

HOM **MEETING**

TECHNICAL PAPER

Getting Started with Web Office System

April, 2005

A HomeMeeting Inc. Official Document

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Introduction

Welcome to *Getting Started with Web Office System*. This guide should be used after your System Administrator has installed and configured the Web Office server software.

HomeMeeting Web Office multimedia communications system consists of four major components: MCU meeting server, web application, and two clients — HomeMeeting Messenger and JoinNet.

-  MCU meeting server: JoinNet connects to MCU meeting server during online meeting or recording playback.
-  Web application: Web application facilitates user management, presence awareness, and directs JoinNet to the associated MCU meeting server.
-  Messenger client: HomeMeeting Messenger is digital communication software that connects you to other Web Office users. Its features include text messaging, adding personal contact, visiting owner's web office, inviting users to join online meeting and more. See *Messenger User Guide* for more details.
-  JoinNet client: JoinNet is the multimedia client software for online meeting or recording playback. JoinNet is launched by a simple click at website or email integrated with the MCU meeting server, and JoinNet can be launched by HomeMeeting Messenger as well. See *JoinNet User Guide* for more details.

Web Office's web application displays a list of Owners on an automated web page. Visitors can click on any of the Owners to join online meetings with the Owner or leave messages to the Owner if the Owner is not online or busy— this offering an answering machine like feature. The entire meeting session can be recorded for future online playback or download by the Owner. The Owners of Web Office can start instant meetings, check recording message, change personal profile, send out meeting invitations, and more.

When JoinNet connecting to the MCU meeting server, you can see and hear your colleagues while you make presentation, send instant messages, work on a shared interactive board and shared whiteboard, browse the same web, and share your desktop as though everyone were in the same room.

This paper provides information and tips for a successful Web Office meeting, including:

- For System Administrator: Owner Account Management
- For Web Office Owner: Personal Office Management
- For Web Office Visitor: Visit Owner & Accept Invitation
- Beyond Personal Office: Examples of Web Office Application

Technical Requirements

General Requirements for Using Web Office System

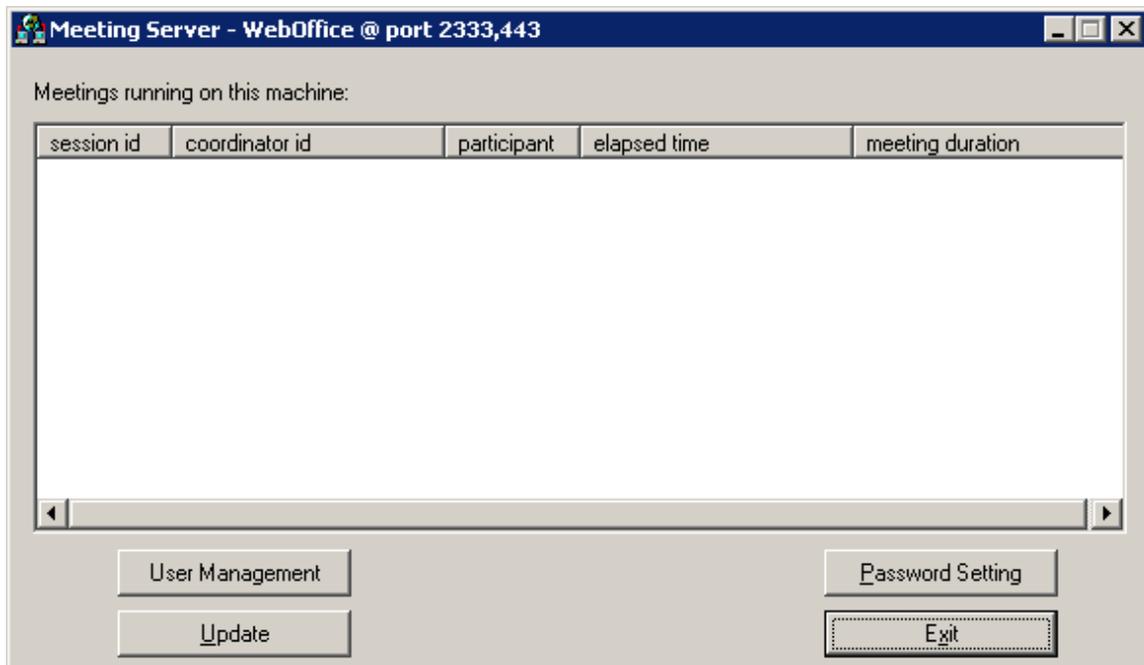
- Processor: Pentium III 333 MHz or higher, 600 MHz minimum CPU is recommended
- Operating Systems: Windows 98 SE, Windows ME, Windows 2000 Professional, Windows 2000 Server, Windows XP
- RAM: 64 MB or higher, 256 MB is recommended
- Browser: Microsoft Internet Explorer 5.0 or higher, Mozilla Firefox
- Monitor: 256-color display adapter at 800x600 resolution (16 bit-color at 1024x768 resolution or higher are recommended)
- Client Software: Installation of JoinNet and HomeMeeting Messenger
- Required Readings: *JoinNet User Guide* and *Messenger User Guide*
- Bandwidth Requirement: 24 Kbps or faster Internet connection is required or 14.4 Kbps for a stop-video meeting
- Sound Card: You must have a full-duplex sound card to transmit and receive audio
- Microphone and Speaker: Use a headset that incorporates a microphone and headphone(s) or a speakerphone that includes “Echo Cancellation” technology is recommended. A headset that contains a boom microphone performs best. If a desktop microphone is used, a unidirectional dynamic microphone with batteries is preferred. If you do not use a microphone that includes a headset, other participants in the meeting will experience echo and feedback problems
- Video Camera: No special software or hardware is required to receive video, but USB PC camera is strongly recommended

For System Administrator

After the installation of Web Office system (see *Web Office Installation Guide*), the System Administrator needs to create Owner Account to the MCU meeting server. This can be done in three different ways: (1) MCU console, (2) web page, and (3) remote manager (client software).

User Management via MCU Console

After clicking on the MCU icon  at the taskbar, the console of the MCU meeting server will pop up:

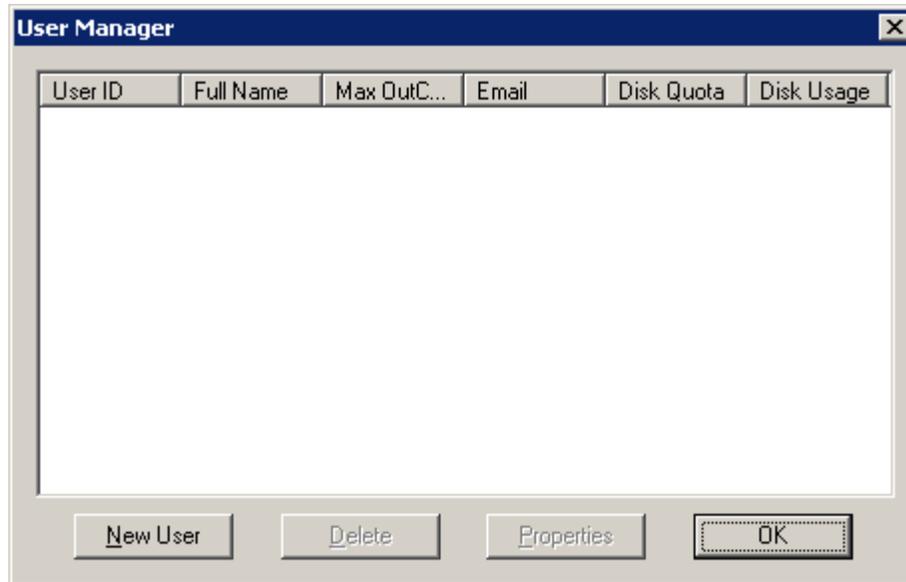


When you click the “Update” button, the following information per meeting is display when in session:

- Session ID: NOT USED.
- Coordinator ID: The name of the coordinator (Web Office Owner).
- Participant: A/B/Cu/Dm:
 - A is the total number of visits (may not be in the class right now).
 - B is the current total number of participants.
 - C is the number of participants using unicast.
 - D is the number of participants using multicast.
- Elapsed time: the elapsed time of current session.
- Duration: NOT USED.

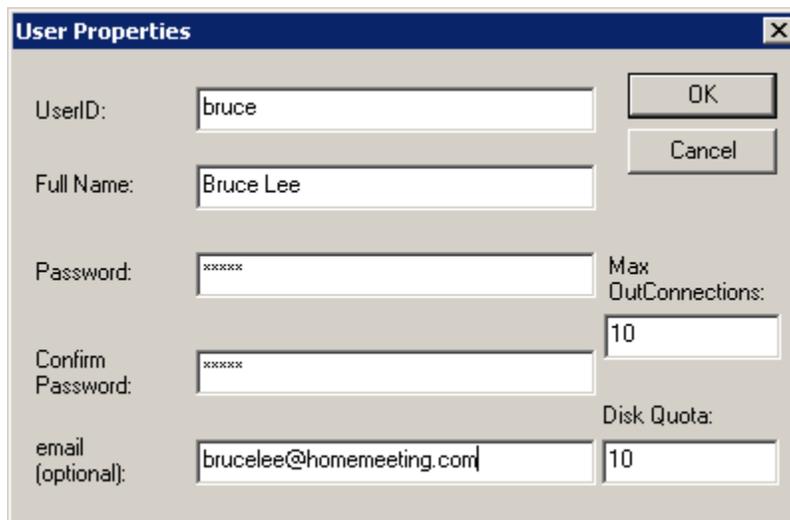
Create an Owner Account

To add, modify, or delete an owner account, click the “User Management” button and enter the administrator’s password, then a User Manager window shall show up.



