MOH3000

User Manual ▶

User Manual

MOH3000

Music On Hold MP3 Player

MOH3000 User Manual   April 2010

All specifications, information contained herein is subject to change without prior notice.

Notice:

- Please read this manual thoroughly before operating the unit and retain it for future reference.
- To prevent fire or shock hazard, do not expose this unit to rain or moisture.
- To avoid electrical shock refer servicing of this product to the dealer from whom the purchase was made or return it to the Dealer or Distributor from whom the purchase was made.
- No user serviceable parts inside.

Static Discharge Warning :

The discharge of electrostatic energy that accumulates on the surface of human body or other surfaces can disrupt the working of the unit or damage the electronic components inside the unit. Observe static safe procedures while handling, installing and maintaining the unit.

This product has been tested for compliance as per the EN60950 Safety standards.

Table of Contents

SPECIFICATIONS

MOH3000

Processor	: 8 bit
Memory	: Internal 32 MB Flash
	Removable SD Card up to 1GB capacity
Real Time Clock	: Available
Battery back up	: Built in, For Time keeping only
Interface	: Ethernet 10 Mbps, SD Card
Power	: 9VAC, +/- 10%, 4W

CONTENT MANAGEMENT SOFTWARE

Recommended System Requirements

CPU	: Pentium IV 1GHz and above
Memory	: 256 MB
Operating System	: Windows 2000 / XP / Vista / Windows 7
Network Card	: 10/100 Ethernet LAN Card

Note: The names of all the Manufacturers, Companies, Web site names etc. used in this manual and in the User Interface screens are the Registered Trademarks of the respective owners or they are imaginary names used for illustrative purposes only.

PRODUCT OVERVIEW

The MOH3000 is a stand-alone Internet enabled Music on Hold player with SD Card interface, housed in a 1U 19″ Rack Mount enclosure. The player can be connected to any phone system (PBX/VOIP PBX) which has an external MOH input. Its extensive feature list includes the following -

- 32 MB of Non volatile Internal Flash Memory
- SD Card interface up to 1GB capacity
- Maximum 32 message/ music files may be stored in internal memory
- No limit on number of files that may be stored on SD Card
- Supports playback of MP3 files
- Minimum sampling rate of 32 Kbps and maximum sampling rate of 256 kbps. Standard sampling rate of 128 Kbps
- Standard playback time is 35 minutes with maximum of 3 hours at lowest sampling rate from internal memory and may be up to 60 hours from SD Card
- Handset socket for monitoring the audio output
- Separate 8 ohms and 600 ohms output available for feeding into the PBX
- Volume control provided on the front panel of the unit
- Reset button to reset the IP address to DHCP or a default address
- Battery backed Real Time clock
- 10 Mbps Ethernet port for Remote connectivity
- Sequential, Shuffle and Timed playback modes available (from internal memory only)
- Ethernet port supports DHCP, BOOTP, UDP protocols for ease of installation
- Auto Gateway detection
- 'Audio playback' of the IP address for ease of installation
- Fully remote programmable using the Content Management Software
- Easy Installation by using the provided Quick Install Software.
- Each unit may be programmed for automatic daily updates by authenticated FTP download from Content Provider's FTP Server.
- Each unit may be remotely programmed to include or exclude specific files from the play list or delete specific files.
- Each unit may be remotely programmed to stop playing content files from a specific date and resume playing under Content Provider's control.
- Each unit may be instructed to "Download now" when it is required to update the content files immediately (Static IP address is required for this feature).
- Each unit will upload a report to the Server on completion of the scheduled content file download.
- Reports of all Upload & Download activities available in easy to view formats on the CMS.
- Log report of all Internet downloads and File Export activity.

Functional Description

The MOH3000 is a stand-alone Internet enabled Music on Hold with dual playback option of playing from internal memory or from the SD card. SD Card playback is simple; just insert the supplied SD Card with your On Hold recording in MP3 format and the unit starts playing the MP3 file immediately. When the SD Card is ejected out of the MOH 3000, the unit starts playing the MP3 file stored in the internal memory.

To update the contents in the SD card, first eject the Card from the MOH 3000, insert the Card into the provided SD Card Reader and attach the SD Card Reader to a PC via its USB port. You may now drag and drop the desired MP3 file/s into the SD Card. To update the contents in the MOH 3000's internal memory, you will need to first connect the unit to the Local Area Network using the instructions given in the following pages and then update via the provided Content Management Software (CMS).

The Content Management Software (CMS) software makes it easy to program and manage hundreds of units remotely and schedule the content file updates and playback settings for each unit as desired. The installation of the unit to a Local Area Network can be easily established using the provided Quick Install Software which supports multiple protocols like DHCP, UDP and BOOTP. The usage of the MOH3000 and the CMS is not restricted to polling a specific content server.

The MOH3000 has an internal non-volatile 32MB of Flash Memory. This holds nearly 35 minutes of CD quality Hi-Fi music data or almost 3 hours of messages at the lowest sampling rate. The unit also has a removable SD Card slot which may accept SD Cards having a capacity up to 1GB. A 1GB SD card can give more than 60 hours of playback time. The MOH3000 plays back files stored in MP3 format.

The MOH3000 has a set of default prompt files required to playback the IP address. These audio files will not appear in the playlist and are not accessible to the user. If there are no content files in the unit, the maximum free memory space will read as 31.8 MB since the balance of 0.2MB is used up by these default prompt files.

The MOH3000 has a built in battery backed Real time Clock which may be used to schedule playback of specific On hold messages at programmed times, for example, Christmas greetings to be played once in a year.

A Handset socket for audio monitoring, 8 ohms and 600 ohms outputs for connections to the PBX ensure that there are no problems during installation time.

When the unit is playing an MP3 file in the internal memory, if you insert an SD Card containing MP3 files into the card slot in the front panel, the unit automatically switches to playing the file in the SD card. If you now remove the SD card, the unit starts playing from the internal memory.

Installation

Unpack the unit from its shipping carton and check that all the materials have been received in good condition. Any damages or shortfalls must be reported immediately to the distributor from whom the purchase was made. Your MOH3000 shipping carton must contain the following:

> The MOH3000 Unit
> Power Adaptor
> User Manual
> Ethernet Cable
> Audio Output cable
> SD Card and SD card reader
> CD with the Installation software

- Mount the unit : The MOH3000 is housed in a 19 inch Rack Mount enclosure of 1U height and the installation location should have an Ethernet socket, a power socket close by and should be easily accessible for any service or maintenance work. Insert the Ethernet cable into the socket on the unit and insert the other end into the wall jack (required only if the unit is to be installed on the Local Area Network). Plug in the mains Adaptor into the Power socket & the other end into the unit and keep the unit switched off.

Precautions:
> Please do not install the MOH3000 where it would be subjected to:
> 1. Direct sunlight, moisture or rain
> 2. Heat sources, Radiators, Air Ducts etc.
> 3. Draft from an air conditioner
> 4. Excessive dust or corrosive fumes
> 5. Mechanical shock or vibration
> 6. In the vicinity of a communication tower

Connect the appropriate 'Music Out' of the MOH3000 to the 'Music In' of your phone system (refer your PBX manual for connection)

Note : The 8 Ohm and 600 Ohm "Music Out" terminals should only be connected to the "Music In" terminals of a PABX that has isolation from TNV circuits.

