml as a MD5 encrypted string.

4.2.3.7 Chat bot Message

This feature can be used for site news or text advertisements.

With "Chat Bot", specific message(s) can be broadcast to specific rooms or all rooms at

predefined intervals.

Messages can be added, edited and removed from the list.

There can be multiple messages for one room, or one message for all rooms.

4.3 Integrate database configuration

123 Flash Chat supports integrating the existing database of your forum or portal system such as phpBB, PHPNuke, PostNuke, AspNuke, etc., or of other user systems.

Basically 123 Flash Chat can integrate database of any kind, as long as there's username and password in it, but if your website do not support a database your user information will not be able to be integrated. If this is the case you can use 123 Flash Chat to store your user information.

There are a few steps to integrate a database:

1) configure default.xml.

The modes of IntegratedOtherDatabase in default.xml include:

None – does not use an integrated database to authorize users

Mysql - uses a mysql database

Oracle - uses an oracle database

Common - uses all kinds of databases, advanced setting.

URL – uses a web URL to authorize a user's login information.

ODBC – uses an ODBC to connect to any database you want.

2) Configure the database xml file.

It could be:

a) Mysql.xml

Parameter	Type	Description
database-host	string	The hostname of the database server.
database-name	string	The database name you are using.
database-user	string	The user name which is required to connect to the database.
database-password	string	The password which is required to connect to the database.
user-table	string	The table to store the user information.
username-field	string	The column of names of the user names in the

		user-table.
password-field	string	The column of names of passwords in the user-table.
enable-md5	string	It defines whether the password is encrypted with MD5. On - encoded. Off - not encoded. Passwords in many portal systems and forum systems like php-nuke, post-nuke or phpBB, etc. are encrypted with MD5, thus you will need to set this value to 'On'.

b) Oracle.xml

Parameter	Type	Description
mode	string	It could be "thin" or "oci" only. It indicates the way to access the database. The default value is "thin". If you choose "oci", then your server must have installed an oracle client.
database-host	string	The hostname of the database server.
database-port	number	The port of the database.
database-sid	string	The sid of the database server.
service-name	string	The service name to connect to oracle. It doesn't take effect unless you choose the mode "oci".
database-user	string	The user name which is required to connect to the database.
database-password	string	The password which is required to connect to the database.
user-table	string	The table to store the user information.
username-field	string	The column name of user names in the user-

		table.
password-field	string	The column name of passwords in the user-table.
enable-md5	string	<p>It defines whether the password is encrypted with MD5.</p> <p>On - encoded.</p> <p>Off - not encoded .</p> <p>Passwords in many portal systems and forum systems such as php-nuke, post-nuke or phpBB, etc. are encrypted with MD5, thus you will need to set this value to "On".</p>

c) CommonDB.xml

Parameter	Type	Description
jdbc-driver	string	The name of the jdbc driver.
jdbc-url	string	The complete jdbc URL. If the user name and password are required when the database is accessed, they must also be included.
user-table	string	The table to store the user information.
username-field	string	The column name of the user names in the user-table.
password-field	string	The column name of passwords in the user-table.
enable-md5	string	<p>It defines whether the password is encrypted with MD5.</p> <p>On - encoded.</p> <p>Off - not encoded .</p> <p>Passwords in many portal systems and forum systems such as php-nuke, post-nuke or phpBB, etc. are encrypted with</p>

		MD5, thus you will need to set this value to "On".
--	--	--

d) Using URL to authorize a users' login information.

You can authorize a users' log in information by using a dynamic web application.

You can activate this integration method by following the tag below:

Once set to "URL", another 2 arguments have to be defined to avoid an error.

For example:

http://www.yourhost.com/login_chat.php?username=%username%&password=%password%

Or:

http://www.yourhost.com/login_chat.asp?username=%username%&password=%password%

One argument is the %username%, the other is the %password%.

"&" is the character "&' in xml.

