

HOM**MEETING**

TECHNICAL PAPER

Web Office Installation Guide

April, 2005

A HomeMeeting Inc. Official Document

Disclaimer; No Warranty

THIS INFORMATION AND ALL OTHER DOCUMENTATION (IN PRINTED OR ELECTRONIC FORM) ARE PROVIDED FOR REFERENCE PURPOSES ONLY. WHILE EFFORTS WERE MADE TO VERIFY THE COMPLETENESS AND ACCURACY OF THIS INFORMATION, THIS INFORMATION AND ALL OTHER DOCUMENTATION ARE PROVIDED "AS IS" WITHOUT ANY WARRANTY WHATSOEVER AND TO THE MAXIMUM EXTENT PERMITTED, HOMEMEETING INC. DISCLAIMS ALL WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SAME. HOMEMEETING INC. SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION, DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES, ARISING OUT OF THE USE OF, OR OTHERWISE RELATED TO, THIS INFORMATION OR ANY OTHER DOCUMENTATION. NOTWITHSTANDING ANYTHING TO THE CONTRARY, NOTHING CONTAINED IN THIS INFORMATION OR ANY OTHER DOCUMENTATION IS INTENDED TO, NOR SHALL HAVE THE EFFECT OF, CREATING ANY WARRANTIES OR REPRESENTATIONS FROM HOMEMEETING INC. (OR ITS SUPPLIERS OR LICENSORS), OR ALTERING THE TERMS AND CONDITIONS OF THE APPLICABLE LICENSE AGREEMENT GOVERNING THE USE OF THIS SOFTWARE.

Copyright

Under the copyright laws, neither this documentation nor the software may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of HomeMeeting Inc., except in the manner described in the documentation or the applicable licensing agreement governing the use of the software.

© Copyright 2005 HomeMeeting Inc
2721 NE 152nd Avenue
Redmond, WA98052

All Rights Reserved. Printed in the United State

Minimum Hardware and Software Requirements

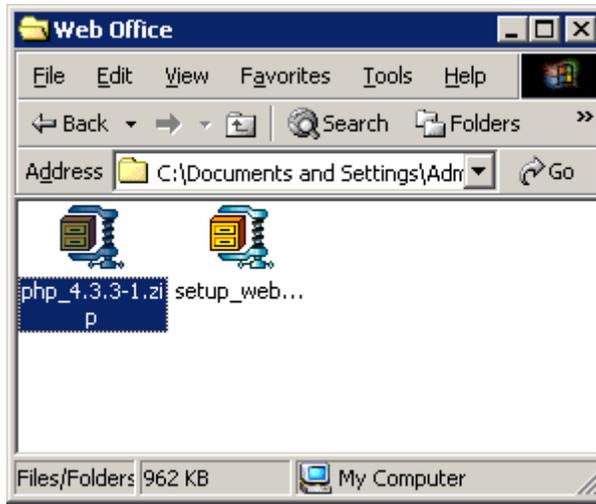
General Requirements for Web Office server

- **Processor:** Pentium III 600MHz or higher
- **Operating Systems:** Windows 2000/XP or RedHat Linux 8/9/Fedora 2
- **Memory:** 256 MB of RAM
- **Web Server:** Microsoft IIS or Apache HTTP Server
- **Script Engine:** PHP 4.0.6 or higher

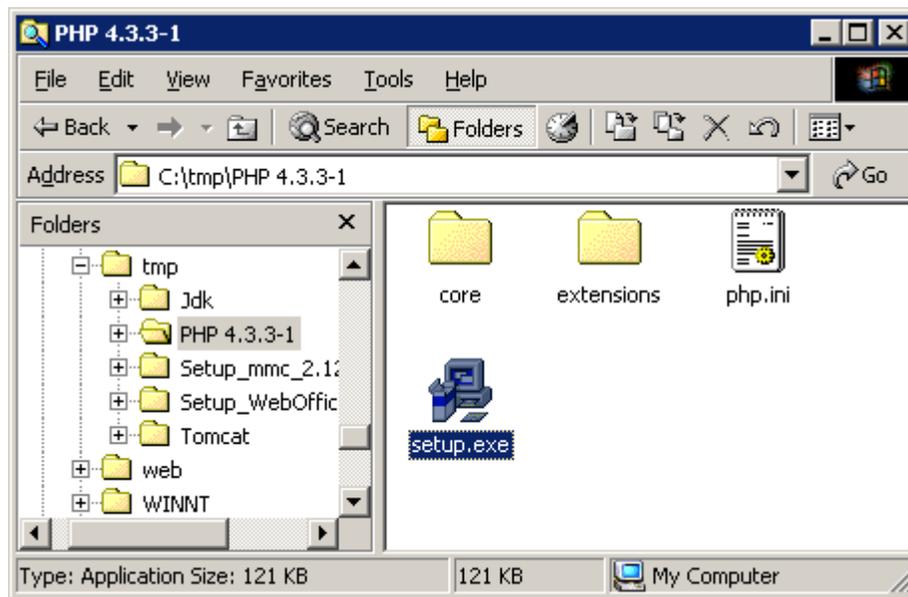
Setting Up Web Office Server

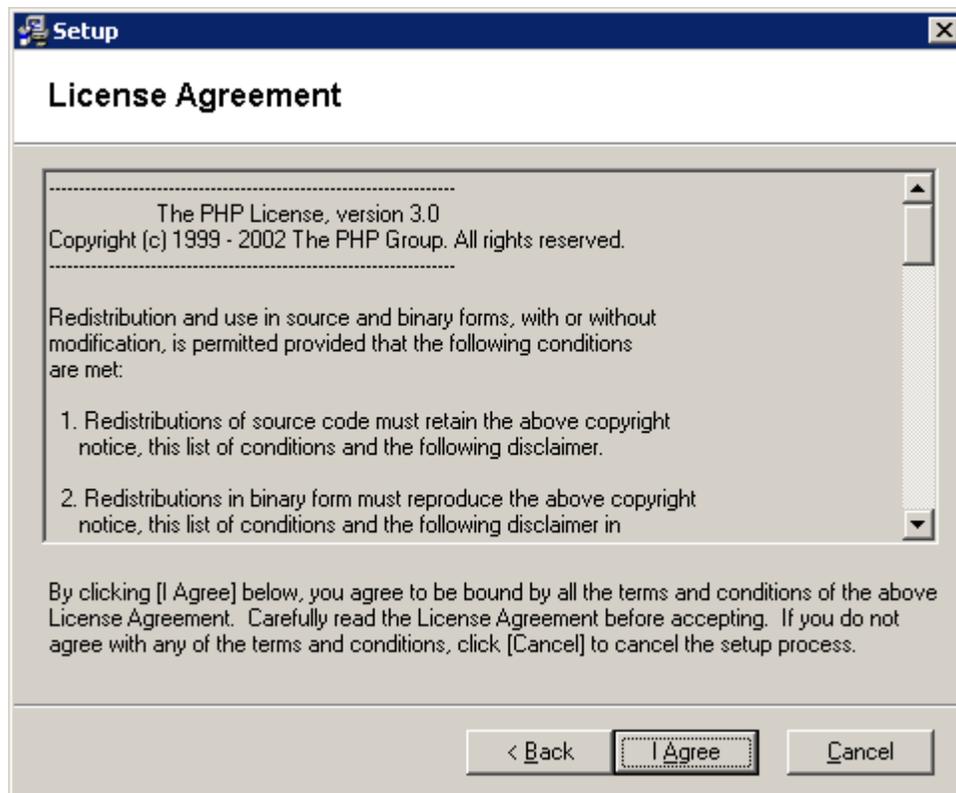
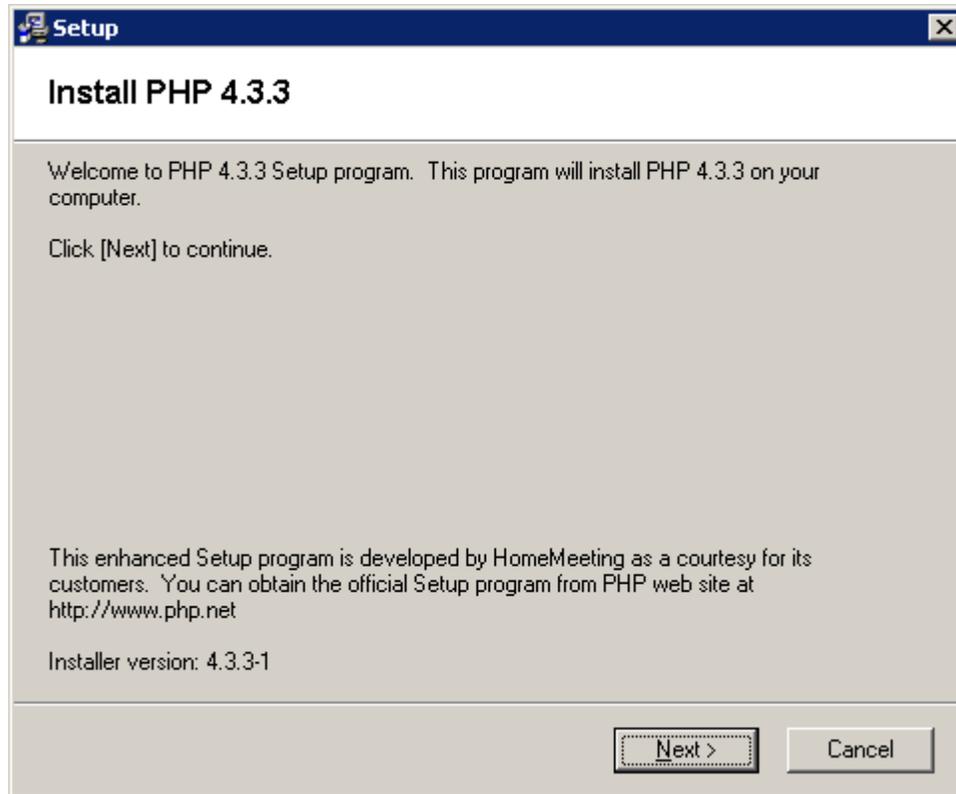
Installing Web Office Server with Microsoft IIS Server

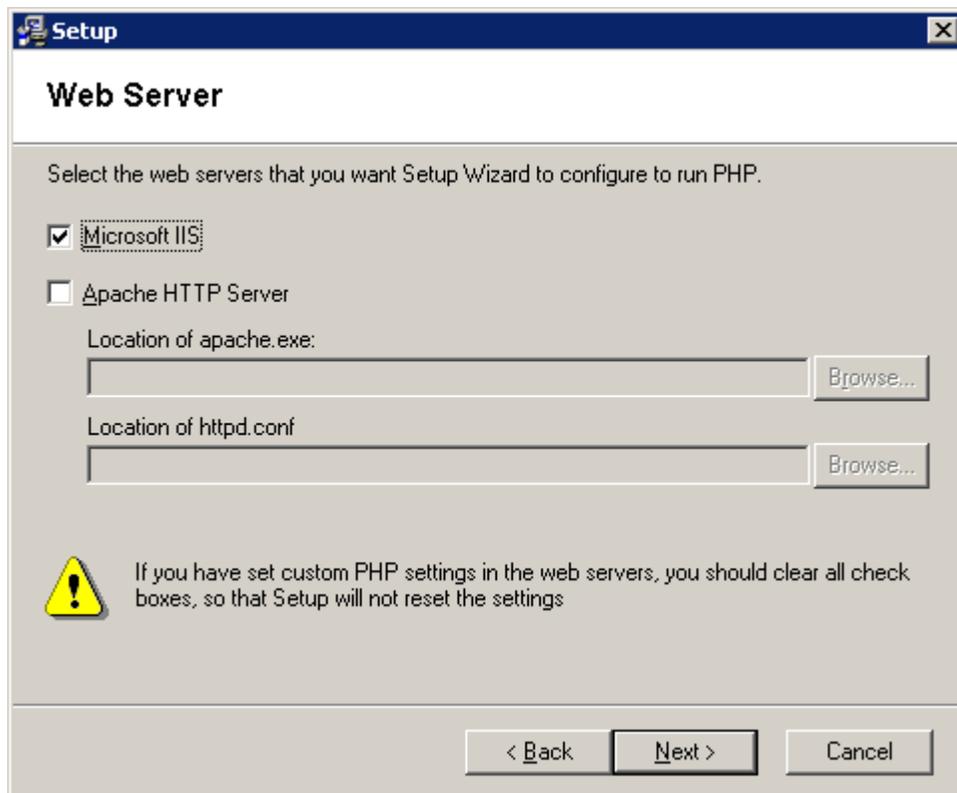
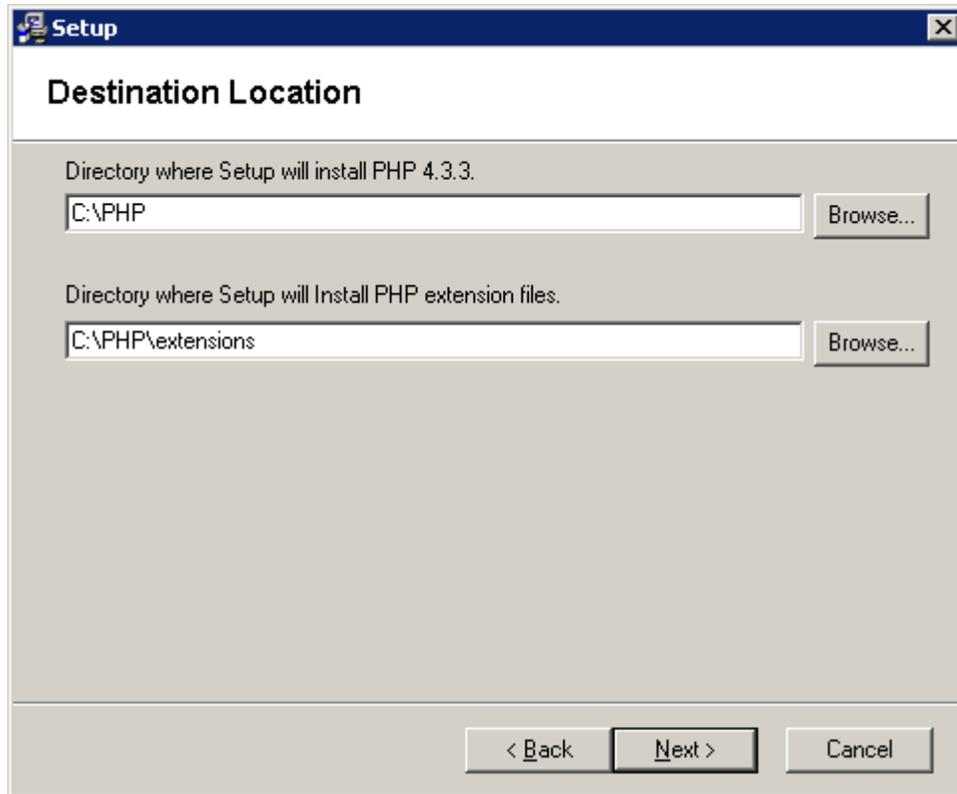
- **Step 0:** install PHP script engine. Download “PHP 4.3.3-1 for Windows” from HomeMeeting—this copy contains an improved installer created by HomeMeeting.

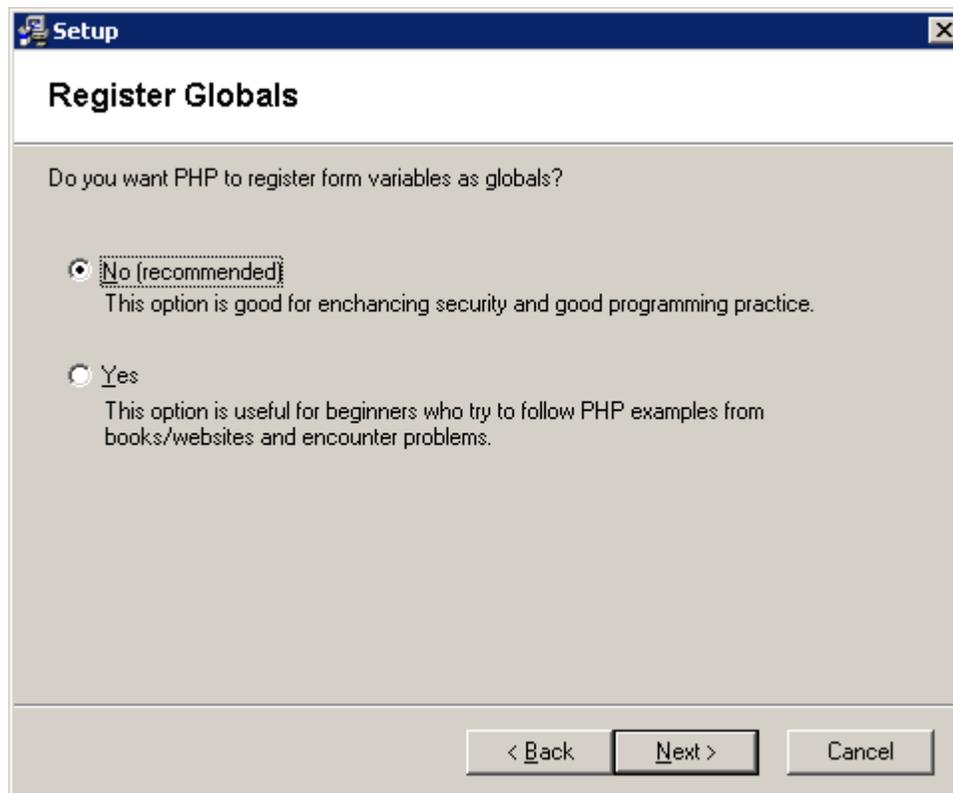
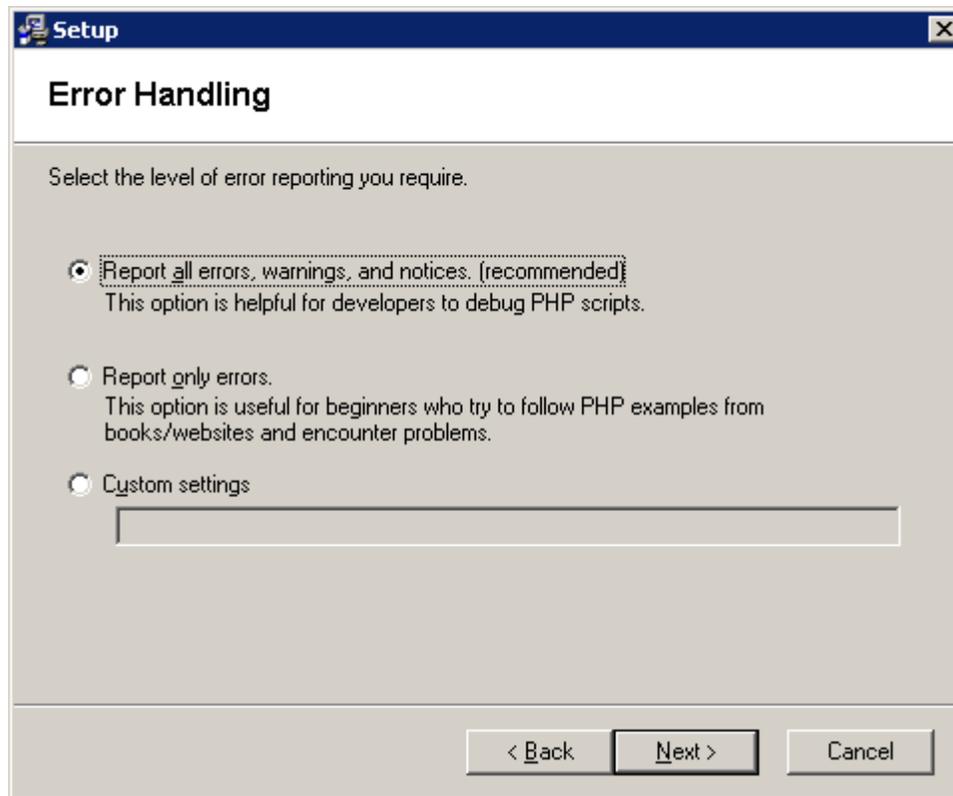