Using the SD Card to play the On Hold Content

Insert the provided SD Card into the MOH 3000's SD card slot and power on the unit. The MOH 3000 now plays the MP3 files stored in the SD Card.

Installing the unit on the LAN

The CD accompanying the unit contains the Installation software package which is to be used for installing the unit at the end-user premises. When this CD is inserted into the CD-ROM drive, the Installation application will be launched

automatically and you will have an option to select the launch of the Quick Installation software or the CMS.

Insert the Ethernet cable into the socket on the unit and insert the other end into the wall socket of your LAN. Insert the power adaptor into the power socket and insert the other end (Plug) into the power connector of the MOH3000.

Note : At this time please keep the unit switched off.

Click on the "Quick Install" button and proceed with the installation of the unit in the network as follows :

- Install the software : Install the software on a PC that is in the same network in which the unit is to be installed. The installer generates the Application File "MOH3000 Installation Package". The shortcut and the icon for this application are also placed on the desktop.

- Launch application : Double click and launch the application and you will see a message which pops up as shown below. Click the OK button to go to the next screen.
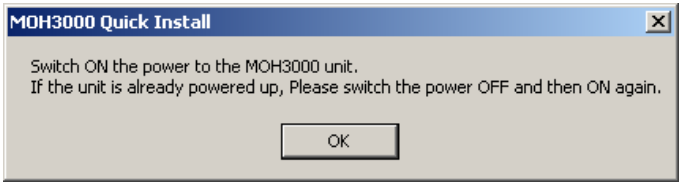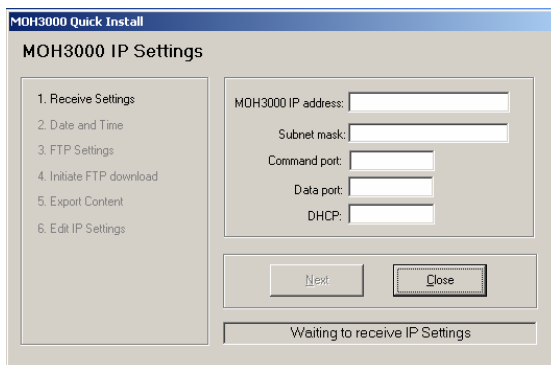

- Power up : Switch on the power to the unit and after about 30 seconds, the PLAY lamp on the unit starts blinking while performing a memory check and network request services. If the Ethernet port has a valid link, the LINK lamp on the unit starts glowing; the ACT lamp blinks a few times while the unit is negotiating with the Server for an IP address to be assigned to it.

   The following pop up screen appears while the application waits to receive the IP settings from the unit.

   Once the unit receives an IP address from the DHCP server, it broadcasts the settings on the UDP port on the network. The application captures these IP settings and displays them in the "Status" window.

   If you need to edit these IP settings or the Port numbers, you may do so at Step 6 of the installation process.
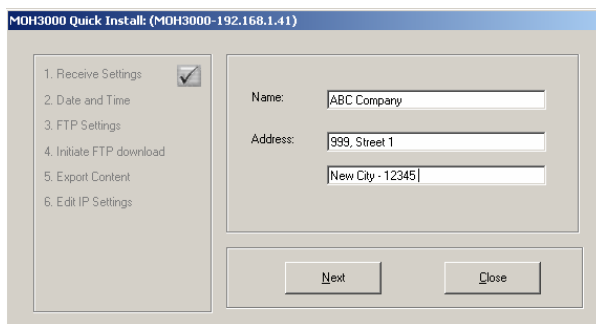
Click the "Next" button to proceed to enter the Name and Address of the installation. These details are used while printing the Installation report at the end.


Enter the desired details and click on the Next button to proceed to the next step.

- Set Date and Time : The next pop up window allows you to set the date and time of the unit and also set the time zone of the unit to the correct zone. This is important as the unit would auto-update and correct its time from one of the available time servers around the world depending on its time zone.

  If Day Light Savings timings are applicable at the location where the unit is installed, select the check-box for automatic adjustment of DST.

  If no changes were made, you may click on the Skip/Next button or else press the Update button to update the settings in the unit and then the Next button to proceed to Step 3.
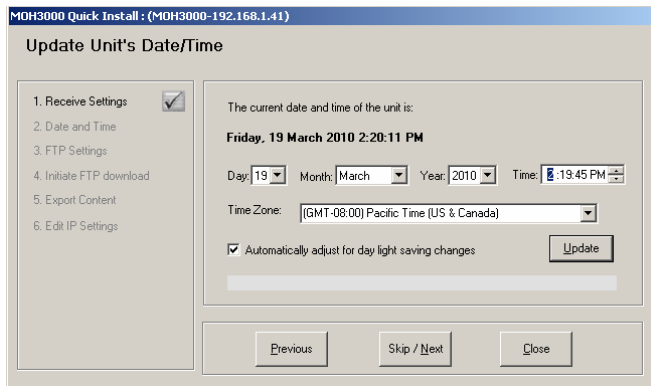
Note :   If the Time zone of the unit is changed, the unit will automatically restart and the application also restarts with Step 1 to receive the IP Settings again.

- **FTP Settings**

  This screen lets you define the ftp settings for the unit to be able to pull new content files from the ftp server of your choice.
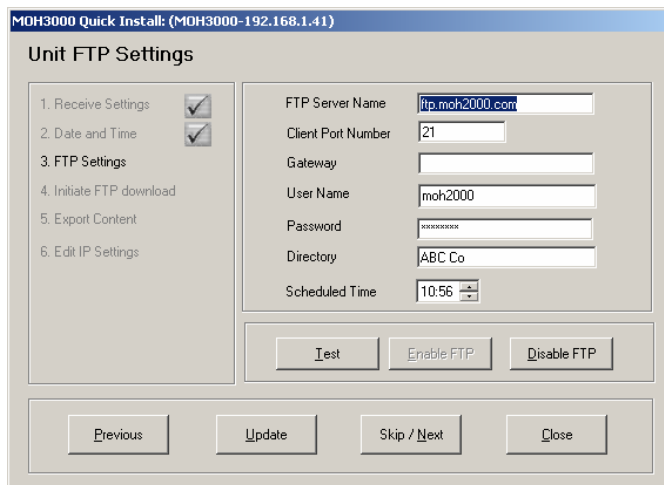
  Specify the ftp server name, User name, Password, directory and the time at which the unit should check for the next download. If the unit is on a Static IP address, then the Gateway must be specified. If the unit is on a dynamic IP address, please leave the Gateway information as a blank.

  You may also disable the ftp check or you may also choose the Test option to verify the ftp settings. Click on the Update button to send the settings to the unit.

  However, please note that these changed settings will not take effect until the unit is restarted at the end of the installation process.