That is to say when the user enters their username: "myname" and their password:

"mypassword" , the chat server will visit:

["http://www.yourhost.com/login_chat.php?username=myname&password=mypassword"](http://www.yourhost.com/login_chat.php?username=myname&password=mypassword)

to get the login information which will return a number between 0 to 7, each with a different meaning. See the table below:

Value	Description
0	successfully login as ordinary user;
1	wrong password ;
2	the username can't be used ;
3	login error, e.g. error in connecting database ;
4	username does not exist;
5	successfully login as the administrator;
6	guest login not allowed

e) ODBC.xml

Parameter	Type	Description
dsn-name	string	The DSN name of your ODBC
database-user	string	Enter username if it is required by your ODBC.
database-password	string	Enter password if it is required by your ODBC.
user-table	string	The table to store the user information.
username-field	string	The column name of user names in the user-table.
password-field	string	The column name of passwords in the user-

		table.
enable-md5	string	<p>It defines whether the password is encrypted with MD5.</p> <p>On - encrypted.</p> <p>Off - not encrypted.</p> <p>Passwords in many portal systems and forum systems such as php-nuke, post-nuke or phpBB, etc. are encrypted with MD5, thus you will need to set this value to "On".</p>

5 Chat Modules

The 123 Flash Chat Server releases several powerful chat modules. They can greatly enhance the chat but are not obligatory for every webmaster. Therefore they are not included in the standard package.

Users can choose these optional modules according to their needs.

All modules are just plug-ins based on 123 Flash Chat Server software which works with the license instead of working alone.

5.1 Moderated chat module

The distinguishing feature of a "Moderated-Chat" (moderation chat or moderate chat) is that questions submitted by participants will not be displayed publicly unless the Moderator or Admin approved/passed it.

Check details here:

<http://www.123flashchat.com/moderated-chat.html>

5.2 Invisible admin chat module

With this module the administrator can monitor chat conversations in chat rooms invisibly. Without the "existence" of the admin participants can freely chat but the administrator can make sure that no one is being inappropriate in the chat room.

Check details here:

<http://www.123flashchat.com/invisible-admin.html>

5.3 Change nickname module

With the "Change-Nickname Module" installed, your users have the ability to change their displayed nickname after they have logged in. This makes their chatting more flexible and fun.

Check details:

<http://www.123flashchat.com/change-nickname.html>

5.4 Pocket-pc & banner chat module

Have you ever thought of attaching a 'mini-chatroom' to your webpage to establish connections between your business and visitors? "Pocket PC or Banner Chat" could be the solution.

It is small and neat and looks like an animation but has full chat features (sending and receiving message in chat lobby, etc.)

It can be attached to any webpage of your site.

A tiny little chat room will encourage visitors to communicate with your representative. This will help them to gain a better understanding of your product or service which will definitely promote sales.

Check details:

<http://www.123flashchat.com/pocket-pc-banner-chat.html>

5.5 flashcom-audio-video module

With flashcom-audio-video module enabled, you can add webcam and voice chat.

In video-voice chat, 8k/sec bandwidth is used by default. And this bandwidth consumption is adjustable.

Unlike the basic text chat, this webcam chat module is developed based on flash communication server, and can fully integrate current 123flashchat.

If you don't obtain the flashcom server yet, you can buy directly at macromedia:

<http://www.macromedia.com>: Flash Communication Server MX 1.5, with patch.

5.6 encrypt-message chat module

With this optional chat module, chat messages can be encrypted by using RSA, which ensure the privacy and chat security.

6 How to customize chat skin

Brief introduction:

All sets of skins are stored under the directory:

<123flashchat installed directory>/client/skin/.

By default we offer 9 sets of skins. You can modify any skin or add your own based on the pre-existing skins.

Skin components are controlled by skin.xml.

Color style can be adjusted by color.xml.

Only SWF or a JPG image file can be used to construct a skin.

GIF or PNG files will not work.

If you like the opaque background, you can save it as a jpg file (non progressive mode). If you would prefer a transparent background, please save it as a png or gif file and import it to flash to convert it to a swf file without the background.

Client FLA files are not necessary to design a skin.

Below are some tutorials which might be helpful for designers:

a) HowTo customize skin? <http://www.123flashchat.com/howtoskin.html>

b) HowTo change skin color? <http://www.123flashchat.com/colormap.html>

c) HowTo customize background?

http://www.123flashchat.com/howto_change_bkground.html

Change background

Every skin offers background pictures in the chat area.

You can also create your own jpg or swf backgrounds and put them into the skin folder.

New backgrounds should be in the dimensions within the basic background. The graphics for the new background will be added above the basic background. (We suggest you double click the background alternative in the download pack to get a better impression of how it should look.)

To offer more backgrounds for users to select, please edit skin.xml,

Find the following section:

```
<SKIN_BKGROUND>
```

```
<BKGROUND name="Standard" value="bkground.swf" />
```

```
</SKIN_BKGROUND>
```

Then add a new line in this format.

"name" is for users to pick from. "value" is the filename of the background that you have created.

