FlashPioneer Video Chat

Make your online audio and video chat solution

FLASH VIDEO CHAT

Category

The Installation Help for

FlashPioneer Video Chat

📚 Welcome

The flash chat is a new mode of chat software which is different from text one. Full of various flashes and funny animation, the flash chat offers an interesting feel of communication online. Based on Flash Media Server and Red5, FlashPioneer Video Chat supports many systems, which brings convenience to users and saves them a lot of money. And Flash Chat itself costs less while works excellently. Every web site may also customize a flash chat matching all the needs and we professional team will do the best for your satisfaction.

To add flash chat in site may attract more people to view the site. At the same time, the site can communicate with its customers and net friends with the super tool at real time.

You can try FlashPioneer Video Chat
at http://www.flashpioneer.com/chat/chatdownload.htm

To view screenshot of Flash Chat you can refer to
http://www.flashpioneer.com/chat/screenshot.htm

And for the skin samples you can refer to
http://www.flashpioneer.com/chat/skin.htm

About Custom Flash Chat Design, we provide more flash chat templates, interface design, animation package, flash emotion and so on for you to add directly. Or you can customize them to your special needs. For more details, please refer to
http://www.flashpioneer.com/custom.htm

To view system requirements and install related software, please visit:
http://www.flashpioneer.com/chat/systems-requirements.htm

You can find more links to more pleasant surprise at Chat Home.

📚 Introduction of Flash Chat

When we are chatting online, our computers do not send the messages to each other directly in fact. The messages we send will arrive at Chat Server first. Then the server transfers the messages to the other clients we want to chat with. So, if we want to chat with Flash Chat program, Chat Client (flash player) and Chat Server are both required.

The server, like FMS, provides technique platform for message communication, video stream and audio stream. Based on the server, we need to develop and reset it at the requirement of the application software. The constitution of Flash Chat is just like the structure of this Client/Server. For realizing real-time communication with multi-users, we take the advantages of the great capability of Flash Server and the abundant performance of Flash Client.

Chat runs like the sketch map below:
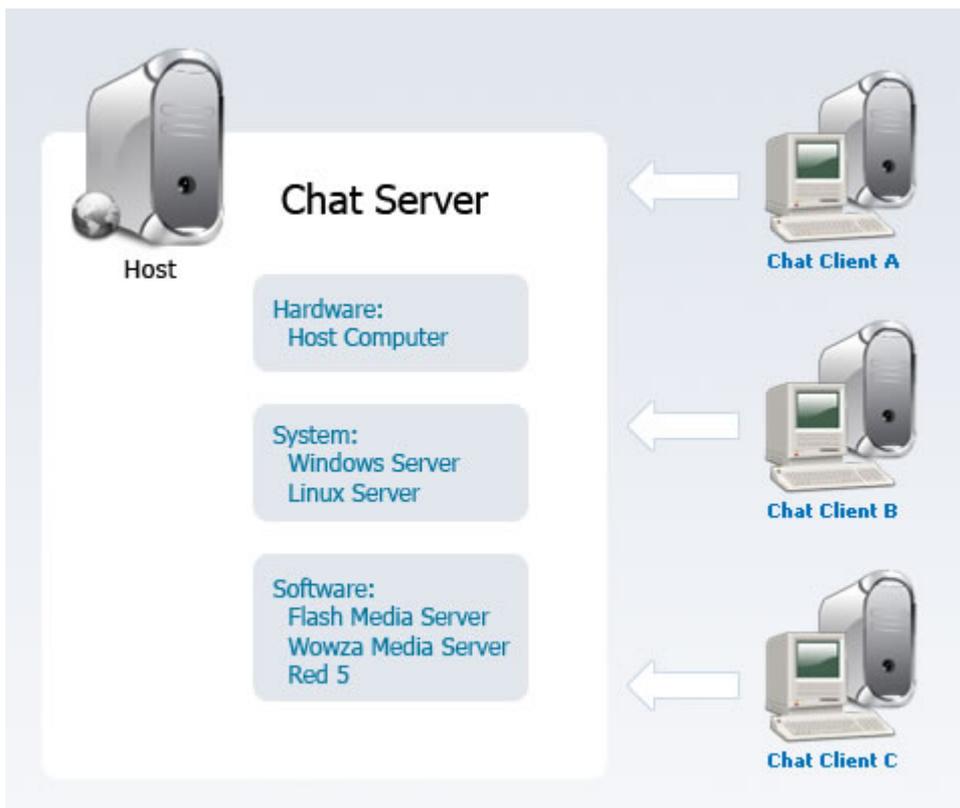
Suppose there are 3 clients, Client A, Client B and Client C. They are in the same chat room. Client A inputs a message, which is sent to the Server. Then the server transfers the message to Client B and User C in the chat room. But things will be different if the three clients are not in the same room. Suppose that Client A and Client B are both in the same chat room while Client C is in another one. Then Client A or

Client B can not see the message sent by Client C. And only Client B can see the message sent by Client A.

The information such as users logging in or out, text messages, smiley and animation are transformed into effective data which is then sent to the Server. At the same time, the Client deals with the data received from the Server .Then it transforms the data back to the messages.

The Server takes charge of message communication. It transfers the data from Client to the other expected Clients. The other task of the Server's is to verify and manage users' identity.

Introductions of Flash Servers

FMS (Adobe Flash Media Server)
FMS, compared with the other servers, is the most mature one to provide industry-standard application and it supports mass scale of applications. The following is the sketch map for FMS cluster. With server group working for the customers at the same time, the bandwidth and customer's load capacity are enlarged. That achieves millions of users chat on line synchronously.
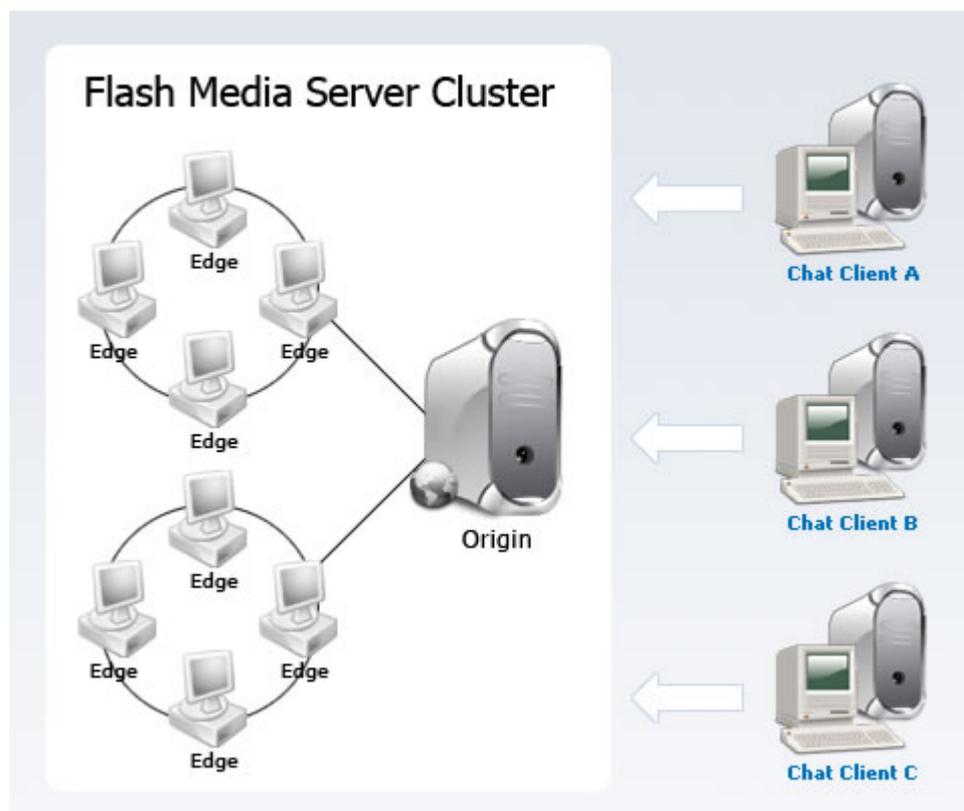
WMS (Wowza Media Server)

WMS is a Flash server written in Java. As cheap and stable, it is suitable for application of primary and medium enterprises. The customer service and technique support make WMS a good choice for the users who care about the costs and stability.

Red5

Red5 is an Open Source Flash Server written in Java which supports:
Streaming Audio/Video (FLV and MP3)
Recording Client Streams (FLV only)
Shared Objects
Live Stream Publishing
Remoting
Red5 has been developed at the end of 2005. It is stable for transferring flash data stream and supporting data application as text based chat room. But for video, especially large frequency video data, it doesn't work that stably. As an open source software, there's no customer service or technique support for it.

Below is a form to compare the three servers.

Server	Capability	Cost	Language
FMS	Mature	Expensive	AS
WMS	Stable	Cheap	Java
Red5	Optimizing	Free	Java

On the side of customers, FlashPioneer has developed a series of flash chat edition according to FMS and Red5.

System Requirements

FMS Edition

Supported Operating Systems
Windows 2000 Server Windows 2003 Server, Standard Edition
Linux Red Hat Enterprise, Version 3.0
Linux Red Hat Enterprise, Version 4.0

Software Environment Requirements

FMS Server 2.0 or a higher

Hardware Requirements

Minimum Required:

X86-compatible CPU (Pentium III, 1 GHz or better)

512 MB available RAM

50 MB of available disk space

Recommended:

X86-compatible CPU (Pentium 4, 3.2 GHz or better)

2 GB available RAM

1 GB Ethernet card

200 MB of available disk space

RED5 Edition

Supported Operating Systems

Windows, Linux, Unix, Solaris, Freed BSD, MacOSX and Debian systems

Software Environment Requirements

Java 1.5 JDK or a higher

Hardware Requirements

X86-compatible CPU (PII, 500MHz or better)

256 MB available RAM

100 MB of available disk space

The software package directory structure

```
/ client                    --- Chat Client program files
    ├──>chat.swf             --- swf file
    ├──>UserIcons.swf        --- user icon file
    ├──>setting.xml          --- configure file
    ├──>themes/              --- style package
    ├──>lang/                --- language package
```

```
        └──>cartoon/                  --- emotion animation

    ./ server                         --- Chat Server program files
        ├──>FMS /
        └──>Red5 /

    ./ doc                            ---Documentation in PDF format

    ./ tools                          --- Tools
        ├──>clientInstallerMaker/     --- A tool for making client setup program
        └──>configtool/               --- Editor to configure file

    ./ remoting                       --- Remoting interface to database
        ├──>asp.net/
        └──>php/

    install                           --- Linux installation Guide Shell Script
    Setup.exe                         --- Windows installation Guide
    license.txt
    readme.txt
```