- **Test FTP Connection**

  If the unit is on Dynamic IP and if the ftp settings have been correctly entered, you may test the ftp connection now by clicking on the Test button.
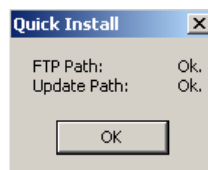
Test: Click on this button to initiate a basic FTP check to ascertain whether the unit is able to access the FTP server. The unit conducts basic communications with the FTP server and returns the status. The unit also checks the access to the default ftp server address for Firmware updates and reports the status of the Update Path.

1. If the unit reports:
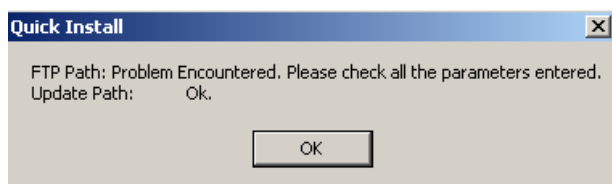
This indicates that the basic communications between the MOH3000 and the FTP server and the parameters entered are O.K.

2. If the unit reports:

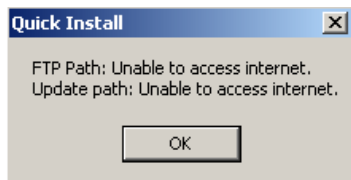Then it shows that some or all parameters entered are not correct. More specifically, there could be an error in entering either the Client Port Number or the User Name or the Password. This test does not check for the directory or for the existence of file/s.

3. If the unit reports:

Then please contact the Network Administrator as the unit is unable to communicate with the FTP server or is unable to get internet access. There could also be errors in the entered parameters.

- Initiate FTP Download Now

You may initiate a complete FTP download of a new content file from the FTP server at this point.
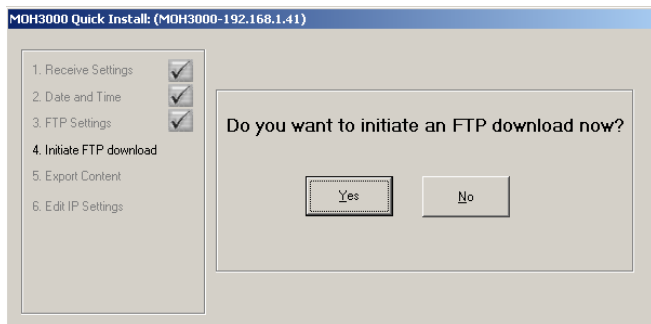
Click on the Yes button to start the FTP Download. This may take a few minutes or longer depending on the size of the file being downloaded.

For this FTP download to be successful, the Content Provider must have previously uploaded a config file for this unit to the FTP folder to which this unit is directed to.

- Export Content

If you need to download new content into the unit before exiting installation, select the desired file by clicking on the Browse button and then click on the Export button to send the file to the unit.
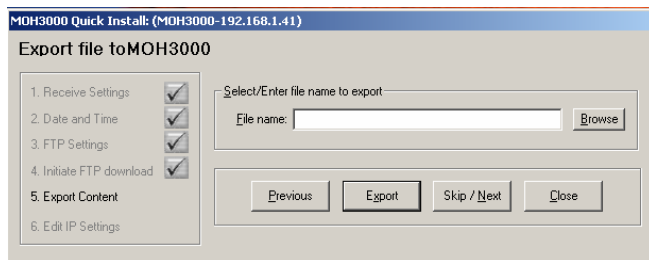
You may also skip this section if it is not required to export a file to the unit at this point.

- Edit IP Settings

  If you need to set up the MOH3000 behind an external Static IP address, either directly or behind a Port-forwarding Router, then you may edit the IP address here and update the settings of the unit.

  If you change the IP settings from DHCP to Static IP, then the unit will restart automatically and the application also restarts automatically.

  Note : If the unit is set to a Static IP in a different subnet / IP address class from the PC/Laptop which is being used for the installation, the application will not be able to receive the changed IP settings or communicate with the unit in any manner after the restart.
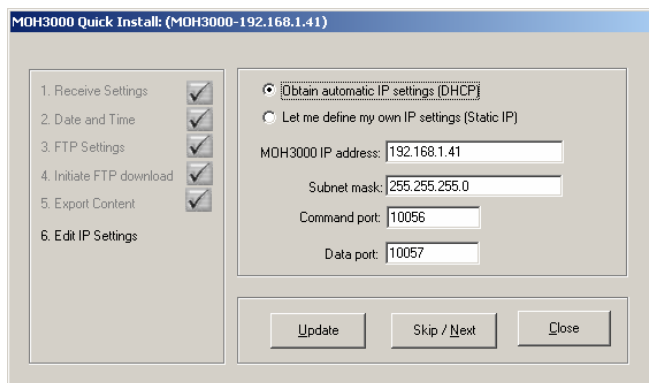
  Click on the Next button to take you to the Report screen. This information may be printed out for record purposes or as confirmation for the installer to fax or email it back to the content provider.

MOH3000 Installation Report

MOH3000 Installation Report

Name: ABC Company
Address: 999, Street 1
                New City - 12345

Settings:

MAC Address: 00 14 BC 00 04 BB
IP Address: 192.168.1.41
Subnet Mask: 255.255.255.0
Command Port: 10056
Data Port: 10057
DHCP: Enabled

FTP Settings

FTP Status: Enabled
FTP Host: ftp.moh2000.com
FTP Port: 21
Gateway IP:
Username: moh2000
Directory   ABC Co
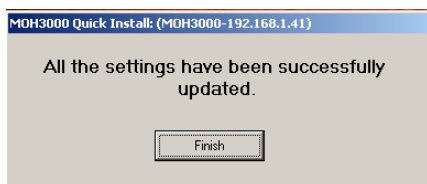Test FTP Path   Ok
Test Update Path Ok

Click on the 'Finish' button to exit and complete the installation.

MOH3000 Quick Install: (MOH3000-192.168.1.41)

All the settings have been successfully updated.

Finish

FTP Connection check during normal operation

If the MOH3000 is set up to 'pull' new content from a FTP server periodically, it may be desirable to check the status of the latest attempt by the unit to access the FTP server. To do this, press the RESET button on the front panel momentarily while the unit is playing back the content files.

The unit would take about 30 seconds to check if the FTP settings are correct and then play back its IP address, followed by a 0 or 1 for the Static / DHCP and then a 3 digit numeric code.

A numeric code below 100 would be returned if there is no link, Unable to connect, Wrong Server name or port, blocked port etc. and would mean a failure.

A numeric code of 125 or 150 means all parameters correct and a successful FTP connection.

A numeric code above 200 would mean that the unit is able to access the internet but the User name / Password / Gateway parameters were either wrong / not given or Incorrect file name / File not present / Invalid Directory.