7 . Programmer's tools

Server APIs are provided for 123 Flash Chat Server software developers. This will enable the developers to obtain detailed chat server information. Client APIs are also provided

to customize the chat client.

7.1 Server API

7.1.1 Get Server Running Status from the files

When a chat server is running, some parameters are stored in text files which can be read by your application. Useful information can be extracted from them. This feature is included in the standard version of 123 Flash Chat.

7.1.1.1 Get numbers

To obtain a current connection number, the logon user number and the room number from a record file, use the following format:

<123FC installed directory>/server/data/default/online.txt

This file will real-time change according to the chat room status.

Format:

< connection number >|<logon user number>|<room numbers>

Sample: [230|180|10](#)

The example above shows that there are 230 connections on the chat server, 180 of them have logged in and there are 10 chat rooms altogether.

This data can be read and displayed in php, asp or other dynamic webpages.

7.1.1.2 Get username list of each room

You can display the user name list of each room on your webpage by retrieving data from "room_*.txt".

In the <123 installed directory>/server/data/default/, you can find the following files:

"room_1.txt ", "room_2.txt", etc.

These files store the online user lists of relevant rooms. These will keep changing depending on the changes of specific rooms.

7.1.2 Send command to server to operate or get real-time data

This feature can be very handy for an advanced user.

With it you can develop an application to connect to the chat server via a socket. Then a TCP string command can be sent to operate or obtain the real-time data.

In "<123flashchat installed directory>/server/etc/groups/default.xml" file you will find:

```
<server-api enable="On">
  <!-- auth-password
```

Only commands made using the right key (password) will be authorized by the chat server and will be effective.

```
-->
  <auth-password>3874-3459-9293-2194</auth-password>
  <!-- allow-access-from-ip
```

Only commands from this IP address are legitimate.

If it is set to " *", then commands from all IP address will be valid. This will not be secure.

```
-->
  <allow-access-from-ip>127.0.0.1</allow-access-from-ip>
</server-api>
```

The socket message string being sent is in standard syntax which will appear as shown below:

```
<?xml version="1.0" encoding="UTF-8"?><Command group="default"
api_pwd="api_pwd_in_default.xml_file" type="command_type" "command_parameters... "
/>
```

Note: Remember to terminate XML-commands with a null-byte.

group: in the standard version, the group value has to be "default"

api_pwd: this has to be the "auth-password" value which is defined in "default.xml".

type: this is the type of the command being sent. It could be in the following types: "add_room", "del_room", " broadcast" " private_message ".

command_parameters: these are parameters needed for every command. They can be different for each command. These will be introduced later.

Below is an example of a command string

```
<?xml version="1.0" encoding="UTF-8"?><Command group="default" api_pwd="3874-
3459-9293-2194" type="add_room" name="the_room_name" owner="abcd" desc="test"
max="200" />
```

7.1.2.1 add_room

Rooms can be added on the fly using the 'add room' command.

The following parameters are indispensable:

Parameter	Type	Description
Name	String	Expected room name
Owner	String	New room moderator

Desc	String	New room description
Max	Number	max number of people the new room can hold

A full sample of this command is shown below:

```
<?xml version="1.0" encoding="UTF-8"?><Command group="default" api_pwd="3874-3459-9293-2194" type="add_room" name="test room" owner="aaa" desc="room for test" max="200" />
```

For advanced details, please check webpage:

<http://www.123flashchat.com/addroom-serverapi.html>

7.1.2.2 del_room

Rooms can be deleted dynamically using this command.

Parameter	Type	Description
room_id	Number	The ID of rooms needed to be removed.

A full sample of this command can be seen below:

```
<?xml version="1.0" encoding="UTF-8"?><Command group="default" api_pwd="3874-3459-9293-2194" type="del_room" room_id="1" />
```

7.1.2.3 broadcast

This command will broadcast messages to every logon user, whether or not they have entered their username or entered a room.

The following parameters are indispensable:

Parameter	Type	Description
userid	String	What name should be used to broadcast.
Msg	String	Broadcast message.

7.1.2.4 private_message

This allows a private message to be sent to a specific user.

