MokaFive Creator Manual

for Mac OS X

1.6

12/10/2008 r18923

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Introduction, Installation, and Launch

Overview

In using computers everyday you likely send email, check the news, track finances. In using different computers you probably have different programs on each machine, maybe even different operating systems. Have you wished each machine had the same applications? Or that the bookmark you just added to your browser were on the other machine? Have you worried about computer viruses or your child deleting the wrong files? LivePCs can help you in each case. MokaFive Creator will help you create, modify, and share LivePCs.

A LivePC is a virtual computer. You can run a different operating system and different applications within it than the computer normally runs. You can run this virtual computer directly on a computer or from a portable drive on most computers. LivePCs can be found in The Lab on MokaFive.com or you can make, and even share, your own.

Variety
LivePCs are run from MokaFive Player or Creator on Windows XP and Vista or Intel based Mac OS X machines. They can also be run on BareMetal. You can run many different LivePCs from the Player. Have an application you'd like to use that only works under DOS? You can have a DOS LivePC and add that application. Would you like to run some applications under Linux? Download a Linux LivePC. Would you like to have a safe games play space for your child? Launch a child friendly LivePC.

Offline Use
LivePCs can be set for use without access to the internet. You could compose an email at the top of Mount Everest on your LivePC to send once you are again connected to the web.

Security
LivePCs run on your computer but they are copies of the ones maintained on our servers. The LivePC operating system and applications are kept separate from your personal data. If your LivePC gets a virus, it will be removed when you exit and re-launch the LivePC. The operating system and applications on a LivePC are kept clean by matching them to the LivePC in The Lab on MokaFive.com. LivePCs are also independent. They are not able to open or affect files in other LivePCs.

Updates
MokaFive Player and Creator download LivePCs and their updates seamlessly in the background. Each time you launch a LivePC any updates are automatically applied. You simply click on the LivePC start button to run the latest version.

Portability
You can put LivePCs and the Player on a memory card, USB flash drive, USB hard disk, or an iPod and take them to another machine. You will be able to take your LivePCs between Intel based Macs and Windows XP or Vista machines.

Backups
Your portable LivePC and your personal data can be backed up automatically to a Windows XP or Vista computer. Should you lose your portable drive you can create a new one from the backup as described in the Player manual.

Personalization
You can create and share your own LivePCs, either by modifying existing LivePCs or creating

your own from scratch. You can then register your LivePC at MokaFive.com to share with the world or just your friends, or you can keep it private. By posting and subscribing to your own LivePC you can be assured that any spyware you pickup in your LivePC virtual computer will be removed the next time you launch it.

System requirements

To create LivePC images you need to meet the following hardware and software requirements:

Mac requirements

- Intel Mac with OS X 10.4 or 10.5
- VMware Fusion 1.1 or greater pre-installed in the /Applications folder without being in a subdirectory
- 2 GB RAM minimum
- Hard drive with at least 4 GB of free space
- Network connection to the Internet (during installation and for updates)
- Account with administrator privileges