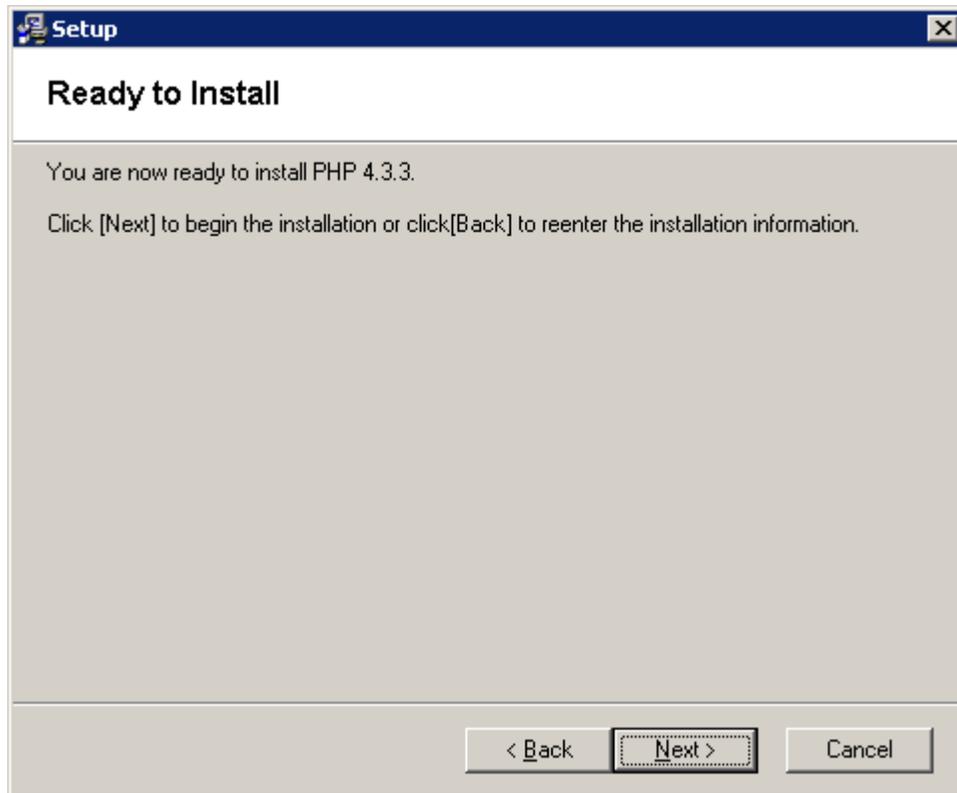
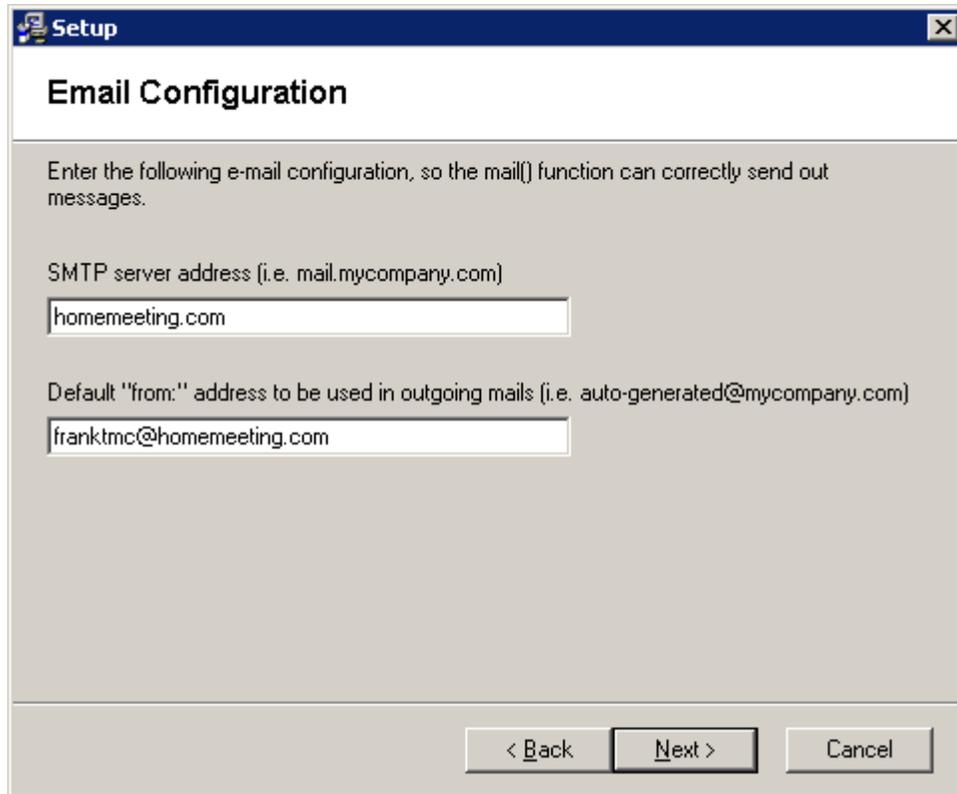
Extract the zip file to a temporary folder and then double click “setup.exe” and follow the popup instruction to install the PHP script.

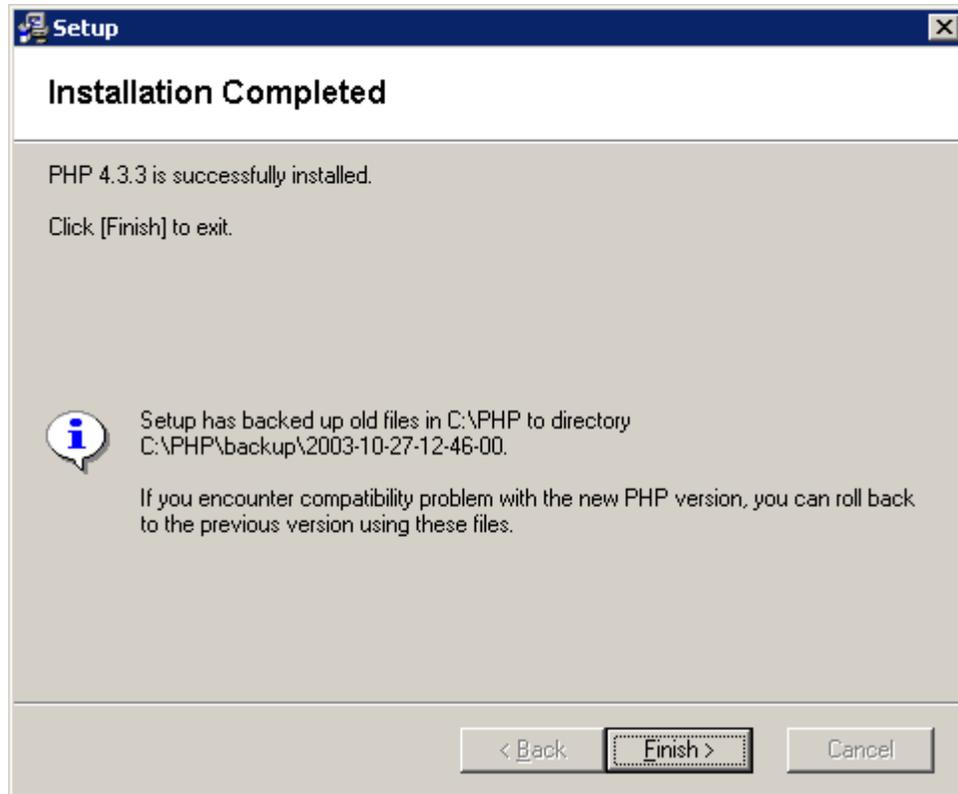




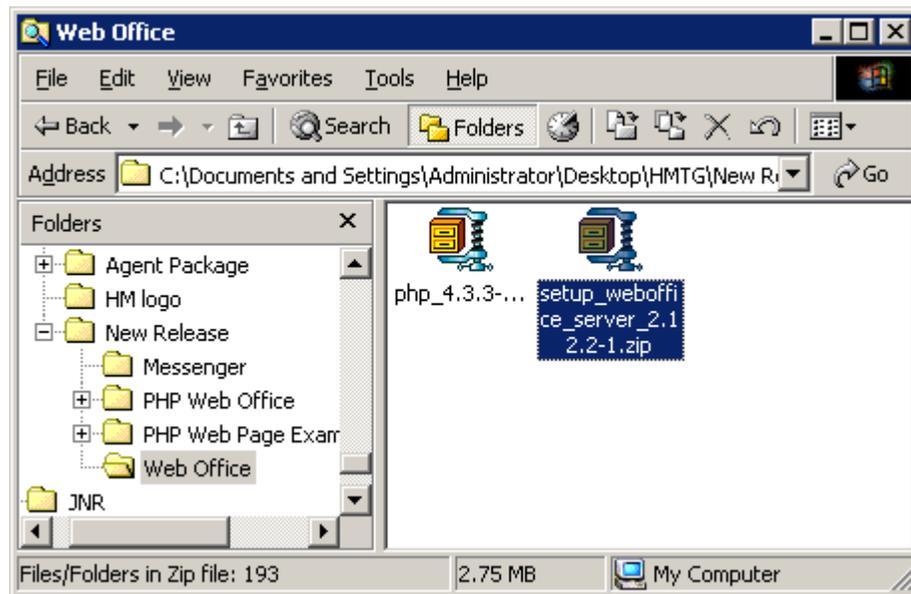






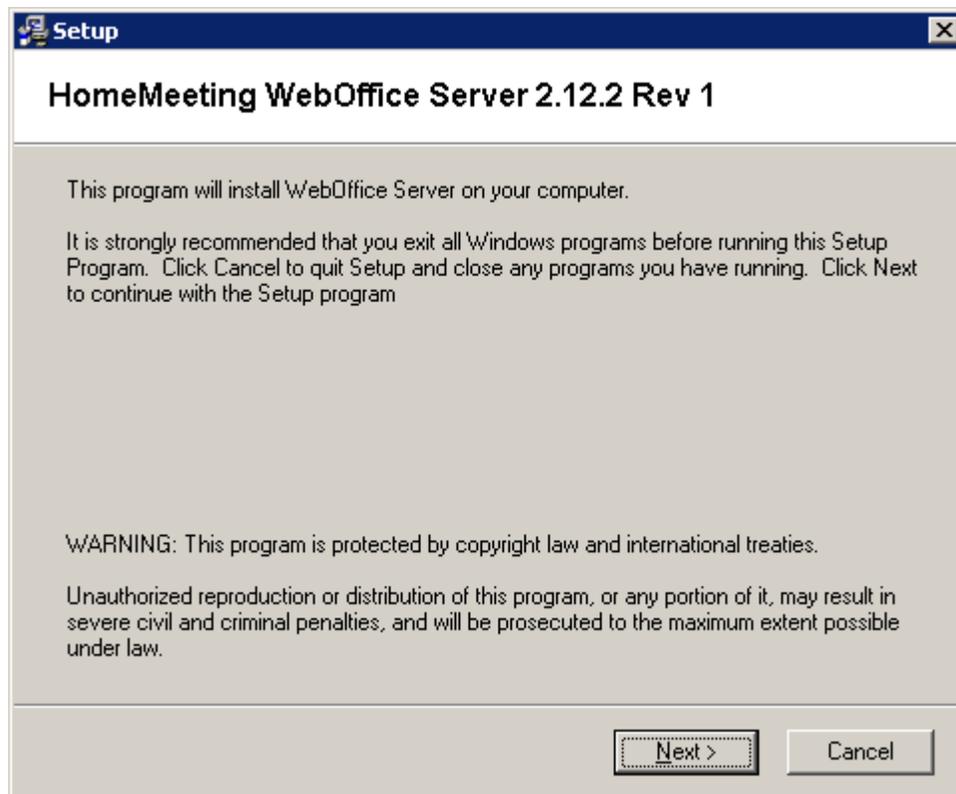
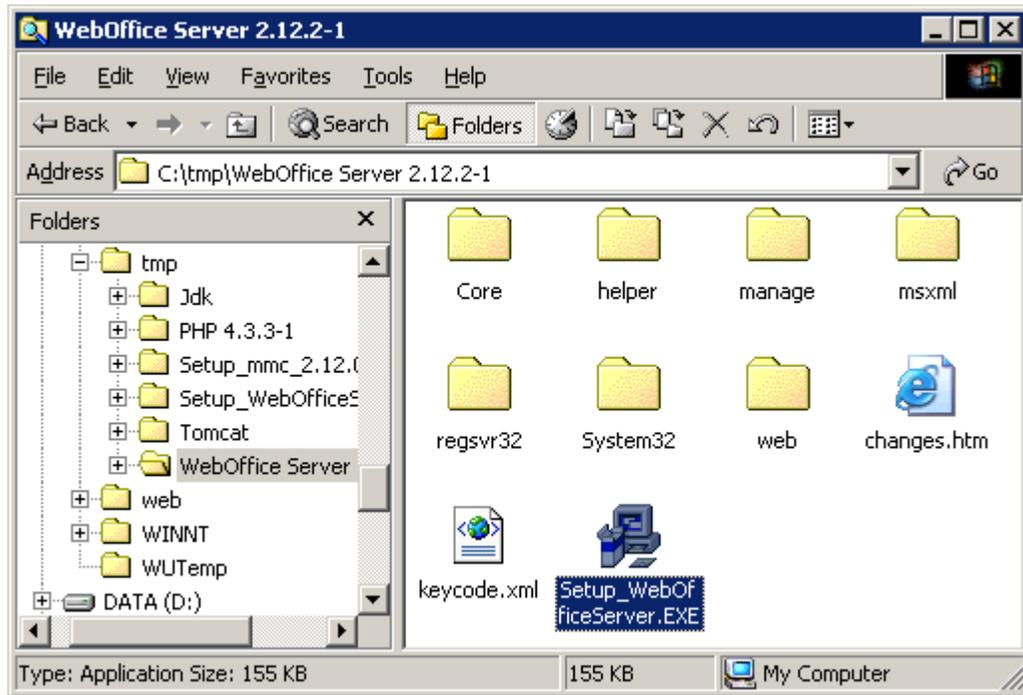


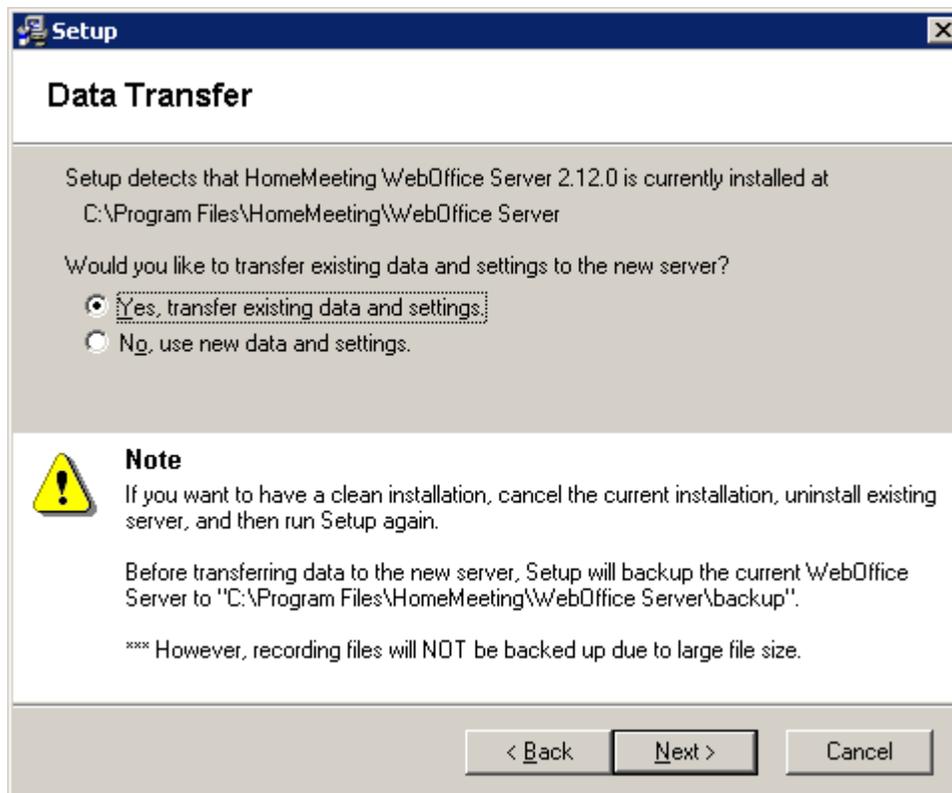
- **Step 1:** download ““setup_weboffice_server_xxx.zip”” from HomeMeeting (xxx is the version number).



Extract the zip file to a temporary folder and then double click “Setup_WebOfficeServer.EXE” and follow the popup instruction to install the Web Office server.. Before the installation, it is strongly recommended that you

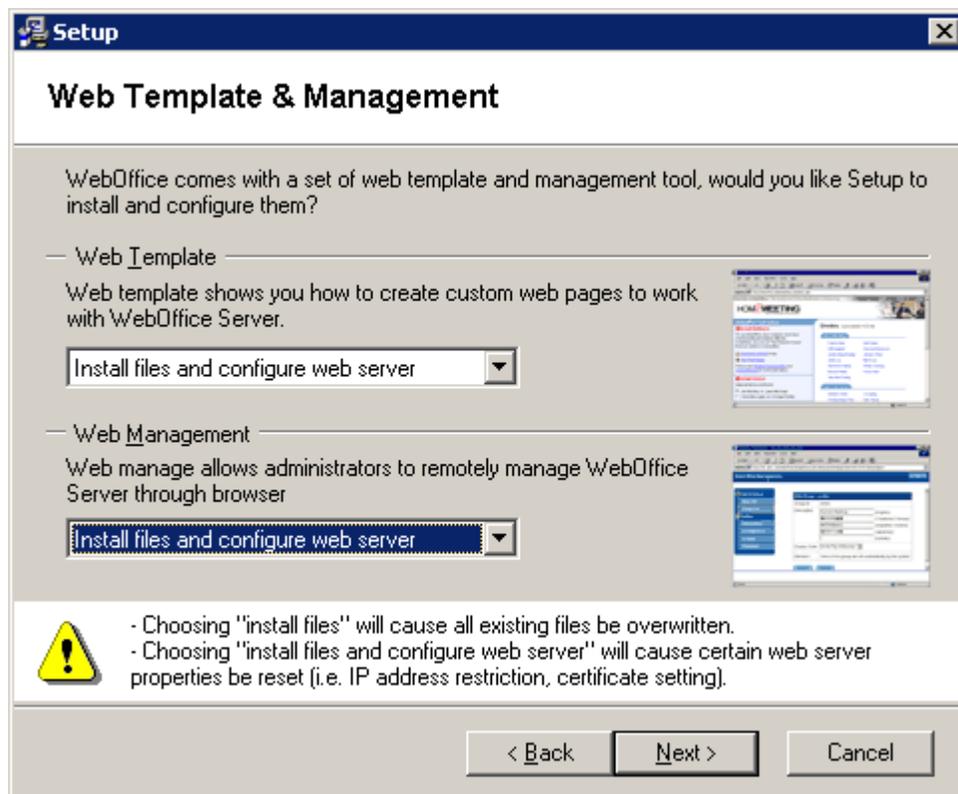
exit all Windows programs, including anti-virus and/or network security program, before running the Setup Program.

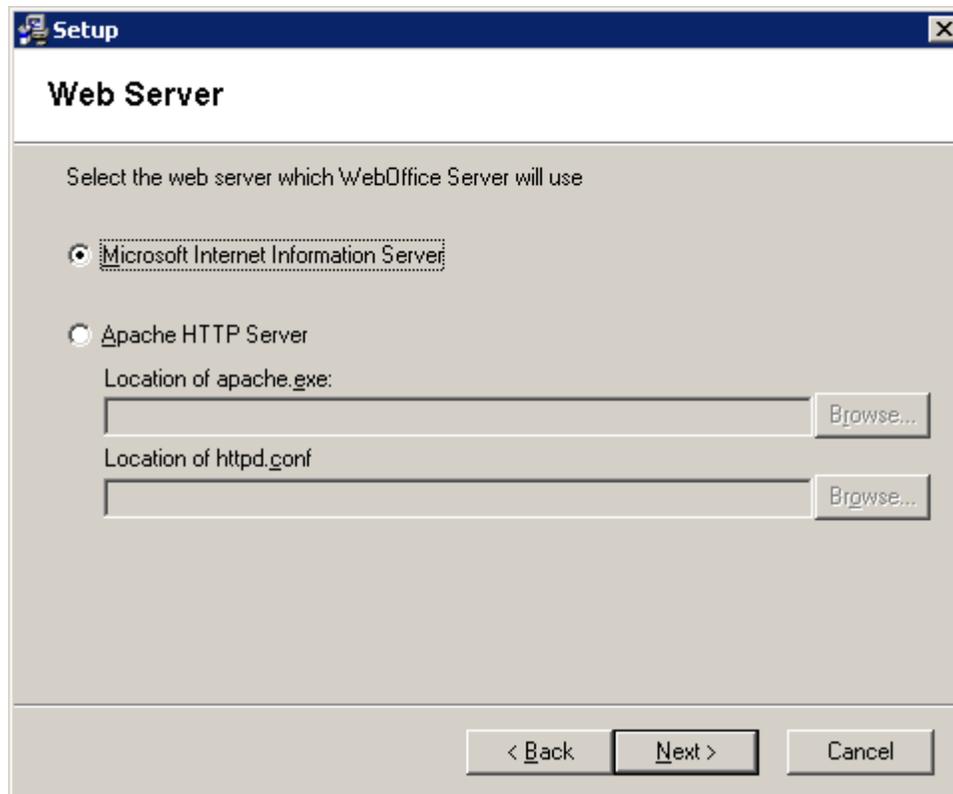




If Setup detects an existing Web Office server, you will be asked whether it should transfer data and setting from existing server. Whether you choose yes or no, Setup will make a backup copy of all the files in existing server in case you need to switch back to the old version. Note that recording files are not backed up due to large file size.