📚 The Installation Guide for Windows


Please execute Setup.exe program under the software directory.
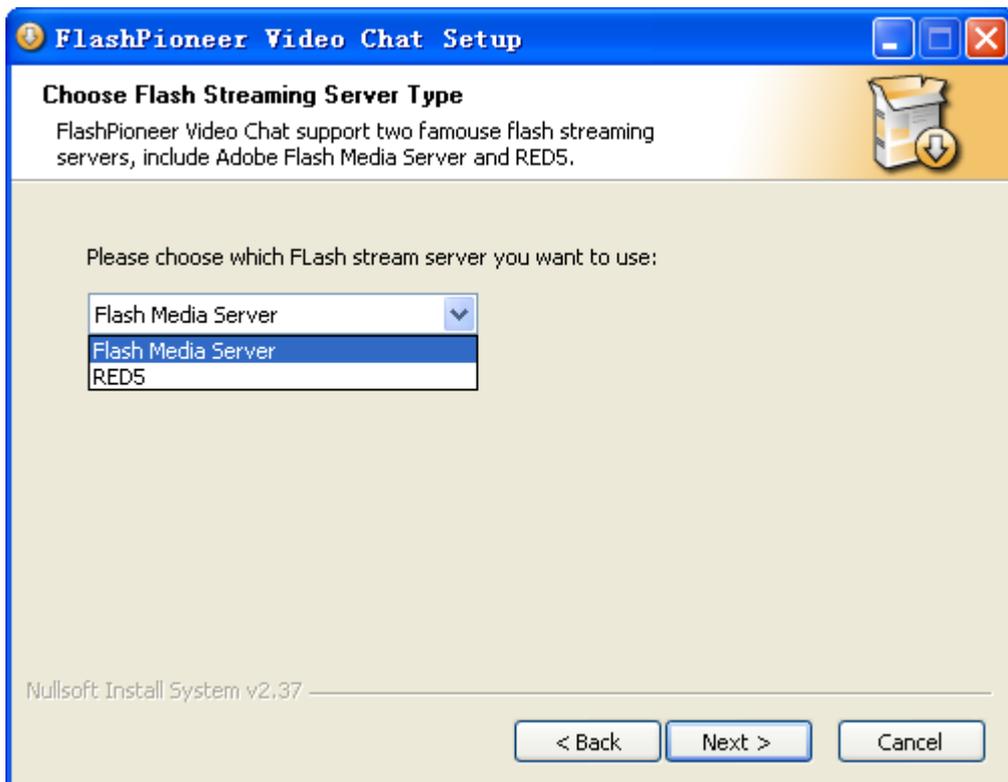
Please make a choice according to your Flash stream media server platform.
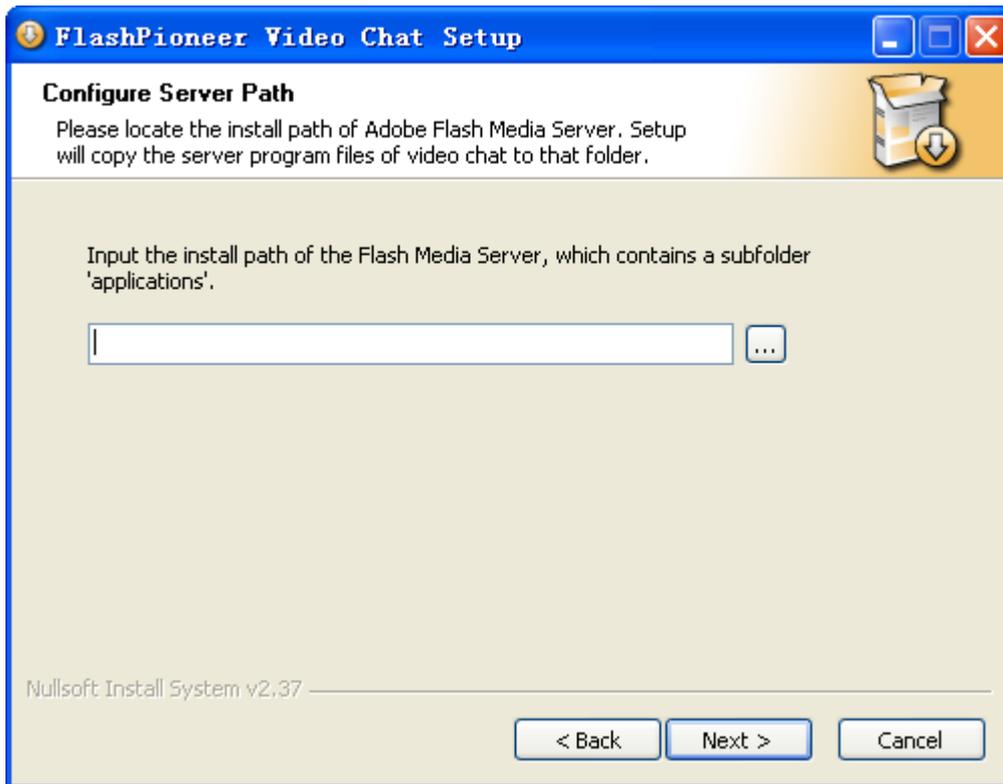
If you choose Adobe Flash Media Server, please specify the installation path. If you haven't installed FMS, please go to the Adobe official website to purchase and download. Please refer to Appendix for detail installation processes.
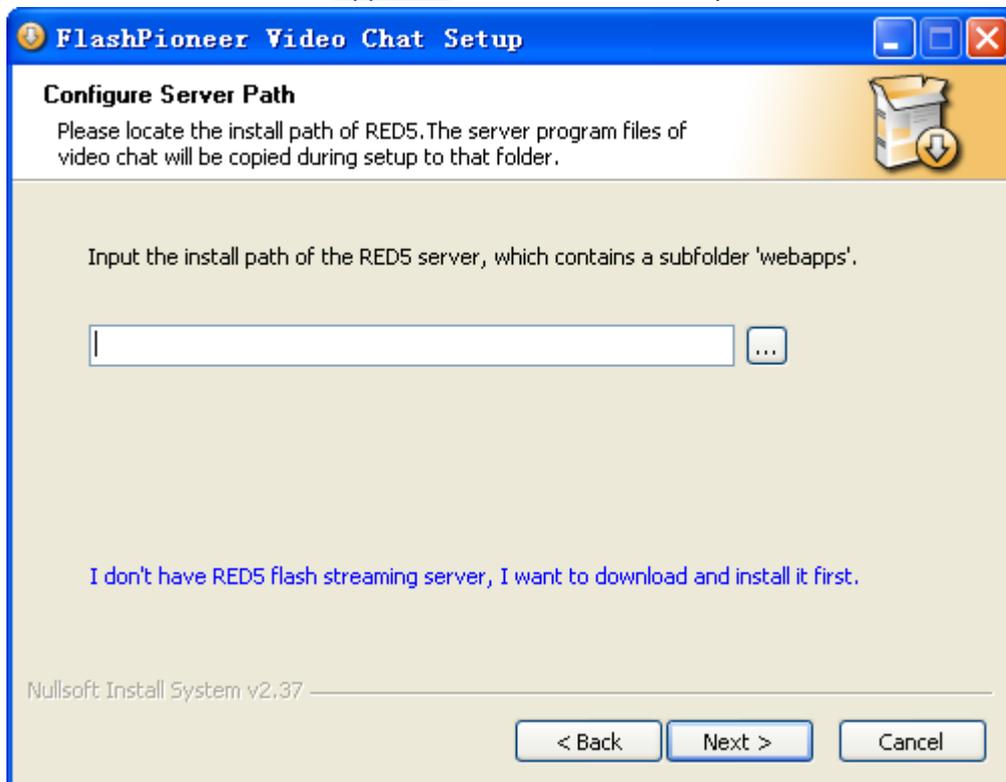

If you choose to use RED5 server, please specify its installation path. If you haven't installed RED5 server, please click the link below to download and install the server.

Please refer to the Appendix for the [RED5 installation processes](#).
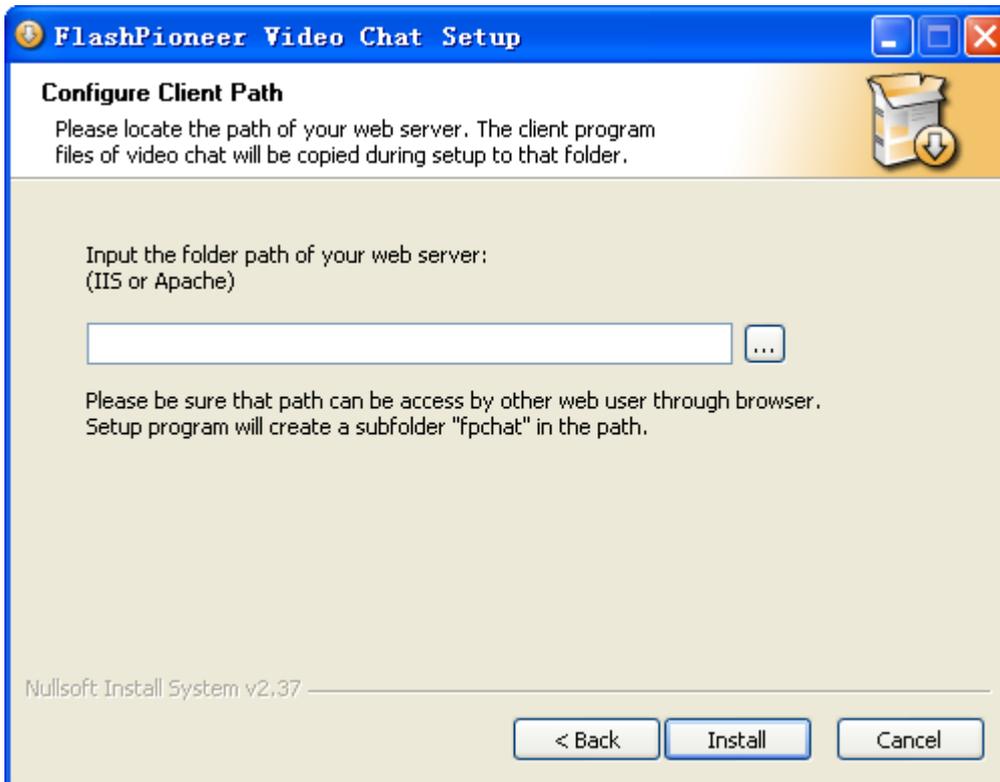
The Client program must be installed under the website folder so that the other web user can access the video chat by browser.
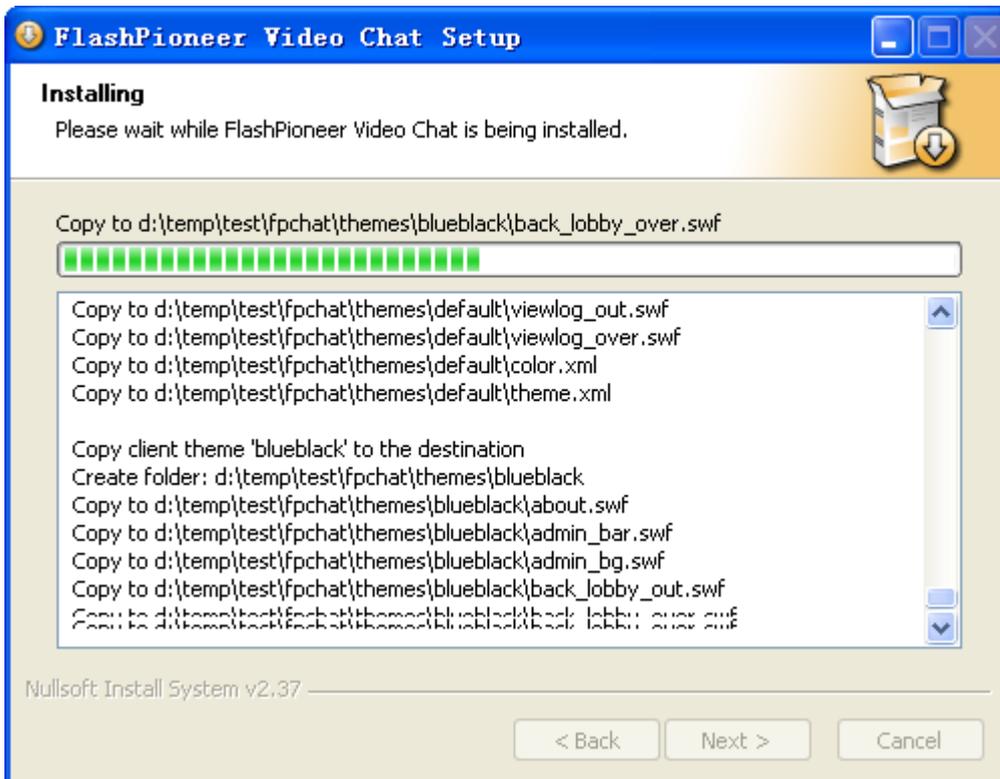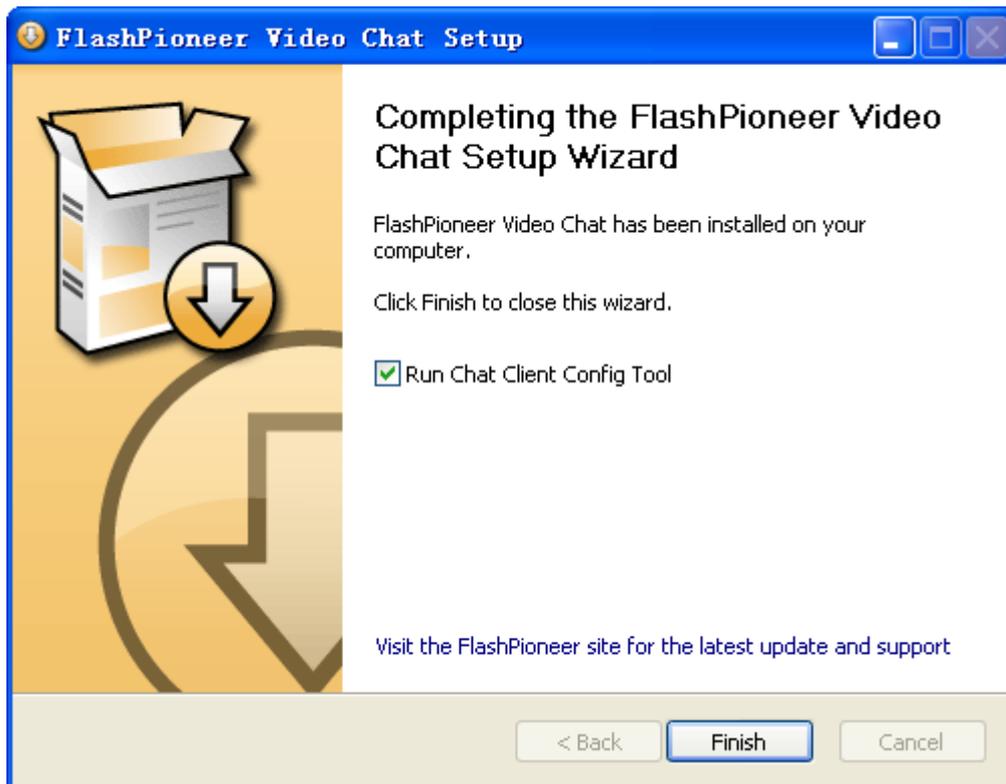
The installation is completed.

You can choose "Run Chat Client Config Tool" to open the configuring tools for the Client program. Please refer to Configure Client Detail.

📚 The Installation Guide for Linux

Go to the software package directory;

Use 'su' command switching to root user;

Input "**./install**" to start installation. (Please operate according to the Guide)

```
Your Linux Version:
=====================================
Fedora release 9 (Sulphur)
=====================================

Please choose which Flash stream server you want to use:[1/2]
[1] Flash Media Server
[2] RED5

Please enter '1' or '2'.
2

Please choose the correct software package:
[1] DEB
[2] RPM
[3] BIN
[4] Skip RED5 install, I was already installed it.

Please enter '1', '2', '3' or '4'.
```

Attention: Red5 server will be installed into /usr/lib/red5 by DEB and RPM

Please refer to the [Appendix](#) for the detail installation of FMS, RED5.

The Configuration on the Client Program

After finishing the installation, you need to modify the setting.xml file under chat directory of the Client Program. This chapter will explain the basic configurations for Chat running. Please refer to the [next chapter](#) for the detail configuration.

<server url="localhost" port="1935" />
Please change url into your server IP or domain. It is ok to keep the port default setting: 1935. But if you have changed the port when you installed FMS or RED5, please make the relevant port change here.

Then the installation is finished and you can experience the online video chat system.