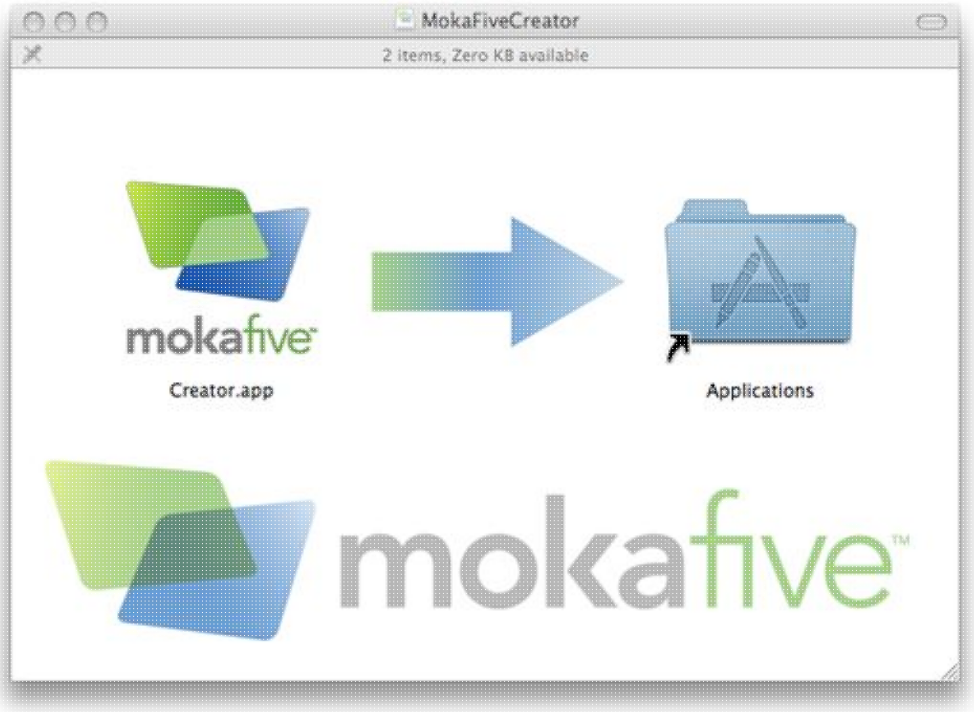
Installation on an internal hard drive

Before installing MokaFive Player™ you will need to have installed VMware Fusion 1.0 or 1.1.

Download the Mac OS X MokaFive Player file. Click 'Continue' if asked about continuing the download.

The file should automatically unzip onto your desktop or into your downloads directory, if not double click MokaFiveCreator.dmg to unzip the file. Open the MokaFiveCreator disk image:

Drag the Creator icon onto the Applications folder:



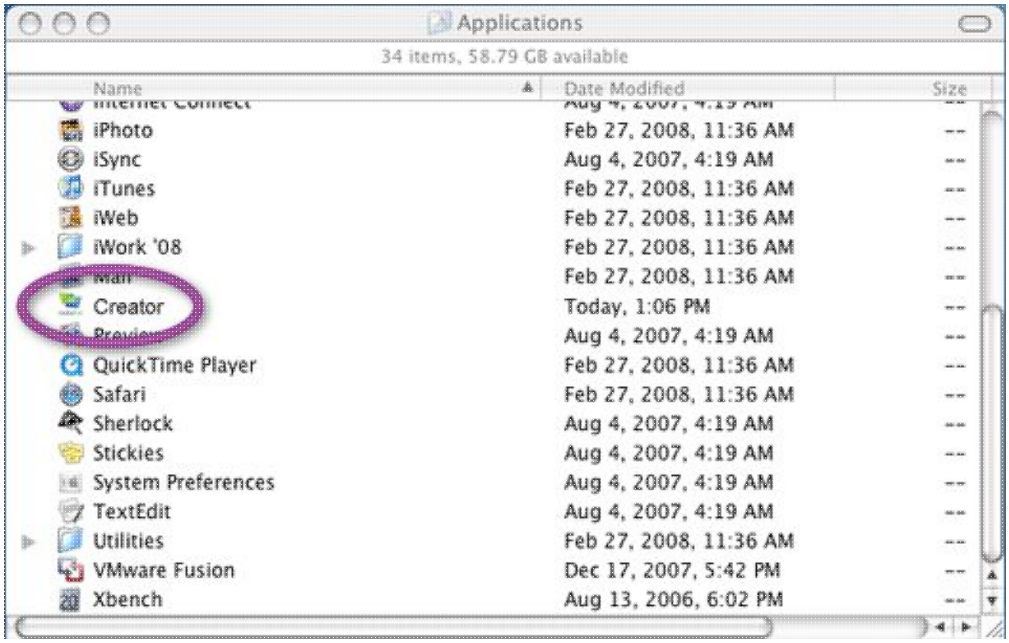
If you are upgrading your Creator application you will need to accept replacing your older version:

You may now eject the MokaFiveCreator disk image and delete the MokaFiveCreator.dmg. The first time you launch MokaFive Player VMware Fusion will be configured. See the configuration notes below.