14

Content Management Software (CMS)

CMS is the content management software developed for the internet enabled music on hold player - MOH3000. CMS enables a music on hold content service provider to administer thousands of MOH3000 units installed globally via a broadband internet connection. The software allows the administrator to update the audio content, change play schedules or change the unit parameters of a single MOH3000 or a group of MOH3000's at the click of a button.
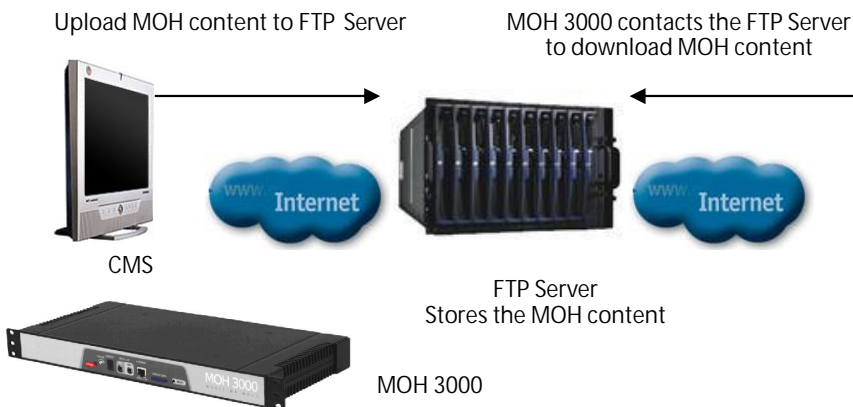
Operation:

The MOH3000 units may be configured to operate in two ways:

▸ Automatic (Pull): Here, the unit may be installed on a static or dynamic IP address. In this method the unit is configured to contact a remote FTP server once a day to check for fresh content. On finding new content or a change in its configuration, the unit downloads the files and updates itself.

▸ Manual (Push): This method requires the unit to be installed on a network with a fixed / static IP address. Once configured, the on hold audio content may be directly downloaded into the unit using the CMS.

Automatic (Pull) Operation:

Each remote unit which has been configured to operate in the automatic (pull) mode, communicates using File Transfer Protocol (FTP) with an assigned FTP server periodically (once a day). On contacting the remote FTP server, the unit checks and downloads a Configuration File (Config File) if available. The Config File contains the instructions to either download the fresh on hold content or change in its programming parameters such as play schedules, new FTP server details, expiry dates etc. The CMS software has the facility to upload the Config File and/or the on hold audio content to the FTP server which the unit has been configured to communicate with.

Upload MOH content to FTP Server   MOH 3000 contacts the FTP Server
                                                 to download MOH content

CMS

FTP Server
Stores the MOH content

MOH 3000

Steps:

- Install the CMS software in your Studio.
- Ensure that you have a broadband internet connection and access to the internet
- Set up an FTP server which will be used for communication by all MOH3000 units and the CMS software
- Create a Config File for the unit to be installed on your clients LAN
- Assign the Config file to the unit in the Client Tree
- Upload the content file/s as well as the config file to the FTP server
- Install the MOH3000 using Quick Install on your Client's LAN and enable FTP
- Ensure that the unit has free access (usually through Port 21) to the specified FTP server and that it is able to download the MOH content from the FTP server
- Check the downloaded content by placing yourself on hold.

Requirements for updating remote units:

The CMS software needs to be installed on a PC which has access to a broadband internet connection. An FTP server also needs to be assigned for the remote MOH3000 units to communicate. You may assign your own server or use any of the FTP servers provided by your internet service provider or web service provider.

CMS Installation:

The CMS may be installed on any PC that has access to a broadband internet connection. Please ensure that the firewall on your network does not block the application and that Port 21 has been assigned to communicate with the assigned FTP server. Also please note that the application uses ports 10056 and 10057 as default ports for communication. Hence ensure that these ports are available and accessible.

PC Requirements:

CPU   : Pentium IV and above
Memory   : 512 MB and above
Operating System : Windows XP or Vista (Professional)
Network   : 10/100 Ethernet
Internet   : Broadband Internet connection

Software Installation:

Insert the CMS software CD into the CD-ROM drive of the PC on which the CMS is to be installed; the installation application will be launched automatically. Click on the 'Install' button and follow the instructions displayed to install the software.

IMPORTANT!

> In case you desire to pre-configure the MOH 3000 units before sending them for installation, install the software on a PC that is in the same network in which the unit is to be pre-configured. Also ensure that the PC has access to the internet.

CMS

Click on the CMS icon on your desktop to launch the CMS application and wait for the main screen to appear as shown below. The top half of the screen shows the Client tree where each individual MOH3000 unit is defined. The bottom half of the screen shows the Last Download status of the reports for the units which are programmed to contact the FTP server periodically. When the CMS is launched for the first time, as there are no units defined, there will be no details to be displayed on the screen.

Follow the stepwise instructions given below to control remote MOH3000 units installed with a Dynamic IP address:

Step 1 - Create the Client tree and define each unit in a Client-Group-Location-Unit tree.

Step 2 - Create a Configuration file for a Client or for a Group under a client or for a location or even for each individual unit. Also upload the associated MP3 file/s if required.

Step 3 – Upload the config files to the FTP server

Step 4 - Download and view the status reports for all the units.

Define Client tree

The Client definition window is shown on the top half of the screen when the CMS is launched. If you click on the "Clients" button at the bottom of the screen, the Clients screen will be expanded to full screen view.

This screen facilitates assigning the MOH3000 to a Client, Group and a Location.

Right click on the MOH3000 and add Client 1. Select "Client 1" and right-click with the mouse to bring up the Rename-add group-delete options. You may rename the Client, add a Group or delete the Client. Add a Group, then the Location under the Group and then add the unit under the Location. Select the unit and define the settings for the unit to complete the definition. A sample Client tree is shown here:
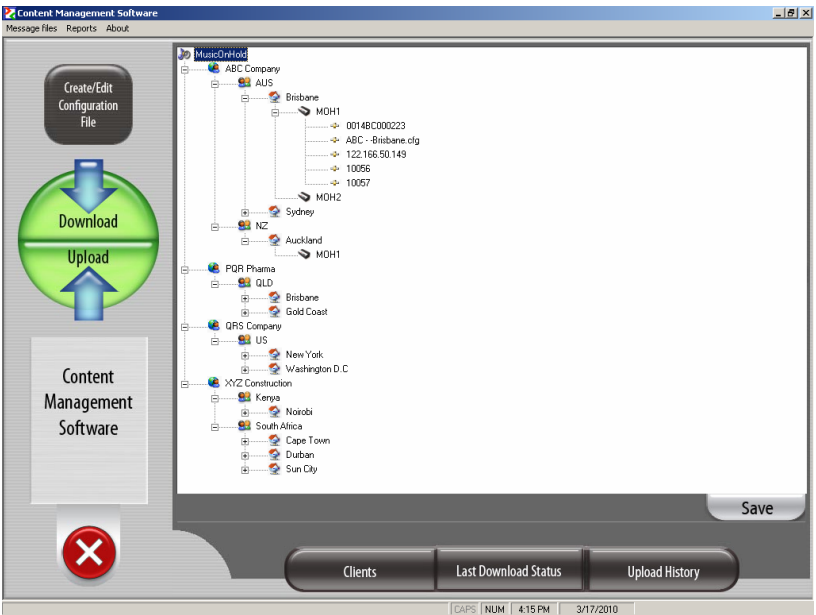
After adding a unit or making any changes, click the "Save" button to save the changes.

When defining a new unit, you are asked to enter the MAC address, the config file name, the IP Address and port numbers. The IP address needs to be specified only if it is a Static IP address and if it is possible to remotely access the unit. The MAC address information is available on the product serial number label located on the bottom of the unit (characters starting with 0014BC xx xx xx)

18

It is possible to get the unit to "Initiate a FTP download now" only if that unit has a Static IP address and is possible to access it remotely.