Configure Client Detail

The graphic configure tool on Windows platform is offered in package, which requires .NET Framework 2.0. After finishing the installation, the configure tool will be called automatically. You also can find it in the package directory "tools/configtool" and use it to edit file "setting.xml". It analyzes, notice and offer the optional items.
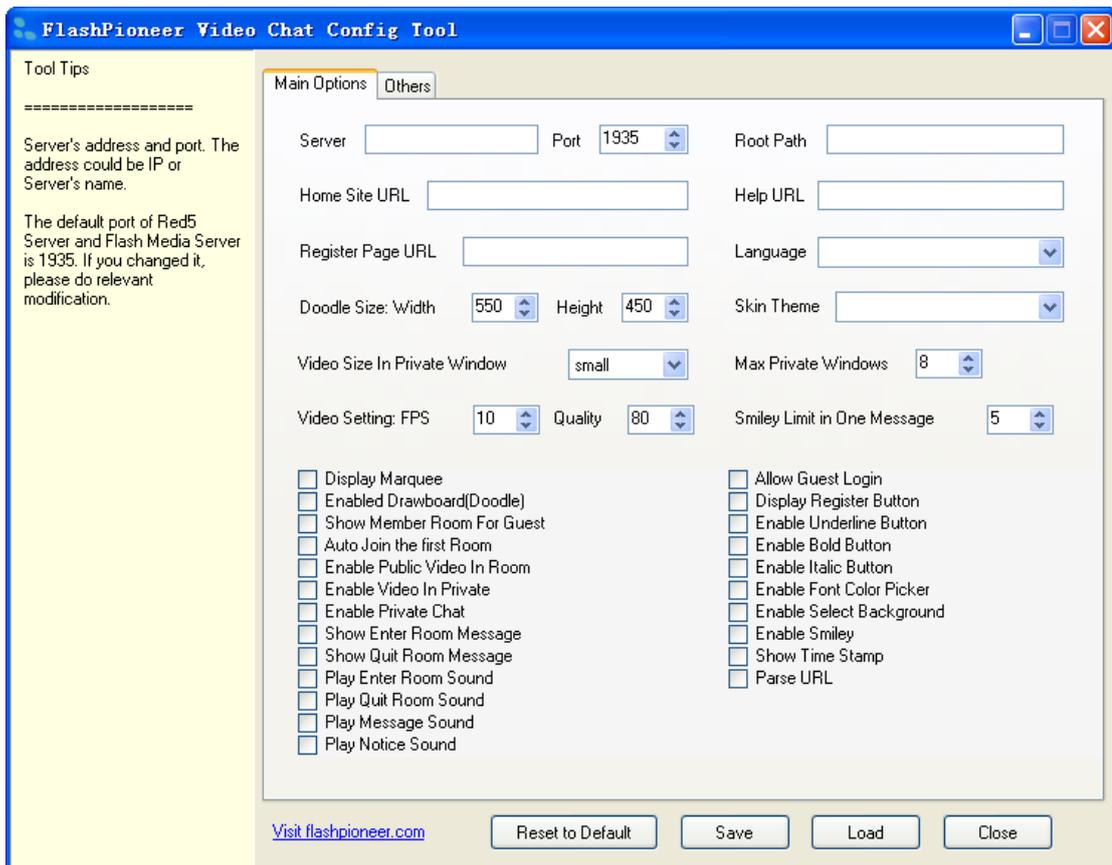
And you also can edit it manually by the other text edit tools. The following is the detail description of this file:

<?xml version="1.0" encoding="UTF-8" ?>
<clientSet>

<server url="localhost" port="1935" />
Here input server's address and port. The address could be IP or Server's name.
The default port of Red5 Server and Flash Media Server is 1935. If you changed it, please do relevant modification.

<rootPath value="" />
Root directory setting defines the root paths of language package and skin package.
By default, the current path is applied. You just leave it empty.
It could be defined as relative path or absolute path, for example: **./flashchat/** or

----

Notice that the path must end with "/".

<homePath value="http://www.flashpioneer.com" />
Your web site address

<helpPath value="http://www.flashpioneer.com/chat/onlinehelp/help.htm" />
The path of help file. The page will be opened when user click Help.

<registerPath value="" />
Register page is for new users. This configuring item works only when Romoting data
interface is used in the chatting program. Its function is to integtat the existing register
function on the website so to provide more convenient interface.

<language value="en" />
Language package setting. Select the language for interface. Now we provide
following languages:

en   -- English
zh-CN   -- Chinese Simplified
zh-TW   -- Chinese Traditional
fr   -- French
de   -- German
ko   -- Korean

The language package is in the directory of <roomPath>/lang/
You can also do translation according to the language package available in the
directory. You should save the translation file in the name of **language_***.xml** into
the directory of language package, and then select language.
If no language is selected, Client will automatically get the language information of
user's operating system, and then to get relevant language package.
If a language has been selected, then this language package will be loaded.

<theme value="default" />
Interface style file is in the directory of <rootPath>/themes/, and each style is a
directory named by this style.
We provides 6 different styles in the chat package, you can custom the skin by
yourself or let us to do it for you.

<visibleMarquee value = "true" />
Whether to show the scrolling news bar on the top. The scrolling news bar on the top
shows the news sent by administrator. If you don't want to show it, set it to be "false".

<visibleWhitePaper value="true" />
Whether to show Doodle. If you don't want to use the module, set it to be "false".

<paperWidth value = "880" />
<paperHeight value = "480" />
Doodle window size setting

<showMemberRoomForGuest value="true" />
Whether to show Member-Only room when guest login.

<autoJoinRoom value="true" />
Whether to join room when only one room.

<enableVideoInRoom value="true" />
Whether to turn on the public video

<enableVideoInPrivate value="true" />
Whether to turn on the video in private chat

<videoSizeInPrivate value = "small"/>
Video size in private chat window
small   --80x60
middle   --100x75
big   -- 120x90

<enablePrivateChat value="true" />
Whether show private chat interface

If you open private chat interface, click the name in user list then appears a menu including private chat. Through the private chat menu, users can privately chat with someone and the conversation won't be seen by others.
If you want to disable the function, set to be "false".

<videoSetting fps = "10" quality = "65"/>

fps:	The requested rate at which the camera should capture data, in frames per second. The default value is 10 and it suggested to be between 10 to 15.
Quality:	Specifies the required level of picture quality, Acceptable values range from 1 (lowest quality) to 100 (highest quality). To specify that picture quality can vary as needed to avoid exceeding bandwidth, pass 0 for quality. The default value is 65.

<maxPrivateWindow value="5" />

Max windows number of private chat. Default is 5 and it suggested to be between 1 to 8.

<enterRoomMsg value="true" />

Whether to show the information of someone's entering. Default is "true".

<quitRoomMsg value="true" />

Whether show the information of others' quit. Default is "true".

<enterRoomSound value="false" />

Whether play notice sound when someone enters room. Default is "false".

<quitRoomSound value="false" />

Whether play notice sound when someone quits room. Default is "false".

<messageSound value="true" />

Whether to play sound when receive new message. Default is "true".

<noticeSound value="true" />

Whether play notice sound when receive new broadcast news. Default is "true".

<visibleLoginAsGuest value="true" />

Whether show the login as guest checkbox. If do, guest can login.

<visibleRegisterButton value="true" />

Whether show the register button. If do, everyone can register through registration port. Default is "true".

<enableUButton value="true" />

Whether show Underline button in chat toolbar.

<enableBButton value="true" />

Whether show Bold button in chat toolbar.

<enableIButton value="true" />

Whether show Italic button in chat toolbar.

<enableColorPicker value="true" />

Whether show ColorPicker in chat toolbar.

<enableSelectTextBack value="true" />

Whether show Select Text Area Background button in chat toolbar.

<enableSmiley value="true" />

Whether show Smiley button in chat toolbar.

<showSmileLimit value = "5" />

The use of smiley is limited. Max number of smiley in one message can be set. If you set it be 0, it means no limit.

<showTimeStamp value="true" />

Whether show time stamp ahead of message.

<parseURL value="true" />

Whether automatically parse the URL in chat message to be hyperlink.

<emotions enabled="true" column="5" autoPlay="false">
    <item name="Birthday" src="cartoon/movie/birthday.swf"
    thumb="cartoon/preview/birthday-small.swf" duration="15"/>
    <item name="Boom" src="cartoon/movie/boom.swf"
    thumb="cartoon/preview/boom-small.swf" duration="7"/>
    <item name="Bubble" src="cartoon/movie/bubble.swf"
    thumb="cartoon/preview/bubble-small.swf" duration="7"/>
</emotions>

Animation panel in chat tool.

enabled:	whether show the panel
column:	amount showed in each column
autoPlay:	whether play animation automatically.

    You may add animation in the form of following format:

<item name="Birthday" src="cartoon/movie/birthday.swf"
thumb="cartoon/preview/birthday-small.swf" duration="15"/>

name:	animation name
src:	animation file path
thumb:	the path of abbreviated animation
duration:	playing duration

<preDefinedMsg enabled="true">
    <msg value="Hello,can I help you?"/>
    <msg value="May I have your name and E-Mail address please?"/>
    <msg value="Could you please give more detailed steps so that we can reproduce the problem on our side?"/>
    <msg value="Wait a minute please; I am now checking the problem for you."/>
    <msg value="I will send the relevant information to you via email; please remember to check your mailbox for it."/>
    <msg value="My pleasure."/>

</preDefinedMsg>

Predefined Message : Frequently used messages.

enabled: whether show the Predefined Message panel in chat tool.

<fontSizeList enable="true" value="10,11,12,13,14,15,16,18,20,22" defaultSize="12"/>

The font panel in chat toolbar.

enabled: Whether to show this panel.

value: available font size group, separated by "," .

defaultSize: default front size.

</clientSet>

Upgrade

---

2 Easy Steps to Upgrade Chat System

Note: Please backup all the files before the upgrade so as to avoid losing any important data.

1) Upgrade the server program

It is very simple to upgrade the server program, which can be done just by copying and covering.

Red5 Edition
Under the installation folder of Red5, enter the directory webapps/soChat/WEB-INF/lib. Then replace the file soChat.jar with the latest version which is under the path "server/Red5/soChat/WEB-INF/lib" in software package.
At last, restart Red5 service to finish: /sbin/service red5 start

FMS Edition
Go to the path under FMS installation directory applications/soChat/.
Cover the old files by soChat.far file of the new version copy which is under the path "server/FMS/soChat" in software package.

2) Upgrade the client program

It can be done by replacing the old files by the new client program file "chat.swf" which is under the path "client" in software package.

Database Integration

![icon] **PHP Edition**

● **Install Chat's Database**

There two ways to keep the data. One is using the file format which is the same as
the former version, there is no need for users to setup to use, Users' information
and chat history are stored under the Chat server path with an encryption; the
other is integrating with the present database by PHP interface through which the
users' information and chat history store in the database.

1) First please make sure that your web server supports php and MySQL

2) Build MySQL database

please use your MySQL control panel to create a data base named "flashchat".
Operating sql statement of database.sql and build two new data tables: users and
log

"users" table is for saving the users' information, the structure is as following	
uid	Primary KEY, autoincrease
username	User's name
password	Password
level	The user's level, the default value is 0, if it is 1 then it is the administrator
signDate	Register time
lastLogin	The last login time

"log" table is for chatting history, the structure as is as following	
lid	Primary KEY, autoincrease
target	Massage receiving one
ip	The user's IP address

username	Massage sending one
message	Message content
date	Message sending time

After running sql statement, insert two users in users table

username	admin	test
password	admin	test
level	Administrator	Register user

3) Install amfphp program

Unzip phpService.zip, go into the amfphp_1.2 folder after unzipping, use Notepad or other text editor tools to open "services/flashchat/chatService.php", and modify the code.
Find the two lines of code as following:

```
// connect the data server
mysql_connect("localhost", "root","root");
// choose the database, if the name of your database is different, please change it
// to your database name.
mysql_select_db("flashchat");
```

Modify the database server address, database user's name and password, database name in mysql as your configuration respectively.

4) Configure Flashchat

After finishing install chat program, log in chat as administrator, and then go to the administrator panel.
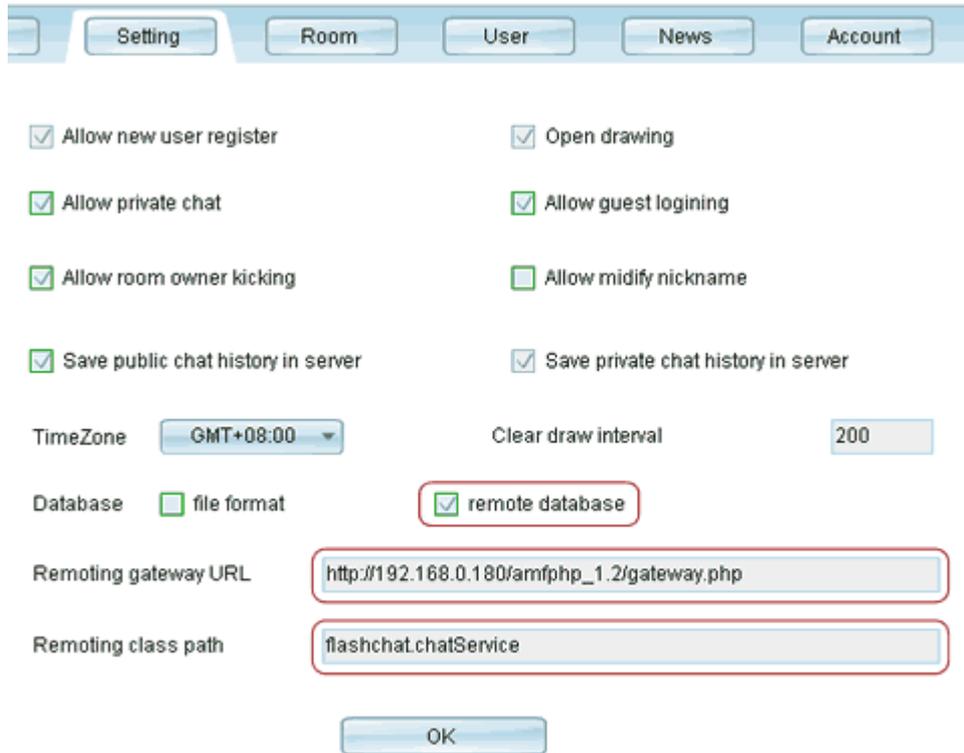
In the Setting panel, choose "remote database" in the red pane in the picture. In "Remoting gateway URL" textfield, fill the absolute url of gateway.php in amfphp_1.2 directory. And then fill "flashchat.chatService" (the class path of server object) in "Remoting class path" textfield, save the setting.

● **PHP Interface Description**

There is PHP reserved interface. Through this, you can save the chat users' information and chat history into your database on the website. And you also can check the user's identity through the interface.

Flash Remoting technology which is based on open source library AMFPHP is used for PHP interface. The following is the usage description:

1) Server Environment

Php (php4,php5) + mysql
Remoting gateway interface program: Amfphp 1.2

2) Server-side program

Remoting program file exists as class file, and it is placed in "Service" folder of amfphp directory. Class file can be put directly in service directory, or it is can be put in the individual folder in Service directory.