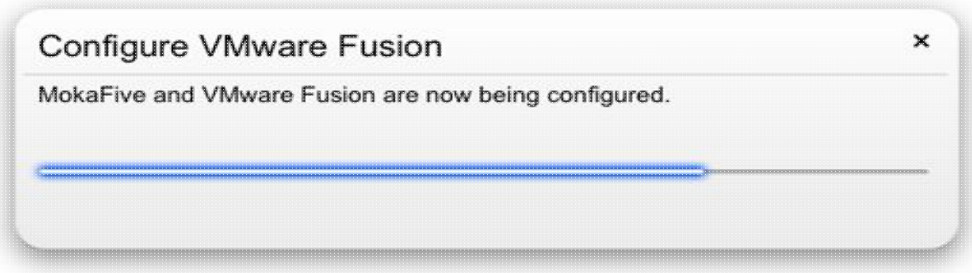
NOTE: Both MokaFive Player and Creator can be installed on the same OS X hard drive. However they can only be run independently (one at a time). The two applications will share the same listing of LivePCs.

Configuring VMware Fusion on a Mac

1. The first time you run MokaFive Creator on a specific Mac you will need to configure VMware Fusion. **NOTE**: Fusion must be installed in the default /Applications directory and not in a special location. Double click the Player icon in your applications folder or removable device.



2. A 'Welcome Screen' will open. A 'Configure VMware Fusion' screen will open on top of the 'Welcome Screen'. Click 'Install' to complete the installation.



3. A window will open requiring you to provide an administrator user name and password.

4. The 'Configure VMware Fusion' window will confirm the components have been successfully installed.

NOTE: When there are updates to MokaFive Creator you will need to re-configure VMware Fusion.

Launching MokaFive Creator™

Mac desktop: Double click the Creator icon on the desktop. (If this is the first time you launch the MokaFive Creator you will need to 'Configure VMware Fusion' as described above.) **NOTE**: You can not run VMware Fusion and the MokaFive Creator at the same time. VMware 'Unity' mode is unsupported in LivePCs. Each running LivePC will have its own VMware icon in the dock.

When running LivePC applications that expect a Windows interface you may need to use the following:

- **Right click**: On a laptop do a two finger tap on your trackpad or press the 'control' key while clicking.
- **Alt key**: Press the 'option' key on the right side of your keyboard or press both the 'fn' (function) and 'option' keys on a laptop.

When you launch MokaFive Creator™, a Welcome Screen will come up, followed by a second screen that informs you that the software is loading.

The MokaFive Creator ™ interface will launch. MokaFive Creator comes with two demonstration LivePC images: Fearless Browser and Linux XP Desktop. They will need to be downloaded to your MokaFive Creator. Depending on your internet connection it may take some time. While being pulled from our servers there will be a progress bar and the status will say 'downloading'. After installing the MokaFive Creator and allowing either virtual machine to be downloaded, you can use your first LivePC!

NOTE 1: If you are running firewall or virus protection software you may need to grant access for individual LivePCs or VMware Player to connect to the internet. The internet connection allows the LivePC to be download initially. LivePCs are maintained by their creators and you will receive updates automatically which will also require access to the internet. LivePCs are also compared to the version on the server each time they are started. If any spyware has infected your LivePC it will be removed as your LivePC is reset to match that stored on the server.

NOTE 2: For information on running LivePCs and the Creator interface see the Player manual. Almost all aspects of the Creator are also in the Player except for the ability to create and share LivePCs and the 'stop' button available for each LivePC virtual machine. The creation and publishing of LivePC images is covered in this manual. The 'stop' button has the same functionality of the 'Power Off' option. It should only be used when the LivePC is unresponsive. It is equivalent to using the power button on a non-virtual machine.