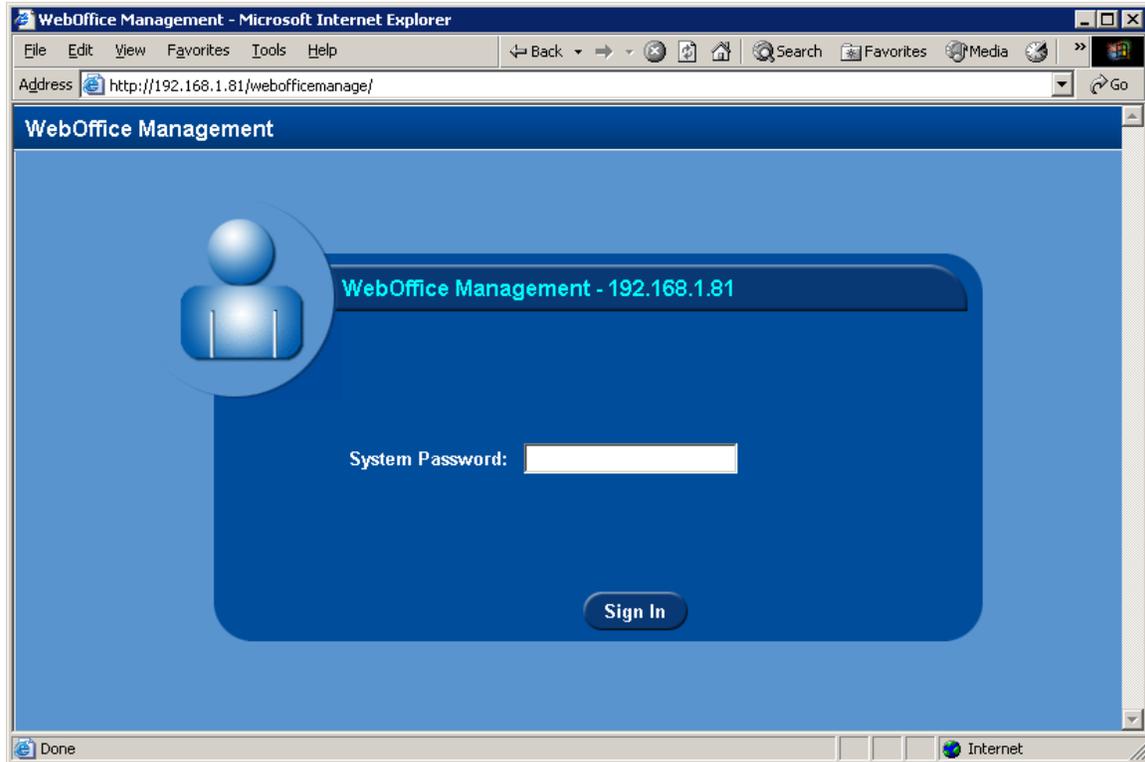
Click on “New User” to add Owner Account to the MCU server. Each user has the following attributes:

- UserID: the ID of the user
- Full Name: display name of the user
- Password: used to authenticate the user
- Email (optional): for e-mail notification
- Max Guests: maximum number of guests simultaneously connected
- Disk Quota: storage space (in Mega bytes) for recording files

The image shows a dialog box titled "User Properties" with a close button in the top right corner. It contains several input fields and two buttons: "OK" and "Cancel". The fields are: "UserID:" with the value "bruce"; "Full Name:" with the value "Bruce Lee"; "Password:" with masked characters "*****"; "Confirm Password:" with masked characters "*****"; "email (optional):" with the value "brucelee@homemeeting.com"; "Max OutConnections:" with the value "10"; and "Disk Quota:" with the value "10".

User Management via Web Office Management

Create Owner account(s) at the MCU meeting server. Simply browse the following URL: http://server_ip/webofficemanage/, you will see the manage login web page.



Once administrator login, Web Office Management allows system administrator to do the followings:

1. Add office Owner account: click Users and Groups→User List→Add New User.
2. Add office directory: click Users and Groups→Group List→Add New Group
3. Change video size: click System→Configuration and choose options
4. Change bandwidth settings: click System→Configuration and choose options
5. See license details: click System→License
6. Change password: click System→Password
7. Start/stop MCU: click System→Status and Info

Items 3 to 7 are straightforward. Let's start with adding new users (i.e., Web Office Owner). Administrator must assign user ID and password to a Web Office Owner, while display name in different language is optional. Current HomeMeeting supports English, Traditional Chinese, Simplified Chinese and Japanese—not ready for Korean.

Web office Management also provides secured HTTP connection for user management. Please consult your local HomeMeeting agent for details or read the help file in `~/Program Files/HomeMeeting/WebOffice Server/webserversetup.chm`.

Click Users and Groups→User List→Add New User, and you shall see the flowing page:

Add New User	
User ID	<input type="text" value="brucelee"/>
User Name (optional)	<input type="text" value="Bruce Lee"/> (English)
	<input type="text" value="李小龍"/> (Traditional Chinese)
	<input type="text"/> (Simplified Chinese)
	<input type="text"/> (Japanese)
	<input type="text"/> (Korean)
Password	<input type="password" value="*****"/>
	<input type="password" value="*****"/> (Retype to confirm)
E-mail Address (optional)	<input type="text" value="brucelee@homemeeting.com"/>
Groups	Member Of <input type="text" value="Empty"/>
	Other Groups <input type="text" value="Empty"/>
Max Outside Connection	<input type="text" value="10"/>
Disk Quota	<input type="text" value="20"/> in MB

When an Owner gets a recording message, a notification email will be sent to his/her email address. There are two meeting capacities to be assigned by the administrator: maximum outside connection and recording storage space—the default values are set in configm.ini (will be discussed later). The total outside connection (and total connection, too) is specified in the license file (keycode.xml).

One of the advantage features of using Web Office Management is creating Group List. If you want to add an Owner to a specific group or directory, you need to set up the group first. For example, let's add a group name call "movie legend" to the web office as shown by next web page.

Here "Group ID" is required, as well as its description (in different language versions) and display order. There are three default display order been created: (1) at the top of directory, (2) after group: online, and (3) after group: undefined. Let's put the group "movie legend" after the online group and add in brucelee from "Other Users".



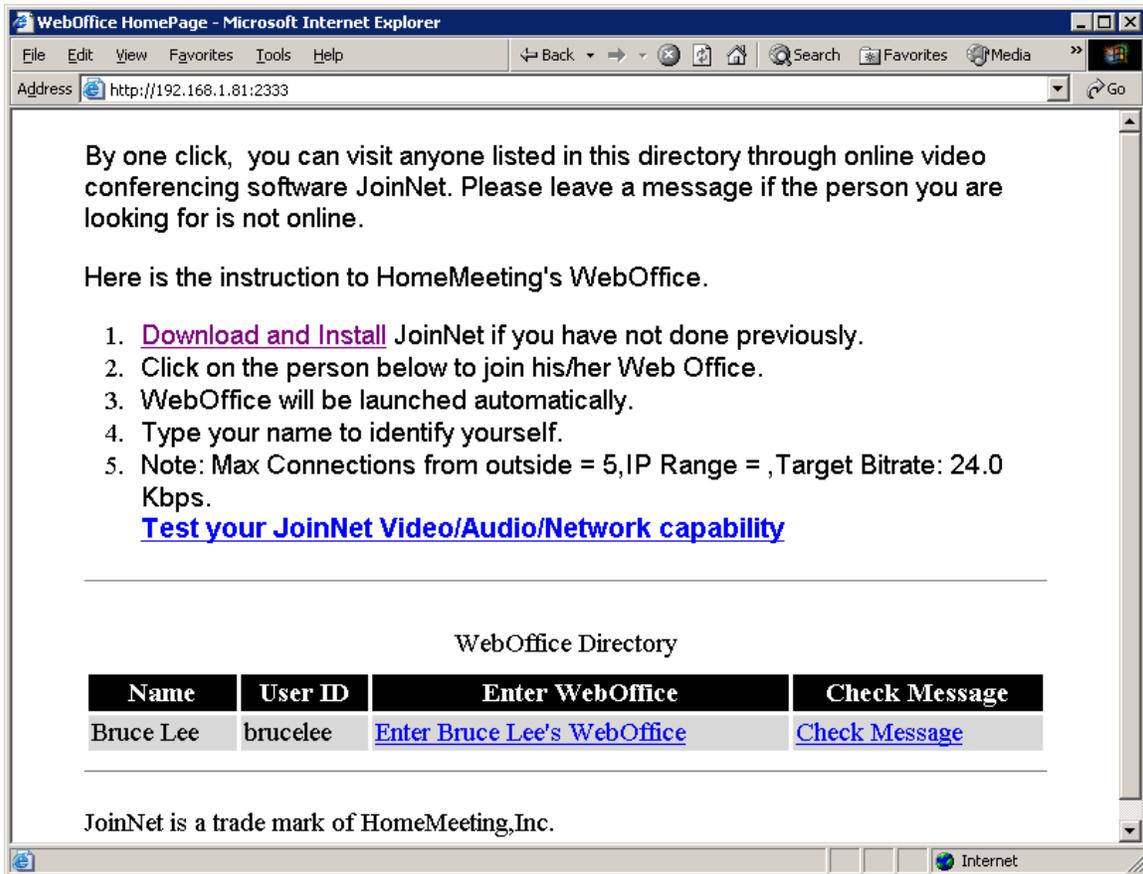
Add New Group

Group ID	legend	
Description	Movie Legend	(English)
	電影傳奇	(Traditional Chinese)
		(Simplified Chinese)
		(Japanese)
		(Korean)
Display Order	After Group: online	
Members	Users belong to this group	Other users
	brucelee	Empty

Now we can browse the web office URL again to see the result:

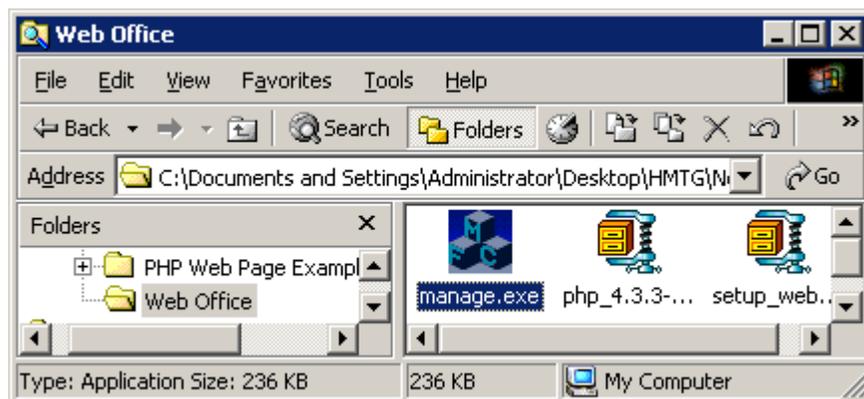


Or you can browse http://server_ip:2333 or http://server_ip:443, a default web page generated by the MCU meeting server, to see the Web Office Directory generated by MCU Console:



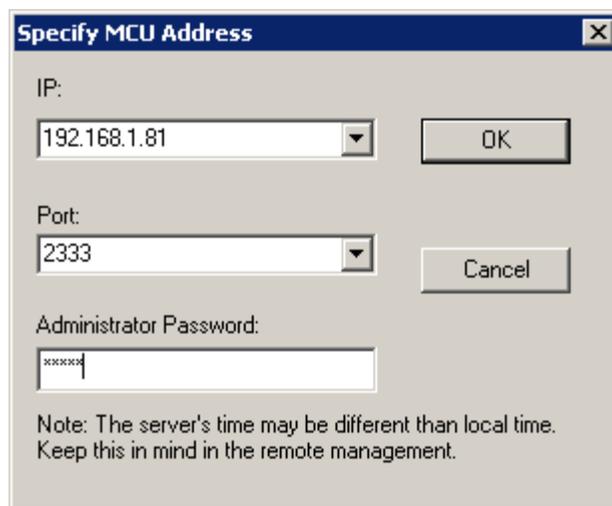
User Management via Remote Manager

Download “manage.exe” from HomeMeeting or your installation package shall come with a remote manage client software, “manage.exe”, to allow you access the MCU server through a remote Windows-based PC. Run “manage.exe” from a Windows PC and it shall prompt the following dialog box:

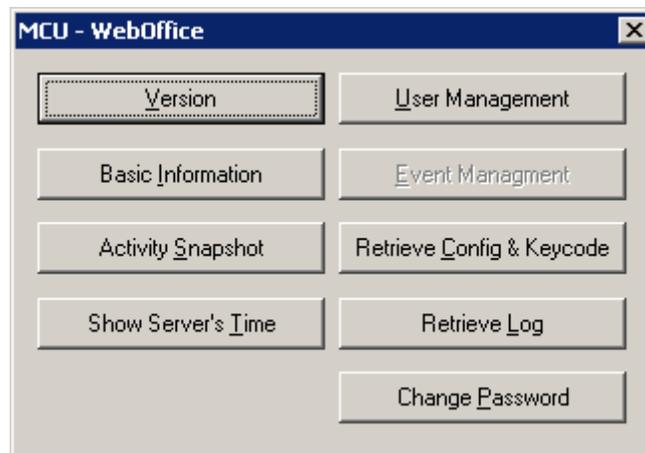




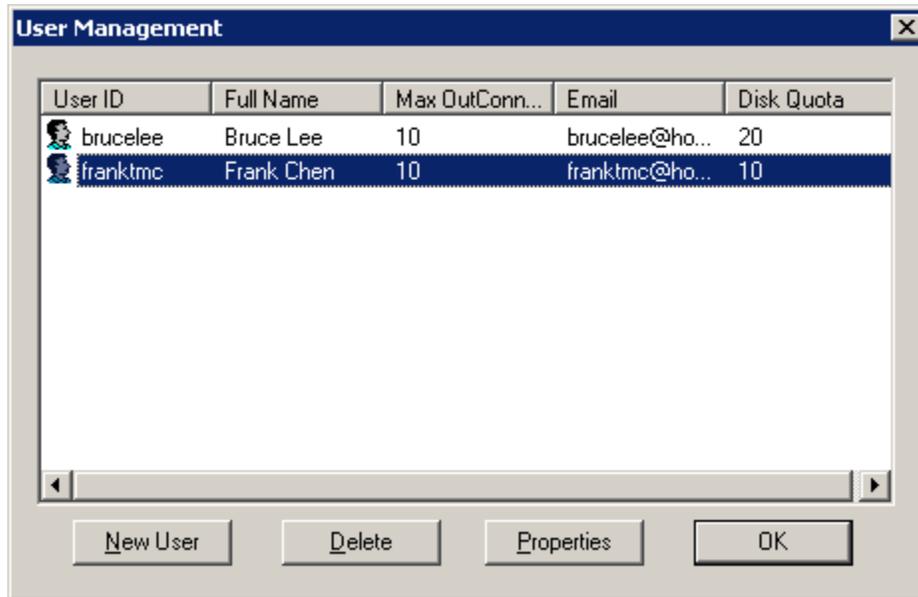
Click “Start” button and type in the MCU server IP (e.g., 192.168.1.81), port number (e.g., 2333 or 443), administrator password, and you shall the following:



Once the connection to the MCU server is established, you shall see the console “MCU-WebOffice”. This console provides useful information regarding the MCU server. Here we just show you how to create an Owner account. Firstly, you click the “User Management” button.



This is the same dialogue box as that of MCU Console. You can follow the same instruction to create an owner account. Let's create a new user called "Frank Chen" and browse http://server_ip/weboffice to see the difference.



Setting Preferences for the MCU Meeting Server

In order to accommodate deployment flexibility, the MCU meeting servers can be configured through a set of parameters in the configuration file “config.ini” in the directory “~\HomeMeeting\Web Office Server”. Each parameter comes with a default (and sometimes recommended) values. These parameters are only read in when the MCU meeting servers start. That is, if modify the parameters, you need to **restart** the MCU meeting server. Here are some important parameters categorized in terms of their relative functional sets:

Directories:

- recording=. \recording
Set the recording file directory. Recording files will be written to this directory
- webdir=. \jnj Files
Set the web page directory. MCU-generated JNJ, HTML, and XML files will be written to this directory.
- log=. \log
Set the Log file directory. All the MCU logging data will be save in this directory.
 - MCU_<year>_<month>.XML: monthly archive
 - W_daily.XML: daily activity
 - MCU_event_log__<year>_<month>.TXT: MCU system log
 - MCU_email_selflog__<year>_<month>.TXT: MCU email log

Ports:

- portm=2333
Set the listening port for the MCU meeting server.
- portm2=443
Set the backup listening port for the MCU meeting server.

IP Addresses:

- listenip=
This is the IP address of the MCU meeting server and it has to match the IP address of “Fixed Server IP” in the license file (keycode.xml) to launch MCU successfully.
- jnj_ip=
This IP address setting is used to generate the IP address in the JNJ file that is then used by JoinNet to locate the MCU meeting server. Therefore, this IP address of the multi-homed computer is usually the public IP that can be accessed by external users.
- backupip=
This is available for MMC system, not Web Office, to setup one or more backup MCU meeting servers to continue providing meeting service in case the primary MCU meeting server is down or is put down for maintaining.

Miscellaneous:

- bandwidth=24000

Set the maximal bandwidth that this MCU support. The default value is 24000 (24Kbps). Currently allowable bandwidth setting is restricted between 10000 and 5000000 (10Kbps and 5Mbps).

- **banned_text=**
Set the filter text file name. This setting points to a text file. Any text chat that contains text which is in this text file will be filtered out by MCU.
- **size_w=176**
- **size_h=144**
Set the video size. Note that the USB cameras at the client side need to support this size (format) in order to capture and send video. The default is 176x144, with another option of 320x240. Popular video sizes are 352x288, 160x120, and 320x240. If a camera support 640x480 format, JoinNet will cut the image to fit either 176x144 or 320x240.

Note: The higher the bandwidth setting will result in better video quality, but the bandwidth for audio transmission remains 10 Kbps. Moreover, since the bandwidth setting is for the connection bandwidth for each user, the higher the bandwidth setting also results in less number of concurrent connections under the same total bandwidth. For example, if your company has an outside connection of 512 Kbps, changing from 24 Kbps to 64 Kbps will reduce the number of outside connection from about 21 to 8 for a good meeting quality. You shall better know the total bandwidth available for online meeting before setting a higher value than 24000.

Proxy:

- **http_proxy=test.proxy.com,8080**
- **https_proxy=test.proxy.com,8080**
- **socks=asdf.aer.qe.com,1080**
Set the IP addresses and the port number of HTTP/HTTPS/SOCKS proxy. This proxy is used for the MCU to connect to the Authorization server when the MCU is behind a proxy. The default port number is 80 for HTTP proxy; 443 for HTTPS proxy; and 1080 for SOCK proxy.

URL's:

- **mcu_homepage=http://weboffice.homemeeting.com**
This homepage will appear in the content of the notification email.
- **default_joint_browsing_page=http://www.homemeeting.com**
This sets the default Joint Browsing web page. If this item is set, all users in all sessions will receive this page as the first page in the joint-browsing window.
- **download_page= http://www.homemeeting.com/en_US/software/joinnet.asp**
The URL to download JoinNet.

E-mail:

- **email_notify=1**
When set to 1, MCU will send email notification the Owner if there is a new Web Office message, or the Owner's total recording file size exceeds the disk quota.

- email_notify_sender=
This email will be used as the sender in the message notification email.
- email_server=
Set the email server (SMTP server) [IP address, Port number].
- admin_email=
Set the MCU system administrator's email address, system level warning, such as insufficient disk space, will be sent to this email address.

User Parameters:

- default_max_guest=10
- default_disk_quota=10
- grace_disk_quota=20
These parameters limit each Owner on the number of guests (connections) and the total recording files sizes. The disk quota is specified in Mega Bytes. The “grace_disk_quota” parameter is in terms of percentage, which allows an Owner to go over the limit by as much as the specified percentage before any further recording is suspended. Note that these are just default values when creating an account and can be override when the administrator creating an Owner account.

Desktop Sharing:

- app_data_rate=24000
Set the max data rate in bps for application data channels default value is 24000, while 64000 is recommended for better bandwidth condition.
- app_burst_size=1000
Set the max burst size in bytes for application data channels default value is 1000. This value is unnecessary under normal condition.
- allow_app_recording=1
Set whether the data in application data channels can be recorded (0 or 1.) Default value is 0 (recording is not allowed by default).

Of course, there are more advanced settings for the MCU configuration. Please consult your local HomeMeeting agent for more technical details.

As a system administrator, you should eventually face a challenge question, “What is the JNJ file?”

This is the most important question to be answered by the end of this paper. Once you know the JNJ file—and its relationship with the MCU meeting server, web application, HomeMeeting Messenger, and JoinNet—you should have a clear picture of how Web Office multimedia communication system works. As a short but precise answer, the JNJ file is to launch JoinNet and to pass the information of a designate MCU to JoinNet—this is how JoinNet will connect to the right MCU and join the right meeting session.