When Flash client invoke the method of the program object on the server, the class path must be appointed completely. For example, class file "Helloword" is saved in "service" directory, the path is "Helloworld", if class file "Helloworld" is in the "test" directory of "service" directory, its class path changes to "test.Helloworld".

3) Server program syntax

The class files must include by the following 3 methods, the name of method and parameters style must be the same as the following description, or the program can't work properly.

```
/*
* used for login and identifying
*
* @ param $username: User's name login
* @ param $pass: password, if login as a guest, don't fill in the blank
* @ param $isRegister: whether the user is new, if he/she is, it is true, or it is a
* blank or false
*/
function doLogin($username,$pass = null,$isRegister = false){
    /*
        Please put your code here to database connection processing
    */
    return Null/"guest"/"member"/"admin"
}
```

doLogin Function must have the return value for Red5/FMS to receive, there are four kinds of return value
- Null: Null, login failed
- "guest": String, login succeed and login as a guest
- "member": String, login succeed and login as a register user
- "admin": String, login succeed and login as an administrator who has the highest purview.

Explanation: doLogin function is the most important, if it is wrong then nobody can login. So please check it very carefully before you modify.

```
/*
* change the password, only for the register users
```

```
*
* @ param $username: User's login name
* @ param $oldPass: old pass word
* @ param $newPass: new pass word
*/
function modifyPassword($username,$oldPass,$newPass){
   /*
       Please put your code for checking your old password and setting your new
password here
   */
   return true/false;
}
```

"modifyPassword" function must have the return value and it is true or false which is for showing whether the action is completed.

```
/*
* save the chat history
*
* @ param $target: Receiving massage one's name, if the one is in the
* chatting room then it is the room's name. If it is a private chat, it is the user's
* name.
* @ param $ip: The user's IP address
* @ param $username: Sending message user's name
* @ param $message: Massage content
*/
function saveChatLog($target,$ip,$username,$message){
   /*
       Please put the code for saving the chat record into the database.
   */
}
```

The function doesn't need the return value.

Explanation: only the administrator enables the function of saving chatting history in the control panel at the background, the function works.

ASP.NET Edition

● **Install Chat's Database**

There are tow ways to save user's data. One is to save it in file, the other is to save it by database. Before Chat 1.6 verstion, user's data only can be saved in file which is easy because there is no need for user to configure.

Users' information and chat history are stored under the Chat server path with an encryption; the other is integrating with the present database by ASP.NET interface through which the users' information and chat history are stored in the database.

1) First please make sure that your web server supports ASP.net and SQL SERVER

2) Build SQL SERVER database
Operating sql statement of database.sql and build two new data tables: users and log
The "users" table is for saving the users' information, the structure is as following

"users" table is for saving the users' information, the structure is as following	
uid	Primary KEY, autoincrease
username	User's name
password	Password
level	The user's level, the default value is 0, if it is 1 then it is the administrator
signDate	Register time
lastLogin	The last login time

"log" table is for chatting history, the structure as is as following	
lid	Primary KEY, autoincrease
target	Massage receiving one
ip	The user's IP address
username	Massage sending one
message	Message content
date	Message sending time

After running sql statement, append two users in "users" table

username	admin	test
password	admin	test
level	Administrator	Register user

3) Install Fluorine program

Unzip aspService.zip, go into the Fluorine file after unzipping. Use Notepad or other text editor tools to open "Web.config", and modify the code.
Find the two lines of code as following:

```
<add key="ConnStr"
value="uid=sa;password=password;database=flashchat;server=localhost" />
```

Modify the database server address, database id and password, database name in sql server as your configuration respectively.

4) Configure Flashchat

After finishing install chat program, log in chat as administrator, and then go to the administrator panel.
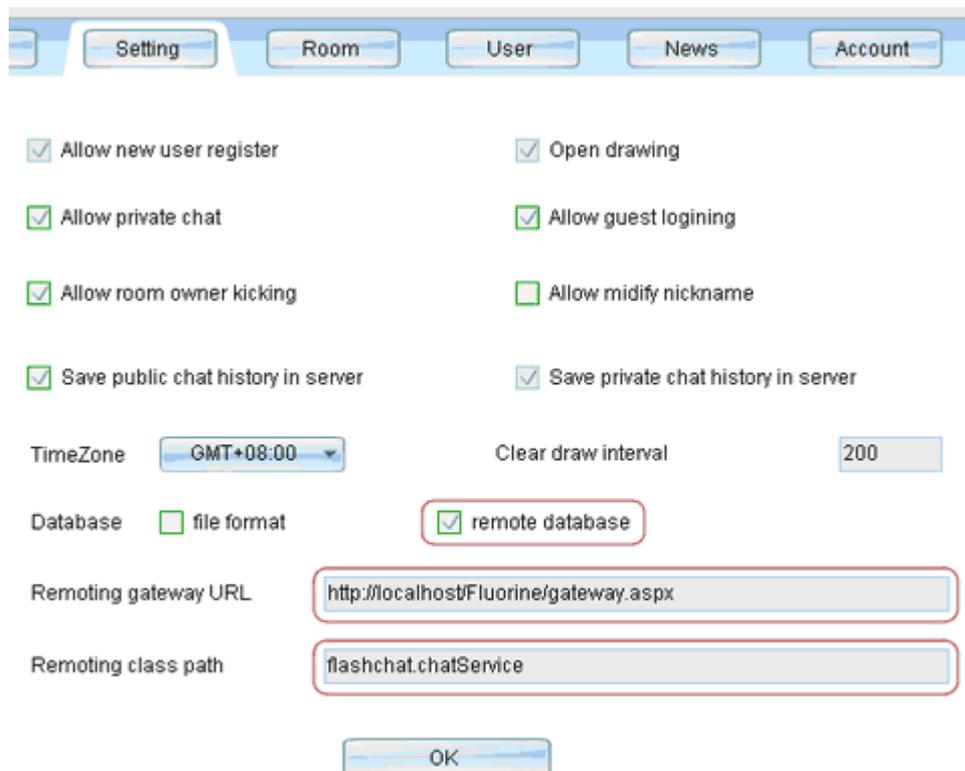
In the Setting panel, choose "remote database" in the red pane in the picture. In "Remoting gateway URL" text field, fill the absolute url of gateway.aspx. And then

fill "flashchat.chatService" (the class path of server object) in "Remoting class path" text field, save the setting.

● **ASP.NET Interface Description**

There is ASP.net reserved interface. Through this, you can save the chat users' information and chat history into your database on the website. And you also can check the user's identity through the interface.
Flash Remoting technology which is based on open source library Fluorine is used for ASP.net interface. The following is the usage description:

1) Server Environment

ASP.net + sql server
Remoting gateway interface program：Fluorine 2.0.7.824 for Windows

2) Server-side program

Remoting program file exists as Class file, and it is placed in "App_code" folder of Fluorine directory.

When Flash client invokes the method of the program object on the server, the class path must be appointed completely.

The path is related with the namespace of the class. For example, the namespace of class HelloWorld is defined as "test", its class path changes to test HelloWorld

3) Server program format

The class files must include by the following 3 methods, the name of method and parameter style must be the same as the following description, or the program can't work properly.

```
/*
 * used for login and identifying
 *
 * @ param username: User's name login
 * @ param pass: password, if login as a guest, don't fill in the blank
 * @ param isRegister: whether the user is new, if he/she is, it is true, or it is a
 * blank or false
 */
public string doLogin(string username, string pass, bool isRegistrt){
```

```
    /*
       Please put your code here to database connection processing
    */
    return Null/"guest"/"member"/"admin"
 }
```

doLogin Function must have the return value for Red5/FMS to receive, there are four kinds of return value
• Null: Null, login failed
• "guest": String, login succeed and login as a guest
• "member": String, login succeed and login as a register user
• "admin": String, login succeed and login as an administrator who has the highest purview.
Explanation: doLogin function is the most important, if it is wrong then nobody can login. So please check it very carefully before you modify.

```
 /*
  * change the password, only for the register users
  *
  * @ param username: User's login name
  * @ param oldPass: old pass word
  * @ param newPass: new pass word
  */
 public bool modifyPassword(string username, string oldPass, string newPass){
    /*
       Please put your code for checking your old password and setting your new
 password here
    */
    return true/false;
 }
```

"modifyPassword" function must have return value and it is true of false which is for showing whether the action is completed.

```
 /*
  * save the chat history
  *
  * @ param target: Receiving massage one's name, if the one is in the
  * chatting room then it is the room's name. If it is a private chat, it is the user's
  * name.
  * @ param ip: The user's IP address
```

```
* @ param username: Sending message user's name
* @ param message: Massage content
*/
public void saveChatLog(string target,string ip,string username,string message){
    /*
       Please put the code for saving the chat record into the database.
    */
}
```

The function doesn't need the return value.

Explanation: only the administrator can enable the function of saving chatting history in the control panel at the background, the function works.

Administrator Panel

If you login as an administrator, you will see the administer buttons on the top of the panel.
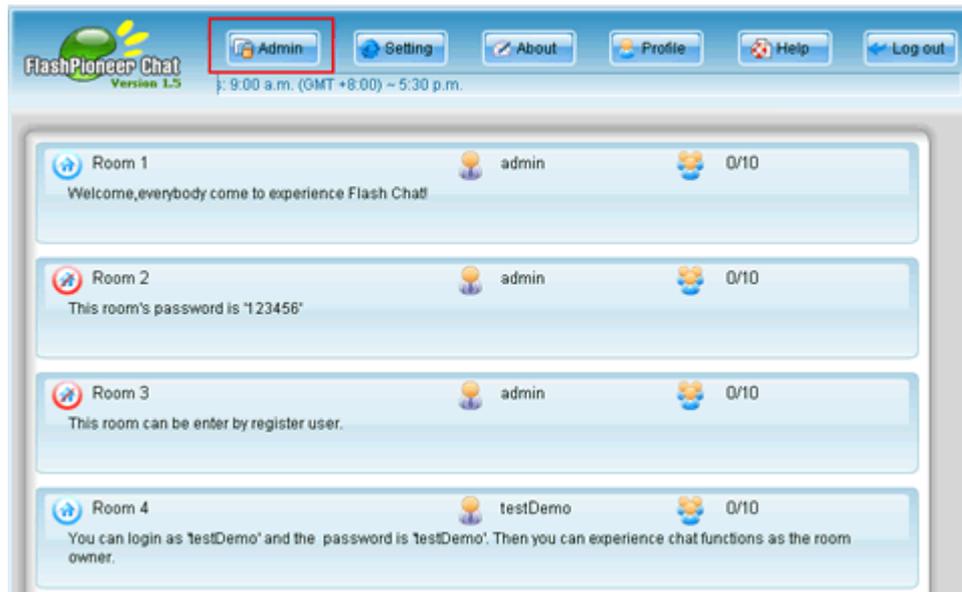
By clicking this button, you can enter the general management. You will see another row of buttons for management on the top of the panel. They are: Monitor, Setting, Room, User, News, Account, and Turn back.
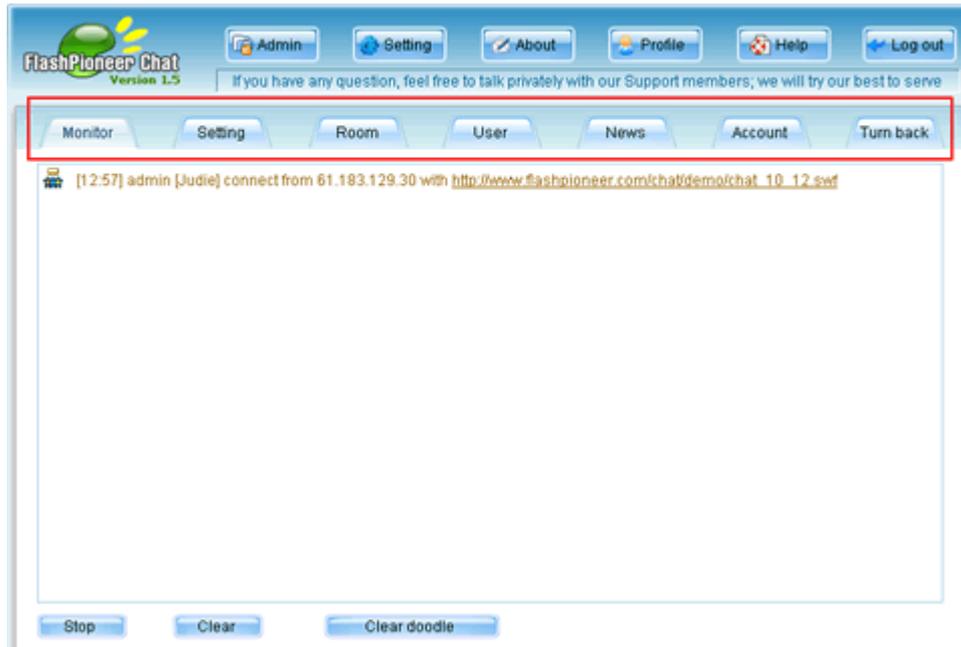
Monitor

Here the administrator can see all the user's log in/out information and chat history. There are three buttons at the bottom.
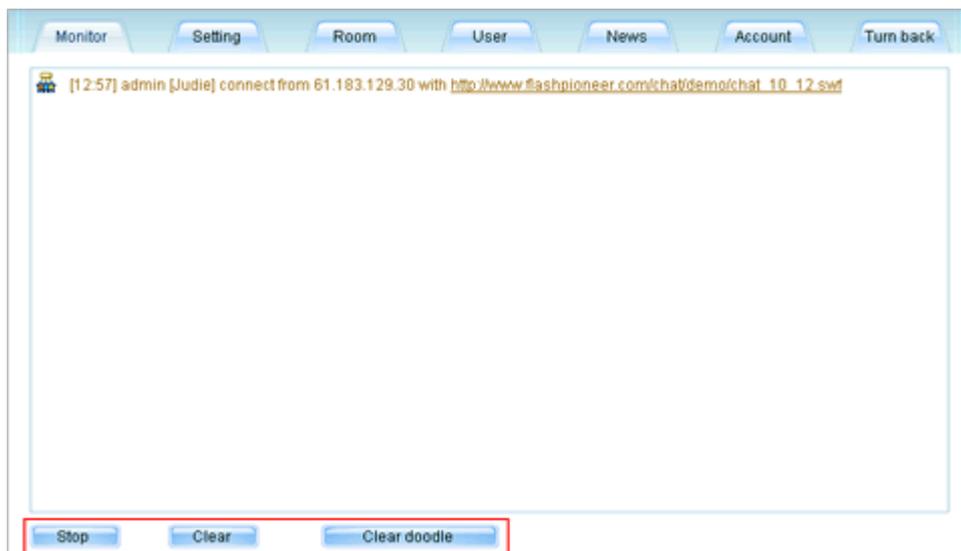
Stop: Stop monitoring. When you click the button, all the information (users' log in/out and chat history) won't be recorded. And the button changes into "Start". Re-click the button; you will start the monitoring function again.