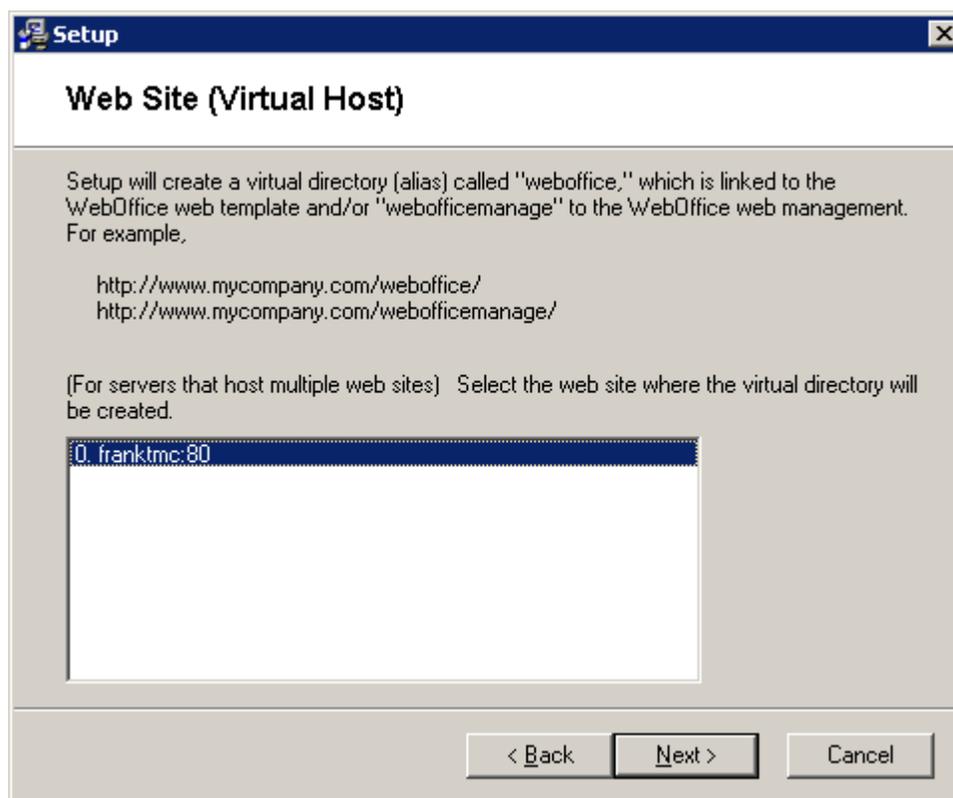
- **Step 2:** installing Sample Web. The HomeMeeting Web Office is flexible that you can deploy your own web application to work with the MCU meeting server. The Web Office installation, however, comes with a sample web application and is ready to be deployed. Setup offers several installation options:
 - **Install files and configure web server:** Choose this option if this is your first time installing Web Office server. When this option is selected, Setup will make necessary configuration on web server and will create a virtual directory that links to the web application.
 - **Install files only:** Choose this option if you are upgrading an existing Web Office server and want to use the updated web application. When this option is selected, Setup will only install web application files. Web server's configuration will not be reset, you will not have to reconfigure.
 - **Do no install:** Choose this option if you do not want web application, or if are upgrading an existing Web Office server and want to keep the existing web application.





If you have selected to “install files and configure web server” for Web Office Management and selected to use Microsoft IIS as the web server, you will be asked to enter the username and password for the Windows administrator account. *Because of security concern, IIS must be run in administrator mode to perform certain operations, such as starting and stopping system services.*

If your web server hosts multiple web sites, you can choose which site that the “weboffice” (and/or “webofficemanage”) virtual directory is created. Therefore the URL to access the Web Office home page is “http://{URL of the server}/weboffice/”. Note this option is available only if you selected “install files and configure web server” option in previous dialog box.

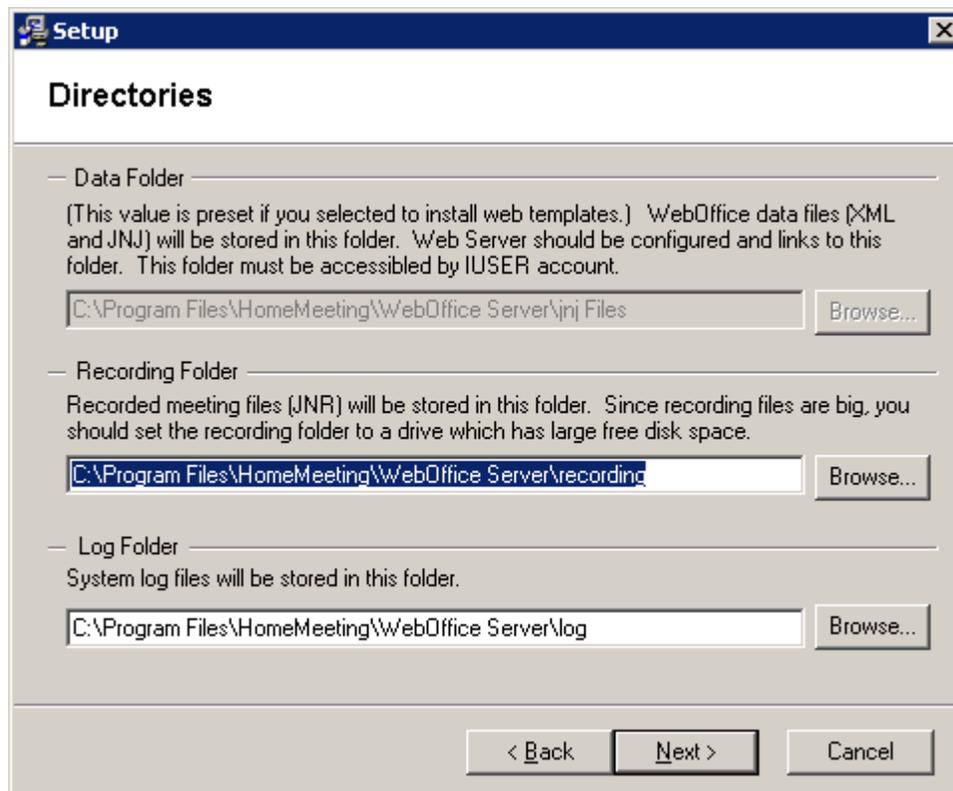
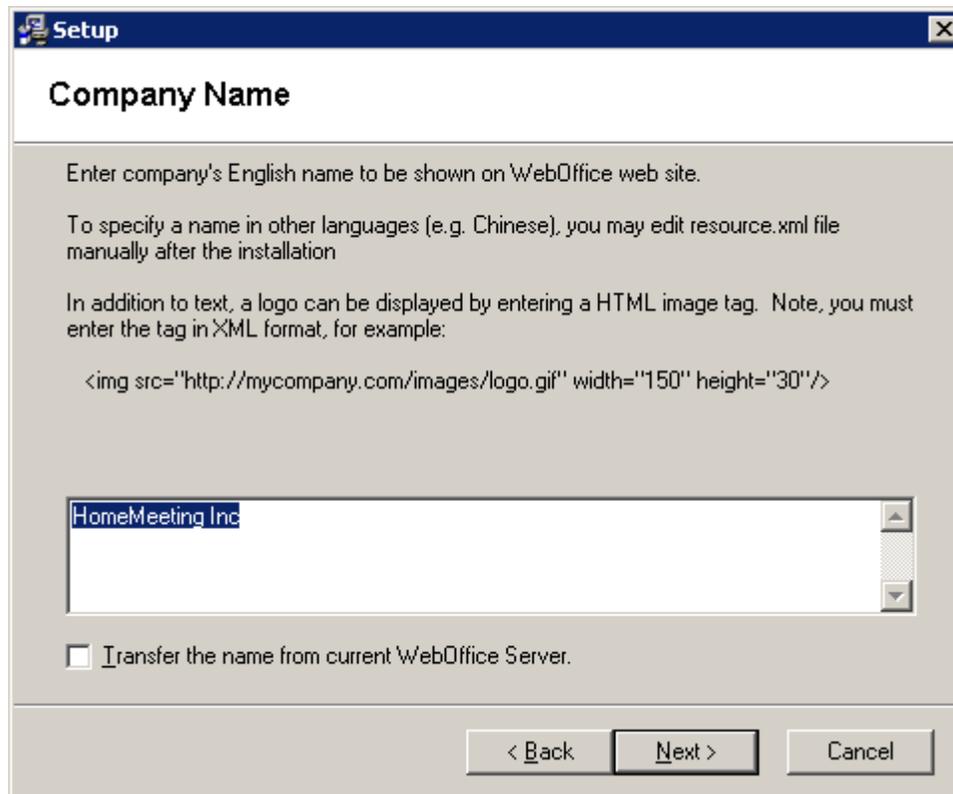


- **Step 3:** display name or logo image of your company at the web page of Web Office server. You can enter your company’s name that will be displayed on the sample web page. HTML syntax can be used here; however, it must be XML compatible. Following is an example to display company logo, note the slash “/” symbol at the end for XML compatible:

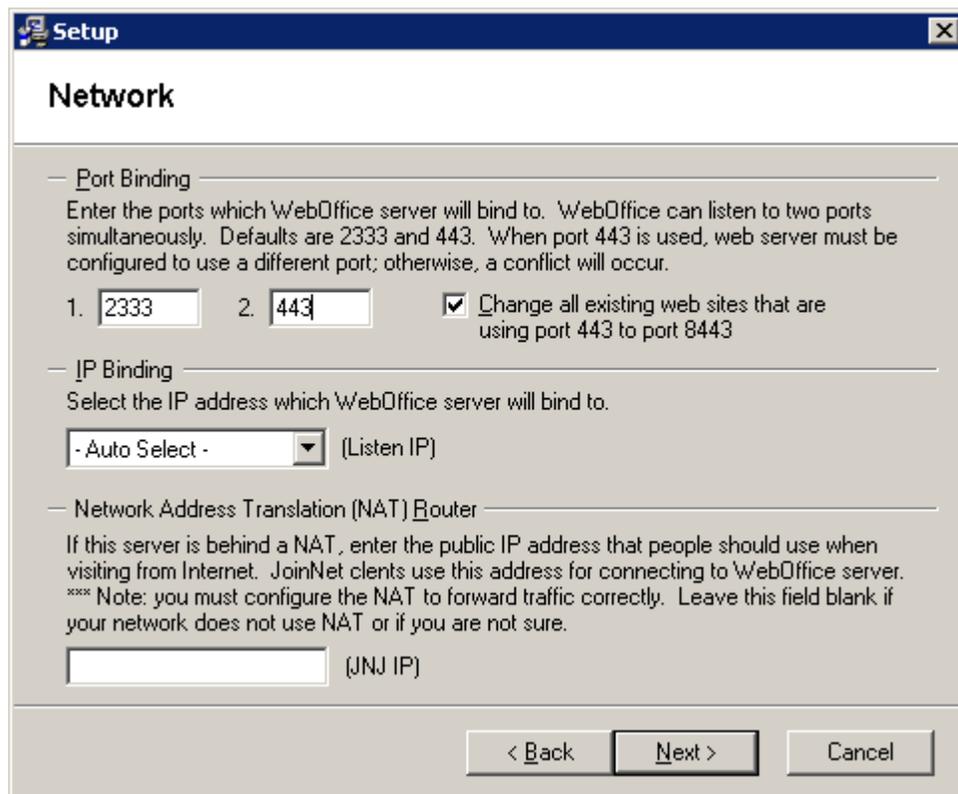
```

```

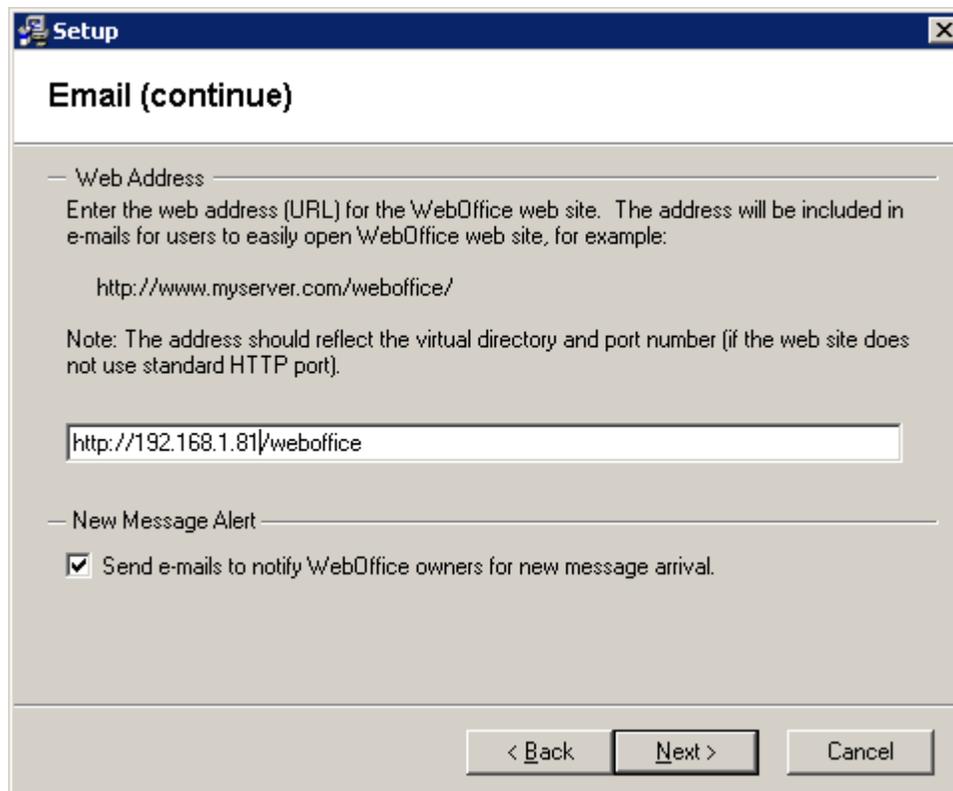
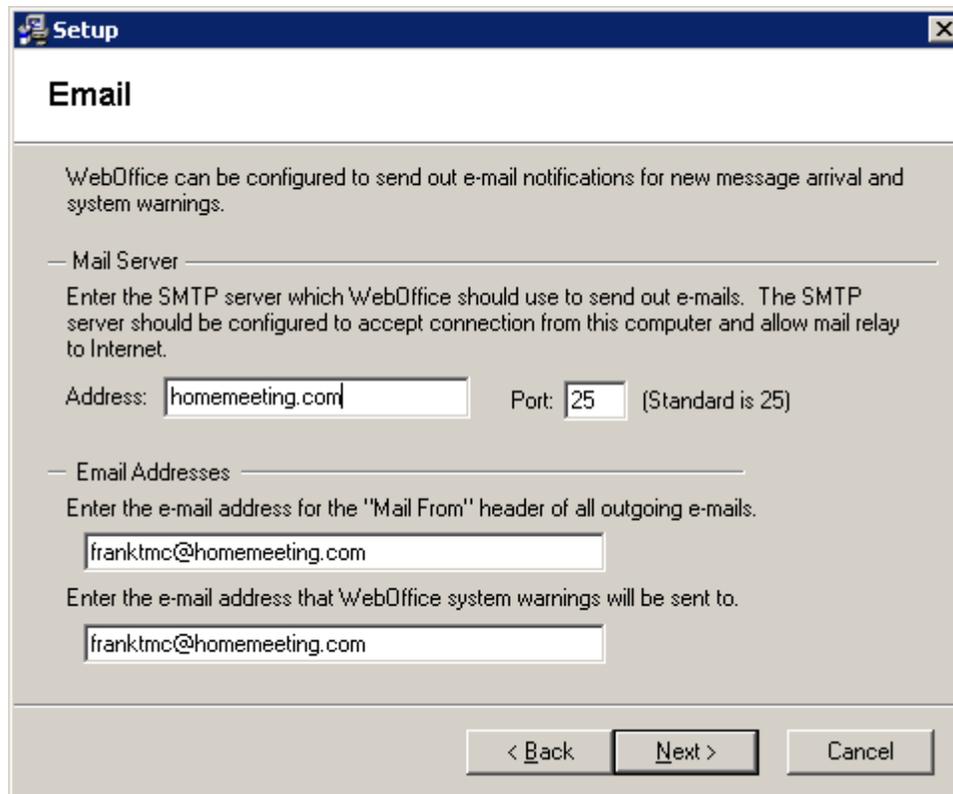
After entering the company name, click “OK” to the data directories setup for the web office server. The recording files can be stored at a separate server of different IP address. See MCU configuration or consult your agent.



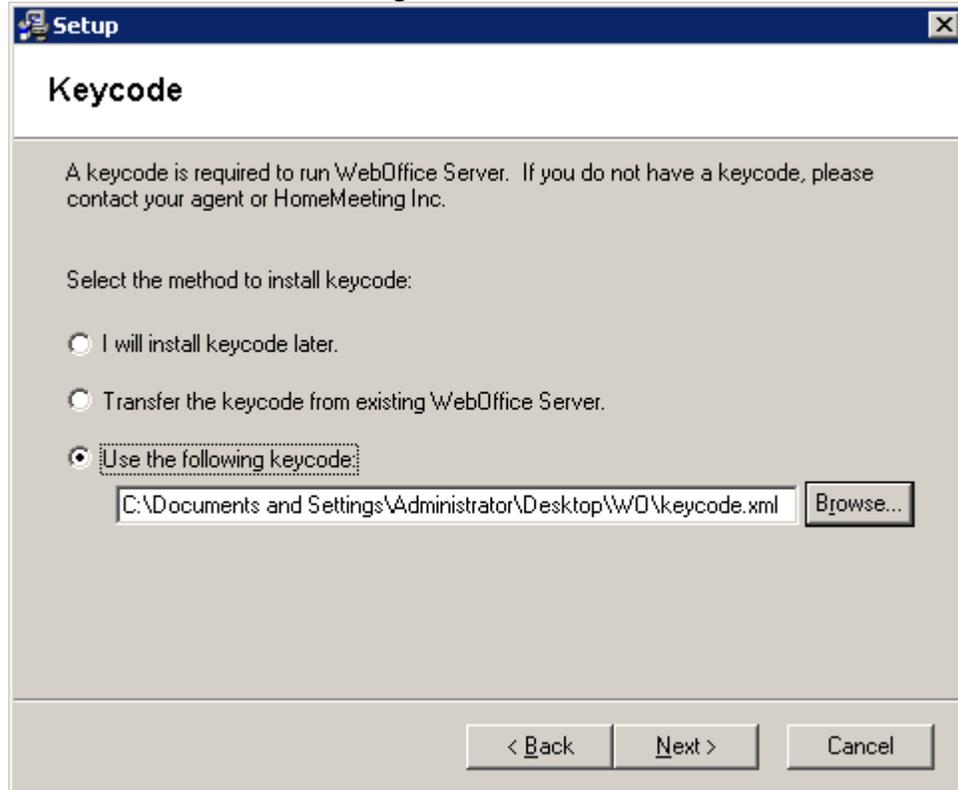
- **Step 4:** network settings for port number and server IP address. The port number(s) has to be open, not only for the server-side firewall, but also for client-side firewall setting, if the connection is through public Internet.
 - Port Binding: You can configure the listening ports of the meeting server. The default port numbers are 2333 and 443. Port 443 is used to allow clients connecting from behind a cooperate firewall through HTTPS protocol. Note that if port 443 is used for the MCU meeting server, web server must be configured to use a different port for HTTPS traffic. By default, Setup will configure web server to use 8443.
 - IP Binding: If you are installing the Web Office server on a multi-homed computer, please select the IP address that the Web Office server will be bind to.
 - NAT Router: If the computer is behind a Network Address Translator (NAT) server, enter the public IP address, which can be accessed from Internet. JoinNet clients use this public IP address for connecting to the MCU meeting server. In addition, the network administrator needs to configure the NAT to forward traffic correctly.