Create a LivePC

Creating a new LivePC introduction

NOTE: For information on running LivePCs and the Creator interface see the Player manual. All aspects of the Creator are also in the Player except for the ability to create and share LivePCs.

You can create a LivePC for personal use, use by your friends, or use by an enterprise. A LivePC can be created from scratch, based on another LivePC, created using a LiveCD or DVD, or created from a VMware Virtual Machine. Once created it can be configured, packaged, and shared.

Creating a LivePC from scratch will provide a pristine virtual computer onto which you can install your own operating system and applications. You will need to have an install CD or DVD for the operating system you wish to use. Alternatively you can use the ISO of an existing LiveCD or LiveDVD. LiveCDs are broadly available on the internet. You can either download a LiveCD or simply make a note of its URL.

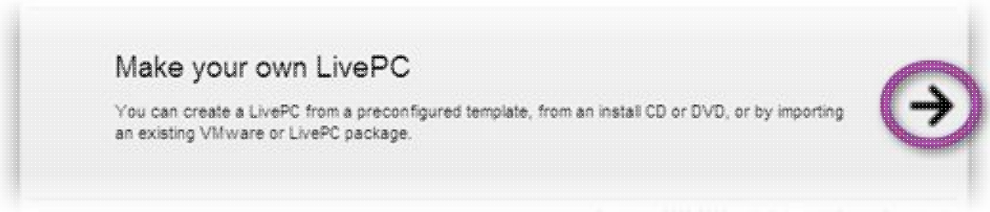
For two popular LivePC systems we have simplified the process:

- **Windows XP LivePC**: In the MokaFive Creator for Windows we have automated Windows XP from CD installation during which the MokaFive Creator will set up separation of system and user state automatically. Select 'Perform unattended install' when selecting the Windows XP OS.
- **Linux LivePC**: You may wish to start from one of our prepared templates. We also have online instructions on optimizing a manually created Linux LivePC.

Create a LivePC from scratch using an install disc, ISO file, or LiveCD or DVD

1. Click on the '+ Add New LivePC' button on the MokaFive™ Creator:

2. Click on the arrow button for 'Make your own LivePC' in the 'Add a new LivePC' window.

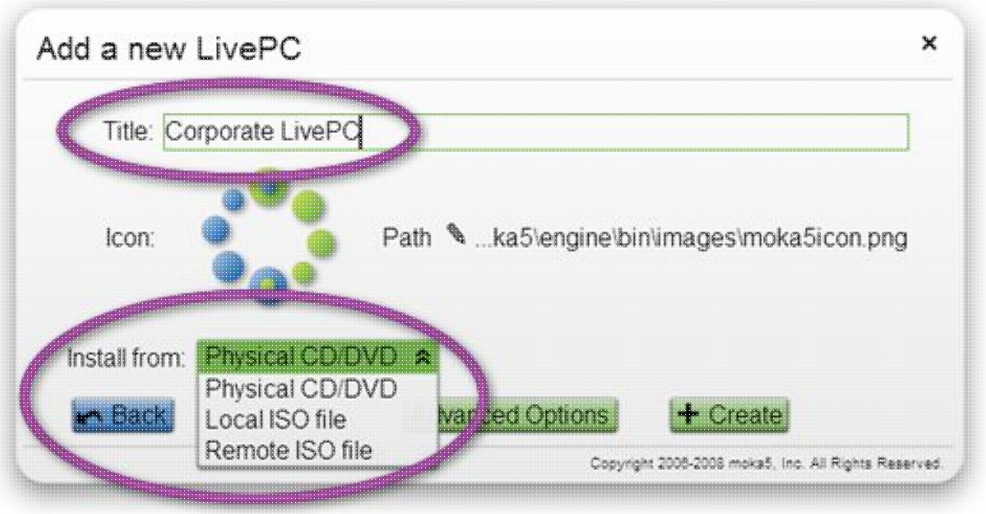


3. Select the operating system and its flavor using the 'OS type' drop down menus under 'Create a new LivePC from an install CD or DVD'. Then click on the arrow beside the options.