Clear: Clear all the record including users' log in/out and chat history.

Clear Doodle: Clear the doodle immediately.

Setting

There are 8 options on the up part of the panel. If you want to enable the option, just select the square in front of it. And if the function has been started, there will be a mark in the square. Re-click to stop the function and the square showed empty.
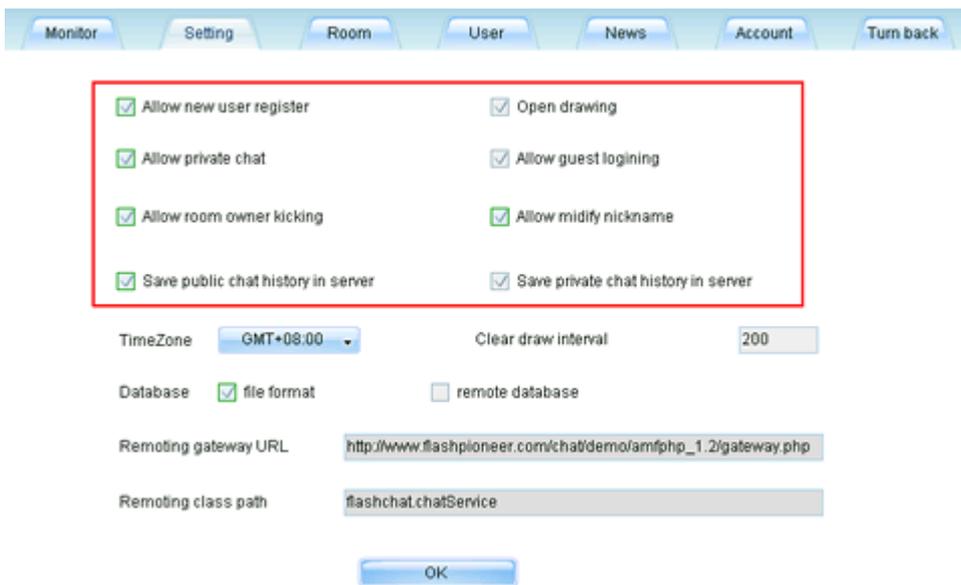
In the middle, Time Zone is for Chat time zone setting.
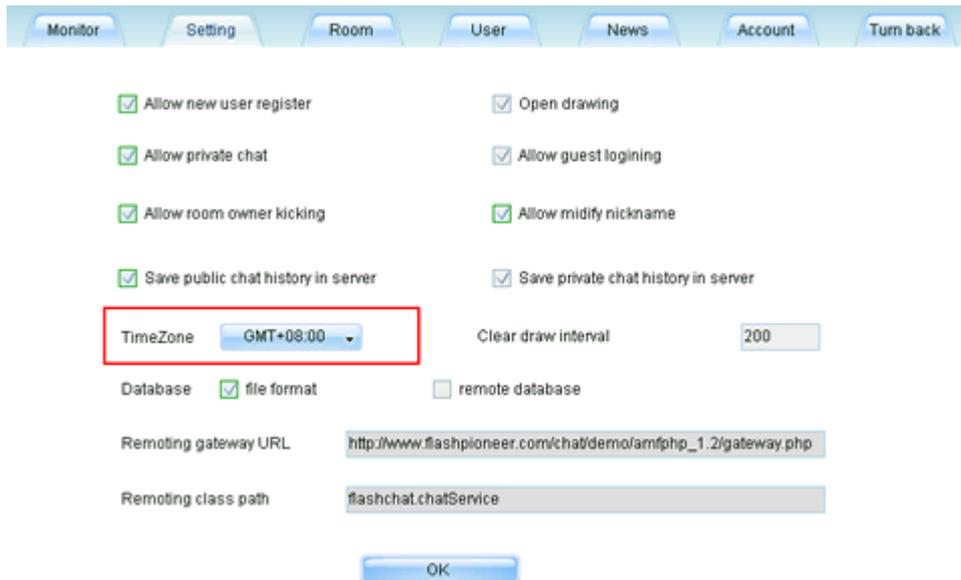
Clear draw interval is for the doodle. The doodle board will be cleared automatically by the interval you set.
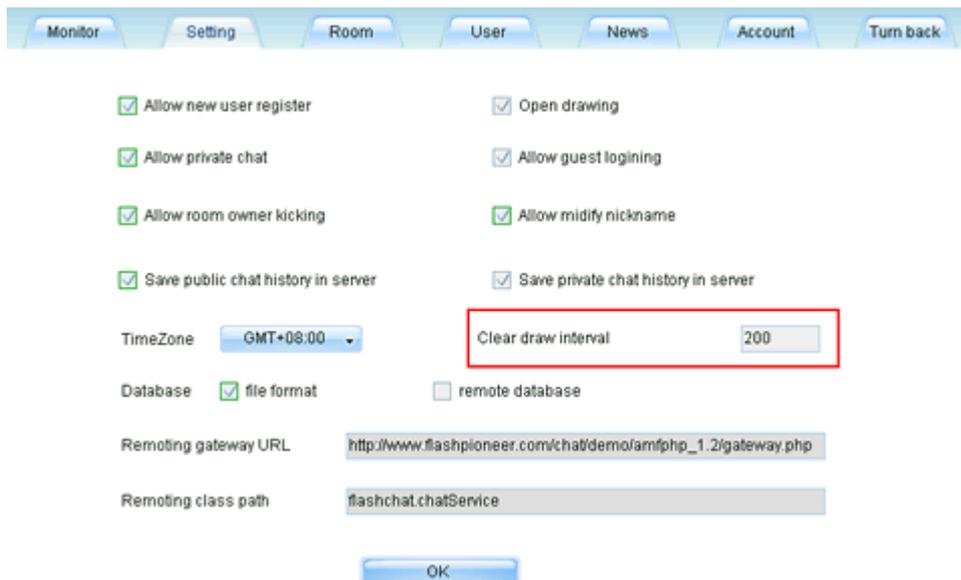
And the rest part is to set the method of storing user information and chat history. You can save them to a file or record them in a database, esp. to integrate with your other database. By default, the option file format is checked. If you want to save the user information and chat history to a remote database, please refer to the article Database Integration at first.

When you finish your setting, click "OK" to save the change.

Room

In this panel, the administrator can add and remove rooms. There are also many settings for the room:

- **Room title** --- the administrator can name the room by filling in this blank.
- **Room owner** --- room owners are pointed by administrator. And there can be more than one room owners in one chat room. And the room owners' names should be separated by "," without space
- **Max membership** --- the user number in the room can be limited by the admin. It can be set to 50, 100, or just 2.
- **Room password** --- the room also can be locked by a password set by the admin. Only the user who knows the password can enter the room.
- **Room type** --- the room is for all the users or member only. If you tick the square in front of "Member only", then only the register users can enter this room.
- **Welcome** --- here the admin can write down the welcome news to the user who enter the room. When he or she enters the room, he or she will see the news.
- **Room** --- here you can write something about the room. It maybe "Movie fan" or "sports", or "welcome to chat with the financial consultant". It is shown in the room list of the chat lobby.

The administrator writes the content here:

And it is shown here:

User

In this panel, the admin can ban the improper words in user register name or login name.

| Monitor | Setting | Room | User | News | Account | Turn back |

Filter username | Filter message | Ban IP:

[ ] Add filter | [ ] Add words | [ ] Add IP

fuck | fuck

Remove filter | Remove filter | Remove IP
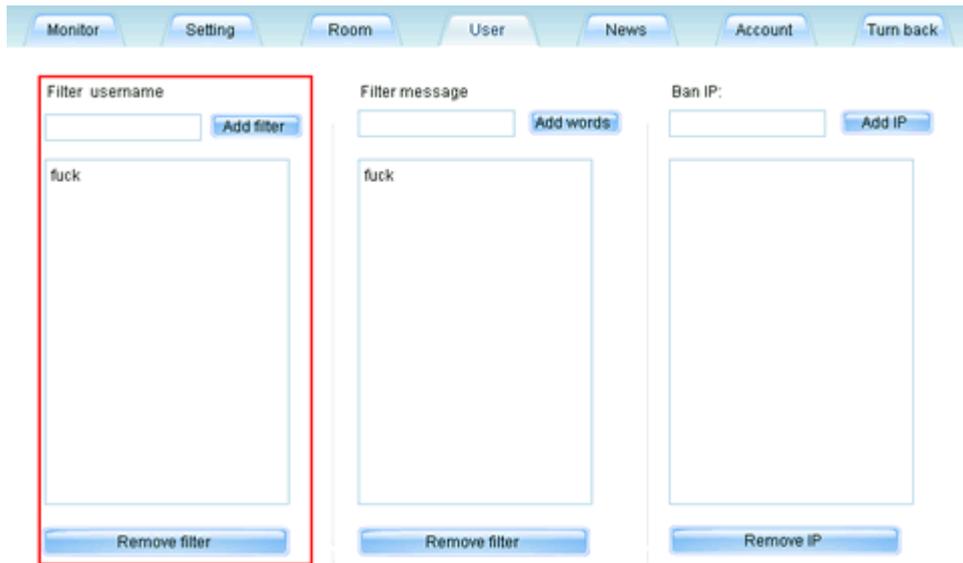
And you also can filter some improper words in the message. So when the user sends a message with a word you have set to be filtered, The word won't be shown in the chat.

| Monitor | Setting | Room | User | News | Account | Turn back |

Filter username | Filter message | Ban IP:

[ ] Add filter | [ ] Add words | [ ] Add IP

fuck | fuck

Remove filter | Remove filter | Remove IP
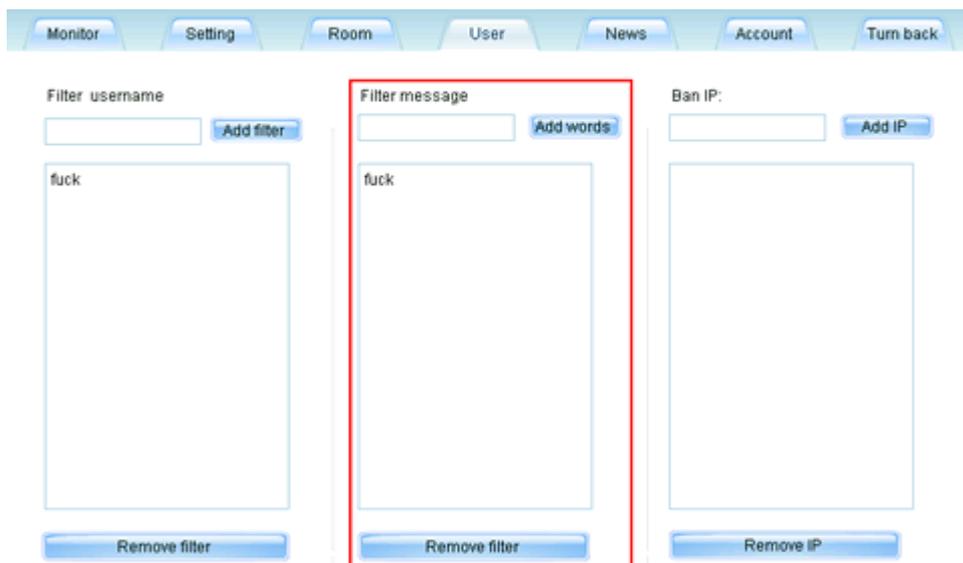
If you don't want someone has the access of your chat, you can just ban the user by his or her IP. Then the banned user can't login your chat with his or her IP.
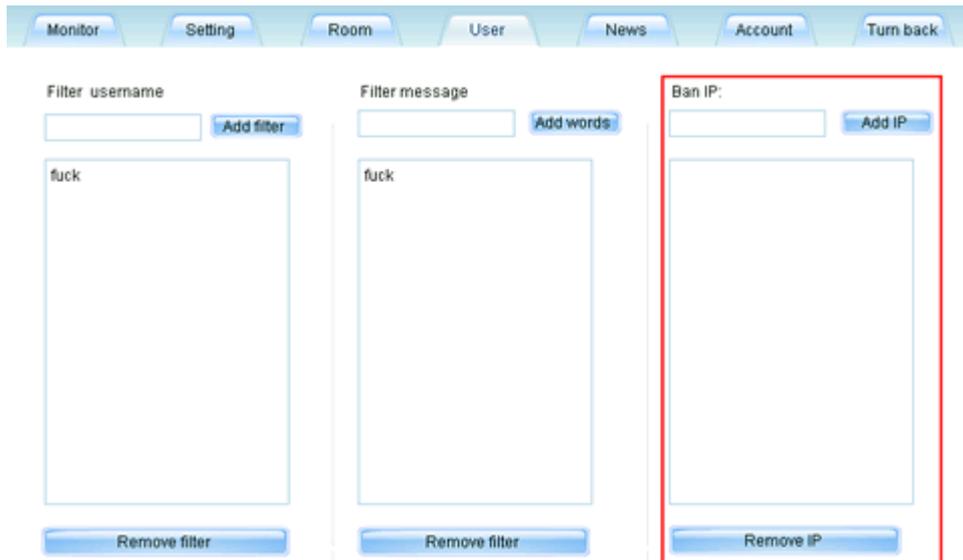
News

Here you can set the news on the top of the Chat. And you have choice on which room users can see the broadcast. If you choose Broadcast, the news will be shown scrolling on the bar at the top of Chat window. If you choose a room, then the news will be only shown in the public chat window of that room.
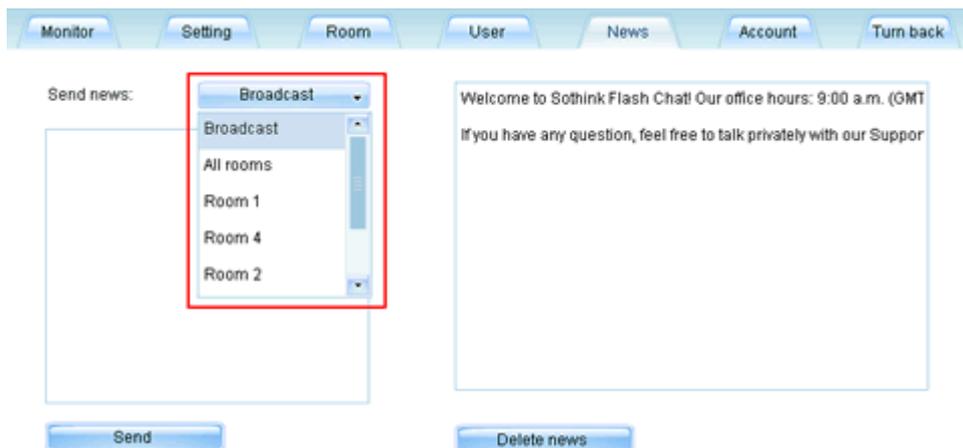
TIPS: When the admin edits the broadcast news, the system takes the first line as title. The user can click message in the rolling bar then see the whole message.

