Part 1: How to install and run MITPlayer on a Mac using (free) VirtualBox and (unregistered) Windows 10 [1]
Part 2: How to set up the Dance Hall Display (aka 2nd Monitor)

Before starting Part 1 …

- Read this entire document before starting, as some questions you may have during the process may be answered later in the document.

- You will need at least 12 gigabytes [2] of disk space: 11G for a dynamic virtual Win10 hard drive, and 300M for the VirtualBox application.

- You should be experienced with the MacOS user interface and, as with installing other software, know your Mac's admin password.

- Although not necessary, it is recommended that you close other applications during the install, such as mail, as they may indirectly slow down the installation process.

- Depending on your computer and network speed, installation can take from 30 minutes to a couple hours. Much of the time will be waiting for downloads and the Windows 10 install.

- The major steps are:

  ○ Downloading and installing VirtualBox on MacOS

  ○ Creating a virtual machine for installing Windows 10

  ○ Downloading Microsoft Windows 10 image

  ○ Installing and Setting Up Windows 10 OS

  ○ Installing and Setting Up Guest Additions to VirtualBox for Windows 10

  ○ Installing and Setting up MITPlayer

The following website provides the details for installing VirtualBox VM and Windows 10 on MacOS. www.howtogeek.com/657464/how-to-install-a-windows-10-virtualbox-vm-on-macos

The following will help you follow these instructions:

Notes for Installing VirtualBox on MacOS

1. Follow the howtogeek's instructions on to download and install VirtualBox for MacOS.

2. Per the instructions, you may get the following pop-up window:

System Extension Blocked

A program tried to load new system extension(s) signed by "Oracle America, Inc.". If you want to enable these extensions, open Security & Privacy System Preferences.

Open Security Preferences   OK

If so click "Open Security Preferences" and "Allow the Oracle America install"

You may have to redo the install from the beginning again.

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[1] Tested on MacOS 10.14.6, 10.15.7 and 11.5.2 on Intel Macs
[2] Note: You can install the Windows 10 Virtual Machine on an external drive to save space on your Mac

Notes for Installing Windows 10 Virtual Machine on VirtualBox

1. Follow the howtogeek's instructions to install Windows 10.

2. The VirtualBox installer asks many questions. I used the following along with default settings:

    a. Operating System Version should be Windows 10 (64 bit).

    b. Creating dynamic storage for a 50G Windows 10 VM works well. (It's not necessary to have a fixed size virtual drive.)

You've now successfully installed VirtualBox and a Windows VM. However, just like on any physical machine, you have to install and set up the Windows OS.

Notes for Installing and Setting Up Windows 10 OS

1. The howtogeek instructions say "You can download the <u>free Windows 10 disc image</u> directly from Microsoft." You may land on a page saying "You've been routed to this page because the operating system you're using won't support the Windows 10 media creation tool and we want to make sure you can download Windows 10." You can ignore this message and proceed with the download.

2. When downloading the Windows 10 ISO disk image, choose 64 bit.

3. Installing Windows 10

    a. When asked for a Windows 10 product key, if you have one, provide it. Otherwise, click "I don't have a product key." Without a key, Windows will occasionally request you to enter a product key, otherwise it operates normally for running the MITPlayer

    b. Re which Windows operating system to install: I chose "Windows 10 Home"

    c. Choose Custom Install, since this is not an upgrade install.

    d. Among the last steps, follow instructions to create a Microsoft account and PIN, which will becomes your password to start Windows.

Installing VirtualBox Guest Additions for Windows 10

To be able to copy/paste to/from MacOS and the Windows virtual machine, drag files, and share folders, you will need to install VirtualBox Guest Additions.

To install Guest Additions, perform the following steps:

1. Start the virtual machine in which you installed Windows, if it is not already running.

2. Select "Insert Guest Additions CD Image …" from the Devices menu.

3. Select Optical Drives from the Devices menu in the Virtual Machine's menu bar (on top) and then "Choose/Create a Disk Image"

4. In the window, under "Attached," select "VBoxGuestAdditions.iso" and click on Choose.

5. Click on the File Explorer icon on the bottom of the screen to open a window. If you don't see a list of folders on the left, then click on the "View" tab and choose "Navigation Pane" to display the folders on the left.

6. Make sure that "File name extensions" is checked (under the View tab). If it isn't, click it.

7. Scroll down the left side and click on "This PC," then click on "CD Drive (D:) VirtualBox Guest Additions"

8. Double-click on VBoxWindowsAdditions.exe to start the installer.

9. When asked to allow "Oracle VM Virtual Box Guest Additions" to make changes to your device, click Yes.

10. In the installer dialog, accept the defaults. Reboot at the end.

11. After rebooting, if you see a screen with the date and time, click anywhere on that screen to display the Windows login screen. Enter your PIN to login (noted earlier).