When creating a Windows XP LivePC from CD we recommend you check the box for 'Perform unattended install' to simplify the process (only available in the MokaFive Creator for Windows). This option is unavailable for other Windows installations. Follow the instructions for an

unattended install.

4. Name the LivePC and either choose an install option.



Type in a title as a name for your LivePC. (Note: You can use the shift key with the cursor to highlight and select text.) You can also specify a path to an icon to use for your LivePC by clicking on the pencil icon.

Use the drop down 'Install from:' menu to select whether you are installing from:

- Physical CD/DVD: You will need to have an install CD or DVD.
- Local ISO file: Use this for an ISO file you have downloaded to your PC. You can also use this option with LiveCDs or LiveDVDs. Click on the 'Path' pencil icon to open a browse window to select the file on your hard drive or network.
- Remote ISO file: A text box will open for you to type in the URL for the ISO file.

Click the 'Create' button in the 'Add a new LivePC' window to accept default system settings or click on 'Advanced Options' to adjust the LivePC settings first. You may change the settings at any time by selecting 'Configure' from the option drop down menu for the LivePC.

5. Add an OS:

After clicking 'Create' your new LivePC will appear in the MokaFive Creator menu. It is empty as nothing has been added to it. It will automatically start so that you can install an operating system. If you are installing from a physical CD/DVD insert an Operating System CD in the host PC. If an install window opens automatically in your host PC please cancel that install and start it in your LivePC. Your new LivePC will open and install the OS as if you had new hardware. If you are creating a Windows-based LivePC you will need to disable hibernation.

6. Add your applications:

When creating a LivePC from scratch, you should install the VMware tools package into your LivePC's operating system to improve the user experience for your LivePCs. You can obtain these tools by downloading the free VMware Server.

Add other applications via download or CD to build your LivePC. You can add applications to match your desktop or create a new custom environment.

The LivePC will be created. The option 'Keep my changes' will be enabled and you won't be able to turn it off, until you package and upload your LivePC to MokaFive and subscribe to it.

Once you are done adding the OS and applications to the LivePC, you must perform a complete shutdown of the operating system and return to the MokaFive Creator UI, otherwise, your changes may be lost! For a complete shutdown it's recommended that you use the shutdown option in your operating system.

Continue to configure or skip to package and upload

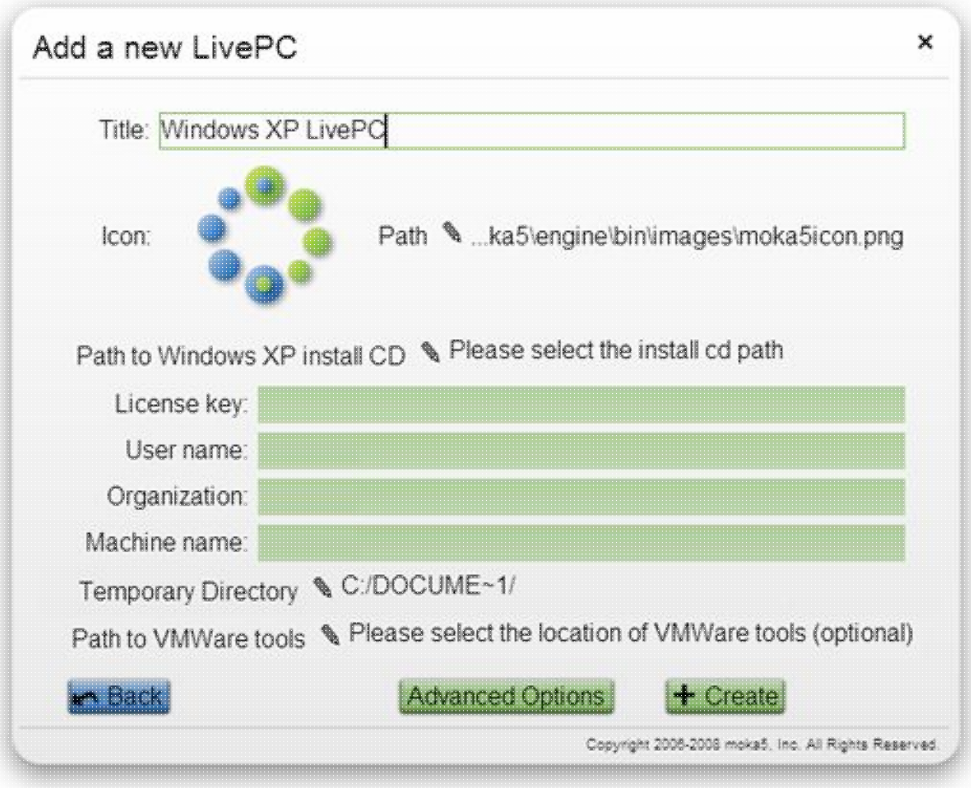
Create a Windows XP LivePC as an unattended install from CD