- **Step 5:** set up E-Mail server and administrator information.

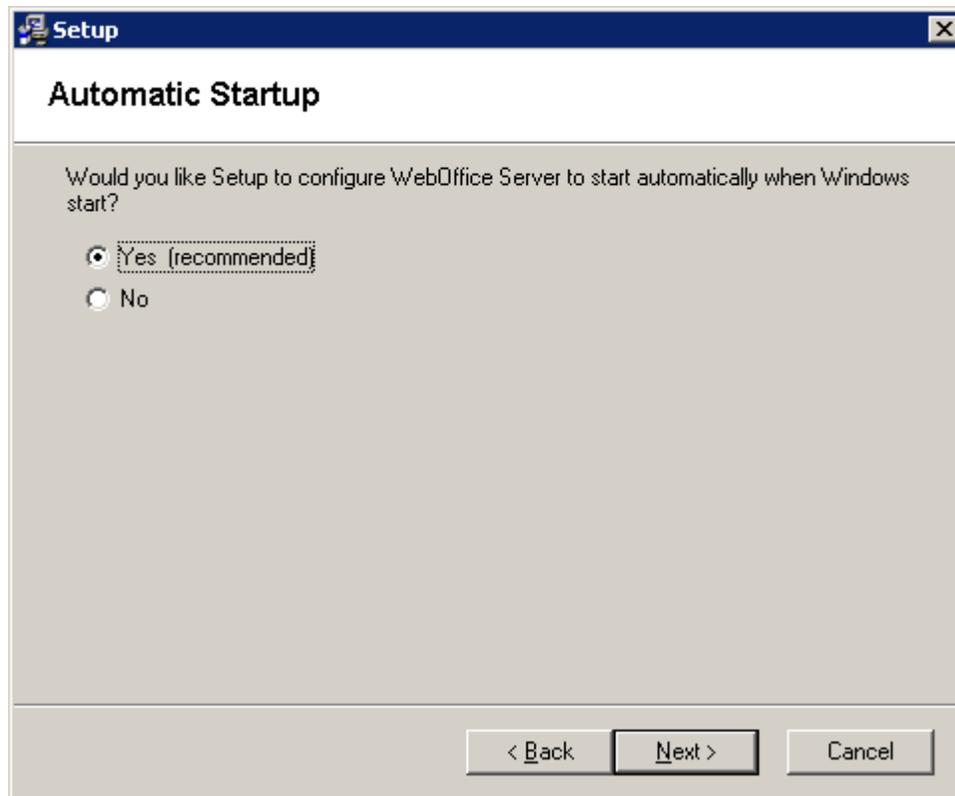


- **Step 6:** License Key Installation. MCU meeting server can be launched only with a valid license from HomeMeeting.

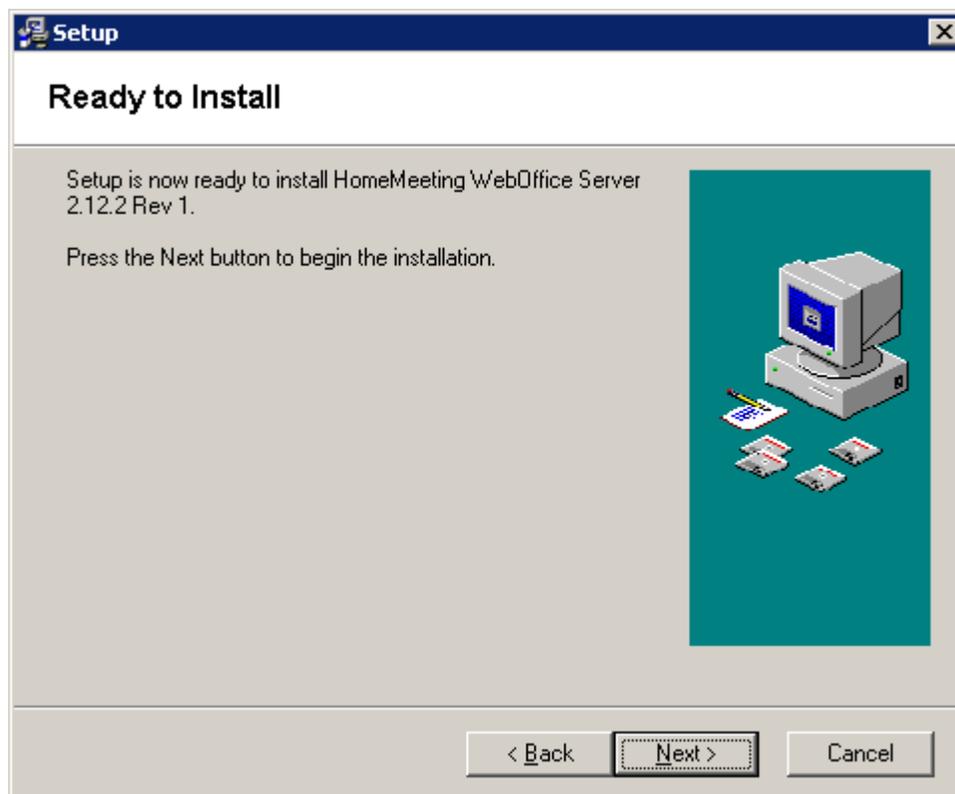


- **Step 7:** set system password and allow automatic server startup.

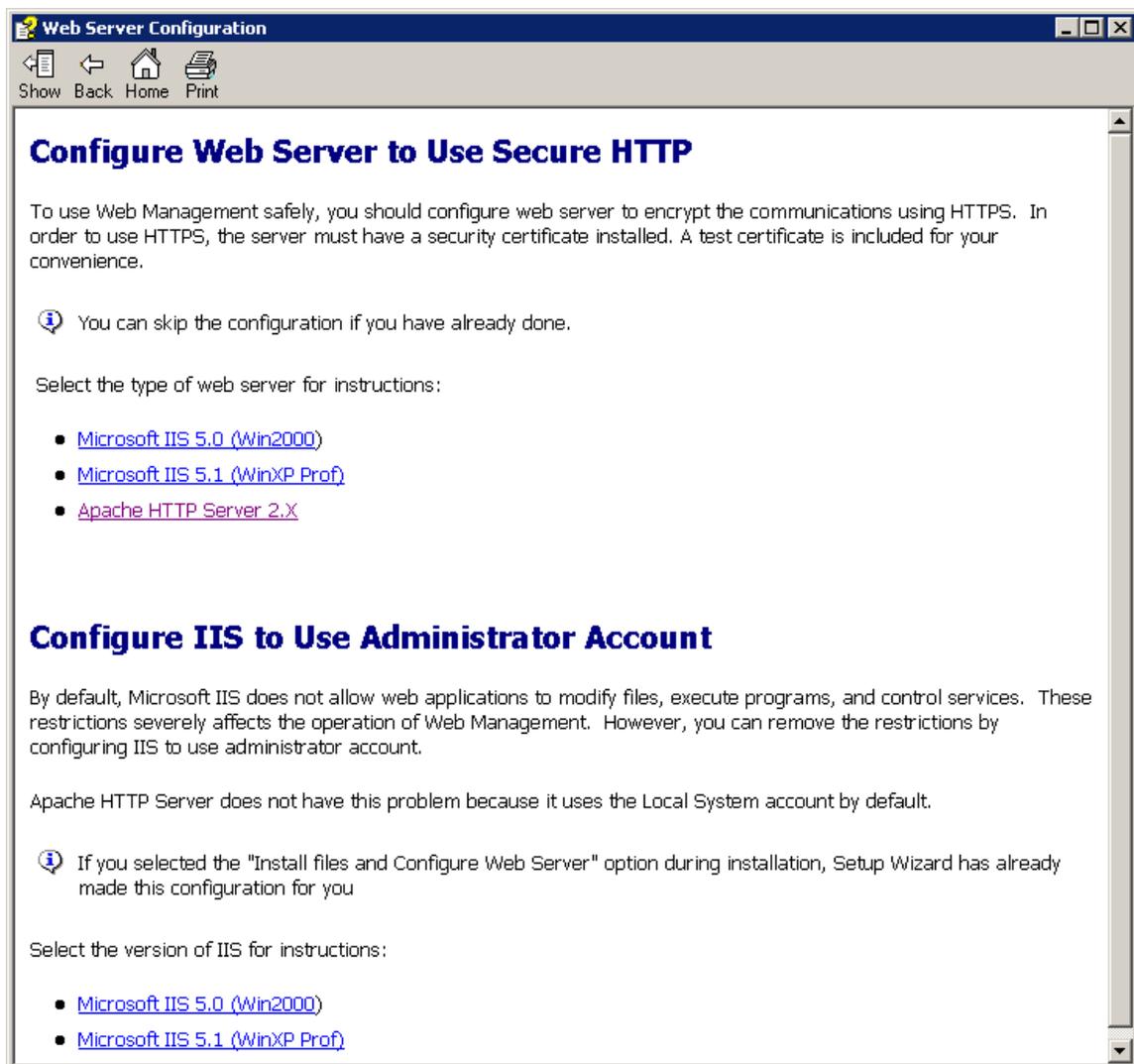
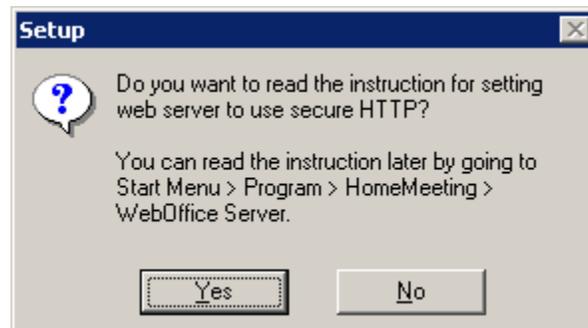




The installer is now ready to install the new Web Office server.



Web Office server allows remote management of user account via secured HTTP. Please consult your local HomeMeeting agent for more details or you can read the instruction come with the installation package.



The "Web Server Configuration" window features a navigation bar with "Show", "Back", "Home", and "Print" icons. The main content area is titled "Configure Web Server to Use Secure HTTP".

To use Web Management safely, you should configure web server to encrypt the communications using HTTPS. In order to use HTTPS, the server must have a security certificate installed. A test certificate is included for your convenience.

i You can skip the configuration if you have already done.

Select the type of web server for instructions:

- [Microsoft IIS 5.0 \(Win2000\)](#)
- [Microsoft IIS 5.1 \(WinXP Prof\)](#)
- [Apache HTTP Server 2.X](#)

Configure IIS to Use Administrator Account

By default, Microsoft IIS does not allow web applications to modify files, execute programs, and control services. These restrictions severely affects the operation of Web Management. However, you can remove the restrictions by configuring IIS to use administrator account.

Apache HTTP Server does not have this problem because it uses the Local System account by default.

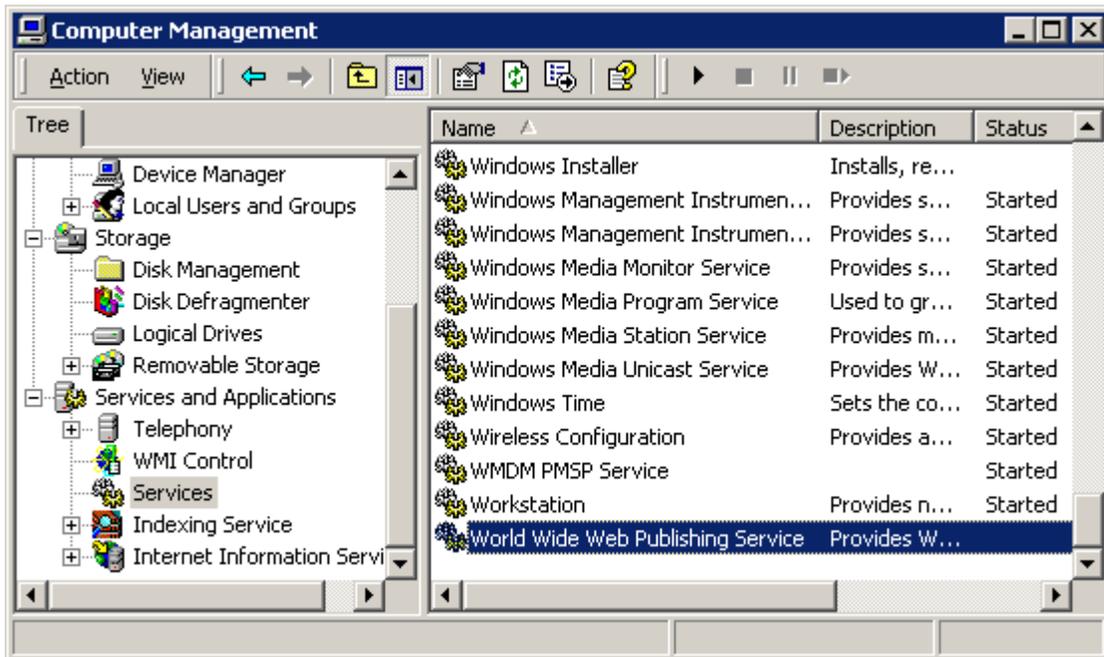
i If you selected the "Install files and Configure Web Server" option during installation, Setup Wizard has already made this configuration for you

Select the version of IIS for instructions:

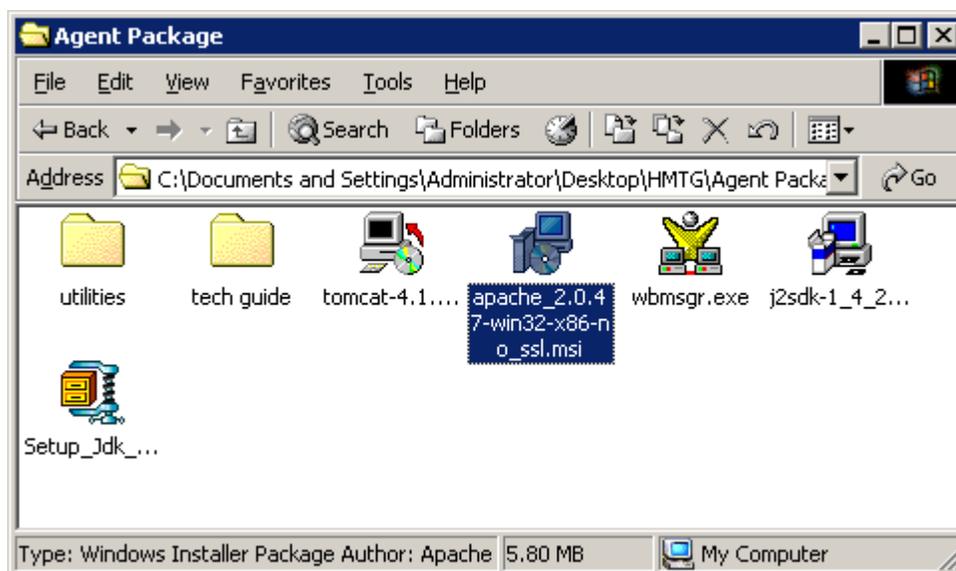
- [Microsoft IIS 5.0 \(Win2000\)](#)
- [Microsoft IIS 5.1 \(WinXP Prof\)](#)

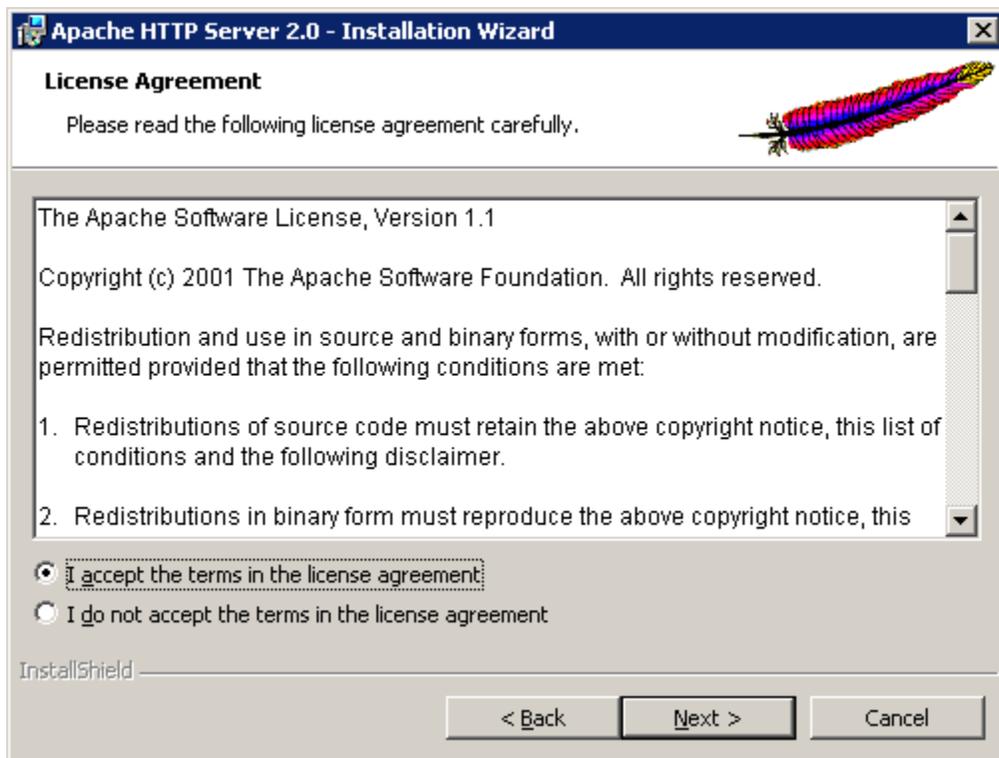
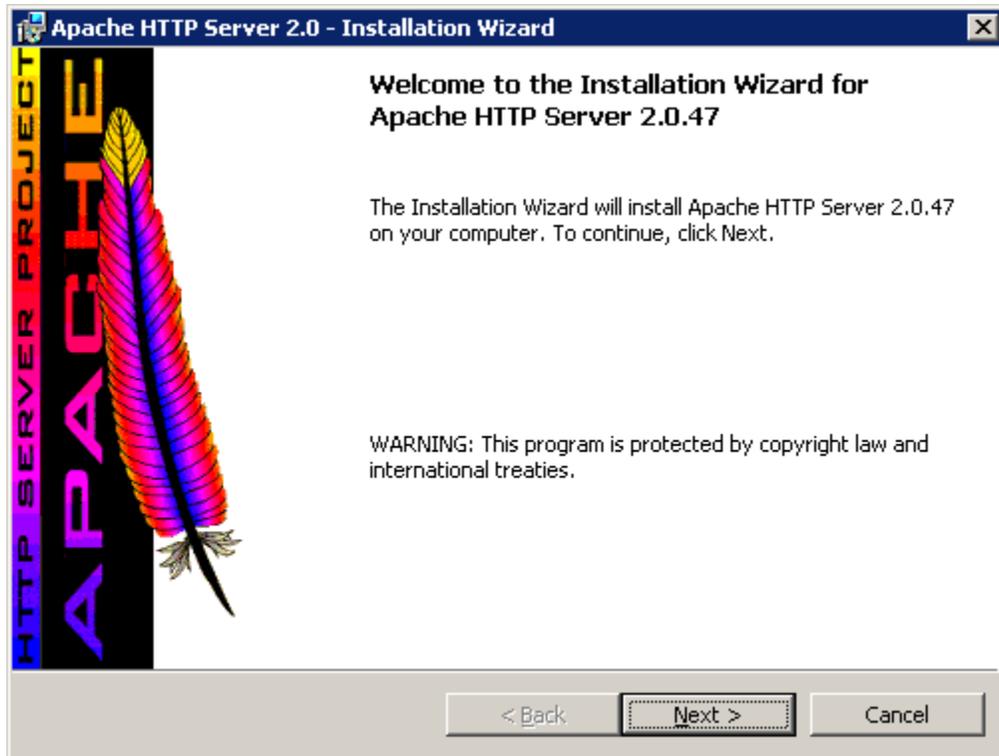
Installing Web Office Server with Apache HTTP Server