Parameter	Type	Description
dest_uid	String	The receiver's userid
msg	String	Message to be sent
avatar	String	Avatar name in the message(could be "e1" , "e2" ... "e32")
owner_uid	String	The sender's userid
owner_nick	String	The sender's nickname
b	"1" or "0"	1 – bold font for the message being

		sent 0 – not bold
i	"1" or "0"	1 – italic font 0 – not italic
u	"1" or "0"	1 – underlined font 0 – no underline
color	Hexadecimal Number	Color value must begin with "0x", eg: red is "0xFF0000"

A full sample of this command can be seen below:

```
<?xml version="1.0" encoding="UTF-8"?><Command group="default" api_pwd="3874-3459-9293-2194" type="private_message" dest_uid="test" msg="hello world" emotion="e2" owner_uid="admin" owner_nick="admin" b="1" i="1" u="1" color="0xff00ff" />
```

How to use above server APIs with php to send command to chat server, here is the sample code:

```
<?
$host = "127.0.0.1";
$port = 51127;
$apiCommand = '<?xml version="1.0" encoding="UTF-8"?><Command group="default" api_pwd="3874-3459-9293-2194" type="add_room" name="Chit Chat" owner="Mod" desc="Chit Chat room." max="200" />';
$fp = fsockopen($host, $port, &$errno, &$errstr, 2);

if(!$fp)
{
    echo "$errstr ($errno)\n";
}
else
{
    fputs($fp,$apiCommand."\n");
    fclose($fp);
}
?>
```

7.2 Client Parameters

The "123flashchat.swf" can fulfill special tasks (like auto-login) by appending the parameters after it when inserting it into html code.

Specific code can be generated by the dynamic web application to allow logged-in users to access your system. They will automatically be able to log in to any chat room without re-entering their name and password, etc.

7.2.1 init_user and init_password

With these two parameters your users do not have to re-enter their names and passwords to access the chat room list page as their usernames and passwords are already attached.

The 'login' button has already been activated.

This provides an effective method for auto-login.

You should be able to encrypt your user's passwords with MD5 to make them secure.

For example:

If the user name = myusername, password = my password, the code you should add into your html will be as follows:

```
<OBJECT classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=6,0,0,0" WIDTH="634" HEIGHT="476">
<PARAM NAME=movie
VALUE="123flashchat.swf?init_user=myusername&init_password=mypassword">
<PARAM NAME=quality VALUE="high">
<PARAM NAME="menu" value="false">
<EMBED src="123flashchat.swf?init_user=myusername&init_password=mypassword"
quality=high menu=false WIDTH="634" HEIGHT="476" TYPE="application/x-shockwave-flash"
PLUGINSOURCE="http://www.macromedia.com/go/getflashplayer"></EMBED>
</OBJECT>
```

Note: The auto-login will not happen until both of the parameters are attached at the same time.

7.2.2 init_nickname

This parameter gives logged on users a display nickname automatically.

It will only be valid if you set it in the server configuration as follows:

```
<enable-change-nickname>On</enable-change-nickname>
```

It can be used in conjunction with init_user and init_password, so that a user can have their own nickname once they are automatically logged in.

7.2.3 init_root

The init_root is the string of an URL or a directory.

It is only useful when the chat html file and the 123flashchat.swf are located in different directories.

With init_root, the swf can automatically load client.xml, lang folder and skin folder under

the specified root directory:

```
<PARAM NAME=movie
VALUE="123flashchat.swf?init_root=http://www.yourhostname.com/yourdir/ ">
```

Note: please add a slash at the end of this value,

It should look like the following:

```
http://www.yourhostname.com/yourdir/
```

It should **NOT** look like the example below:

```
http://www.yourhostname.com/yourdir
```

7.2.4 init_room and init_room_pwd

Your users can skip the room list page and automatically log directly into a specific chat room. Parameter "init_room" can help you with auto-login-room.

Parameter	value	type	Description
init_room	Room_id	number	is room ID (init_room=) instead of room name.
init_room_pwd	Room password	string	If the room is password protected, you need to set init_room_pwd (init_room_pwd=) Of course init_room_pwd is not obligatory.

For example:

If the user name = myusername, password = mypassword, room id=1001, the code you should add into your html will be as follows:

```
<OBJECT classid="clsid: D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=6,0,0,0" WIDTH="634" HEIGHT="476">
<PARAM NAME=movie
VALUE="123flashchat.swf?init_user=myusername&init_password=mypassword&init_room=1001">
<PARAM NAME=quality VALUE="high">
<PARAM NAME="menu" value="false">
<EMBED
src="123flashchat.swf?init_user=myusername&init_password=mypassword&init_room=1001" quality=high menu=false WIDTH="634" HEIGHT="476" TYPE="application/x-
```

```
shockwave-flash"
```

```
PLUGINSPAGE="http://www.macromedia.com/go/getflashplayer"></EMBED>  
</OBJECT>
```

To be effective, this parameter must be used in conjunction with the other two parameters: `init_user` and `init_password`.