It's easy to create a Windows XP LivePC from an install CD. Download or insert the CD for the VMWare virtual machine you would like to import. This option is only available on Windows XP host machines. During an unattended install autologin and user files will be set up automatically as well as the system and local disk. The installation will enable HGFS (Host Guest File System) so that files can be shared between the guest LivePC and the host PC by typing \\.host in the address bar of the file system in LivePC.

NOTE: Before performing an unattended install stop running all LivePCs and do not start any until the installation is complete. A Windows XP installation will require at least 2 GB on your LivePC drive. It will take about 30 to 45 minutes to complete the install. You might wish to enjoy a coffee break once the installation is in progress.

1. Click on the '+ Add New LivePC' button on the MokaFive Creator.
2. Click on the arrow button for 'Make your own LivePC' in the 'Add a new LivePC' window.
3. Select 'Windows' and 'XP Professional' for OS type and click on the box for 'Perform unattended install' to select it.

4. Click on the arrow button for 'Create a new LivePC from an install CD or DVD'.
5. Fill in the window which opens:



- 'Title': Type in a title as a name for your LivePC for display in MokaFive Creator or Player. (Note: You can use the shift key with the cursor to highlight and select text.)
- 'Icon': This icon will be displayed in MokaFive Creator or Player. Click on the pencil icon to specify a path to an icon for your LivePC. The default MokaFive icon is displayed.
- 'Path to Windows XP install CD': Click on the pencil icon to set the path.
- 'License key': Provided and required by Microsoft.
- 'User name': Required by Windows XP. A user with this name will be created.
- 'Organization': A Microsoft field for a Windows XP installation. You may leave the default 'myorg'.
- 'Machine name': During an XP installation this would be the computer name.
- 'Temporary Directory': You have the option to change the location. You may wish to use a different disk if you have space limitations on the one you are using. The temporary directory space is required during the install and will be approximately twice the size of the installation disk. It will be cleared once the install is complete.
- 'Path to VMware tools': This is not required. The VMware tools package, called windows.iso will allow MokaFive to automatically install VMware guest tools. If the full VMware player from VMware is installed on the host machine the file can be found in C:\Program Files\VMware\VMware Player\ on the host. The full VMware player is available at http://www.vmware.com/download/player.

6. Insert the installation disc. You will need to cancel or exit the installation window that opens in the host PC.

7. Click 'Create' to start the installation. If you have not completed all the required fields an error bar will be displayed along the bottom of the window. Clicking 'Show Diagnostics' will open a terminal window displaying the installation progress. 'Hide Diagnostics' will close the terminal window.
8. Run your LivePC and add your applications.