To prepare our journey of understanding the JNJ file, let’s begin with how an Owner starts an online meeting.

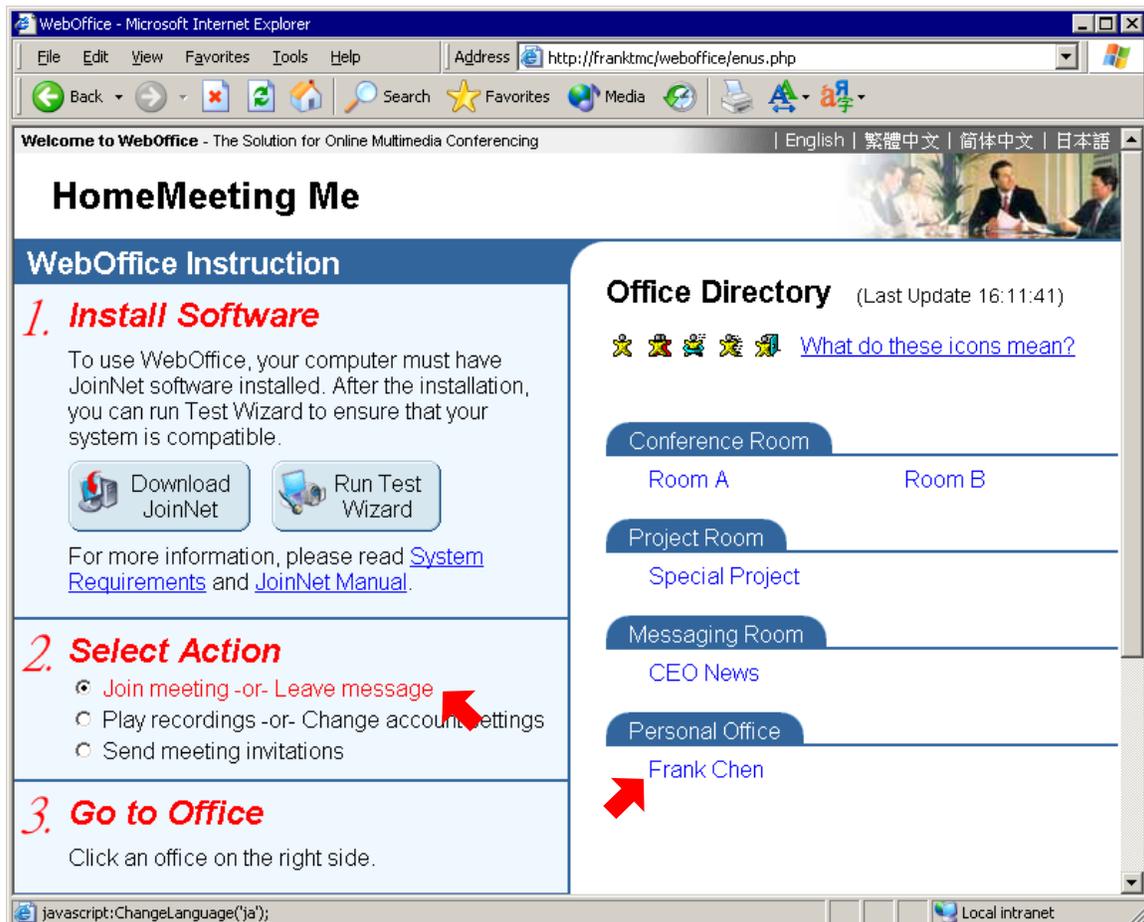
For Web Office Owner

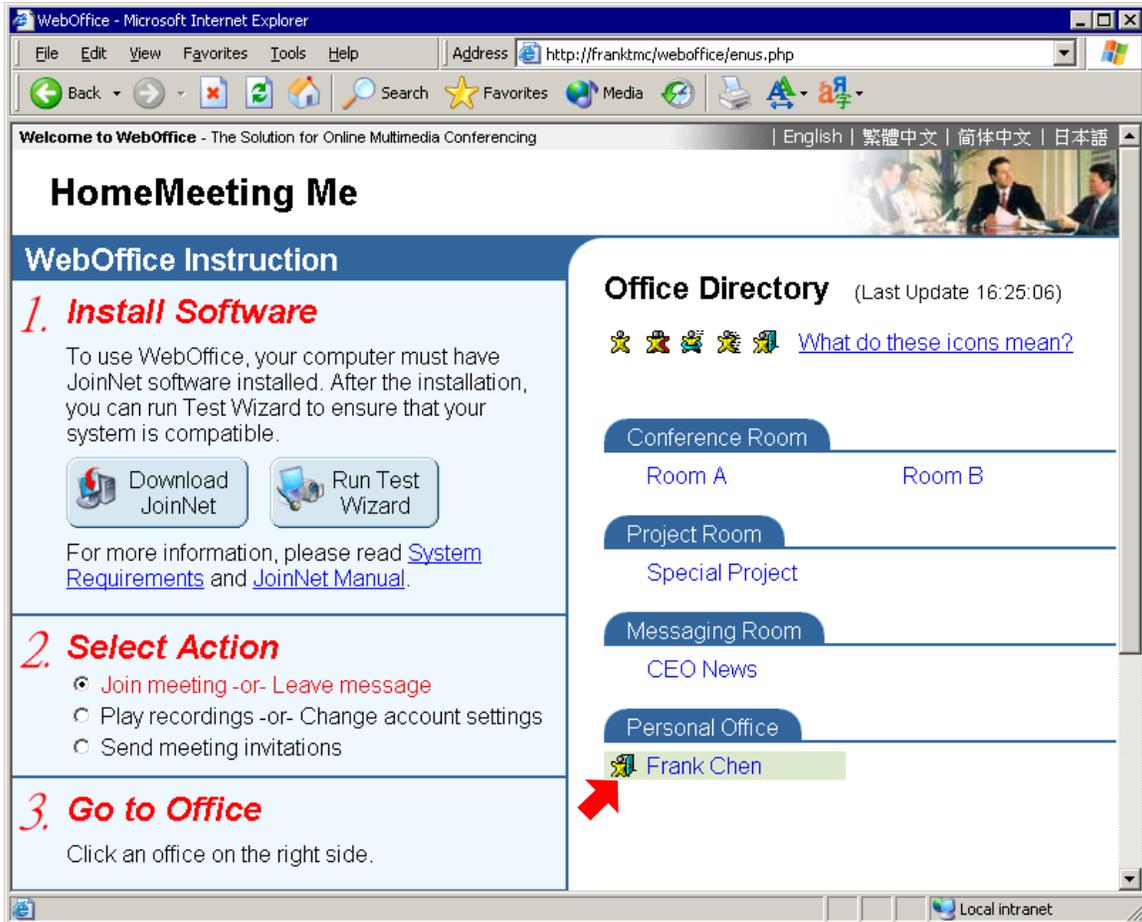
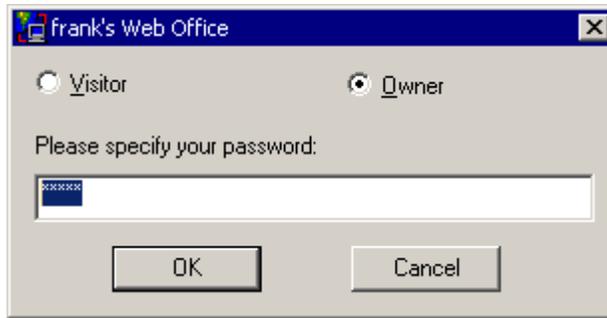
Launch Personal Web Office

Typically, there are four ways to launch an Owner's personal web office: (1) from website, (2) from HomeMeeting Messenger, (3) from email, and (4) from desktop icon.

From a Website

To launch your web office from a website, you first browse the URL of your web office, choose Join Meeting-or-Leave Message check box, click on your name, choose Owner and types in your password at the JoinNet popup window, and then enters your web office—but **install JoinNet first**. Once the Owner's web office is open, visitors can click on his web office—an office-open icon shown beside his name at the web—to request permission to enter his web office. As an Owner, you can accept or deny that request or you can choose “Do not disturb” at the JoinNet (see *JoinNet User Guide*) to avoid such a request – the visitor can leave message, if there is available connection lines remained to the Owner's office (see Max Guest setting from previous discussion).





Note that, if the size of Owner's recordings, either from regular meetings or visitors' messages, exceeds the Owner's assigned disk quota, the Owner will not be able to open his/her office, nor can a visitor leave a message to the Owner. In such a case, the Owner should delete some recordings from his office at once.

From HomeMeeting Messenger

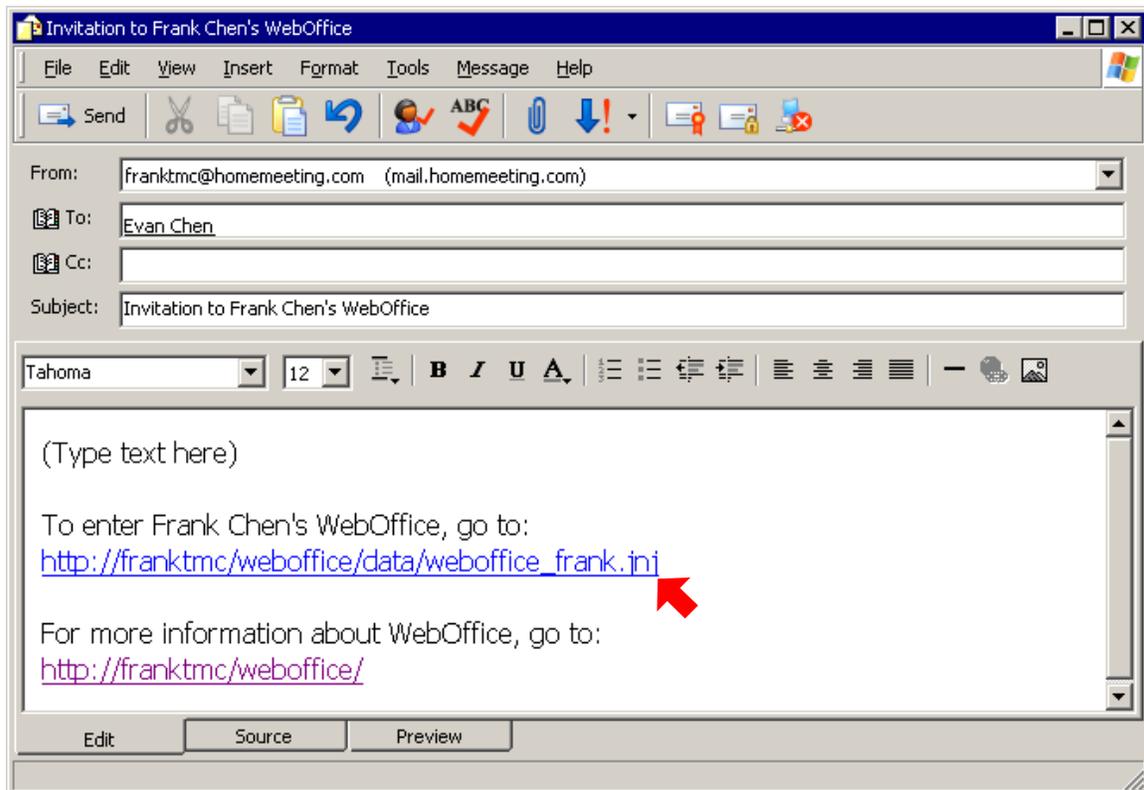
HomeMeeting Messenger is digital communication software that connects you to other Web Office users. Its features include text messaging, adding offices, adding personal contact, looking up meeting status, visiting owner's web office, inviting users to join

online meeting and more. See *HomeMeeting Messenger User Guide* for launching your personal web office.