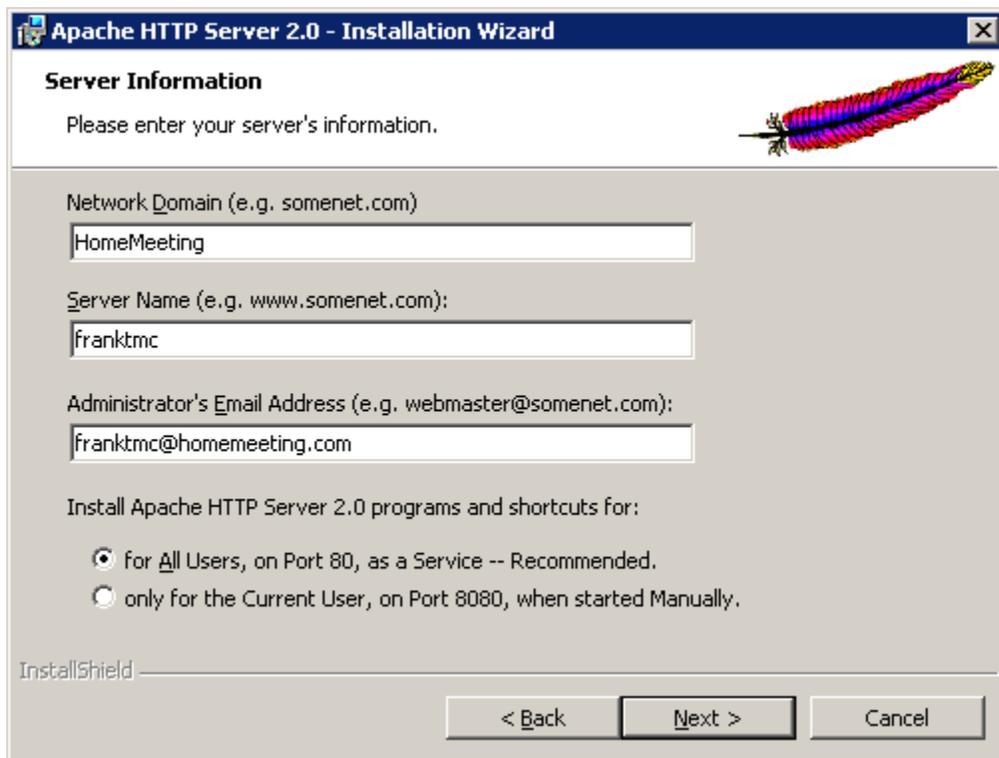
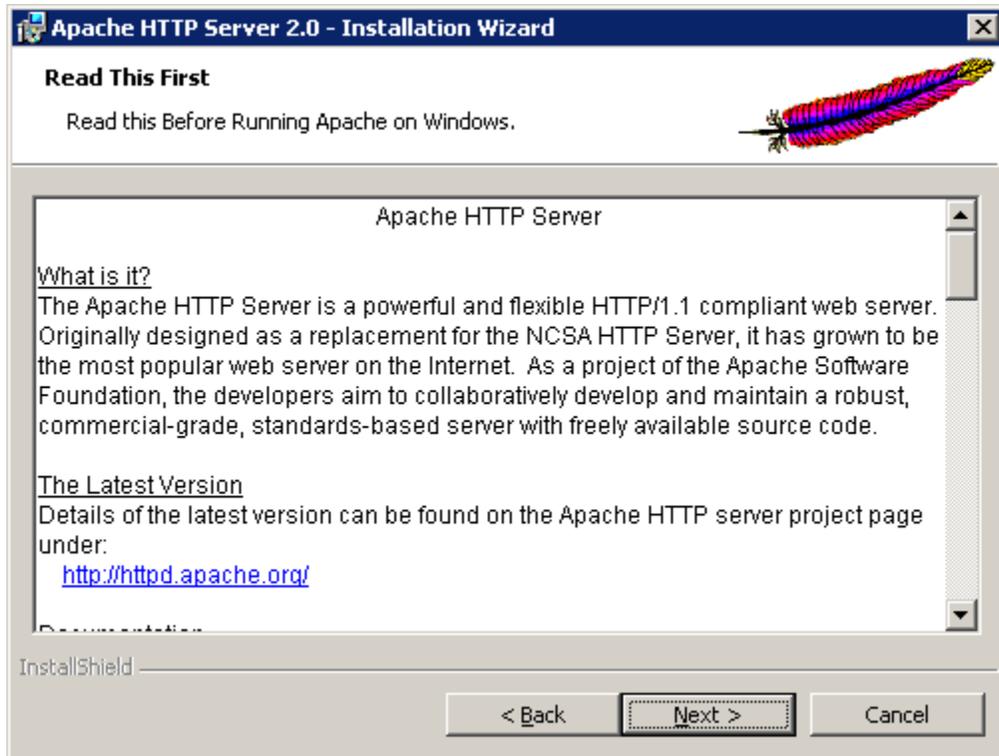
- **Step 0a:** *STOP Microsoft IIS server before installing Apache HTTP server.* To stop Microsoft IIS server, right click “My Computer” → “Manage” → “Services and Applications” → “Services” → Stop “World Wide Web Publishing Service”.

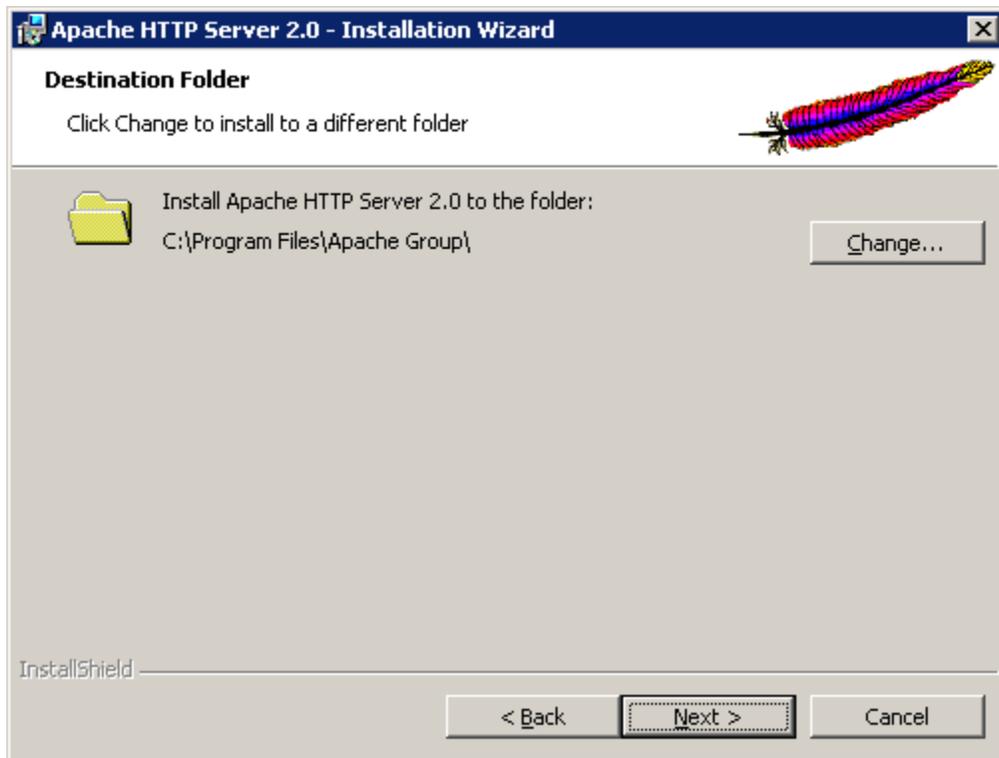
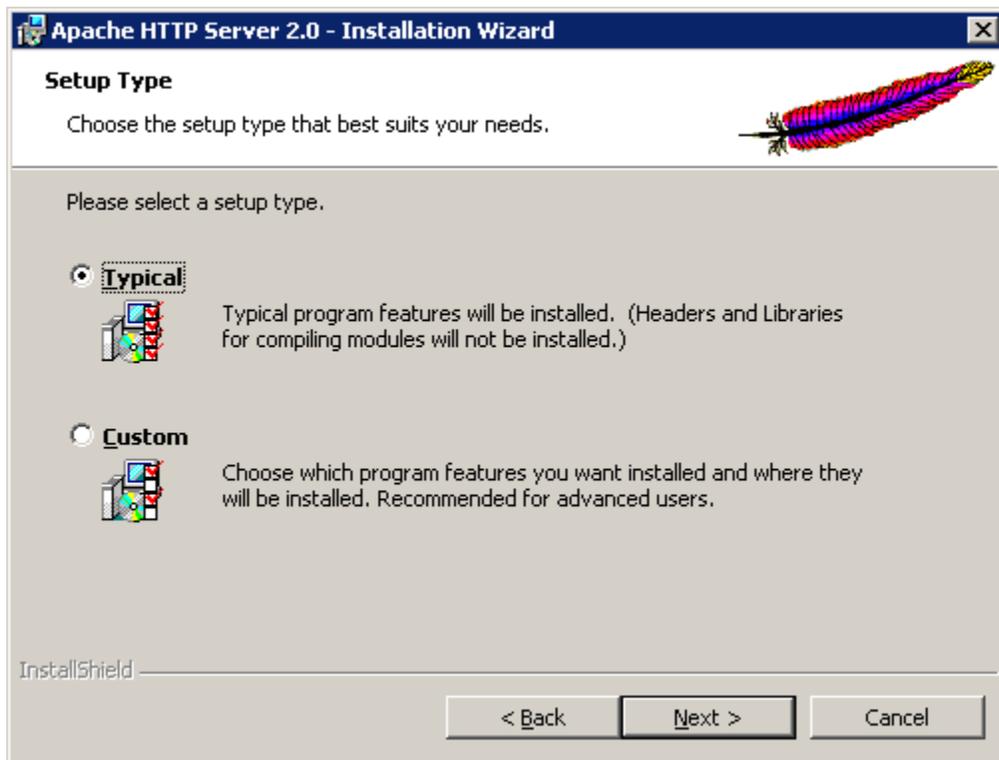


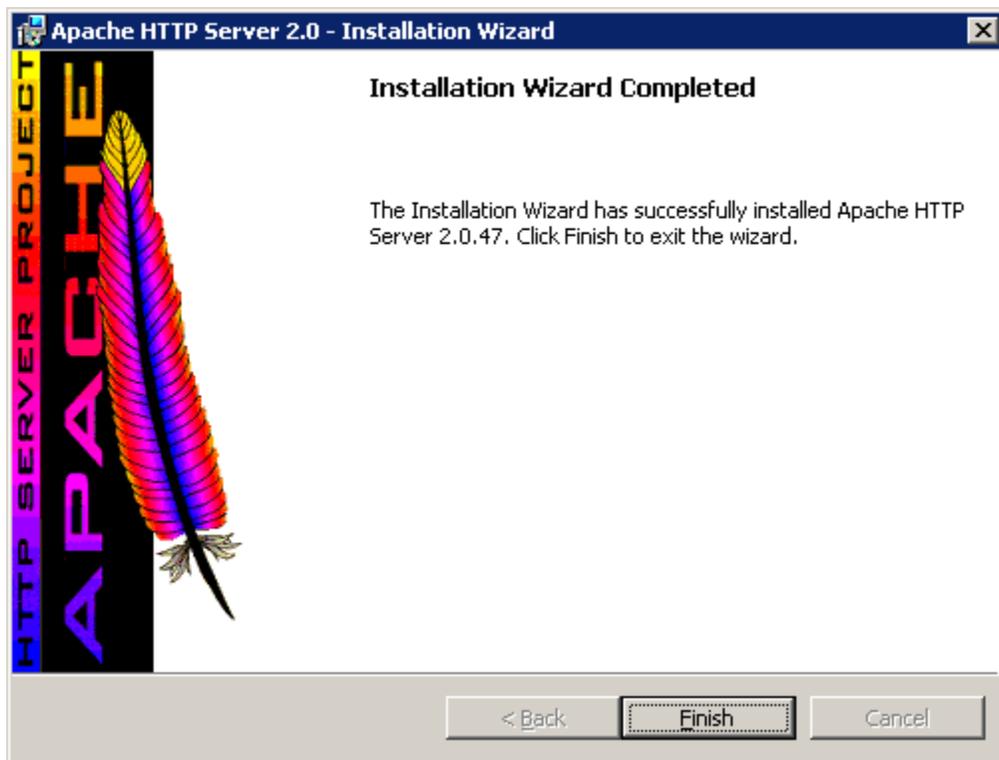
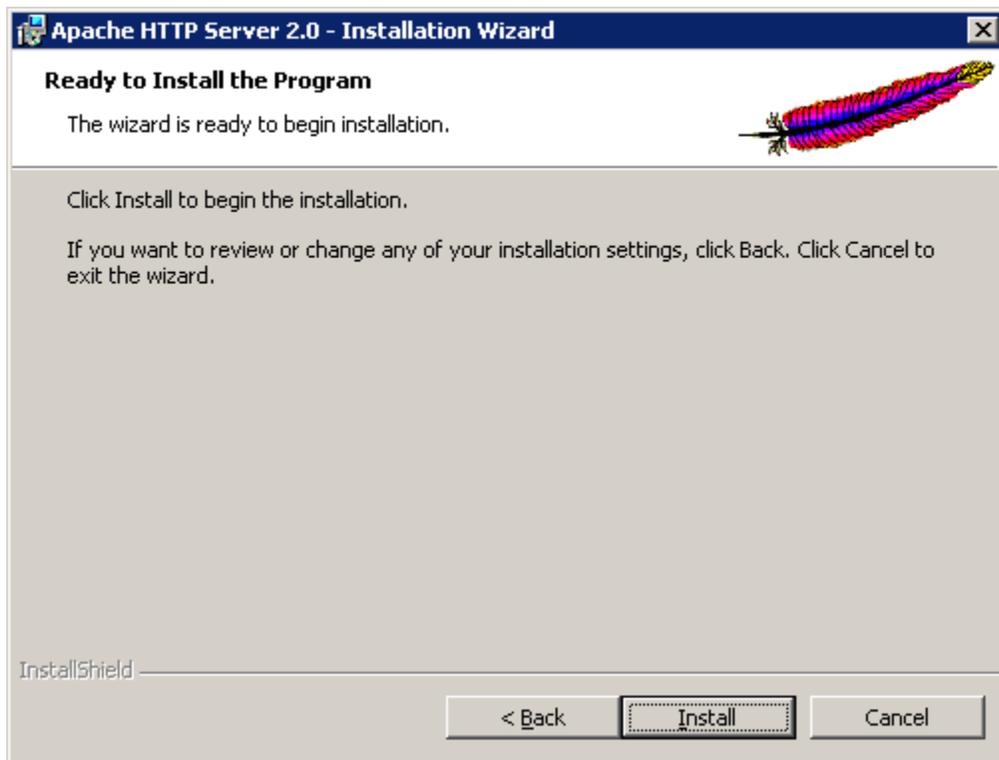
- **Step 0b:** copy “apache_2.0.47-win32-x86-no_ssl.msi” to your computer and double click this file to install Apache HTTP server.





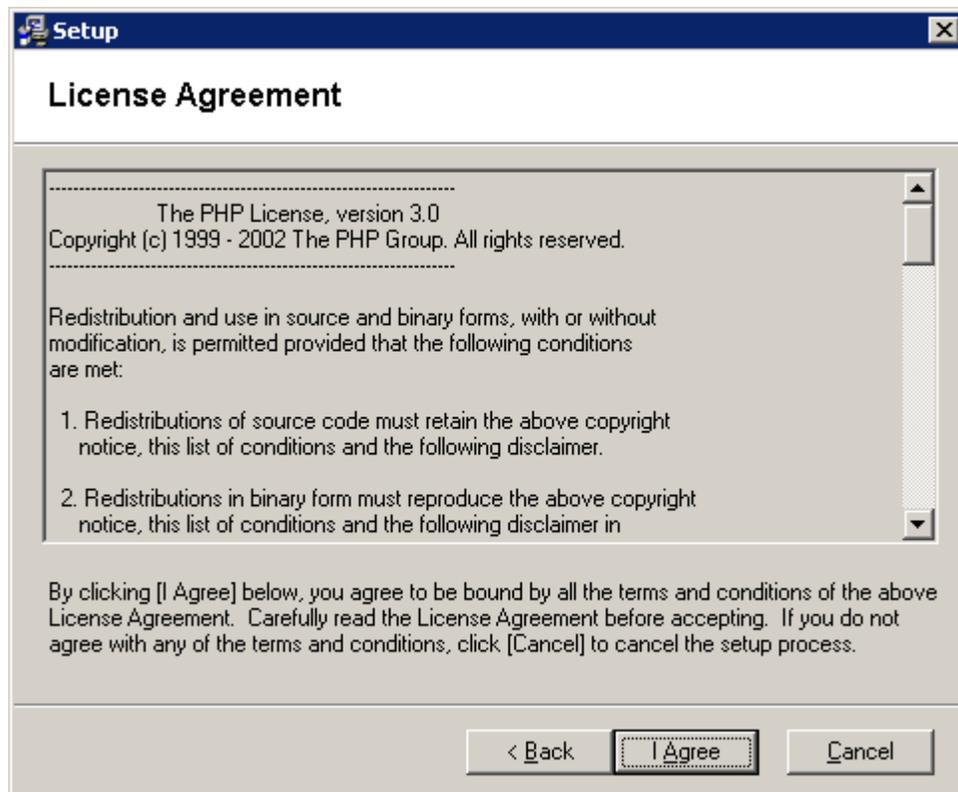
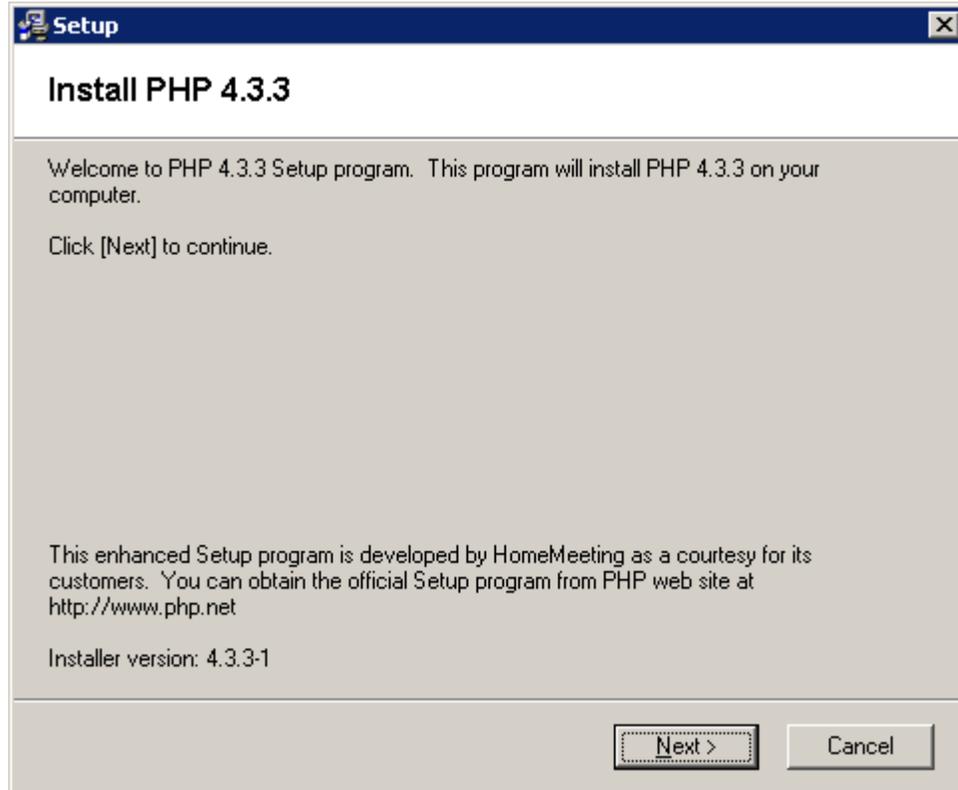