12. To set up copy/paste: on the VirtualBox VM menu bar (on the top), click Devices, choose Shared Clipboard, and choose "Bidirectional"

13. To set up drag/drop: click Devices, choose Drag and Drop, and choose "Bidirectional"

14. The following steps allow you to access folders and files on MacOS (such as your iTunes music files and other music files). click Devices, choose Shared Folders, click "Shared Folder Settings …"

15. A window will display where you can add folders to be shared between MacOS and Windows. On the right side of the window click on the green + sign: Add each folder you need to share. A popup window will display in which you choose the MacOS path for your music.

16. In the Folder Path dropdown, select "other" to browse your MacOS drive (e.g. your iTunes music folder or other folders with music).

17. When you find your music folder, select it, click "Open,"and then click the Auto-Mount and Make Permanent boxes. Click OK. Then click OK to finish.

How to install and use MITPlayer in VirtualBox

1. Start a web browser. To use Microsoft Edge, click on the icon:

2. Navigate to njfolkdance.tripod.com/mitplayer.html and download MITPlayer.

3. As this is an initial install, click on "Full zip file" to download it. At the bottom left of the window, you will see the zip file name. Click on "Open file"

4. Double click on the file _README.for.full.zip to learn how to complete the install. To copy the files to the C:\fd or C:\MIT folder, and the Mx folder with music samples, you first create folders as follows:

5. Click on the File Explorer icon   to display the File Explorer window. You should see a list of folders on the left. If not, click on the "View" tab and choose "Navigation Pane" to display the folders on the left. One of those folders will be "Local Disk (C:)" Click on it and that is where you will create the fd (or MIT) and Mx folders. To create each folder, right click and select "New – Folder"

How to access music on your MacOS drive from MITPlayer

To access your iTunes and other music files from Windows, you should have shared your music folder per the earlier instructions.

The MITPlayer instructions tell you how to add individual music files and/or all the music in your folders. The basic idea is: When you select "Add individual dances" or "Add a group of dances," a window pops up. Click on the location under "Location of music files:" to navigate to the MacOs folder you set up previously.

Double click to select the folder, and select appropriate settings for the features you want to store – Type, Country, Choreographer, Repertoire, etc – then click the Add button.

Part 2: How to set up the Dance Hall Display (aka 2ⁿᵈ Monitor)

One of the MITPlayer's nicest features is the Dance Hall display, showing the current, past and upcoming dances on a second monitor. These instructions explain the steps for doing this within the Win10 VM.

First time instructions for setting up a second monitor:

- Make sure that your Windows 10 virtual machine is Shut Down.
- Connect your second monitor to your Mac.
- Using MacOS System Preferences, choose Displays and the Arrangement tab, make sure:
  - Mirror Displays is off
  - Your Mac is the primary display
  - Arrange the second display relative to the primary display, so that you can move your mouse between displays. I put my second display to the right of my main display and the tops are at the same level
- Run VirtualBox and click on your virtual machine running Windows 10, but don't start it.
- Click the orange "Settings" icon on the top and the Settings window will open.
- Click on the "Display" icon.
- Change the Monitor Count from 1 to 2.
  - Note: you may need to change the "Scale Factor" depending on your monitor resolutions. For example, my configuration is Monitor 1 scale 240% and Monitor 2 is 100%. This can be adjusted while the virtual machine is running.
- Click "OK"
- Click Start to run the Windows virtual machine and log in.
- Since you now have two monitors known to the virtual machine, two windows should display. If not, see Note 1 below. Drag the blank (second) window to your second physical screen as you would on MacOS.
- Start Windows 10 from VirtualBox and log in to Windows.
  - Check that you have a Windows 10 window on your second screen. If you don't, you'll need to set up two monitors in Windows 10. See Note 2 below.
- Your main virtual monitor should show the Windows desktop with the Microsoft "Edge" icon.

You are now ready to run the MITPlayer using a second monitor:

- Start the MITPlayer
- Turn on the Dance Hall display. Under Options: Playlist on Monitor 2 or F11. The second display should appear on your second monitor. If not, it's on the main monitor. Drag it to your second monitor window in Windows. Next time you start the Player, it will remember the position of the 2nd screen.

After the first time:

- You only need to verify that your MacOS System Preferences>Display settings are correct. That's it!
- You do not need to do anything with the VitualBox virtual machine settings

Notes

1. As noted above, for my Mac and second monitor (a TV), I had to change the VirtualBox VM scaling so that the items on each monitor looked as they should.

2. How to set up to use two monitors in Windows 10:
   - Click on the Start icon on bottom left of the Windows 10 window to bring up the menu.
   - Click on Settings then System then Display.
   - Under Multiple Displays, select "Extend These Displays"
   - Rearrange the display windows in Settings to mimic what you did in MacOS.

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