From Email

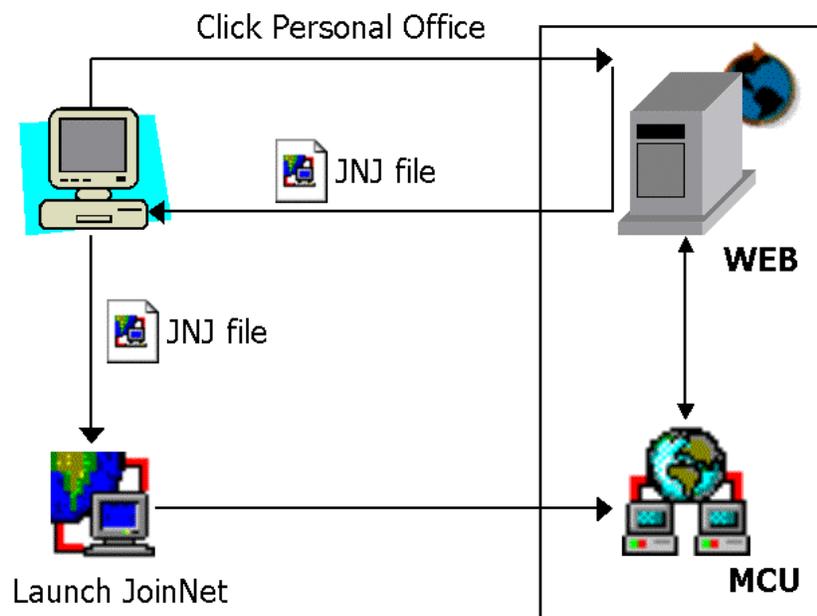
As an Web Office Owner, you can put a personal Web Office URL link to your email (see Send Out Meeting Invitations below). By clicking this URL, you are doing exactly the same thing as you were clicking your personal office at the website. An example of email looks like this,



From Desktop Icon

After you click the Owner name at the website, choose launch web office from the Messenger's menu, or click the personal URL at the invitation email, you download a JNJ file from the MCU meeting server immediately. From our previous example, the file name is *weboffice_frank.jnj*. Every Web Office Owner has his/her own two jnj files at the MCU meeting server: one for join-meeting and the other for message-checking.

As mentioned earlier, the JNJ file is to launch JoinNet and to pass the information of a designate MCU to JoinNet, whether it is for join meeting or playback recording. How does MCU understand the user's request? Website tells MCU what the user wants to do. We will return to this important topic later.



There are a couple of ways to find out the two JNJ files of yours at the MCU meeting server where you are registered as an Owner. The most easy way is to visit the website of your Web Office and do the followings:

(1) Find out the Join-Meeting JNJ file:

Step 1: Choose Join Meeting and click your personal office—JoinNet will pop up.

Step 2: Close JoinNet.

Step 3: Go to C:\Program Files\HomeMeeting\JoinNet.

Step 4: Find the filename, *lastjnj.txt*, move it to the desktop and rename it by filename.jnj, for example, *visit_frank.jnj*.

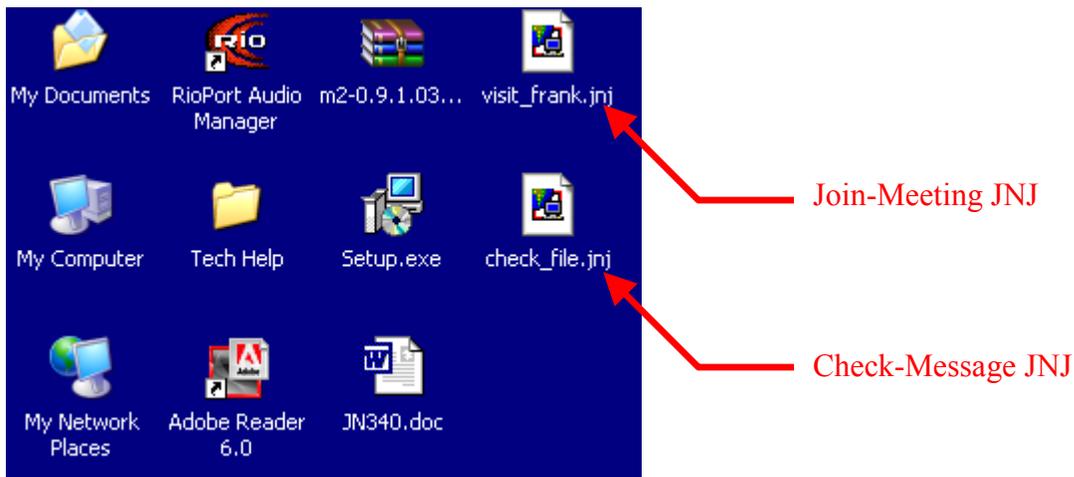
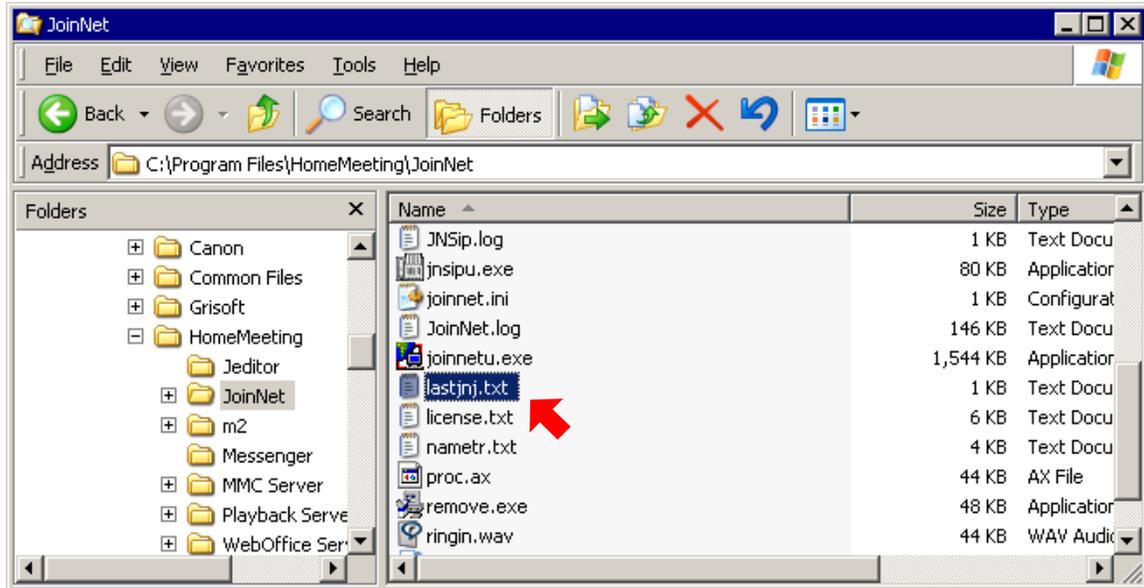
(2) Find out the Check-Message JNJ file:

Step 1: Choose Play Recordings and click your personal office—JoinNet will pop up.

Step 2: Close JoinNet.

Step 3: Go to C:\Program Files\HomeMeeting\JoinNet.

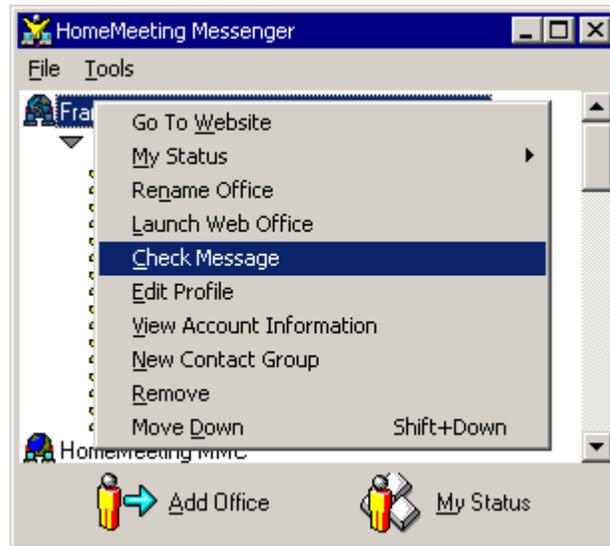
Step 4: Find the filename, *lastjnj.txt*, move it to the desktop and rename it by filename.jnj, for example, *check_file.jnj*.