📚 Account

Administrator can set the password here.

📚 Appendix:

FMS Installation on Windows

1) Locate the installation file, FlashMediaServer2.exe. This file is on your installation CD, or you may have downloaded it.

2) Double-click the installer icon. The installer launches.

3) Follow the prompts in the installation wizard.

4) Accept the License Agreement to continue the installation process.

5) Enter a user name and password for the first valid server administrator. These values are written to the fms.ini file. (You can use the management console to add other administrators later.)

6) Enter the server ports that Flash Media Server should use.

7) Accept the default location for the Flash Media Server files, or enter a new location to which Flash Media Server should be installed.

8) Accept the default location for the Flash Media Server program shortcuts, or enter a new location to which the shortcuts should be installed.

9) Review your installation choices. Click Back to make any necessary changes.

10) Click Install.

11) The final installation step gives you the opportunity to view the Readme.htm file, start Flash Media Server, and select the option to start Flash Media Server manually when you reboot your computer. Select any options you'd like, and click Finish. The installation is complete. If you configured it to start automatically, the Flash Media Server service starts.

12) To start the server manually, select Start > Programs > Macromedia > Flash

---

Media Server 2 > Start Flash Media Server and Start Flash Media Admin Server.

13) To open the Flash Media Server management console, select Start > Programs > Macromedia > Flash Media Server 2 > Management Console.

FMS Installation on Linux

Red Hat Linux
1) Log in as a root user (required to install Flash Media Server).

2) Locate the installation file, FlashMediaServer2.tar.gz. This file is on your installation CD, or you may have downloaded it.

3) Copy the file to a directory on your local disk.

4) Open a shell window and switch to the directory with the installation file.

5) Unzip the installation file: **unzip flashmediaserver2.tar.gz**

6) Untar the installation file: **tar -xf flashmediaserver.tar** A directory with the installation program is created.

7) Switch to the following directory: **cd flashmediaserver2**

8) Start the installation program with the following command: **./installFMS** The installation program starts and displays a welcome message.

9) Press Enter to start the installation.

10) Follow the installation instructions on your screen.
Enter a user for Flash Media Server processes to run as. The default is the "nobody" user. (The user you select is also the owner of the Flash Media Server files.) Your choices are written to the fms.ini file; you can edit the fms.ini file to modify this and other security properties later, if needed.

11) Review the summary of the installation options you have chosen, which are displayed in the installer. The installation is complete. If you configured it to start automatically, the Flash Media Server service starts.

12) To start the server manually, type **fmsmgr server start**.

13) To log on to the Admin Service and perform administrative functions, open the management console by opening the fms2_console.swf file.

Other Linux System

the following operating processes have been approved in Fedora Core 7 system)

The operating processes are the same as the above.

Because library "libstdc++.so.5" hasn't been installed in Fedora system, which is an essential for Flash Media Server installation, please install it by using following command before you start the Media Flash Server installation:
yum install libstdc++.so.5

Since the installation script of Flash Media Serve will exam the platform and only RedHatLinux is permitted, please modify the command in step 8 to:
./installFMS -platformWarnOnly

When the installation finishes, don't start up the FMS.
Go into the installation category. By default, it is **/opt/macromedia/fms**
Execute the command:
ldd fmscore

The result is displayed as following:

```
linux-gate.so.1 =>   (0xffffe000)
libssl.so.4 => not found
libpthread.so.0 => /lib/tls/libpthread.so.0 (0xb7fd2000)
libnspr4.so => /usr/lib/libnspr4.so (0x0449b000)
libplc4.so => /usr/lib/nspr/libplc4.so (0xb7f93000)
libplds4.so => /usr/lib/nspr/libplds4.so (0xb7f90000)
librt.so.1 => /lib/tls/librt.so.1 (0xb7f87000)
libdl.so.2 => /lib/libdl.so.2 (0xb7f82000)
libstdc++.so.5 =>
/usr/lib/gcc-lib/i686-pc-linux-gnu/3.3.5-20050130/libstdc++.so.5
(0xb7ecd000)
libm.so.6 => /lib/tls/libm.so.6 (0xb7eab000)
libgcc_s.so.1 =>
/usr/lib/gcc-lib/i686-pc-linux-gnu/3.3.5-20050130/libgcc_s.so.1
(0xb7ea3000)
libc.so.6 => /lib/tls/libc.so.6 (0xb7d91000)
```

```
lib/ld-linux.so.2 (0xb7feb000)
libcrypto.so.4 => not found
```

libssl.so.4 and libcypto.so.4 which are the essential for can't be found, so the program can't work properly. Please add symbolic link manually:

cd /usr/lib
ln -s /lib/libssl.so.0.9.8b libssl.so.4
ln -s /lib/libcrypto.so.0.9.8b libcrypto.so.4

Last, execute following command to start up FMS.
service fms start

RED5 Installation on Windows

Download required files

Red5

Download the latest Red5 edition (currently is 0.6.3) for Windows.
Download page: http://www.osflash.org/red5/red5downloads

JDK:

Download from the official site. Red5 requires JDK1.5 or a higher version to be used and here it is JDK-1_5_0_11.
Download page: http://www.sun.com/download/

1) Install JDK
If you have installed JDK, please go to next step.

Double-click the installation file jdk-1_5_0_11-windows-i586-p.exe to start installation. The whole installation process is simple and users just need to pay attention to the selection of installation path.

The file path can only be composed by letter, number and underline. It can not contain blank space or any other special characters. The structure and level of directory are very clear, e.g. D:\JDK, so it is convenience for maintain later. Even if JDK is upgraded, it does not affect the use of other program because the path doesn't change.

2) System Environment Configuration:
Right click "My Computer", go to "Properties", "Advanced", and select "Environment Variables".
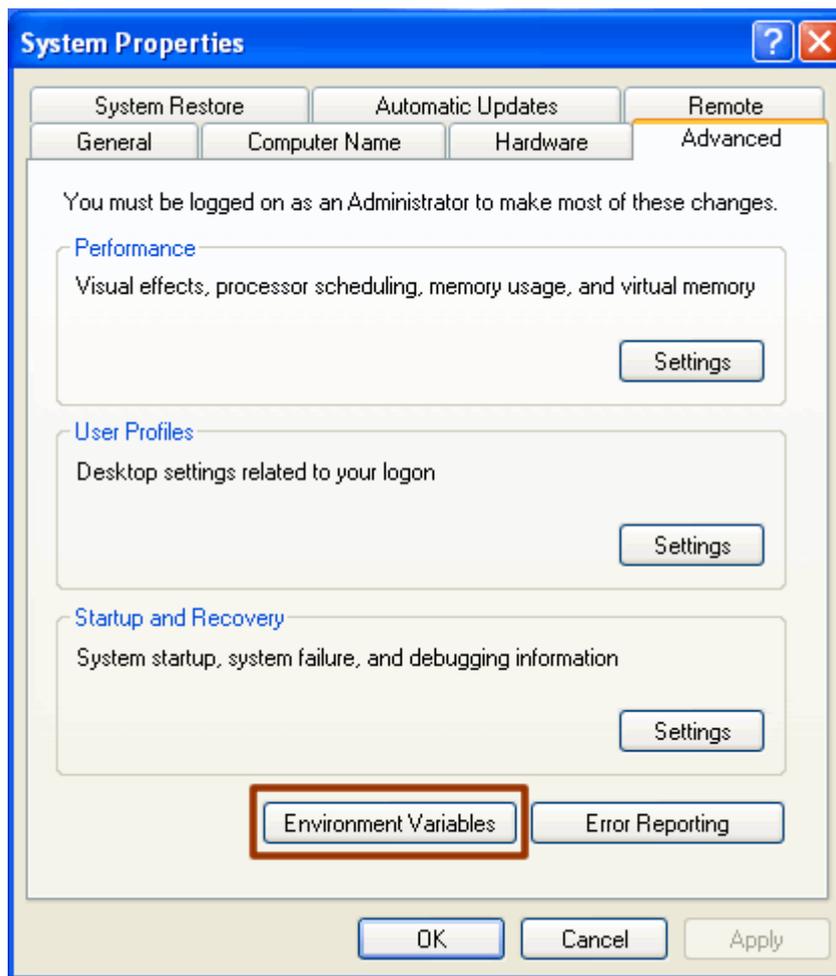
Add following variables: (Suppose the installation path of Java JDK is **D:\jdk**.)

Add variable PATH and set its value as **D:\jdk\bin**

Add variable CLASSPATH, value **.;D:\jdk\lib;D:\jdk\lib\tools.jar;D:\jdk\lib\dt.jar**

Add variable JAVA_HOME, value **D:\jdk**

Note: Here "." cannot be omitted.
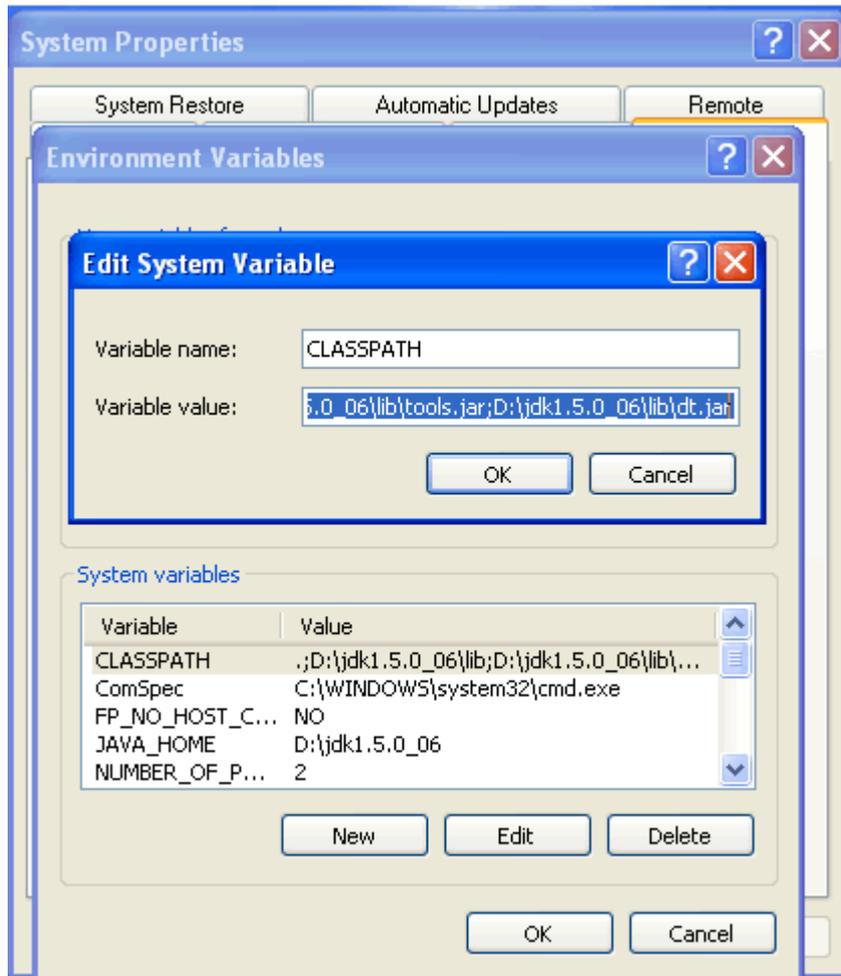
If variable name exists already, edit it and add relevant information.

When finishing configuration, we need to test if the JAVA developing environment has been installed successfully or not. Open the command-line window and input command "java" and execute it. If there is no error message that means the installation is successful. If not, please check if you have finished the above steps correctly.

3) Start the installation of Red5.
Double-click the downloaded file setup-red5-0.6.3.exe to show installation wizard.