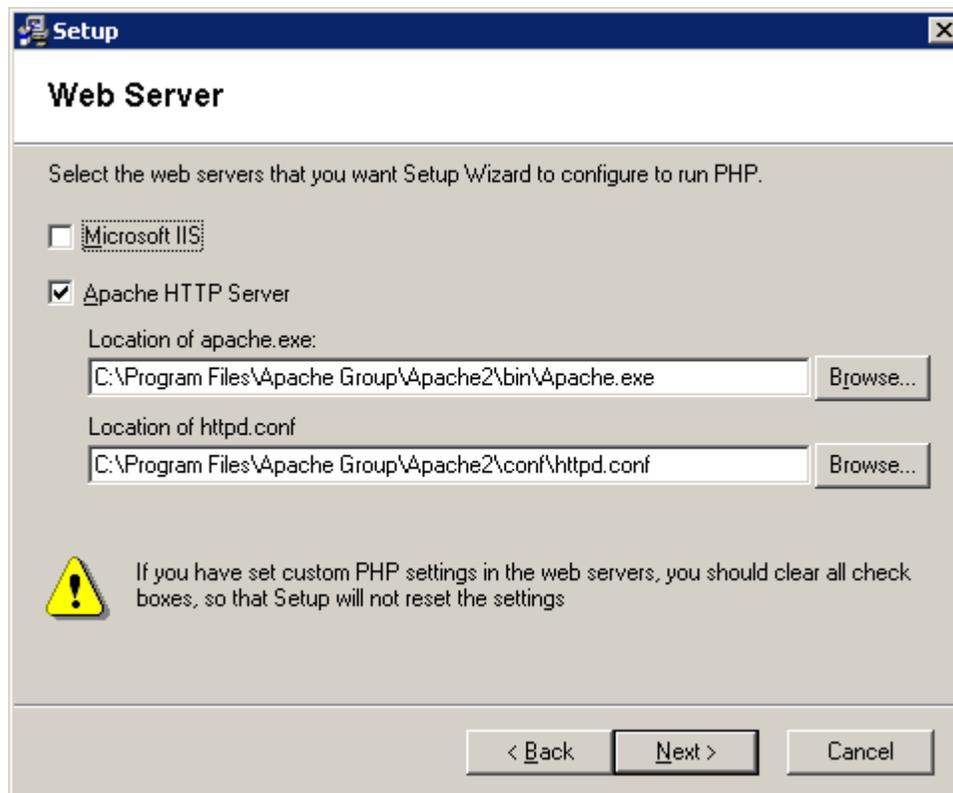
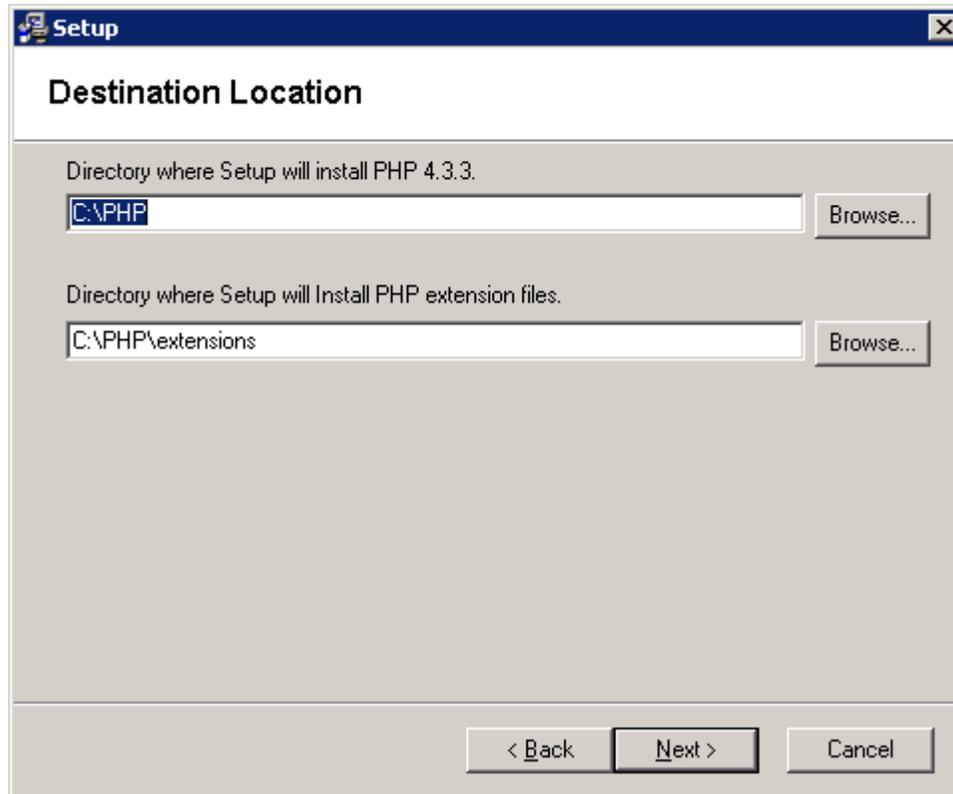


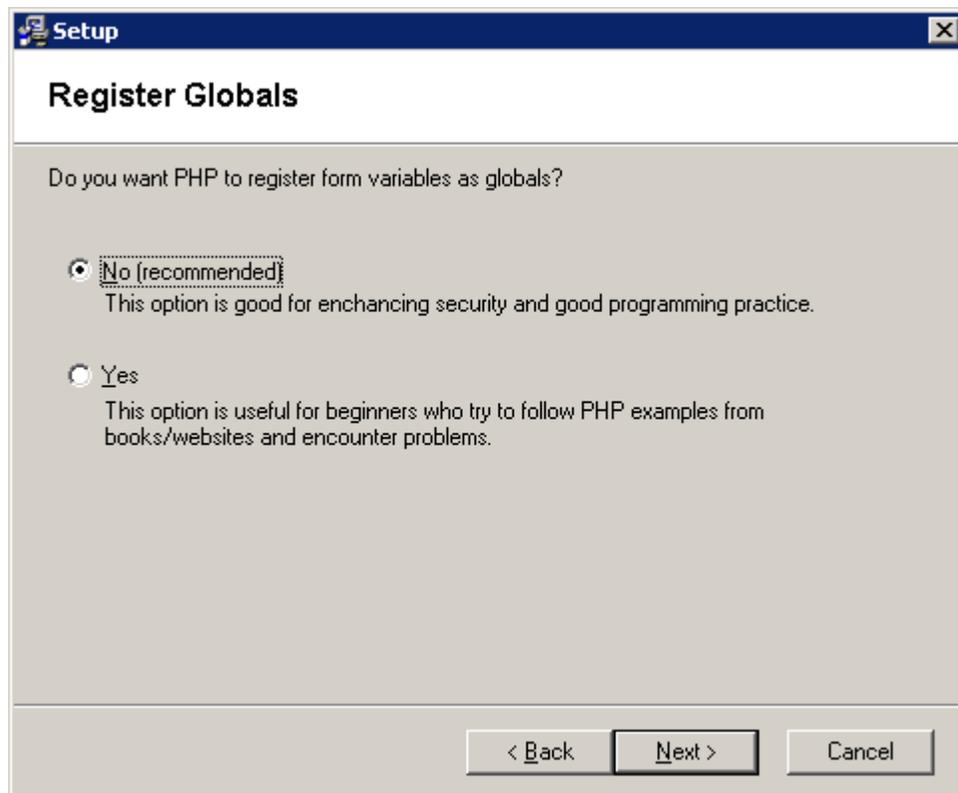
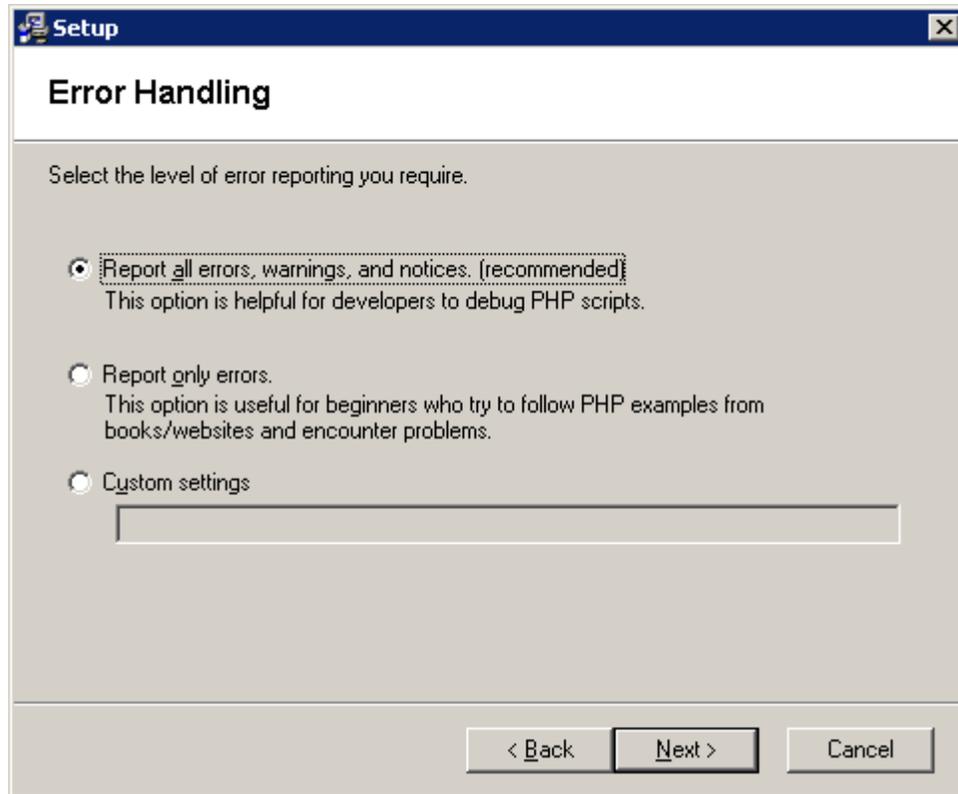


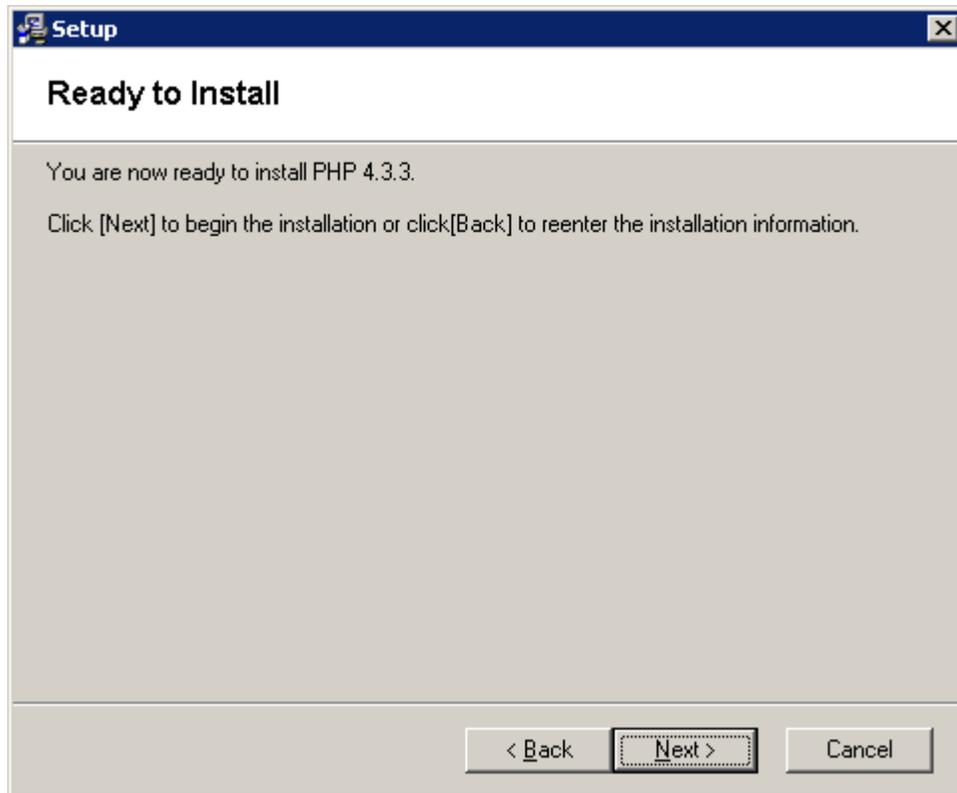
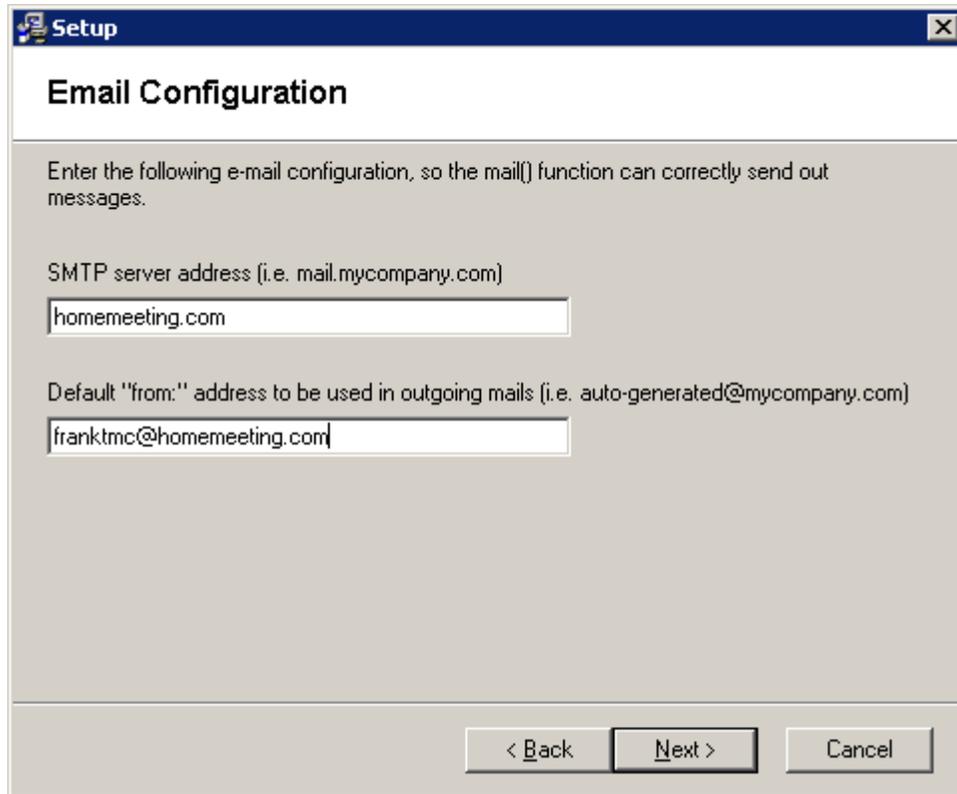
If you can browse http://server_name or http://server_IP and see the Apache's welcome web page, then Apache HTTP server is running correctly.

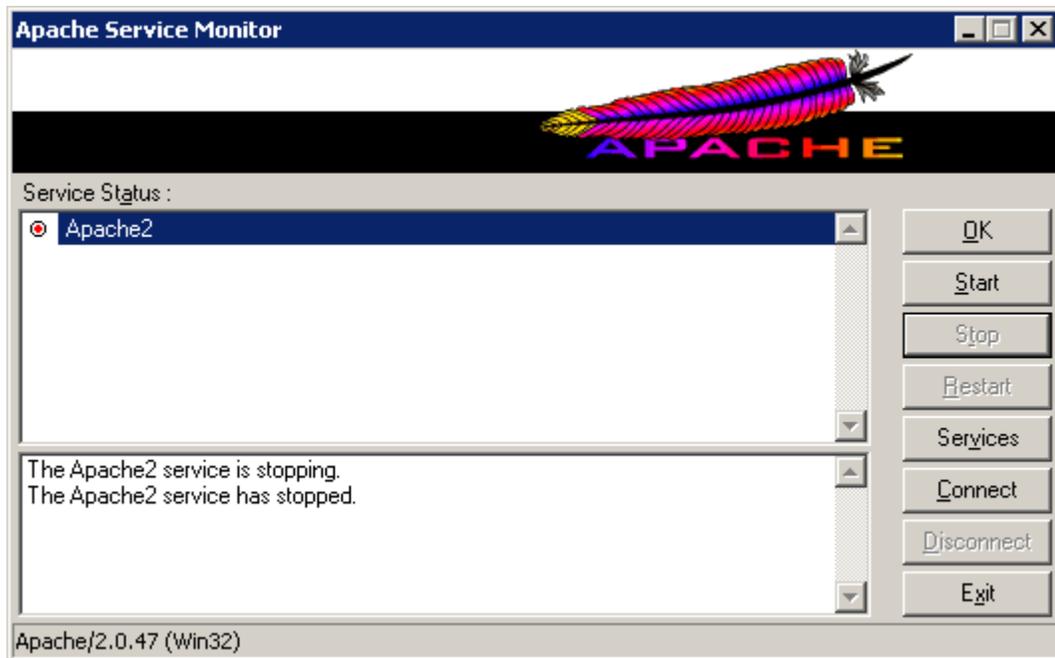
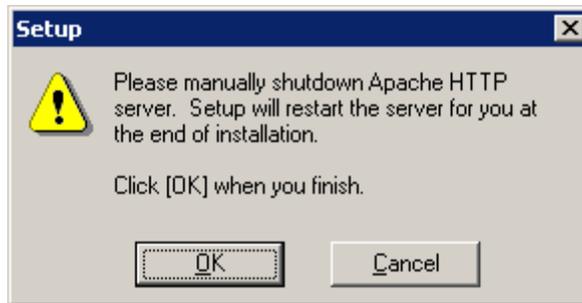
- **Step 0c:** install PHP script engine.





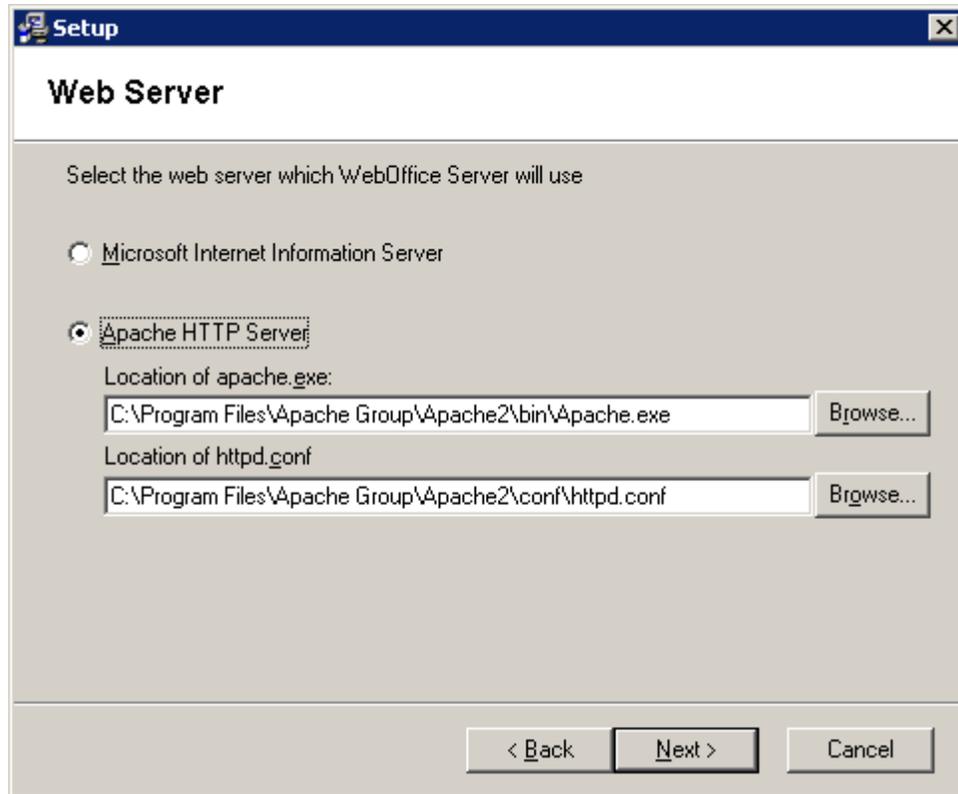




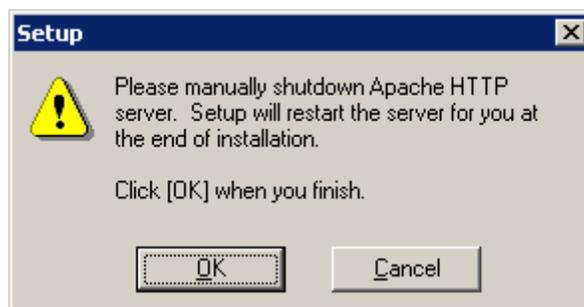


Installation complete and Apache HTTP server is started automatically.