When defining a new unit, the MAC address of the unit must be specified. It is not necessary to enter the IP address and port numbers unless that unit is being installed for direct remote access.

Note: When entering the Unit details, a valid MAC Address must be entered for the unit. If the unit is set up to use the FTP mode for updates, then a config file must be assigned to the unit. If the unit is set up behind a Static IP address for direct access, then the IP address and the port numbers must be defined for the unit.

Create / Edit a new Config file

Click on the "Create / Edit Configuration File" button, select the "New Config File" option and a pop-up window with the default 'New.cfg' file parameters appear as shown below.

FTP Settings: Details of the FTP server where the content files are stored must be entered correctly in this window.

FTP server name: This is the FTP server address. For example "ftp.MOH3000.com". All the units which are configured to use this configuration file will log in to this FTP server.

Client port number: The default value is 21.

User name: This is the username which the unit uses to gain access to the FTP Server.

Password: The password to be used for the authenticated access to the FTP Server.

Directory: This is the directory in which the config and content files are present. The unit will download the files from this folder after authenticating the access using the Username and Password specified above.

Expiry date: The Content Provider may specify that the unit stop playing all the content files after a certain date which is specified here. To specify the date, you may click on the Year or Month or Date directly and enter the desired value or click on the pull down arrow to bring up the calendar and then scroll to the desired date.

If the Expiry date is specified as 10th March, the unit will play the content files until midnight of 10th March and stop playing the files from 00:00 hours of 11th March.

When a new Config file is being created, an expiry date 10 years ahead is shown by default. This may be changed as desired.

If a file named "expiry.mp3" is present in the memory of the unit, this file would be automatically moved in to the play schedule and only this file would continue to play after the expiry date has been reached. (This file name is case sensitive and must be named exactly.)

When the customer renews the contract and the unit is to be programmed to start play back of the desired content files, create a new config file for the unit with the desired files to play and a new expiry date. When the unit checks the FTP server at the next scheduled update time, these changes would take effect.

Download schedule: This is the time at which the unit connects to the FTP server to download new content files. If there are more than 50 units configured to connect to a particular server, it is advisable to stagger the time at which different units connect to the FTP server to eliminate congestion or denial of connection by the server. Typically, most FTP servers limit the number to 50 concurrent connections to a particular folder.

Play Schedule type: This is the desired playback mode for the units which use this configuration file. Select Sequential to play all files sequentially, select Shuffle for a random playback. If you select the "Timed" mode, click on the 'Clock' icon to set the Schedule Type – Daily or Weekly or you could activate the content file to be played during a specified period i.e. from a specified date to a specified date.

Upload Music: Click on this button to upload MOH audio content from your local PC to the FTP server specified above.

Files to play: You may add the desired files to the play list here. Click on the + button and the CMS will connect to the FTP Server specified in the FTP settings, log in to the folder with the username and password and retrieve the list of files present in that folder. A sample view is shown above. You may then select the desired files and add them to the play list. Double-click on the desired file to add to the play list.
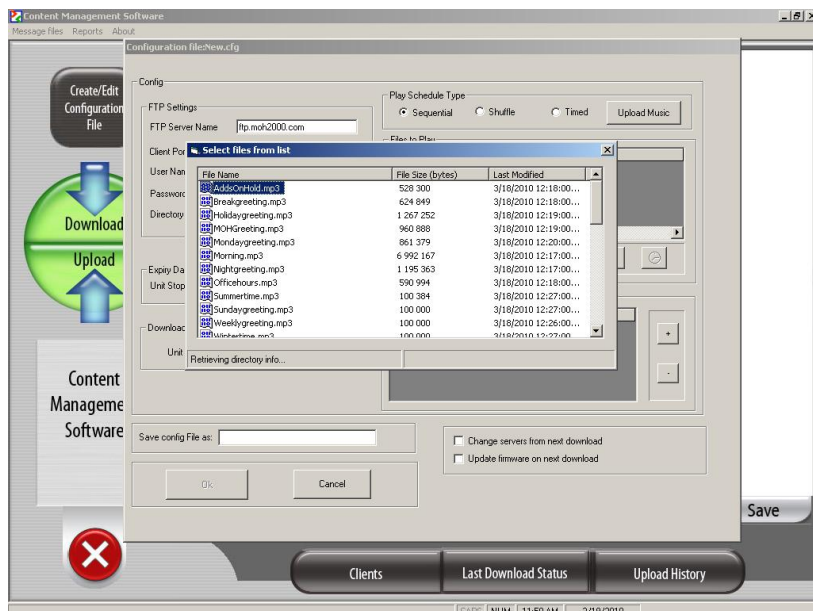
Note : The content files must be already present in the specified folder on the FTP Server before the configuration file is created.

Once the files are added to the play list, the order of files in the list may be modified by moving a file up or down in the list by selecting the file and then clicking the "Move up" or "Move down" buttons as desired. If the "Timed" mode has been selected, you may specify the time between which a particular file should play back.

Files to delete: If it is required to delete some files from the current list of files present in the unit, then these file names should be specified here. The file names are case sensitive and must match exactly as they are stored in the memory of the unit.

If you are not sure of the actual contents in the memory of the unit, you may view the current list of files by right-clicking on that unit in the Client tree and selecting the 'Current play schedule'. However, these details would be viewable only if the unit has uploaded the report after a successful download of new content files. Hence, these details would be available only after the unit has connected at least once to the FTP Server successfully.

Note : When a unit connects to the FTP Server and checks the configuration file assigned to it, all the files included in the play list will replace the existing files in the current play list. Hence, for example if the file "morning.mp3" is present in the current play list and if you desire that this file continue to remain in the play list after some new content files are downloaded, then you must include the "morning.mp3" file name in the config file. The unit will not download this file as it already exists in its memory and will only download content files which are not in its memory but specified in the config file.

Warning: If a config file does not contain any files in the play list, the unit will move all the files in its memory to "files not included in the play list" and consequently, there will be no playback at all.

Change servers from next download: Sometimes it may be desired to change the FTP Servers due to a change in service provider or for some other reasons.

In such a case, for units that are already installed in the field, there is usually no option but to change the server address in each unit in the field by making a visit to each installation.

However, the MOH3000 has a feature where even this change over may be implemented remotely.

Click on the "Change server from next download" box and another pop up window titled "New FTP settings" opens up. You may now enter all the details for the new server such as – Server name, Port number, Gateway, User name, Password, Directory and the name of the config file on the new server. Save this config file and click on the arrow in the "Upload" button to upload the config file.

When the unit checks for the updates on the current server at its scheduled time, the config file will instruct the unit to check for future updates from the new server.

A report file would be uploaded by the unit on the old server and another one on the new server.

Update firmware on next download: Click on this box to enable the unit to upgrade with the latest firmware on the next download automatically. Please ensure that for the firmware updates, the unit is allowed free access to http://update.moh2000.com.