Following the wizard, it requires to select a path for JAVA Runtime Environment (JRE). The installation will search for the path automatically, and if it failed, please define one manually.
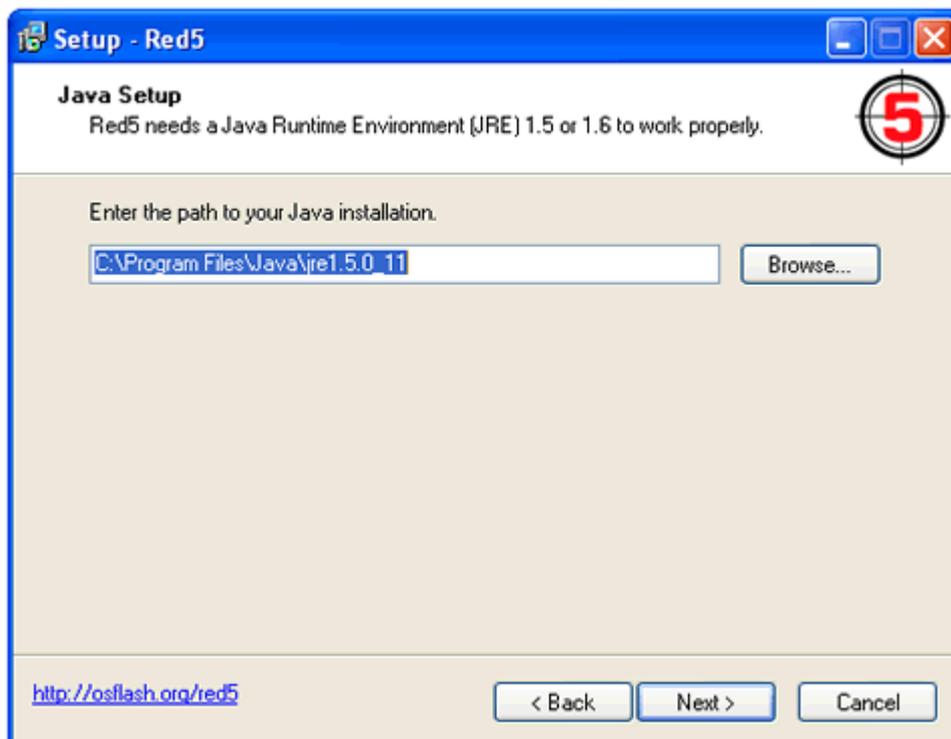

Then select the installation directory of Red5 and non-system disk is

recommended, for example: D:\red5.
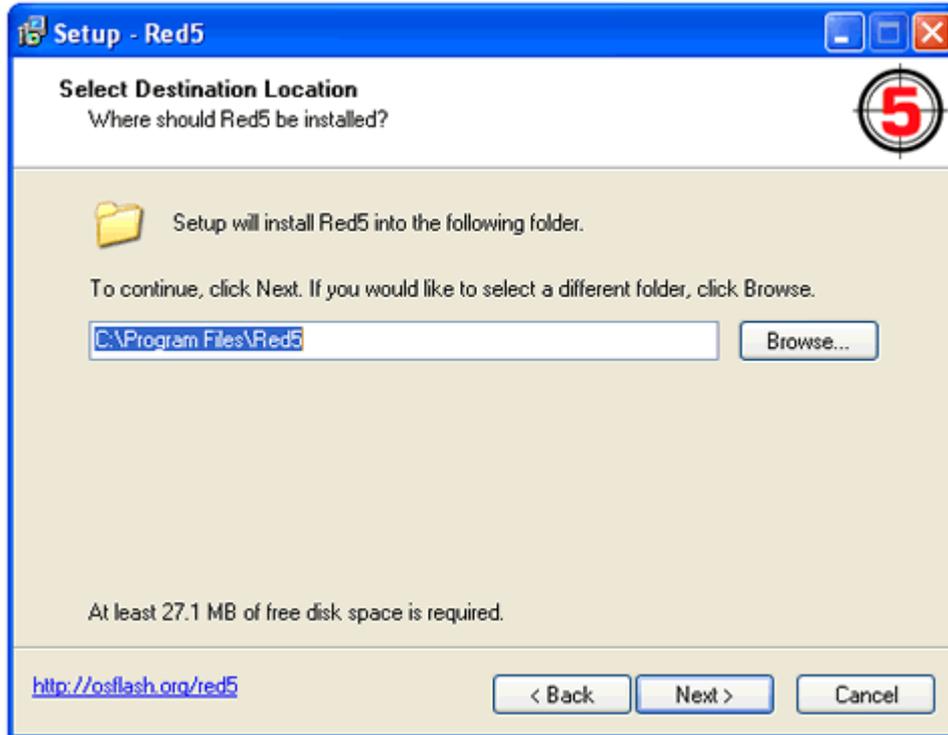
And then select components to install. By default, all items are selected and we do not suggest changing the settings.
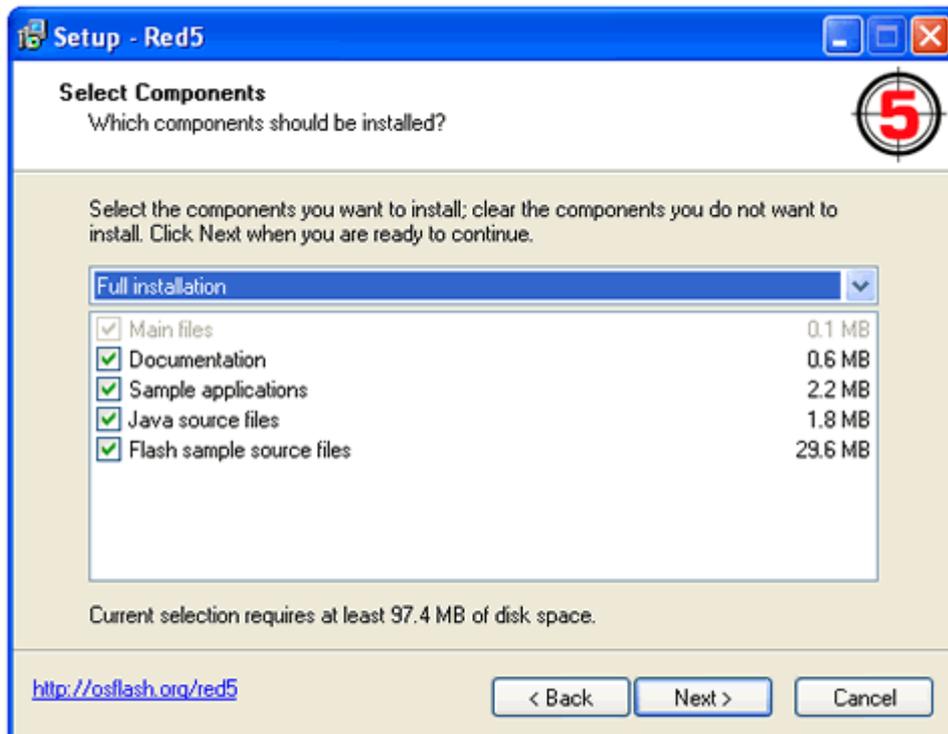
There are installation options in "Select Additional Tasks".
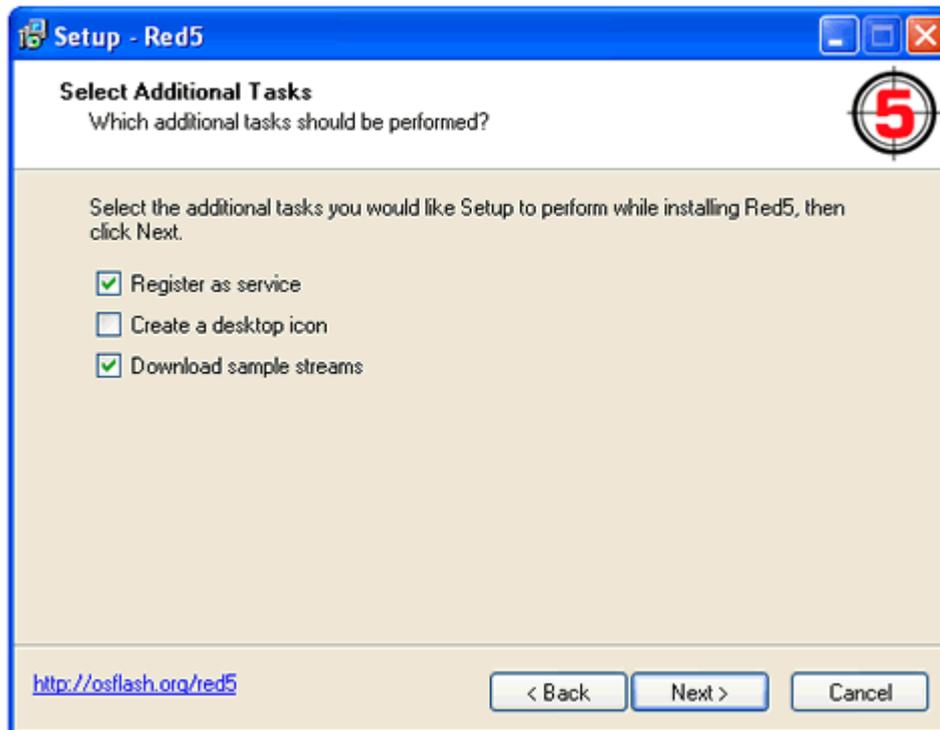
If you want to set it as system service, pick "Register as service". (Recommended)
If you want to "Create a desktop icon", tick the left checkbox.
If you want to "Download sample streams", tick the left checkbox.

4) Red5 Configuration
Last, pay attention to the system configuration of Red5.
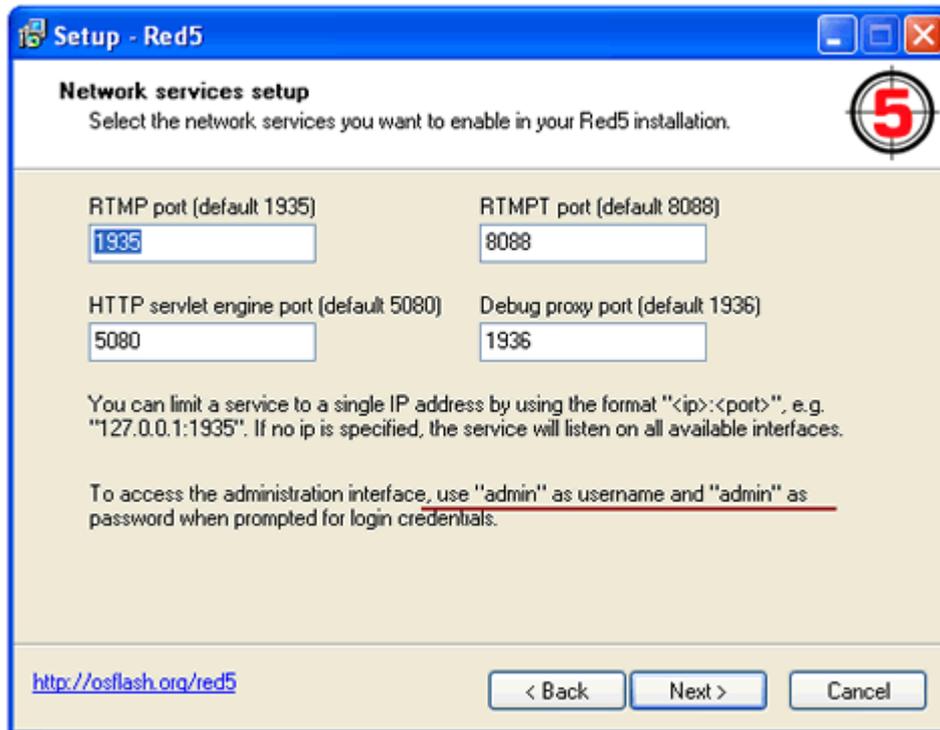
RTMP port is the serving port of Red5 and it is the communication port of server and client.

HTTP servlet engine port is the http communication port of Red5 and it is mostly used by administrator.

In default situation, no change is needed, unless a default port has already been occupied by other applications. If so, change it to an idle port. (Note: Only port number above 1024 is permitted.)

Besides, please pay attention to the notice, the password of Red5 default administrator account is "admin".

When installation is finished, we can still change the port. Enter into Red5 installation catalogue, open file "red5.properties" under folder "conf":

```
rtmp.host_port = 0.0.0.0:1982
http.host = 0.0.0.0
http.port = 5080
rtmpt.host = 0.0.0.0
rtmpt.port = 8088
debug_proxy.host_port = 1936
proxy_forward.host_port = 127.0.0.1:5080
rtmp.threadcount = 4
```

Here list the basic configuration, and for more details please consult the help file of Red5. After changing port, the new port does not go into effect until the Red5 server is restarted.

The whole installation is finished by now. We can find Services program in the "Management Tools" of "Control Panel". Start it, then find Red5.

Portable Media Seri...	Retrieves t...		Manual	Local System
Print Spooler	Loads files ...	Started	Automatic	Local System
Protected Storage	Provides pr...	Started	Automatic	Local System
QoS RSVP	Provides n...		Manual	Local System
Red5	Red5 Open...	Started	Automatic	Local System
Remote Access Aut...	Creates a ...		Manual	Local System
Remote Access Con...	Creates a ...	Started	Manual	Local System
Remote Desktop He...			Manual	Local System
Remote Procedure ...	Provides th...	Started	Automatic	Network S...

Start up the service, visit http://127.0.0.1:5080/admin, and log in as "admin" and so as the password. If everything is OK, it means Red5 has already worked.

Compile and install RED5 on Linux

FlashPioneer Video Chat is already provided a binary RED5 copy. If you want to compile RED5 server by yourself, read follow steps.

Installation Shortcut (for Linux)
Taking Fedora Linux as an example, there are five key steps to install:
1) Install Java 1.5JDK version or above
2) Install Apache Ant
3) Environment variable configuration
4) Install Red5 and compile
5) The system service configuration

More details as following:

1) Install Java developing environment
Download the latest JDK version of Linux from Sun official website. Here we use the version 1.5.0.11 and its downloaded file name is **jdk-1_5_0_11-linux-i586.bin**.

Only super user has the permission to install the software. You can input su at the

terminal and then input password to switch your account to super user.

Add the executable permission to the file: **chmod +x jdk-1_5_0_11-linux-i586.bin**
Execute the following command to start installation:
./jdk-1_5_0_11-linux-i586.bin

According to the reference install information, it recommends the installation path:
/usr/java

2) Install Apache Ant

Download the latest version Ant from the official
website: http://ant.apache.org/bindownload.cgi
Unzip to the proper path, recommended unzip path: /usr/ant

3) Configuring environment variable

There are three methods:
- ✧ Modify /etc/profile file
- ✧ Modify the .bashrc file under the user directory
- ✧ Modify directly under shell

Since we are going to set Red5 as the system service and configure the
environment variable later in the service script directly, we choose method 3 --
make modification directly under shell.

Input command directly through Terminal:
export ANT_HOME=/usr/ant
export JAVA_HOME=/usr/java
export PATH=$PATH:$JAVA_HOME/bin:$ANT_HOME/bin
export CLASSPATH=.:$JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar

4) Install Red5 and compile

Download the latest version for Linux from the official website, so far it is 0.6.3
Download file name: **red5-0.6.3.tar.gz**
To unzip the file, it's commended to unzip to the directory of /opt/red5.