Continue to configure or skip to package and upload

Create a LivePC from a Linux template

If you'd like a Linux LivePC efficient way to create a LivePC™ image is by deriving it from a pre-existing one. You can add or remove applications from a LivePC to create a custom version. MokaFive™ Player or Creator will efficiently share disk storage and bandwidth for the common data that are the same in both LivePCs. You will need to be connected to the internet to download a template.

1. Click on the '+ Add New LivePC' button on the MokaFive Creator.
2. Click on the arrow button for 'Make your own LivePC' in the 'Add a new LivePC' window.
3. Select the flavor of Linux you would like for your operating system using the 'Choose a template' drop down list under 'Start from a LivePC template (recommended)'. Then click on the arrow beside your template choice.

The MokaFive Creator will create a new LivePC with a default logo and description. You can then start your LivePC and add the software you wish to use. You can use your LivePC as is, or package and upload it to share it with the world.

Create a LivePC based on an existing LivePC

An efficient way to create a LivePC™ image is by deriving it from a pre-existing one. You can add or remove applications from a LivePC to create a custom version. MokaFive™ Player or Creator will efficiently share disk storage and bandwidth for the common data that are the same in both LivePCs.

Deriving a LivePC from a pre-existing LivePC is very simple. Just find a LivePC that is a good base for the LivePC you wish to create and subscribe to it.

1. Click on the '+ Add New LivePC' button on the MokaFive Creator.
2. Click on the arrow button for 'Browse the Lab' in the 'Add a new LivePC' window.

3. Select the LivePC you would like to use as a basis for your version and click 'Download'.

Once it is in your Creator click on the tool options icon. Ensure the box for 'Keep my changes' is checked. Now any changes you make to this LivePC will be kept - and you will have your own personalized LivePC!

If you want your derived LivePC to be able to run side-by-side with the original LivePC on another user's computer, you will need to ensure that your LivePC has a different MAC address. To do this, click on 'Configure' in the LivePC option drop down list. The 'Configure LivePC' window will open. Click on the 'Network' tab button. Ensure that the 'MAC Type' is set to 'generated'. Make any other configuration changes and then select 'OK' to save the settings and close the window. After making this change, you may want to run the LivePC to ensure the software did not rely on the old settings.

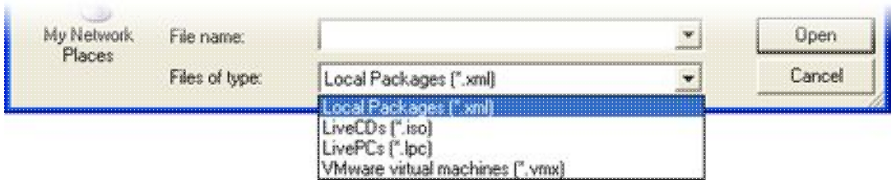
Whenever you make changes to your LivePC that you want to keep, you must perform a complete shutdown of the LivePC and return to the MokaFive Creator UI. Restarting the operating system inside the LivePC is NOT enough to ensure that your changes are saved to the MokaFive Creator. For a complete shutdown it's recommended that you use the shutdown option in your operating system. Alternatively you can click on the orange 'Stop' button for the LivePC in the MokaFive Creator.

Continue to configure or skip to package and upload

Create a LivePC from a VMware virtual machine

It's easy to create a LivePC from an existing VMware virtual machine. Download or insert the CD for the VMWare virtual machine you would like to import.

1. Click on the '+ Add New LivePC' button on the MokaFive Creator.
2. Click on the arrow button for 'Make your own LivePC' in the 'Add a new LivePC' window.
3. Click on the arrow button for 'Import from a VMware or MokaFive package'.
4. Browse to the file you downloaded or have on CD. The following file types are possible:
    - Local Packages: *.xml
    - LiveCD: *.iso
    - LivePC: *.lpc
    - VMware virtual machine: *.vmx



The MokaFive Creator will copy the data from the given location and create a new LivePC with a default logo and description. After the import is done you can use your LivePC as is or package and upload it to have a managed copy or share it with the world.