Save config File as: Please type the name of the configuration file under which it will be saved on your computer. It would be a good practice to name the config files with names which are descriptive of the units to which it is configured for. For example, you may have two clients ABC Company and XYZ Construction and both of these clients have installations in the same city – say Sydney. Then the config files may be named as "abc-sydney.cfg" and "xyz-sydney.cfg" to easily identify them and the units to which they relate to.

Upload Config files

After the Config files have been created and each unit defined in the Client tree has been assigned a cfg file, it is necessary to upload these config files on to the FTP Server. Click on the arrow in the "Upload" button to initiate this process.

The CMS now generates the individual cfg files for each unit defined in the client tree, connects to the FTP Servers specified in the different Config files and uploads the config files.

For example, if "ABC-Sydney.cfg" has been assigned to 10 units in the client tree, 10 separate cfg files will be created in the format "MACaddress.cfg" for each of the 10 units and all these 10 config files are uploaded to the respective server specified in the config file. One config file is uploaded to a server for each unit in the client tree with a config file assigned to it.

If a config file has been created but not assigned to any unit, a warning message "xxxxx.cfg file not assigned to any unit" will be flashed on the screen when you try to upload the Config files.

The small pop up window in the center of the screen shows the progress of the config file upload process.

Download Status Information: Click on the arrow in the "Download" button to download the Status Information.

The information is usually displayed in the bottom half of the screen and this window is maximized when you click on the "Last download status" button at the bottom of the screen.

This screen shows the details of all the units which have logged in and saved their report on the FTP server. The list of units is normally shown by order of date. However, you may view the details sorted by Order of Client name or Group or Location or MOH name, by clicking on the "Order by" drop down menu bar and selecting the desired one. This screen is very useful in finding out if all the units which were scheduled to download new content have done so or not.

This screen shows only whether a unit went through the scheduled daily check and left a report back on the server or not. You may right-click on the status information bar of any of the units and pull up the current play schedule or view the full report for that unit.

Upload history

This screen shows the list of Configuration files uploaded to the FTP server along with the directory names. The list may be viewed in any desired order by selecting the desired values in the Filter box.
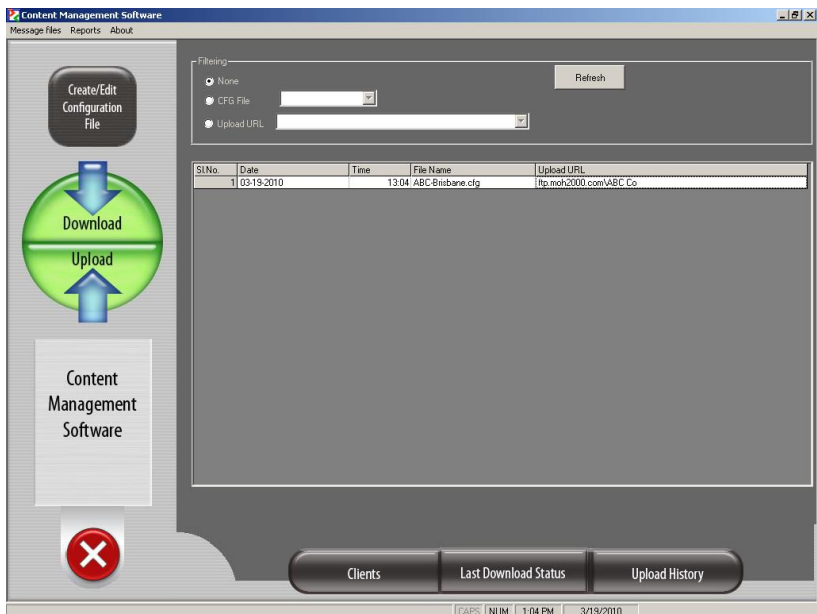
Managing the MOH3000 directly (push method)

Sometimes it may be desired to directly access the unit which is installed in the local network or you may want to directly manage one or more units which are installed on a Static IP address at remote locations.

In such instances, you may use the "Message files" option at the top of the toolbar or select the desired unit from the Client tree and right click to get the options to manage the unit.

Only those units which are defined with an IP address may be managed directly using these options. It is the user's responsibility to ensure that the unit can be reached on the IP address given for it.

Managing a unit

Once a unit is defined in a Client tree, you may manage the contents or check it s status or assign a config file to the unit etc. To do this, select the desired unit in the client tree and right click on the unit.

A pop up message box appears with options for "Unit details", "Edit details", "Delete", "Rename", "Current Play Schedule", "Download Status", "Refresh Reports" and "Assign config file" is displayed.

Unit Details option allows you to communicate with the unit directly if it is in the same network as the Computer running the CMS or if it is on a Static IP address with direct external access to it. The Edit Details option allows you to edit the IP address and port numbers programmed for the unit. The Delete and Rename

options may be used to delete the unit from the Client tree or rename the unit. The Current Play Schedule and the Download Status options display the latest available information for the unit based on the FTP Upload and Download status for that unit. The Refresh Report option makes the CMS to fetch the latest status available from the FTP server for that unit. The Assign Config file option is to be used to assign a new config file for the unit.

Unit Details

The CMS communicates with the unit directly and gets all the details like the files present in the unit and displays them in a pop up window. The IP settings of the unit, the Time and date in the unit, the FTP settings and the Files present in the unit will be shown in four tabs as shown below.

To select a different unit, click on the desired unit in the Client tree and repeat the above operation.

Settings

This tab shows the MAC address, assigned Config file (if any), the IP settings, and the Port numbers defined in the unit. These may be edited and updated if desired.
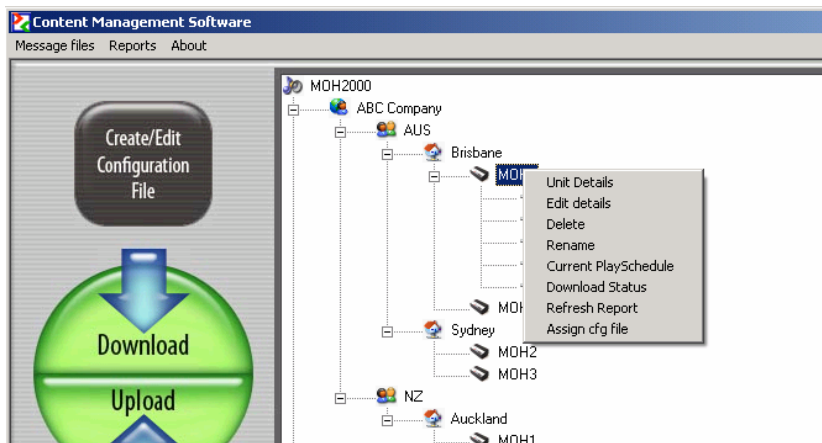
Unit Time & Date

Click on this tab and the CMS shows the current time & date information received from the selected unit and displays this information on the screen.

The system's current local time is prompted on the screen and you may change the time & date on the unit to match the current system time or set it to any other time and date according to the time zone where the unit is installed.

FTP Settings

This tab shows the current FTP settings programmed in the unit.

These details would be required to be programmed if the unit is set up to check a remote FTP Server automatically once a day to receive content updates.