Input command to enter red5 directory: **cd /opt/red5**
Input command to compile: **ant**

5) System service configuration

Save the following script as red5, which is used to start Red5 service.

```
#!/bin/sh
#
```

```
# Startup script for Red5 flash streaming server
#
# chkconfig: 345 81 81
# description: RED5 by java
#
# processname: java (unfortunately)
# pidfile: /var/run/red5.pid
# config: /etc/red5.conf

# Source function library.

. /etc/rc.d/init.d/functions

PID_FILE=/var/run/red5.pid
PID=`ps ax |grep java|grep red5|awk '{print $1;}'`
RETVAL=0

start() {
echo -n $"Starting $DESCR: "
# daemon java $OPTIONS > /dev/null 2>&1 &

export ANT_HOME=/usr/ant
export JAVA_HOME=/usr/java
export PATH=$PATH:$JAVA_HOME/bin:$ANT_HOME/bin
export CLASSPATH=.:$JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar

exec $JAVA_HOME/bin/java -Djava.security.manager
-Djava.security.policy=/opt/red5/conf/red5.policy -cp
/opt/red5/red5.jar:conf:/opt/red5/conf org.red5.server.Standalone > /dev/null
2>&1 & RETVAL=$?

[ $RETVAL = 0 ] && touch /var/lock/subsys/red5 && echo $!>$PID_FILE &&
echo_success
echo
return $RETVAL
}
stop() {
echo -n $"Stopping $DESCR: "
#killproc $PID_FILE
[[ $PID != "" ]] && success && kill $PID || failure
RETVAL=$?
echo
[ $RETVAL = 0 ] && rm -f /var/lock/subsys/red5 $PID_FILE
```

```
}

# See how we were called.
case "$1" in
start)
start
;;
stop)
stop
;;
restart)
stop
sleep 3
start
;;
*)
echo $"Usage: $DESCR {start|stop|restart}"
exit 1
esac

exit $RETVAL
```

Move the file to the path: **/etc/init.d**
Execute the command at Terminal as super user: **chkconfig --add red5**

If it doesn't work, please make sure that the path of command **chkconfig** is correct. Use the following command to check:
Check the installation of chkconfig: **rpm –qa|grep chkconfig**
Chkconfig file path: **whereis chkconfig**

E.g. in Fedora Linux system, the result of performing instruction is as following:

```
$ rpm -qa|grep chkconfig
chkconfig-1.3.34-1
$ whereis chkconfig
chkconfig: /sbin/chkconfig /usr/share/man/man8/chkconfig.8.gz
```

As the above shows, the path of command **chkconfig** is **/sbin/chkconfig**, so we change the command: **/sbin/chkconfig --add red5**
Using the following command can make red5 start the service: **/etc/init.d/red5 start**

If the installation information here is not helpful enough, you may view the official site for details.

Make your client setup program

Since version 1.7, Chat provides the function that enables users to create their own client installation file. So the chat users can just log in the chatting system in desktop environment instead of logging in the web site through browser. Moreover, during the installation, users can define skin style and language. All these advantages accelerate a lot the Client's loading speed and visiting speed.

Instructions:

1) After unzipping the package, open the file "setting.xml" which is in the directory "client" and configure it according to previous configuration tutorial and set the relevant parameters of chat login in this file.

2) Enter directory "tools/clientInstallerMaker" and execute the program Generator.exe. After finishing, the Client setup program--- "ClientSetup.exe" has been generated under OutPut subdirectory. Please offer this installation program to your client users.

Notice:

Please make sure that video chat software package's directory structure is not changed so that Generator.exe can find the necessary client installation file. The script generated by this installation package is based on Nullsoft install System, so it must be used under the Windows operating system.

Tips:
If you are familiar with the script of Nullsoft Install System, you can edit setup.nsi file in clientInstallerMaker directory to generate the client installation program which meets your own needs.

Skin Customization

Default location of interface style package is in directory "theme", and one directory stands for one style.

1. Under directory **theme** create a new directory, which should be named as the style name to be created. The name can only be composed by numbers, letters and "_", what's more, "_" cannot be placed at the beginning.

2. Copy all the files under directory **themes/default** into the new directory, including several swf files, theme.xml and color.xml.

1) These swf files respectively stand for some parts of the interface, and their functions are defined in theme.xml.

```
<?xml version="1.0" encoding="UTF-8" ?>
<skins>

<BACKGROUND>
    <item name="Bus" value="bus.swf" />
<item name="Christmas" value="christmas.swf" />
<item name="City Sky" value="citysky.swf" />
<item name="Dreamland" value="dreamland.swf" />
<item name="Fallen Leaves" value="fallen leaves.swf" />
<item name="Flower Bubbles" value="flower bubbles.swf" />
<item name="Grass Land" value="grassland.swf" />
<item name="Grass Plot" value="grassplot.swf" />
<item name="Heaven" value="heaven.swf" />
<item name="Leaves Boat" value="leaves boat.swf" />
<item name="Lovely Cloth" value="lovely cloth.swf" />
<item name="My Space" value="my space.swf" />
<item name="Night Sky" value="nightsky.swf" />
<item name="Pink Dream" value="pinkdream.swf" />
<item name="Snow Kingdom" value="snow kingdom.swf" />
<item name="Snow Night" value="snow night.swf" />
    </BACKGROUND>
```
Background animation of text area.

```
<LOGO value = "logo.swf" />
```
Your logo file path.

```
<MAIN_BG value = "main_bg.swf" />
```
Main background

<CLOSE_ON value="close_over.swf" />
<CLOSE_OUT value="close_out.swf" />
Window close button. CLOSE_ON: button status when mouse over; CLOSE_OUT: button status when mouse out.

<MIN_ON value="min_over.swf" />
<MIN_OUT value="min_out.swf" />
Window minimum button. MIN_ON: button status when mouse over; MIN_OUT: button status when mouse out.

<BTN_ON value = "btn_over.swf" />
<BTN_OUT value = "btn_out.swf" />
Style of common button. BTN_ON: button status when mouse over; BTN_OUT: button status when mouse out.

<COMBO_BTN_ON value = "combo_btn_over.swf" />
<COMBO_BTN_OUT value = "combo_btn_out.swf" />
Style of ComboBox button.

<TAB_BTN_ON value = "tab_btn_over.swf" />
<TAB_BTN_OUT value = "tab_btn_out.swf" />
Style of Tab

<CHATTOOL_BTN_ON value = "font_btn_over.swf" />
<CHATTOOL_BTN_OUT value = "font_btn_out.swf" />
Style of Font button.

<ABOUT value = "about.swf" />
"About" dialog.

<PANEL_BG value = "panel_bg.swf" />
Common window background

<VIDEO_BAR value = "video_bar.swf" />
Video window title bar

<JOINTIP_BG value = "jointip_bg.swf" />
Joining tip window background

<CHATROOM_BG value = "chat_bg.swf" />
<CHATROOM_BAR value = "chat_bar.swf" />
Chat room background and bar

<CHATTOOL_BG value = "chat_tool_bg.swf" />
Chat tool background

<CHATROOM_BACK_ON value = "back_lobby_over.swf" />
<CHATROOM_BACK_OUT value = "back_lobby_out.swf" />
Button style of back to lobby

<CHATROOM_VIEW_ON value = "viewlog_over.swf" />
<CHATROOM_VIEW_OUT value = "viewlog_out.swf" />
Button style of view chat history

<ONLINE_BG value = "online_bg.swf" />
Online user list background

<NEWS_BG value = "news_bg.swf"/>
News panel background

<ROOMS_BG value = "rooms_bg.swf" />
Room list background

<ROOM_ON value = "room_on.swf" />
Room background when mouse over
<ROOM_OUT value = "room_out.swf" />
Room background when mouse out

<ROOM_PRIVATE value = "room_private.swf" />
Private room icon
<ROOM_PUBLIC value = "room_public.swf" />
Public room icon
<ROOM_OWNER value = "room_owner.swf" />
Room owner icon
<ROOM_SUM value = "room_sum.swf" />
Icon for the number of people

<ICON_MANAGE value = "icon_manage.swf" />
<ICON_CONFIG value = "icon_config.swf" />
<ICON_ABOUT value = "icon_about.swf" />
<ICON_HELP value = "icon_help.swf" />
<ICON_PROFILE value = "icon_profile.swf" />
<ICON_LOGOUT value = "icon_logout.swf" />
Icon of top navigation button

<ICON_HOME value = "icon_home.swf" />
Home icon

<PREMSG_BG value = "premsg_bg.swf" />
Predefined message background
<PREMSG_ADD_ON value = "premsg_add_on.swf" />
<PREMSG_ADD_OUT value = "premsg_add_out.swf" />
Button for add predefined message
<PREMSG_DEL_ON value = "premsg_del_on.swf" />
<PREMSG_DEL_OUT value = "premsg_del_out.swf" />
Button for delete predefined message

<SOUND_BG value = "sound_bg.swf" />
Sound panel background

<TOPNAV_ON value = "topnav_on.swf" />
<TOPNAV_OUT value = "topnav_out.swf" />
Top navigation button style

<SLIDER_TRACK value = "slider_track.swf" />
Sound slider track
<SLIDER_ARROW value = "slider_arrow.swf" />
Sound slider drag bar

Scroll bar's style
<SCROLLUP_ON value = "scrollup_on.swf" />
<SCROLLUP_OUT value = "scrollup_out.swf" />
Up arrow
<SCROLLDOWN_ON value = "scrolldown_on.swf" />
<SCROLLDOWN_OUT value = "scrolldown_out.swf" />
Down arrow
<SCROLLTRACK value = "scrolltrack.swf" />
Scroll bar track
<SCROLLBAR value = "scrollbar.swf" />
Scroll bar's drag bar

<ADMIN_BG value = "admin_bg.swf" />
Management panel background
<ADMIN_BAR value = "admin_bar.swf" />
Management panel title bar background

</skins>

To publish swf file, please use Adobe Flash or some other tool, such as Sothink SWF Quicker

During the creation of SWF file, please pay attention to the following notices:

1. Don't use symbol, please directly draw vector in stage
2. Try your best to keep the size same as original style file.
3. The top left corner coordinate of all the things must locate at (0,0) in the stage.

2) Color.xml, defined global color setting.

<?xml version="1.0" encoding="UTF-8"?>
<SkinColor>

<textColor value = "0x011001" />
Static text color
<textHoverColor value = "0x003366" />
Text color when mouse over
<textDisabled value = "0x666666" />
Text color when disabled
<inputColor value = "0x011001" />
Input text color
<textarea_borderColor value = "0xA8D0E6" />
Text area border color
<textarea_background value = "0xFDFDFD" />
Text area background color
<textarea_disabledBackground value = "0xDEDEDE" />
Text area background color when text area is disabled

<tooltip_color value = "0x000000" />
<tooltip_corner value = "0" />
<tooltip_border value = "0x111111" />
<tooltip_background value = "0xFFFFDD" />
<tooltip_shadow value = "0x000000" />
Style of tooltip text window

<alert_shadow value = "0x6699CC" />
Alert window shadow color
<scrollsign_color value = "0xBED9E7" />
Scroll bar's drag bar color

<news_textColor value = "0x006699" />
Scrolling news text color
<news_rollOverColor value = "0x006600" />
Scrolling news text color when mouse over

<list_textColor value = "0x222222" />

List component text color
<list_background value = "0xFDFDFD" />
List component background color
<list_borderColor value = "0xA8D0E6" />
List component border color
<list_rollOverColor value = "0xECF3F9" />
List component background color when mouse over
<list_rollOutColor value = "0xCBDFEF" />
List component background color when mouse out
<list_selectedColor value = "0xCBDFEF" />
Selected item background color
<list_selectedTextColor value = "0x222222" />
Selected item text color
<list_rollOverTextColor value = "0x111111" />
Text color when mouse over

Picture list component style
<tile_highlightColor value = "0x8DA9DC" />
Highlight color when mouse over
<tile_background value = "0xECF3F9" />
Background color
<tile_borderColor value = "0xA8D0E6" />
Border color
<tile_cellBorderColor value = "0xDEDEDE" />
Cell border color
<tile_cellBackground value = "0xFAFAFA" />
Cell background color

<panel_titleColor value = "0x990000" />
Panel title text color
<panel_shadow value = "0x6699CC" />
Panel shadow color

<paper_color value = "0xFFFFFF" />
<paper_border value = "0xA8D0E6" />
<paper_background value = "0xEFEFEF" />
Drawing board's border color and background color

Checkbox style
<check_borderColor value = "0x97B4C0" />
Checkbox border color
<check_SelectBorderColor value = "0x009900" />
Checkbox border color when selected
<check_SelectColor value = "0x5B8797" />

Checkbox text color when it is selected

<check_background value = "0xEFEFEF" />

Checkbox background color

<check_selectBackColor value = "0xE4F0F6" />

Checkbox background color when it is selected

<chat_textColor value = "0x565656" />

Chat text color

<chat_logtextColor value = "0x999999" />

Text color of chat history when entered room

<chat_textLinkColor value = "0x565656" />

Text link color

<chat_textHoverColor value = "0x990000" />

Text color when mouse over

<chat_nickNameColor value = "0x006699" />

User's nickname color

<chat_noticeMsgColor value = "0x990000" />

Notice message text color

<chat_broadMsgColor value = "0xCC3300" />

Broadcast message color

<chat_meBgColor value = "0xAECDE6" />

Current user background color in user list

<chat_ownerNameColor value = "0x006699" />

Room owner name text color in user list

<chat_ownerNameBgColor value = "0xEDEDED" />

Room owner name background color in user list

<chat_adminNameColor value = "0x990000" />

Administrator name text color in user list

<chat_adminNameBgColor value = "0xD3E9F2" />

Administrator name background color in user list

<video_borderColor value ="0xA9BAD3" />
<video_backgroundColor value ="0xFEFEFE" />

Video window's border color and background color

</SkinColor>

3) Modify the file setting.xml.

Change the property value of theme node to the new created style's name. Then re-open chat. If the program is embedded in the web page, please refresh the page and you can see the new style.