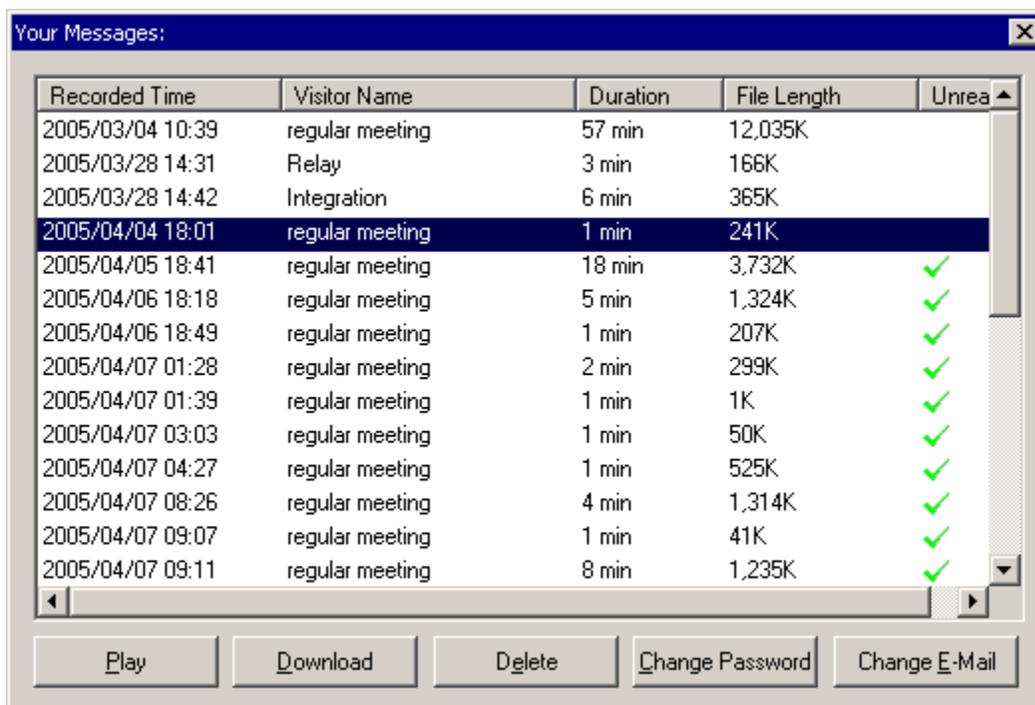
Now Frank can double-click *visit_frank.jnj* to launch his personal web office or double-click *check_file.jnj* to check message and playback recordings. Thereafter, Frank can distribute *visit_frank.jnj*, namely the Join-Meeting JNJ file, to his friends and colleagues as a shortcut to his personal web office. As a Web Office Owner, you can do the same as Frank does.

Recordings Playback/Edit Profile

Similarly, there are three ways for an Owner to check message recordings in his/her personal office: (1) from website, (2) from HomeMeeting Messenger, and (3) from desktop icon. From the previous section, we have shown you how to check messages from the website and from the Owner's desktop. It is quite straightforward to check message from HomeMeeting Messenger:



All the three methods will lead to the same JoinNet pop-up (after you type in your password, if necessary):



Again, if the size of Owner's recordings exceeds the Owner's assigned disk quota, the Owner will not be able to open his/her office, nor can a visitor leave a message to the Owner. In such a case, the Owner should delete some recordings from his office at once.

While checking your recordings or messages, you can change your password or email address. If there is a new message recorded or your recordings in total exceed the allowed disk quota, an email notification will be sent to this email account.

Send Out Meeting Invitation

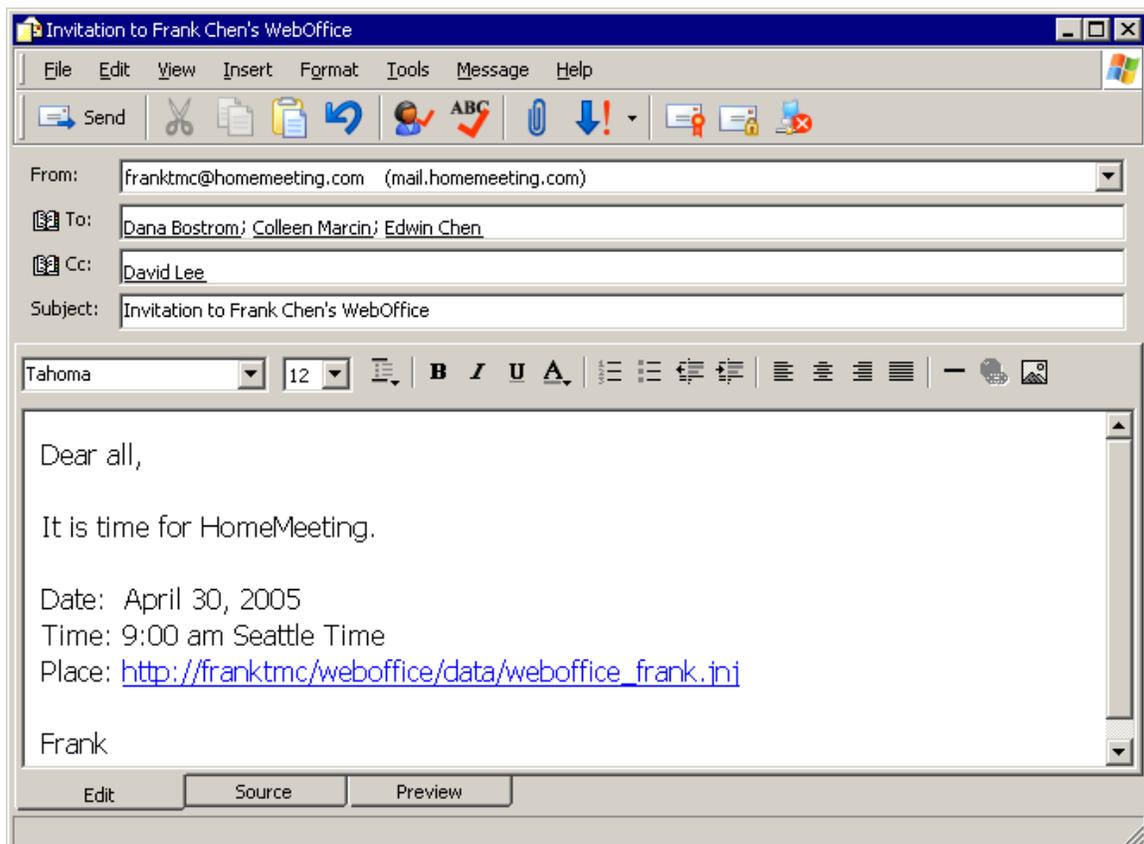
As an Owner, you can send out meeting invitations via your email. Follow these steps to send your email invitations:

Step 1: Visit the website of your Web Office.

Step 2: Click the Send Meeting Invitations check-box and click your personal office.

Step 3: Your email application, e.g., Microsoft Outlook or Lotus Notes, will be launched automatically with the URL of your personal office and the URL of your company's website.

Step 4: Compose your invitation email but keep the Join-Meeting URL intact. Here is an example:



For Web Office Visitor

Any one with Internet access is eligible for a Web Office Visitor—the minimum requirement: installation of a freeware, JoinNet, and a headset for a two-way audio communication. To make it more effective, installation of another freeware, HomeMeeting Messenger, is recommended.

There are two types of visitors: (1) visitor who has his/her own HomeMeeting web office somewhere else, and (1) visitor who has no HomeMeeting web office in the world, yet.

Similarly, there are four choices for a visitor to interact with a Web Office Owner: (1) through website, (2) through desktop icon, (3) through email, and, finally, (4) through HomeMeeting Messenger.

Visit Personal Office via Web/Desktop/Email

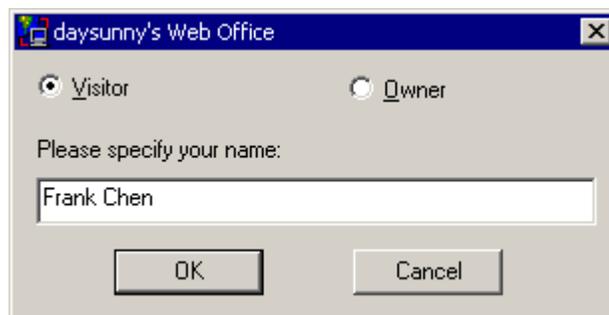
For the first three choices—web, desktop, and email, both Type-I and Type-II visitors behave identically. That is

When Owner's Office Is Open

Any one can visit an Owner's personal web office by the following ways:

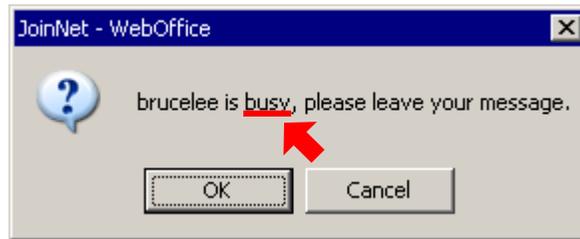
- (1) Browse the URL of the Owner's website and click the Owner's name, or
- (2) Double-click the Owner's JNJ File provided by the Owner (please check the previous section, For Web Office Owner, about JNJ file), or
- (3) Click the Owner's Personal Office URL in the email sent by the Owner.

Then type in visitor's name at the JoinNet pop-up window and wait for the permission from the Owner.



Case 1: If meeting request accepted by the Owner, the visitor will then enter the Owner's meeting room and interact with the owners with JoinNet. See *JoinNet User Guide* for details.

Case 2: If the meeting request rejected or ignored by the Owner, the visitor can choose to leave a recording message or close JoinNet.

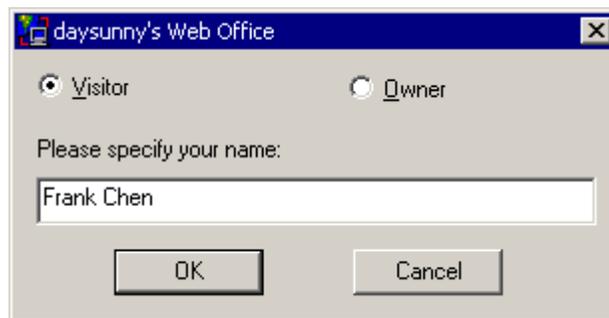


When Owner's Office Is Not Open

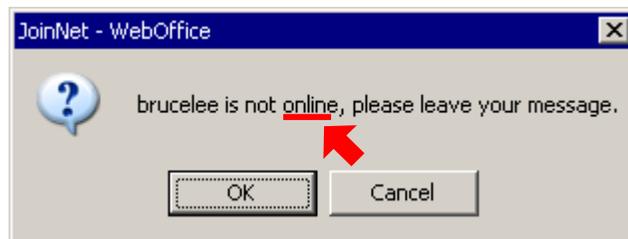
After you visit an Owner's personal web office by the following ways:

- (4) Browse the URL of the Owner's website and click the Owner's name, or
- (5) Double-click the Owner's JNJ File provided by the Owner (please check the previous section, For Web Office Owner, about JNJ file), or
- (6) Click the Owner's Personal Office URL in the email sent by the Owner.