FTP Server name	This is the URL from where the FTP download is to take place.
Port number	This is usually 21 for FTP transfers, but may be changed if required.
Gateway IP address	This is specified by the ISP or the Network Administrator. Need not be specified if the unit is on a DHCP network.
User name	The name to be used to log in to the FTP server
Password	The Password to be used with the User name
Directory	The directory where the content files are stored

The User name, Password and the Directory information are given by the FTP Server's administrator and are used to access the content files on the FTP server. In the pull down options for the Scheduled time, select the time at which the unit has to check daily for a new content file on the FTP server.

Click the "Update" button to send the settings to the unit.

Note:

1. The unit automatically checks for a file name of the format "MACaddress.cfg" on the FTP Server – where the actual MAC address forms the primary part of the file name.
2. It is the content provider's responsibility to ensure that the new content files appearing in the config file are actually present on the FTP Server.
3. If the FTP download for a file is not successful for any reason, the unit tries six times with an interval of 10 minutes between each attempt. If all the attempts fail, then the unit stops making any further attempts on that day and tries again at the same time next day.

Initiate FTP Download now

Sometimes it may be necessary to force the unit to check for content updates immediately. In such cases, if the unit is installed behind a Static IP address and is accessible directly, the user may force the unit to check for updates by initiating a FTP download immediately.

Click on the "FTP Now" button and the CMS would establish communication with the unit and force it to check for updates immediately.

If all the FTP parameters are correct and if the unit could connect to the designated FTP server and access the content files, it would leave a report on the FTP Server giving the result of the FTP check. If new content files were downloaded by the unit, it would leave a "<MACaddress>.rep" file in the FTP folder giving the current play schedule, files in the unit and remaining space in the unit. If no new content files were present, the unit would leave a "<MACaddress>.tik" file in the FTP folder indicating that it could successfully access the FTP folder but that there was no new content available and hence no download took place.

27

These files may be collected and checked by clicking on the "Download" arrow and viewing the report files. Or, you may select the unit in the Client Tree, right click and select the "Refresh report" option to refresh the status for that unit only. If the unit did not leave either a ".tik" or ".rep" file, it means that the unit could not connect to the FTP Server.

Auto Gateway detection :

If the MOH3000 unit is programmed for DHCP operation, it is not necessary to program the Gateway IP address under "Configure MOH3000 – FTP Settings" option. When the unit powers up in DHCP mode, it will automatically request the Gateway IP address from the Server and register it.

If the Gateway IP address of the LAN is changed by the Administrator for any reason, the MOH3000 must be powered off and on, for it to register the new Gateway IP address.

If the unit is set up with a Static IP address, then the Gateway IP address must be specified manually.

Content files

When you click on this tab, the current play schedule as defined in the unit, the files present in the unit but not in the play schedule are displayed on the screen. The size of the individual files, the duration of play, the remaining free space in the unit and the play schedule type is also displayed.

The MOH3000 can play the audio files in Sequential, Shuffle or in a Timed sequence. The MOH3000 may have one or more files present in its memory cartridge and some of these files may be included in the play list and some may not.

To change the play mode, click on the corresponding option. To add or remove a file from the play list, select the file by clicking on it and then click on the 'Add to play list' or 'Remove from play list' button. The same action can be achieved by simply double clicking on the file name.

If there are more than 3 files included in the play schedule and the play mode is 'Sequential', then the play order of the files may be modified by moving a file up in the order or lower down the order of play. To do this, select the file by clicking on it and then click on the 'Move up' or 'Move down' button as desired. The 'Move up' and 'Move down' buttons are disabled if the play mode is 'Shuffle'.

If the 'Timed' mode is selected, click on a file to "Add to Play list" and you will be prompted to select the timings.

In the Timed mode of play, it may be desired to have a file play from 6 pm of one day till 9 am of the next day. To do this, first schedule the file to play "Daily" from 6 pm to 11:59 pm. Next, click on the "Add to Play list" button and then from the pull down options for the available files select the same file again and schedule the timings "Daily" from 12:00 am to 9 am.
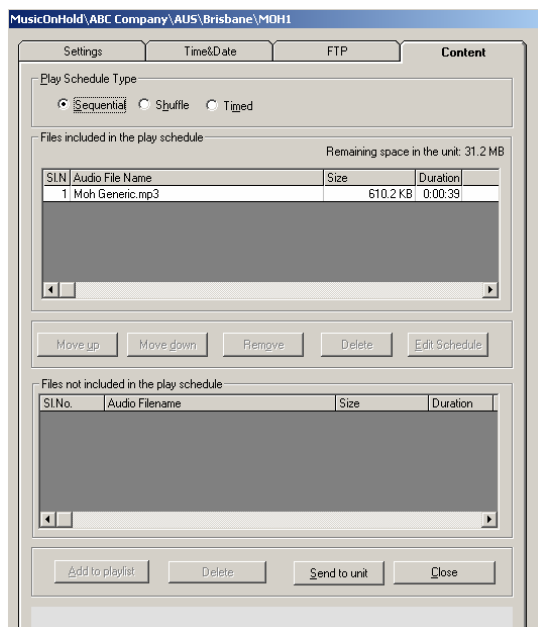
If one file is programmed to play from Friday 5 pm to Monday 9 am, whereas another file is programmed to play daily from 6 pm to 9 am, the first file takes precedence on Friday, Saturday and Sunday evenings, while the second file would play on other weekday evenings.

To exit without updating, click on the Close button. However, if you exit without updating, these changes are not sent to the unit and hence, when you click on the 'Play schedule' next time, the old schedule will reappear again. Click on the 'Send to unit' button to update the schedule in the unit.

To delete a file, click on the file to select it and then click on the 'Delete' button in the appropriate box. The CMS prompts you to reconfirm the delete action – press the 'Yes' button to delete and the 'No' button to cancel the action.
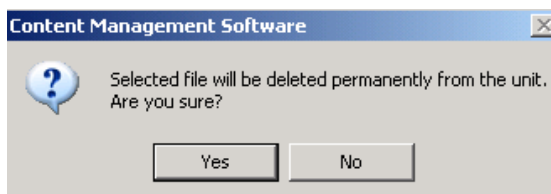

If you press 'Yes', the CMS sends the information to the MOH3000, verifies that the file is deleted and updates the list of files present in the unit by displaying the current list on the screen. The remaining space in the unit would also be updated.

If a content file is corrupted or gives an error while playing the file in the unit, the file name is automatically renamed with a .bad extension, to indicate to the user that this file is not usable. The user must delete this file manually.