- **Step 1:** same as “Installing Web Office Server with Microsoft IIS Server”. Download ““setup_weboffice_server_xxx.zip”” from HomeMeeting (xxx is the version number). If Setup detects an existing Web Office server, you will be asked whether it should transfer data and setting from existing server. Whether you choose yes or no, Setup will make a backup copy of all the files in existing server in case you need to switch back to the old version. Note that recording files are not backed up due to large file size.
- **Step 2:** installing Sample Web. The HomeMeeting Web Office is flexible that you can deploy your own web application to work with the MCU meeting server. The Web Office installation, however, comes with a sample web application and is ready to be deployed. Setup offers several installation options: (1) install files and configure web server, (2) install files only, and (3) do not install. See the instruction as the case of Microsoft IIS server. Here, instead of choosing Microsoft IIS server as the web server, you should choose Apache HTTP Server.

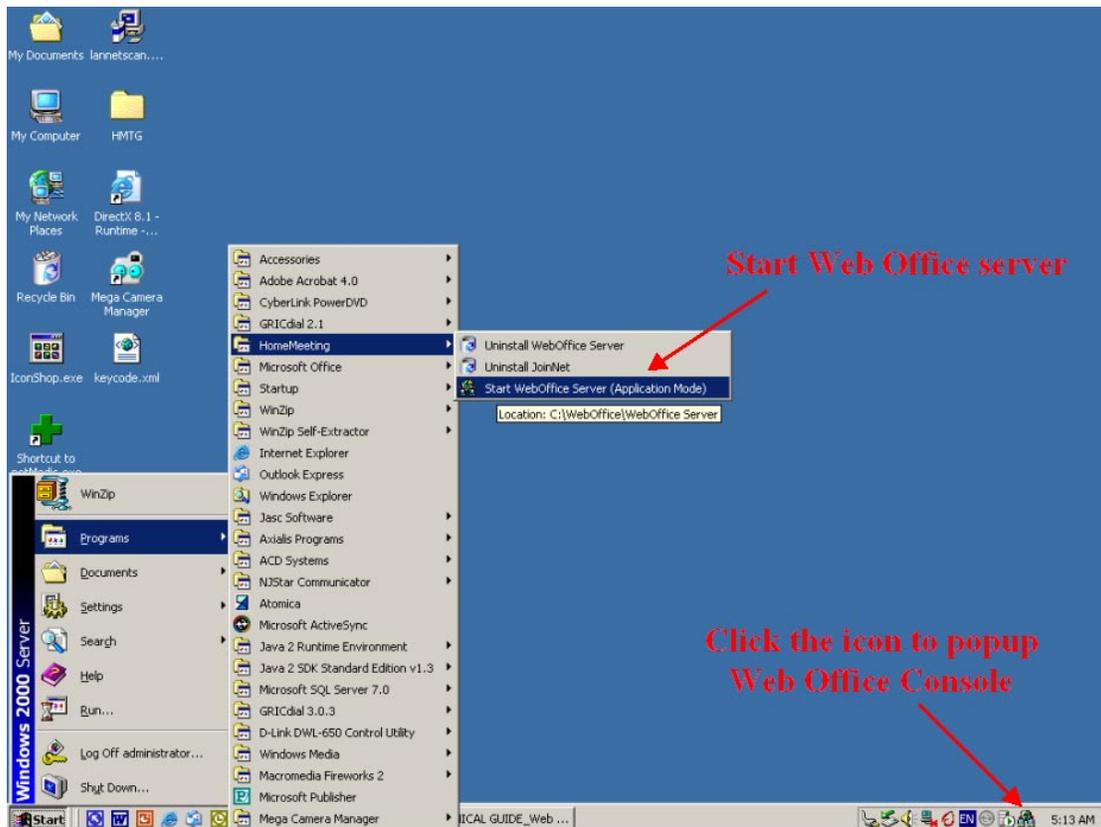


- **Step 3 to Step 7** is identical to those for Microsoft IIS server. Again, the setup program will ask you to manually stop Apache HTTP server at the end of installation. Stop Apache and click “OK”. Apache HTTP server will be launched automatically when the installation completed.



Web Office server allows remote management of user account via secured HTTP. The standard installation package of Apache HTTP server is not equipped with secured HTTP components. The required components can be downloaded from HomeMeeting. Please consult your local HomeMeeting agent for more details or you can read the instruction come with the installation package.

Once the installation is completed, a shortcut icon “Start Web Office Server” should be displayed on the Program list. To start the Web Office server, simply click on that icon and you will see the same icon appears at the taskbar. *If the Web Office icon does not appear at the taskbar after clicking the shortcut to start the Web Office server, it is most likely that the authorization keycode is not a valid one.*

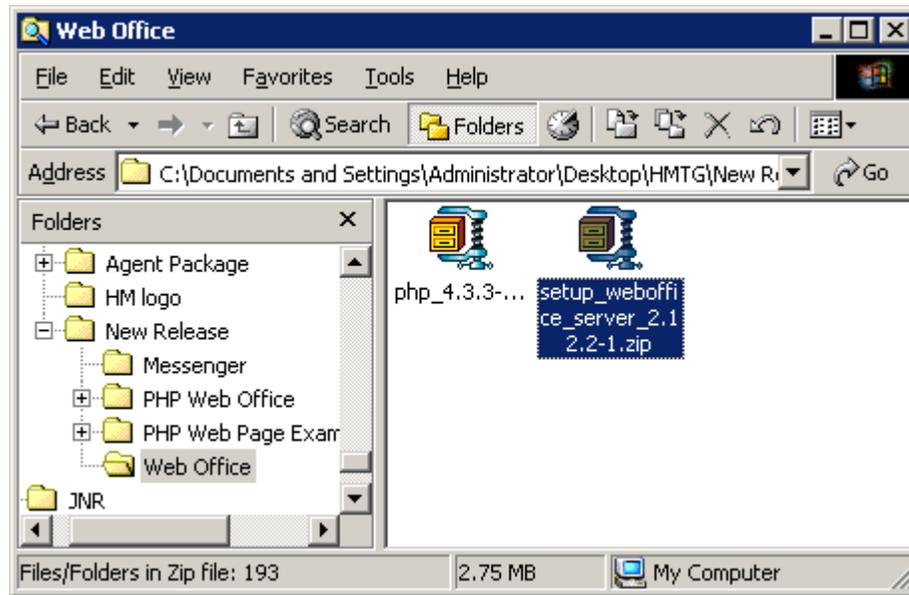


If you can browse http://server_IP:2333 or http://server_IP:443 (assuming the port number is either 2333 or 443, by default setting) and see the “WebOffice Directory” web page, then the MCU meeting server is running correctly.

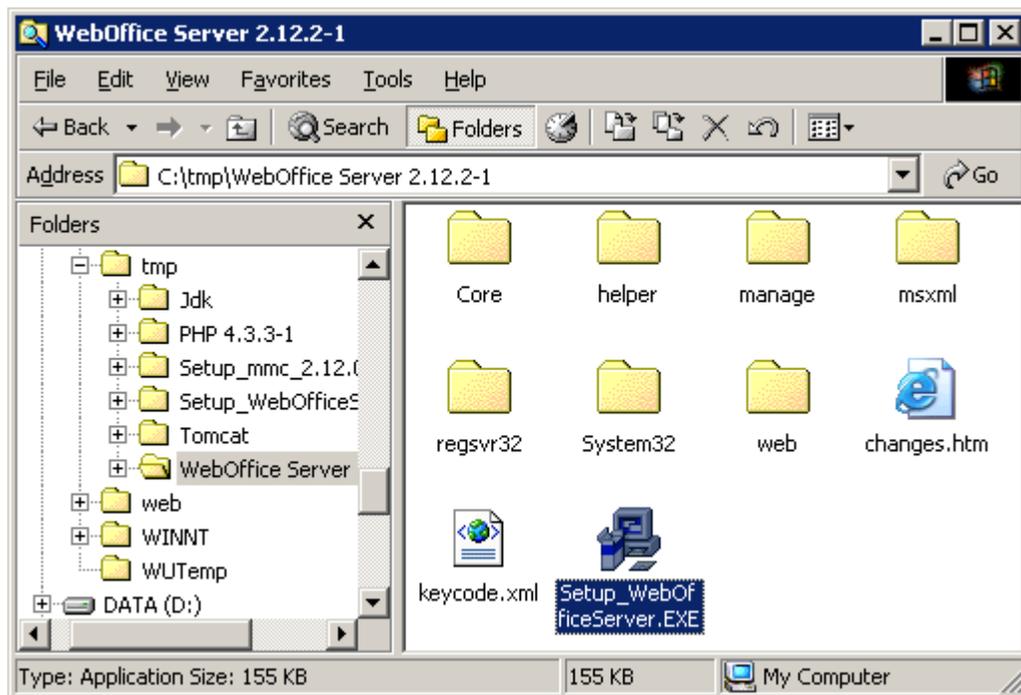


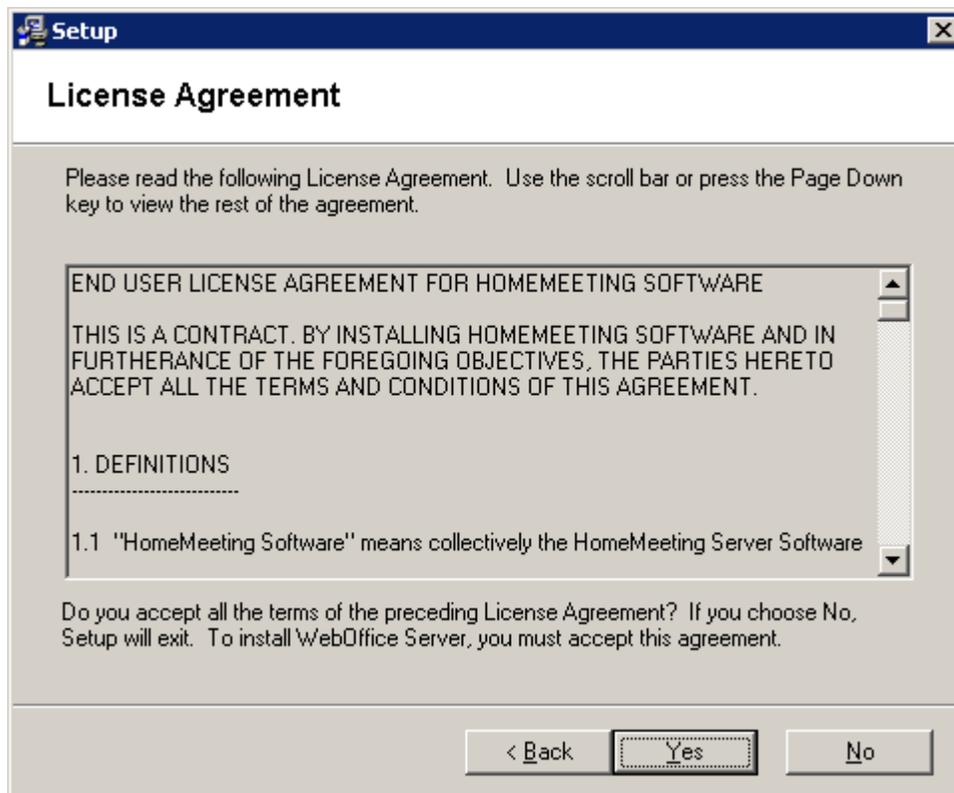
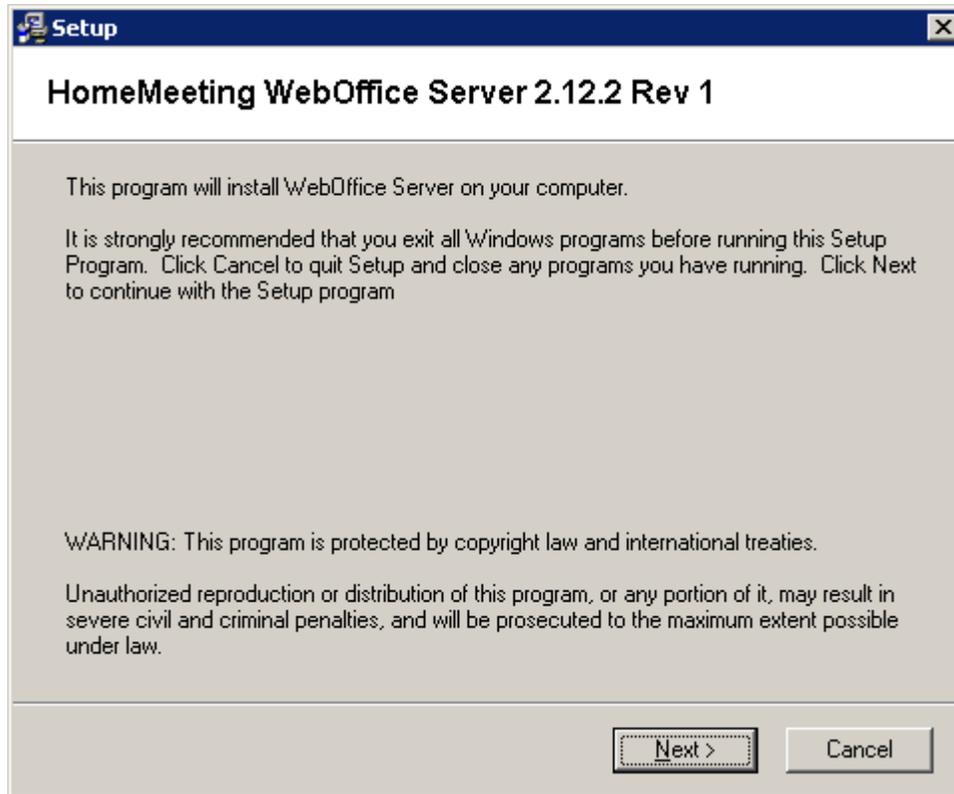
Installing Web Office Server without Web Server

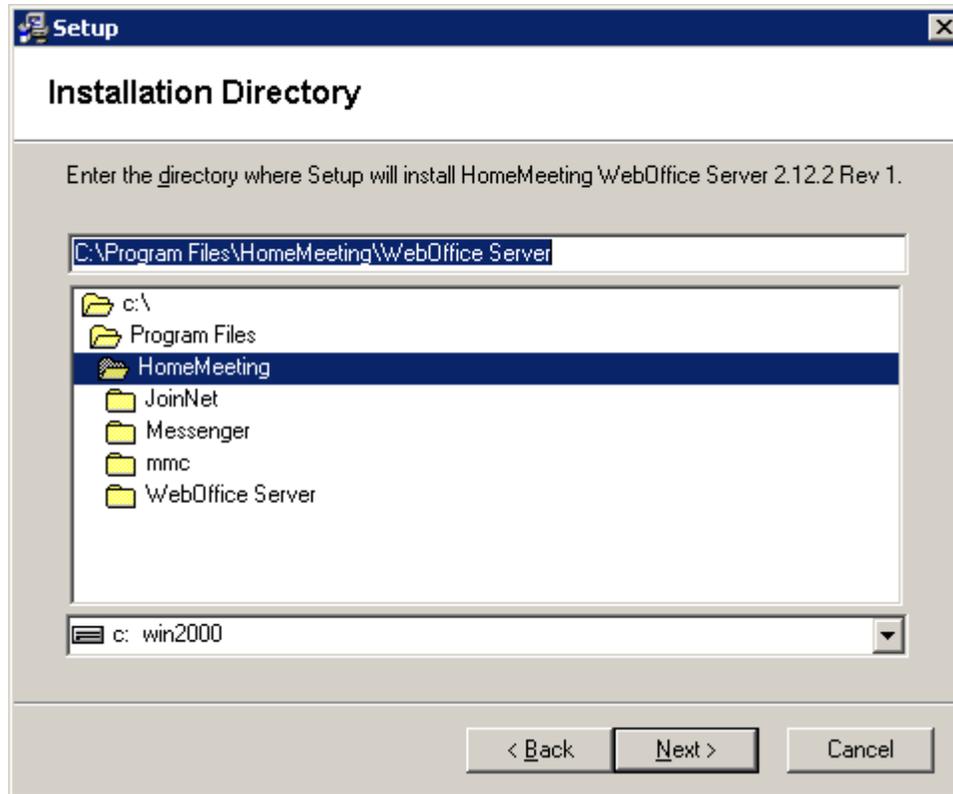
- **Step 1:** download ““setup_weboffice_server_xxx.zip”” from HomeMeeting (xxx is the version number).



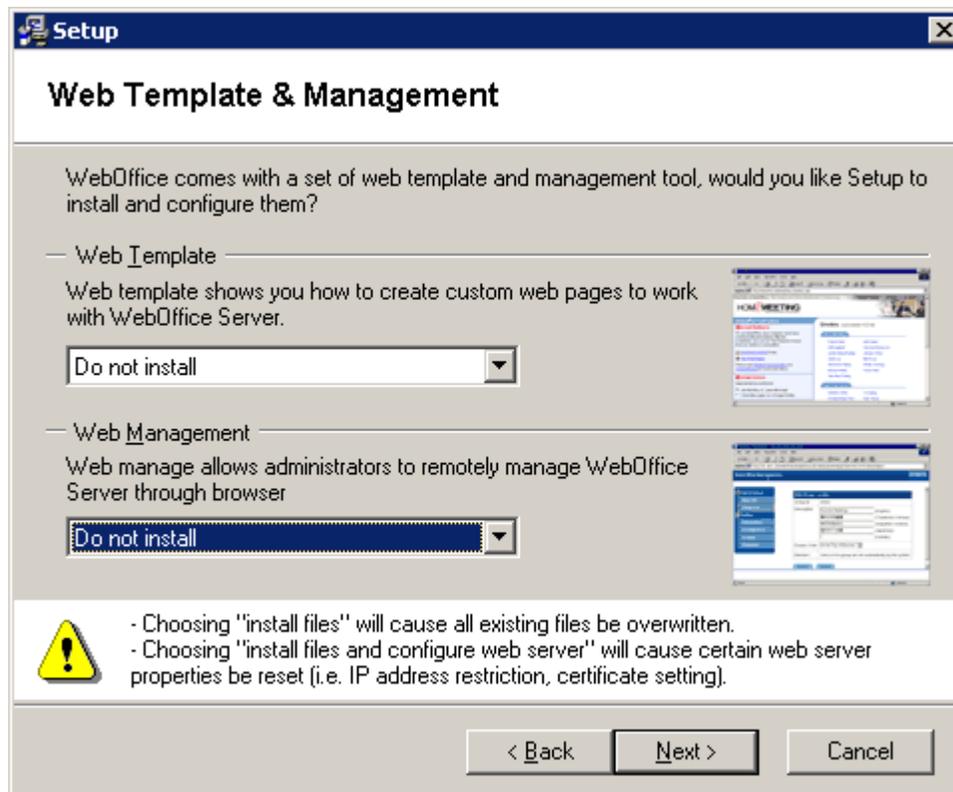
Extract the zip file to a temporary folder and then double click “Setup_WebOfficeServer.EXE” and follow the popup instruction to install the Web Office server..