And type in visitor's name at the JoinNet pop-up window.



You will see a JoinNet pop-up:



Visit Personal Office via HomeMeeting Messenger

With HomeMeeting Messenger, you can launch JoinNet to join an Owner's online meeting or leave a recording message to an Owner.

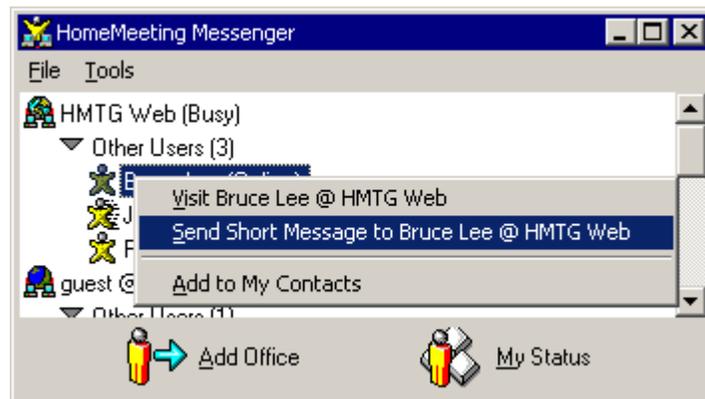
When Owner's Office Is Open

Simply mouse right-click an Owner name and choosing “Visit Owner @ Office” and wait for the permission from the Owner.



When Owner is Online—but Office not Open

As a Type-I visitor, you can send a short message to the Owner or visit the Owner (and wait for the Owner's permission).



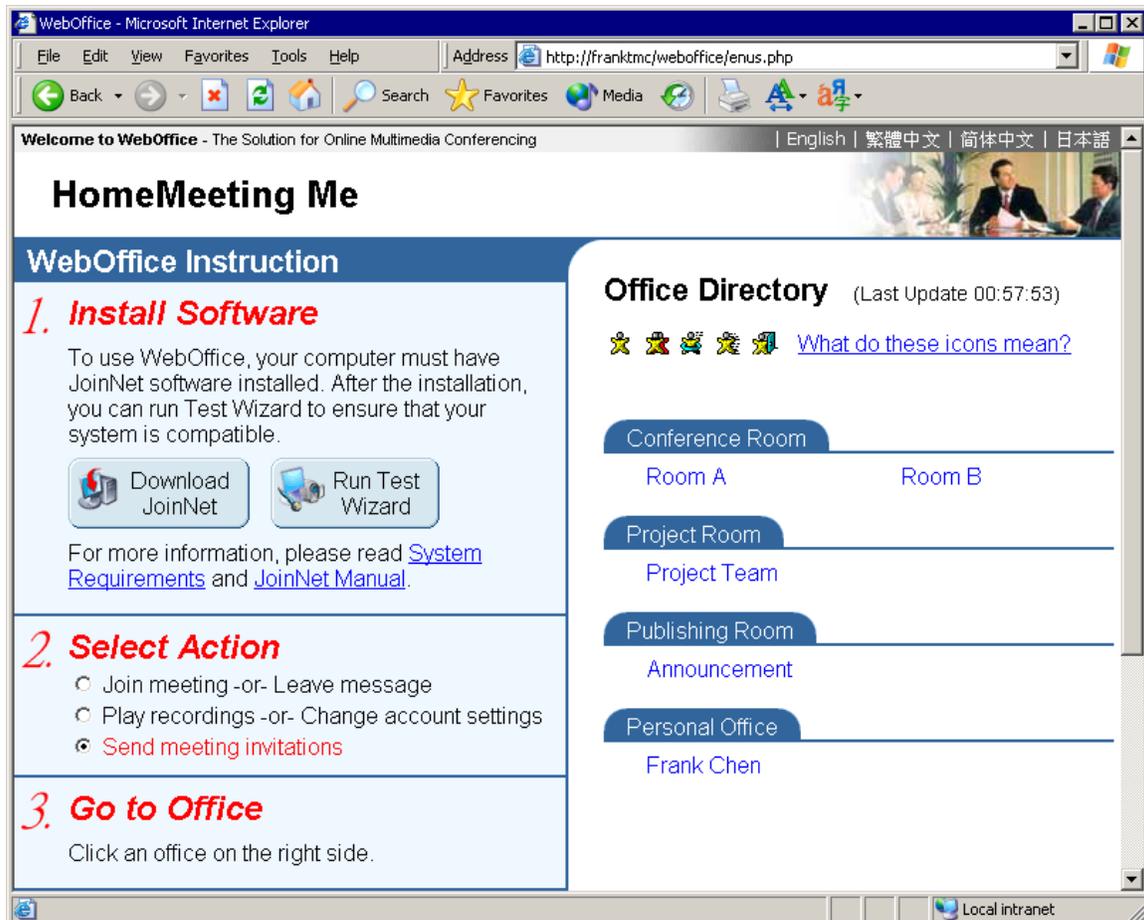
As a Type-II visitor, you cannot send short message but you can visit the Owner (and wait for the Owner's permission).



Beyond Personal Web Office

As an experienced Web Office user, you can set up your own Web Office system to streamline team collaboration. Here is an example:

Suppose Frank is the leader of a regional business operation and he sets up his Web Office webpage in such a way that (as shown by the website below)



- (1) Frank can ask his team members to submit progress reports by making presentations to his *Personal Web Office* on a regular or ad-hoc basis;
- (2) When Frank needs to make an important announcement to his team members, he can record messages at his *Personal Publishing Room* and send out email notifications to his team members for recordings playback;
- (3) Frank can assign a *Team Project Room* to a project team and monitor the team progress by recording playback;
- (4) Frank can create Public Conference Rooms (or Public Class Rooms) to be used by all members.

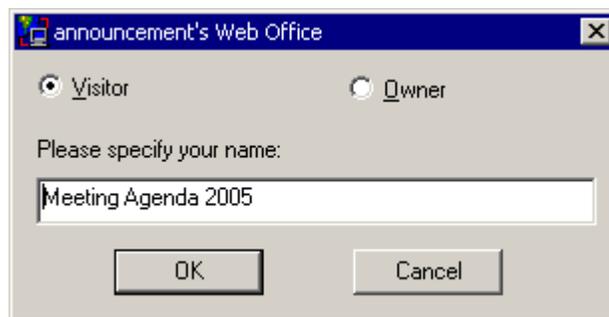
Since we have covered quite a lot about Personal Web Office, let's look at how Frank handling his Personal Publishing Room, Team Project Room, and Public Conference Room.

Personal Publishing Room

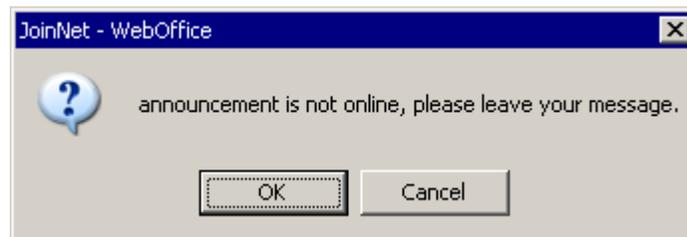
(Create a personal web office under the name of Announcement)

When Frank need to make an announcement recording and publish it afterward, he will do the followings:

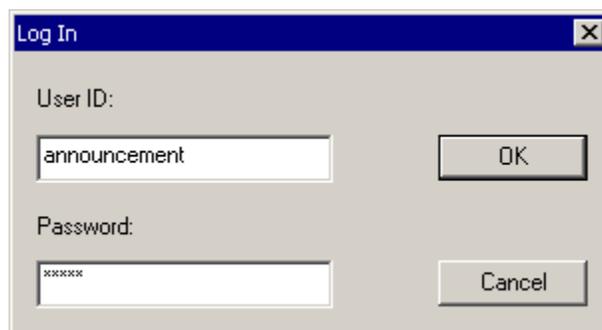
Step 1: Visit the room, Announcement, as a visitor instead of an Owner, and type in the title as the visitor's name at the JoinNet pop-up.



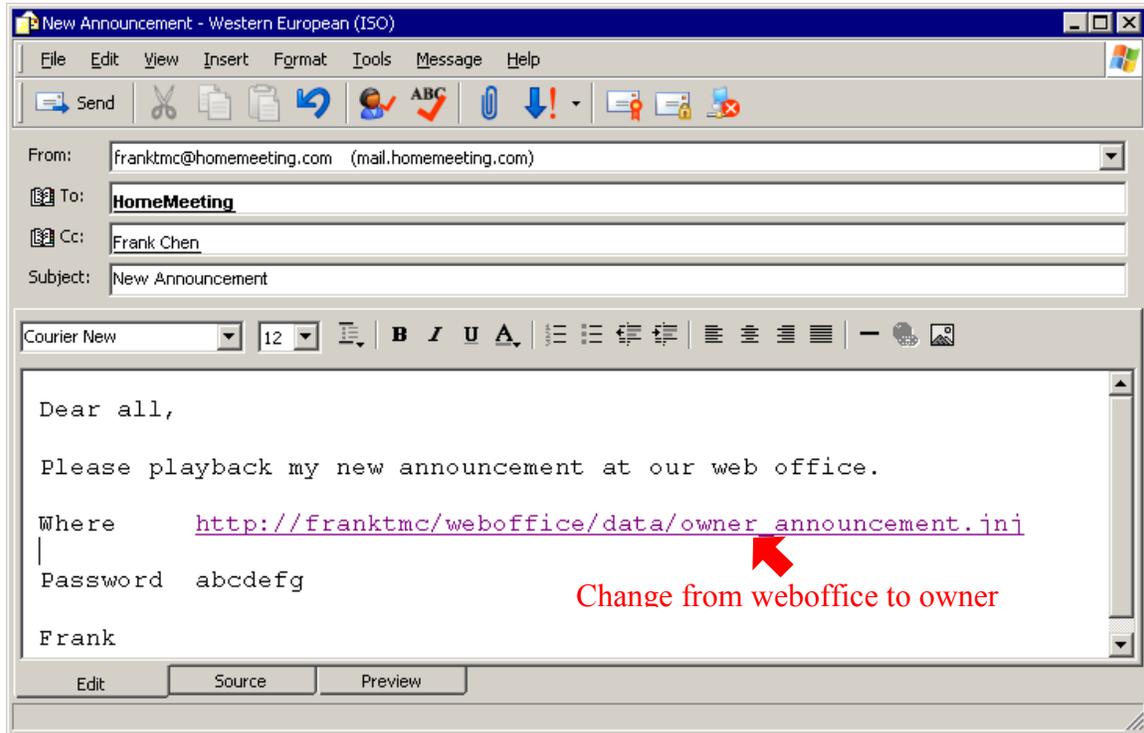
Step 2: Make a recording by choosing leave message at the Owner's office. This step can be repeated until a satisfactory recording is made.