Click on the "Send to unit" button to update the unit with all the changes.
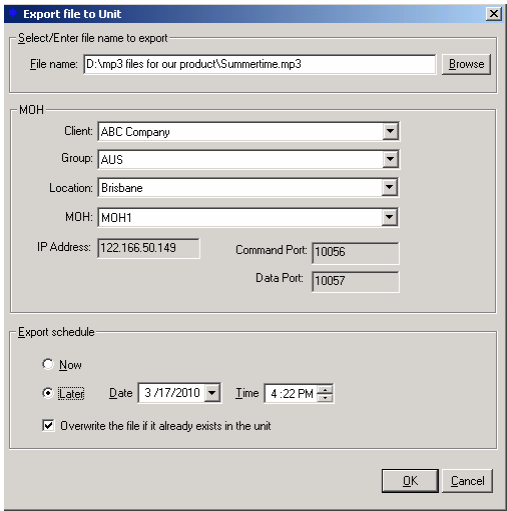
Message Files

Click on the "Message Files" option on the toolbar and you will see two sub-menu options as shown below.
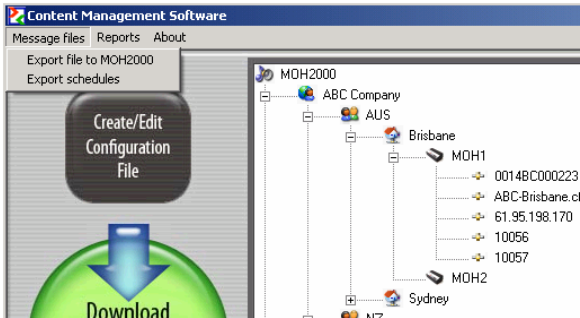
To send a content file directly to a unit, click on the "Export file to MOH3000" option. To see the in-progress or pending export schedules, click on the "Export schedules" option.

Export file to MOH3000

A pop up window appears as shown below, where you may select the desired unit, browse and select the content file to be exported to the unit and set the time at which the file is to be exported.

You may export the file immediately by selecting the "Now" option or select the "Later" option and set the time at which the export should take place.
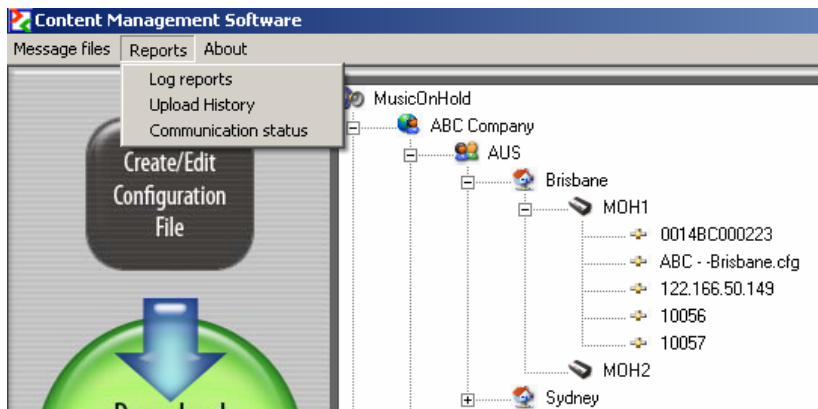
Export schedules
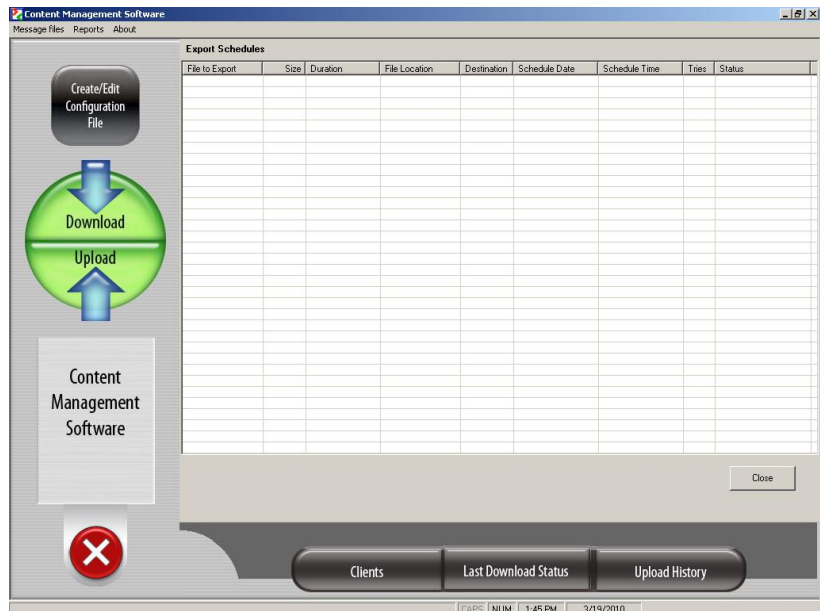
If any export schedules are pending or if any are currently in progress, they would be displayed on the screen.

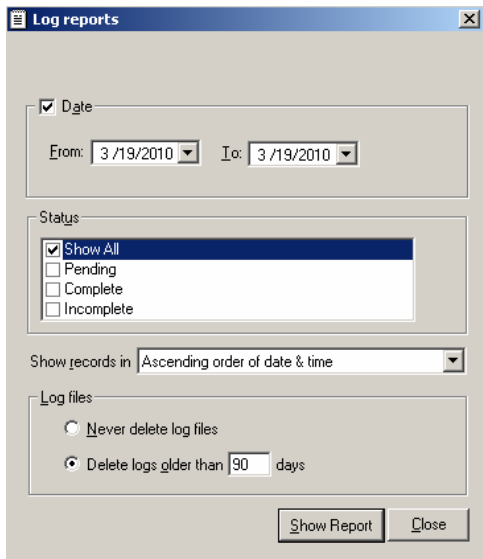Click on the 'Close' button to revert to the normal screen view.

Reports

This toolbar option has three sub-menus : 1) Log reports, 2) Upload History and 3) Communication Status.

Log Reports

This toolbar option allows you to view the Log report. All the File download and export activities are recorded in a log file saved in the default folder of the application.

The Log Report gives the details of all the activity for the chosen period. You may select the type of activity and period for which you want the report. You may view the records in ascending or descending order of time by selecting the desired option at the bottom of the pop up window.

The reports may be converted to TXT or HTML files and saved for future use or emailed if required.

You may program the CMS to delete all the log entries older than a set number of days or select "Never delete log files" if you do not want the entries to be deleted at all.

Back up and Restore Client Database :

The MOH3000 automatically takes a back up of the Client Database every time when the CMS is launched. The changes made since the CMS was most recently launched will not be backed up unless the CMS is closed and launched again.

If for some reason the Client tree is lost or has been corrupted, the last backed up version may be restored.

To restore the database, click on the "About" tab and press the F10 key. This will pop up a window asking you to confirm the restoring of the database. Press the "Yes" button to restore or the "Cancel" button to abort this process.

Statutory Information

$$C\,E$$ This product complies with the requirements of the following European Directives: The EMC Directive 89/336/EEC; the Low Voltage Directive 73/23/EEC, both amended by the Directive 93/68/EEC.

FCC Information :

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy & if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This Class B digital apparatus meets all the requirements of the Canadian Interference causing Equipment Regulation.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Safety:

This product has been tested to comply with the International safety standards as per IEC60950 for CE and FCC compliance

Caution:

This unit should not be connected to or installed directly on a PSTN or any other Public, Government or Private Telecommunication Network which is in violation of any certification or Registration requirements of any State or Central Law or Act or is in contravention of any of the provisions of the local regulations. All direct, indirect and consequential liabilities arising out of the failure to comply with the above instruction is the sole responsibility of the user only and the manufacturer or dealer / distributor is in no way be liable for any claims or damages.