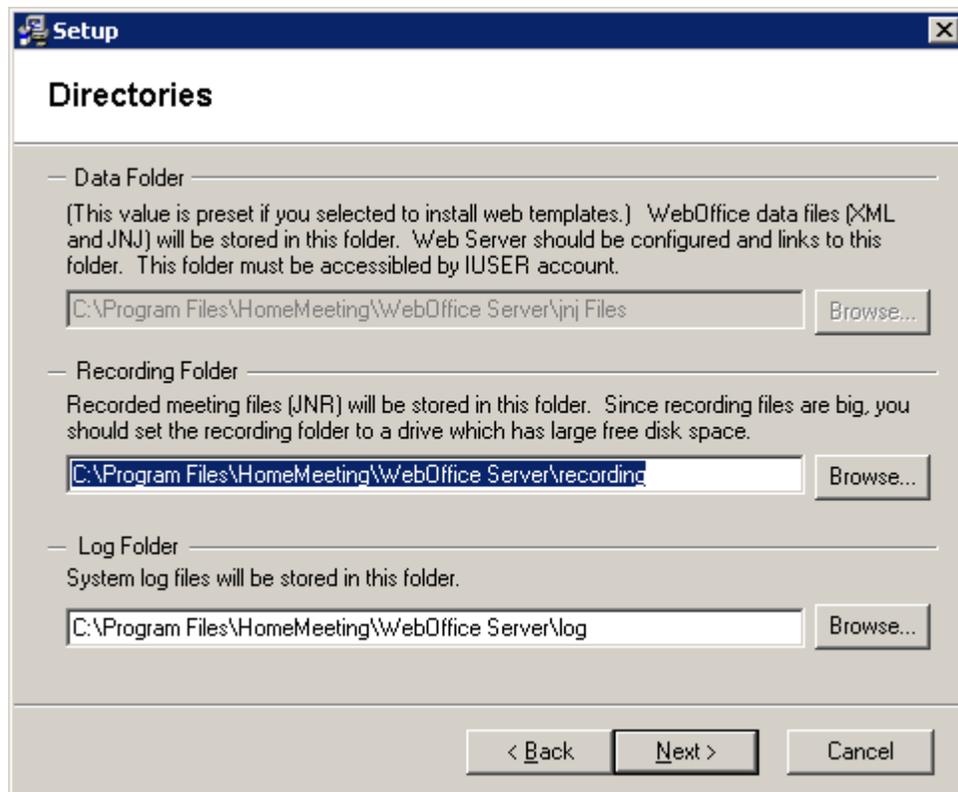
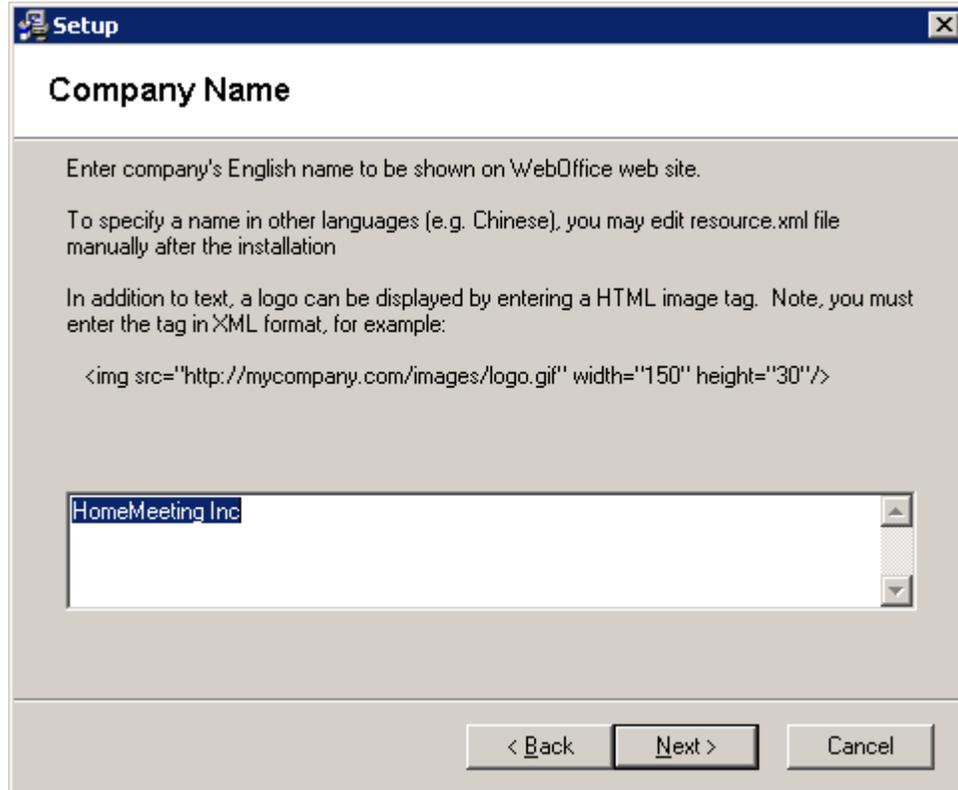




- **Step 2:** do not install web template and management.



- **Step 3:** your company will NOT be displayed. Specify the data directories.



- **Step 4:** network settings for port number and server IP address.

Setup

Network

— Port Binding —

Enter the ports which WebOffice server will bind to. WebOffice can listen to two ports simultaneously. Defaults are 2333 and 443. When port 443 is used, web server must be configured to use a different port; otherwise, a conflict will occur.

1. 2. Change all existing web sites that are using port 443 to port 8443

— IP Binding —

Select the IP address which WebOffice server will bind to.

(Listen IP)

— Network Address Translation (NAT) Router —

If this server is behind a NAT, enter the public IP address that people should use when visiting from Internet. JoinNet clients use this address for connecting to WebOffice server.
 *** Note: you must configure the NAT to forward traffic correctly. Leave this field blank if your network does not use NAT or if you are not sure.

(JNJ IP)

< Back Next > Cancel

- **Step 5:** set up E-Mail server and administrator information.

Setup

Email

WebOffice can be configured to send out e-mail notifications for new message arrival and system warnings.

— Mail Server —

Enter the SMTP server which WebOffice should use to send out e-mails. The SMTP server should be configured to accept connection from this computer and allow mail relay to Internet.

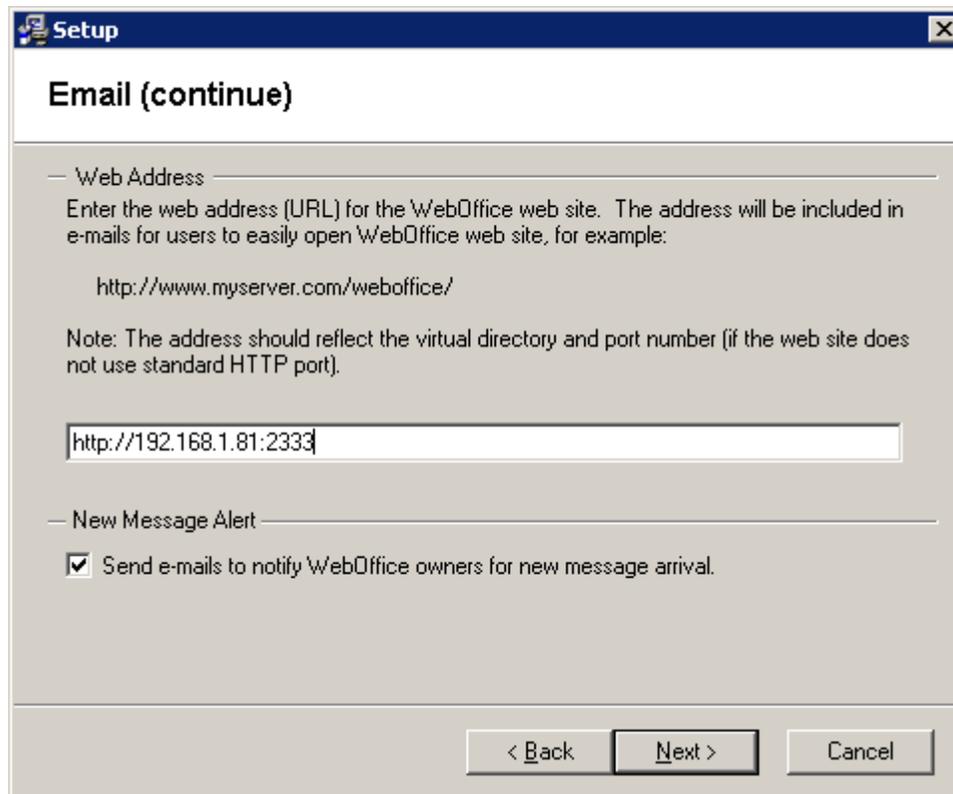
Address: Port: (Standard is 25)

— Email Addresses —

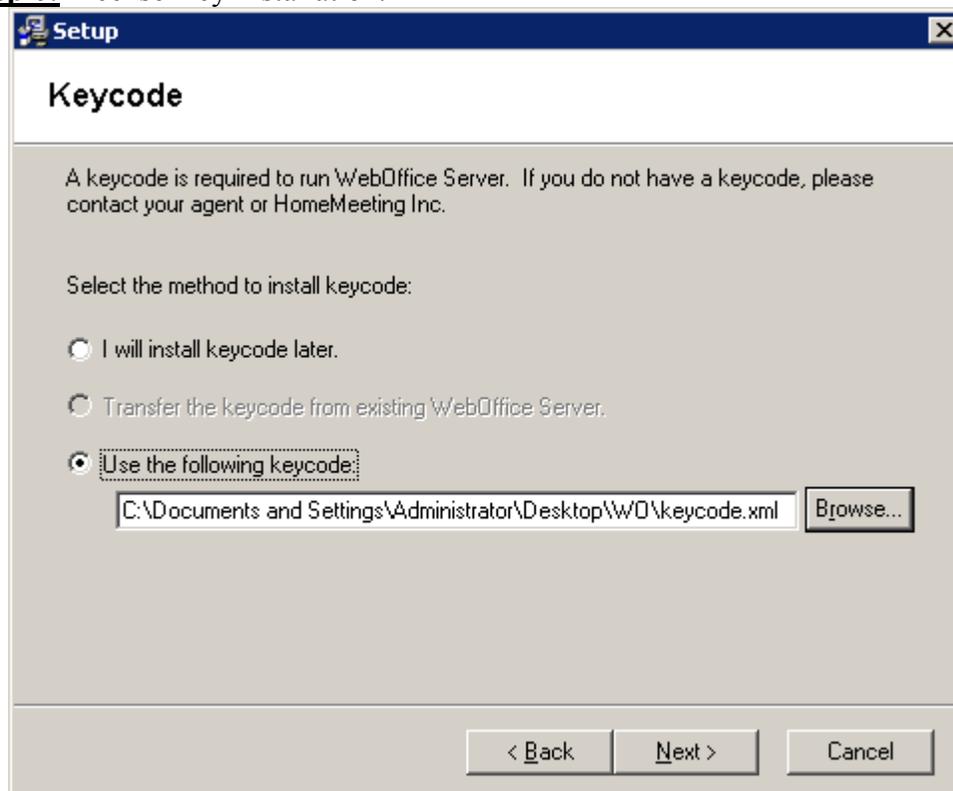
Enter the e-mail address for the "Mail From" header of all outgoing e-mails.

Enter the e-mail address that WebOffice system warnings will be sent to.

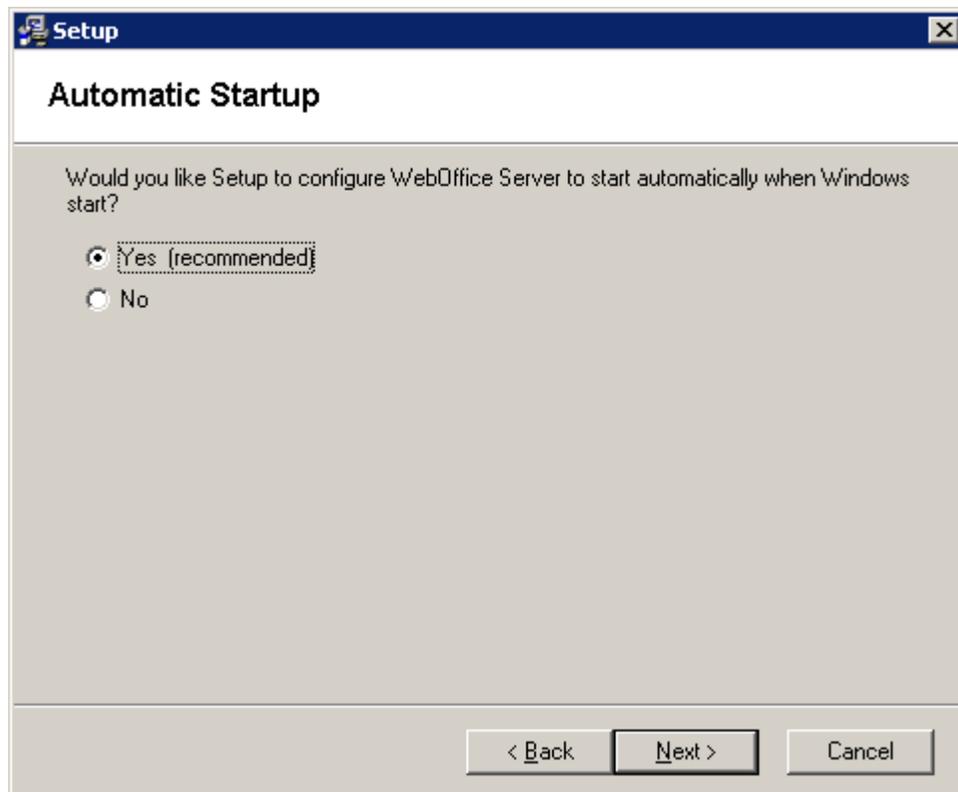
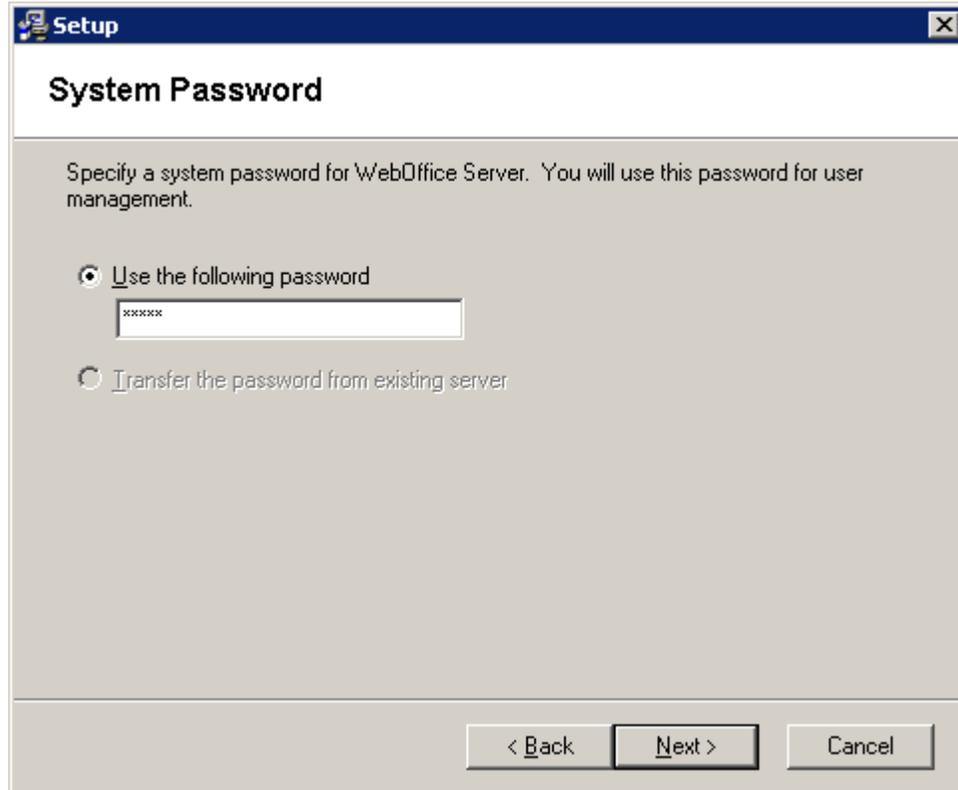
< Back Next > Cancel

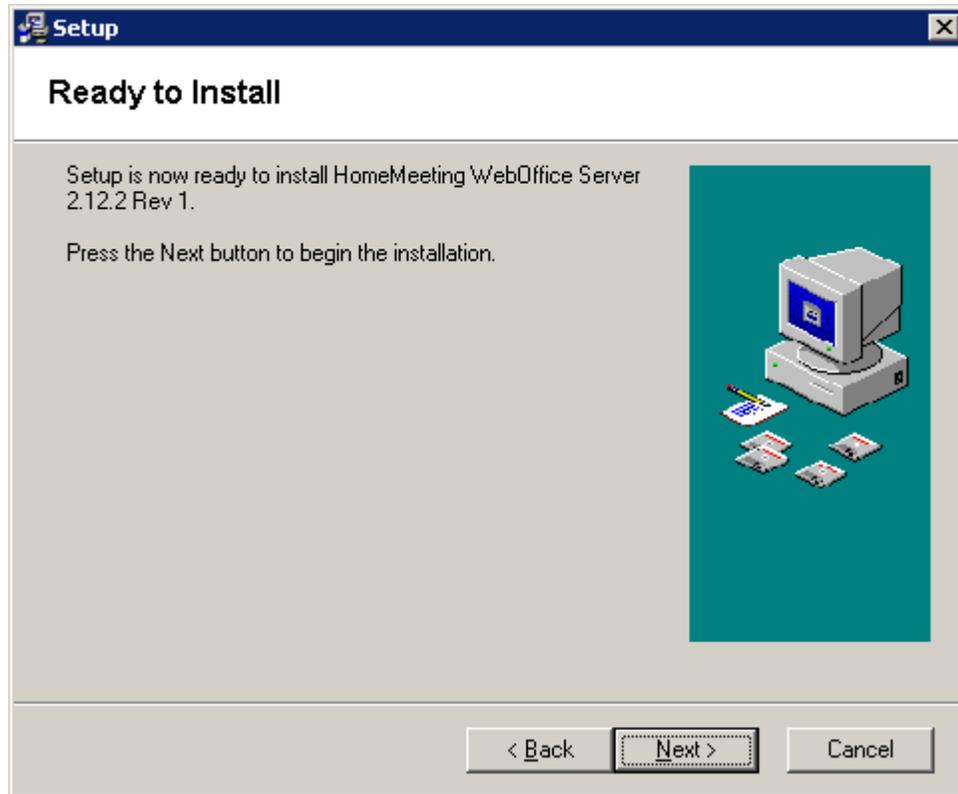


- **Step 6: License Key Installation.**

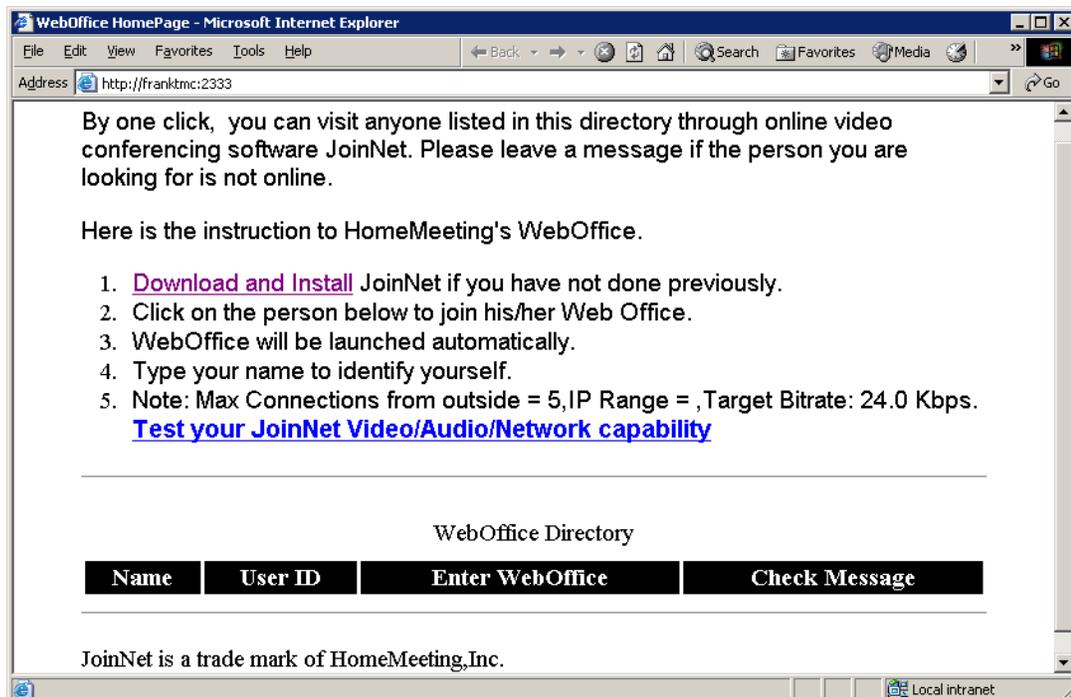


- **Step 7:** set system password and allow automatic server startup.





To view the web office directory, you can browse http://server_IP:2333 or http://server_IP:443 (assuming the port binding number is either 2333 or 443, by default setting).



MCU Configuration Settings

In order to accommodate deployment flexibility, the Web Office MCU servers can be configured through a set of parameters in the configuration file “config.ini” in the directory “~\HomeMeeting\Web Office Server”. See Appendix B for more details. 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 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 (to report server)

Ports:

- **portm=2333**
Set the listening port for JoinNet clients.
- **portm2=443**
Set the backup listening port for JoinNet clients
- **portm_multicast=2333**
Set the port number for multicast packets.

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.

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 and send usage report to the Report 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. This applies only to WebOffice server.
- **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 if upgrade is needed.

E-mail:

- **email_notify=1**

When set to 1, MCU will send email notification the owner if there is a new WebOffice 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 user or each group 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 a user (or a group) can 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 modified the administrator after an account is created.

Desktop Sharing:

- **app_data_rate=24000**
Set the max data rate in bps for application data channels default value is 24000
- **app_burst_size=1000**
Set the max burst size in bytes for application data channels default value is 1000
- **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).

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.