Step 3: Review all recordings by following the procedures mentioned in the section for Play Recordings and delete unnecessary recordings.



Or Frank can specify the direct Check-Message JNJ to his email notification—but Frank has to change the Join-Meeting JNJ from “weboffice” to “owner” to become Check-Message JNJ, where the Join-Meeting JNJ can be obtained by choosing “Send Meeting Invitation” option at the Web Office website and then click Announcement.



Team Project Room

(Create a personal web office under the name of Project Team)

Ask the members of a project team to discuss project details or submit personal reports to this online project room. Password is shared between the project team and the manager—namely, Frank from our example here.

Public Conference/Class Room

(Create personal web offices under the names of Room A and Room B etc.)

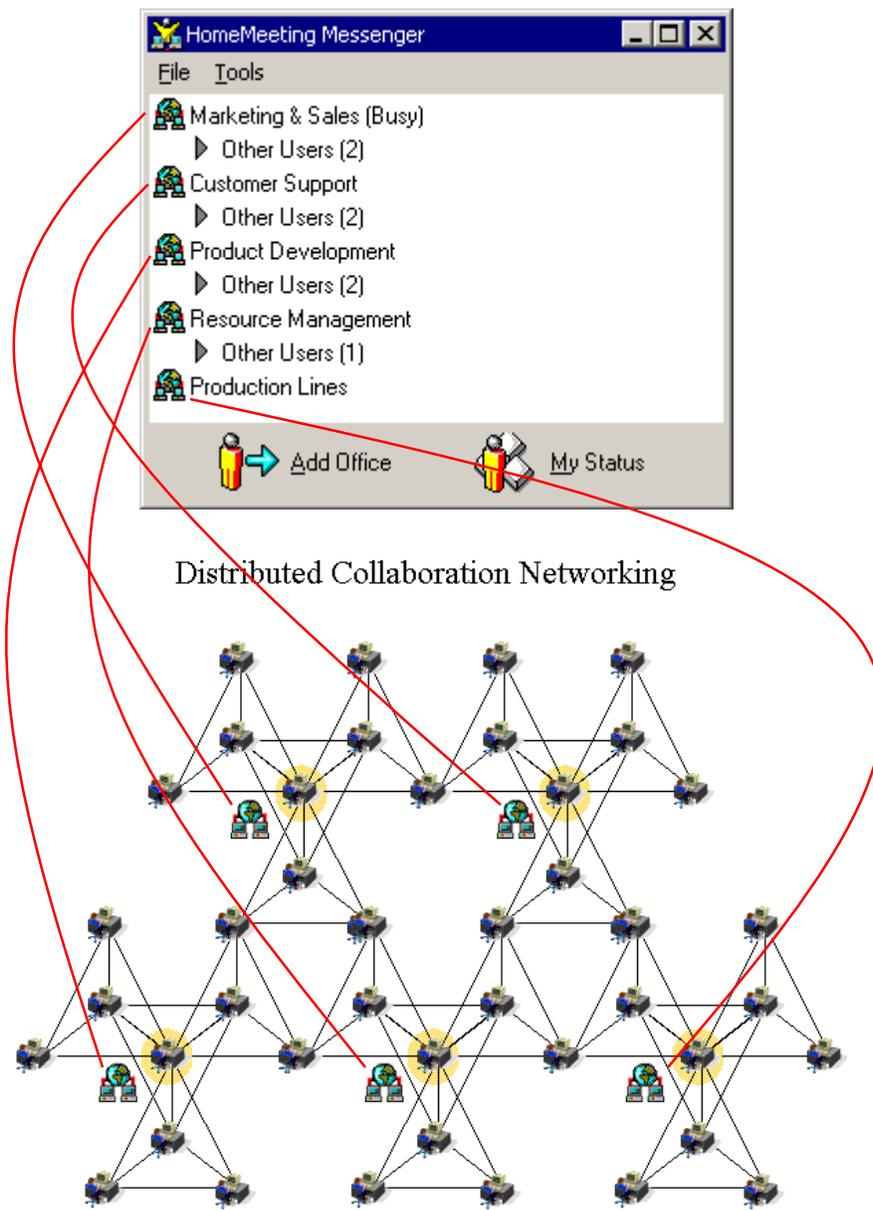
Passwords of the conference rooms are shared by all members on the first-come-first-serve basis since Frank can create up to 200 conference rooms. Usually the following policies are suggested by some experienced managers:

Policy 1: Download and save recording file to personal PC and then delete the recording file from the MCU meeting server immediately after the meeting.

Policy 2: If recording playback is necessary, change the password of the particular personal office immediately after the meeting. However, the person-in-charge must resume the original shared password within a given period.

Distributed Web Office Systems

MCU meeting server can be installed at any personal PC running Windows XP. In our example, the MCU meeting server could be installed at Frank's laptop. If other managers should adopt the same Web Office collaboration system as Frank does, they can together build a network of Web Office collaboration network by using HomeMeeting Messenger. Simply put, by adding MCU to each other's HomeMeeting Messenger.



JNJ File and Its Applications

What is the JNJ file? As we mentioned earlier (see Launch Personal Web Office From Desktop Icon in the section of For Web Office Owner), the JNJ file is to launch JoinNet and to pass the information of a designate MCU to JoinNet, whether it is for join meeting or check message.

You can find two types of JNJ file for a particular Web Office Owner by looking at the file, *lastjnj.txt*, under the directory C:\Program Files\HomeMeeting\JoinNet, after you click the Owner's personal office. When you choose "Join Meeting" option, you get the Join-Meeting JNJ, while "Play Recordings" gives you the Check-Message JNJ. Here are two examples of *lastjnj.txt*.

Join-Meeting JNJ



```
lastjnj.txt - Notepad
File Edit Format View Help
# if you see this file, please downloa
# codetype
#     0 - normal meeting
#     1 - goto meeting
#     2 - playback
#     3 - download
#     4 - web office
#     5 - web office message manager
#     6 - delete recording file
#     7 - e classroom
#     8 - test wizard including GC
#     9 - test wizard only MCU
#    10 - web casting meeting
#    11 - web casting playback
#    12 - chat room
[general]
domain = HomeMeeting
ip = 192.168.1.102
portm = 2333
portm2 = 443
size_w=176
size_h=144
gui_rec_ver = 3.0.0
gui_min_ver = 2.2
codetype = 4
UserID = frank
```

This JNJ provides the information for the JoinNet connection to the specified MCU meeting server, including

- (1) the IP address of the MCU (e.g., 192.168.1.102),
- (2) the port numbers used by the MCU (e.g., 2333 and 443),
- (3) the default video size (e.g., 176x144),
- (4) the recommended JoinNet GUI version (e.g., 3.0.0),

- (5) the minimum JoinNet GUI version (e.g., 2.2),
- (6) the desired task (e.g., code type 4 for visiting web office),
- (7) and the Owner (e.g., frank).

The associated Join-Meeting JNJ URL is given by

http://192.168.1.102/weboffice/data/weboffice_frank.jnj

If you put this URL to a website or include this URL to a document or email, you provide a link to Frank's personal web office.

If you rename the *lastjnj.txt* by *weboffice_frank.jnj*, or any filename with jnj extension, and save it to your desktop, you can visit Frank by double-clicking this JNJ file from your desktop.

Check-Message JNJ



```
lastjnj.txt - Notepad
File Edit Format View Help
# if you see this file, please download
# codetype
# 0 - normal meeting
# 1 - goto meeting
# 2 - playback
# 3 - download
# 4 - web office
# 5 - web office message manager
# 6 - delete recording file
# 7 - e classroom
# 8 - test wizard including GC
# 9 - test wizard only MCU
# 10 - web casting meeting
# 11 - web casting playback
# 12 - chat room
[general]
domain = HomeMeeting
ip = 192.168.1.102
portm = 2333
portm2 = 443
size_w=176
size_h=144
gui_rec_ver = 3.0.0
gui_min_ver = 2.2
codetype = 5
UserID = frank
```

This JNJ provides the information for the JoinNet connection to the specified MCU meeting server, including

- (1) the IP address of the MCU (e.g., 192.168.1.102),
- (2) the port numbers used by the MCU (e.g., 2333 and 443),
- (3) the default video size (e.g., 176x144),

- (4) the recommended JoinNet GUI version (e.g., 3.0.0),
- (5) the minimum JoinNet GUI version (e.g., 2.2),
- (6) the desired task (e.g., code type 5 for message checking),
- (7) and the Owner (e.g., frank).

The associated Check-Message JNJ URL is given by

http://192.168.1.102/weboffice/data/owner_frank.jnj

If you put this URL to a website or include this URL to a document or email, you provide a link to playback Frank's recording, but you need Frank's password to do that.

If you rename the *lastjnj.txt* by *owner_frank.jnj*, or any filename with jnj extension, and save it to your desktop, you can enter Frank's recordings by double-clicking this JNJ file from your desktop, with Frank's password of course.

Important notice to IT professionals:

With Web Office's JNJ file, you can easily integrate Web Office communication system to web, email, document and the like—but this type of integration can be abused by visitors. This is why HomeMeeting also provides a highly secure MCU meeting server with encrypted JNJ file. Please refer to *HomeMeeting Technical Guide: Getting Started with MMC System* for the application of the advanced MCU meeting server.

If security is your first priority, **MMC communication system** should be your choice. Please consult with your local HomeMeeting agent for more details.