If a user logs in as a guest, you can leave the `init_password` blank. This is shown in the following example:

```
<PARAM NAME=movie  
VALUE="123flashchat.swf?init_user=myusername&init_password=&init_room=1001">
```

...

```
src="123flashchat.swf?init_user=myusername&init_password=&init_room=1001"
```

7.2.5 `init_lang`

This parameter helps the chat client to load a defined language file.

`init_lang` in html code will disable the language value in the `client.xml` because `init_lang` has a higher priority.

In this way, your dynamic web application can choose to show the local language for specific users in any country.

For example:

```
<PARAM NAME=movie VALUE="123flashchat.swf?init_lang=en">
```

`123flashchat.swf` will then automatically load the language package: `lang/language_en.xml`

7.2.6 `init_skin`

This parameter helps the flash client to load a specified skin.

`init_skin` in html code will disable the skin value in the `client.xml` because `init_skin` has a higher priority.

In this way, your dynamic web application can 'listen' to each user's favorite skin.

For example:

```
<PARAM NAME=movie VALUE="123flashchat.swf?init_skin=classic">
```

`123flashchat.swf` would then automatically load the skin under directory " `skin/classic`".

7.2.7 admin_mode

With this parameter, functions which are disabled in client.xml for ordinary users will be activated for the administrator.

This will usually only need to be used in special circumstances.

By default it is 'false'.

For example: in client.xml, if you configure it to:

```
<visiblePasswordInput value="false" />
```

then you block yourself from entering a password to enter the admin panel.

If this is the case, with admin_mode = true, you can resolve this problem.

You can create a special html file or dynamic webpage with this parameter to give the admin a control panel. For example:

```
<PARAM NAME=movie VALUE="123flashchat.swf?admin_mode=true">
```

7.2.8 init_ad

This will enable or disable the 'advertisement banner' function.

init_ad=true/false

This parameter has a higher priority over the value of advertisingBanner in client.xml.

For example, if in the html code you set:

```
<PARAM NAME=movie VALUE="123flashchat.swf?init_ad=true">
```

but in client.xml you set `<advertisingBanner enable="false">`.

Then the advertisement banner will still be 'enabled'.

7.2.9 loading_bkground

This defines whether the loading background (which is now a blue cup) appears or does not appear. The default value is set to 'true'. Usually you will not need to use this interface.

If you need a loading number without a background image, you can set the loading background value to 'false'.

For example:

```
<PARAM NAME=movie VALUE="123flashchat.swf?loading_bkground=false">
```

7.2.10 init_private and init_private_message

A private window can be automatically created in 123 Flash Chat with some words to start the conversation. This makes it perfect as a one-to-one live support software.

Parameters "init_private" and "init_private_message" can help you with "auto create private window".

Parameter	value	type	Description
init_private	Receiver name	string	The receiver name in the destination room.
init_private_message	greeting	string	Words you would like to start with.

For example:

If the user name = "abc"; password = "abc"; room id = "1"; the name of the person you want to talk to is "test"; and you want to create a private window by saying "hello", then the script to add into your html code is as follows:

```
<OBJECT classid="clsid: D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=6,0,0,0" WIDTH="634" HEIGHT="476">
<PARAM NAME=movie
VALUE="123flashchat.swf?init_user=abc&init_password=abc&init_room=1&init_private=test&init_private_message=hello">
<PARAM NAME=quality VALUE="high">
<PARAM NAME="menu" value="false">
<EMBED
src="123flashchat.swf?init_user=abc&init_password=abc&init_room=1&init_private=test&init_private_message=hello" quality=high menu=false WIDTH="634" HEIGHT="476"
TYPE="application/x-shockwave-flash"
PLUGINSPAGE="http://www.macromedia.com/go/getflashplayer"></EMBED>
</OBJECT>
```

The code above will enable you to automatically log in to the chat lobby using this account: username: abc, password: abc. and enter the room with id "1". If someone named "test" already exists in that room, a private window will be automatically created and the message: "hello" will be sent out. Of course you can remove the "init_private_message" section to cancel sending messages when creating private windows.

7.2.11 Init_listroom

"init_listroom" API can be added using html code by admin to ensure that only specific rooms can be visible in the room list. Devide rooms using ",".

For example: [123flashchat.swf?init_listroom=1,3,4,5,6](http://123flashchat.com/123flashchat.swf?init_listroom=1,3,4,5,6)

-- END --