Note: The import tool does not support VMware snapshot disks. You must first use VMware to convert the disks before trying to import them into the MokaFive Creator. You can learn more online about converting snapshot disks here.

Continue to configure or skip to package and upload

Disable hibernation in a Windows-based LivePC

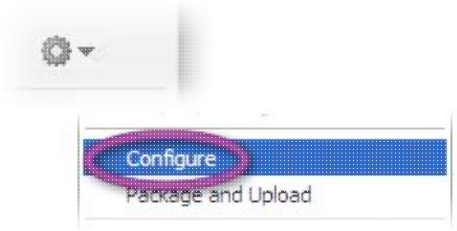
When you create a new Windows-based LivePC by installing from a Windows CD, you should **disable** hibernate**.** In the default MokaFive Creator configuration, if a user quits a LivePC by using the hibernate feature, their hibernation data will be thrown away. To disable hibernate run the LivePC. From the LivePCs 'start' menu select 'Control Panel'. In 'Classic View' select 'Power Options', while in 'Category View' select 'Performance and Maintenance' then select 'Power Options'. In the 'Power Options Properties' window select the 'Hibernate' tab and be sure that 'Enable Hibernation' is unchecked.

Configure a LivePC

Introduction

You can configure a LivePC simply because you want to use a new name or icon for the LivePC. Or you can configure one so that it has a specific environment and applications for your needs. After configuring a LivePC you may keep it for your own use or share it with others. To get started the LivePC should say 'ready' and not be suspended.

1. Click on the gear drop down icon for the LivePC option menu.
2. Select 'Keep my changes'.
3. Click on 'Configure'.

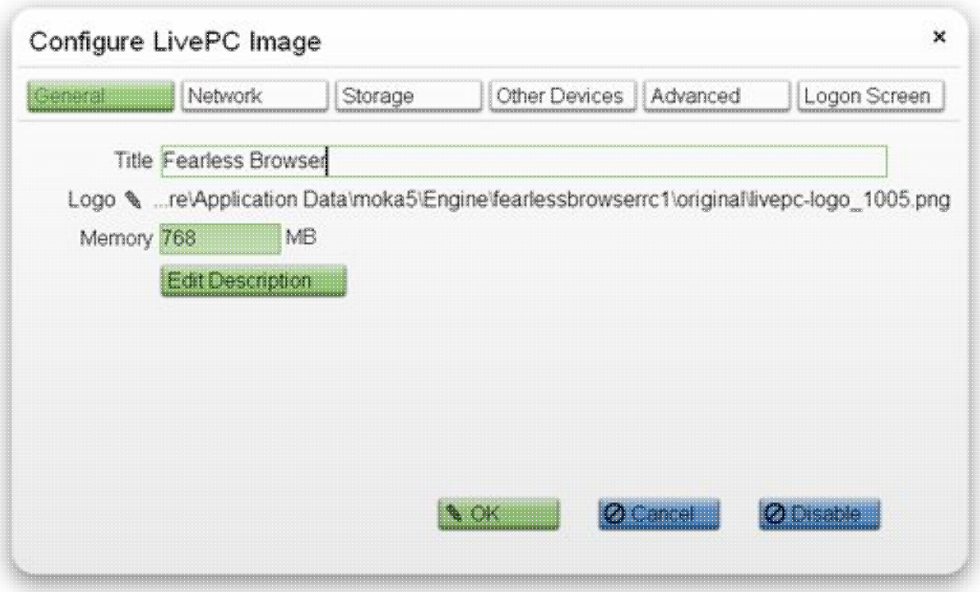


A window will open allowing you to edit the LivePC configuration. At any time you can click on the 'OK' button to save your changes, or 'Cancel' to leave the LivePC unmodified or uncreated. Either button will close the window and return you to the MokaFive Creator.

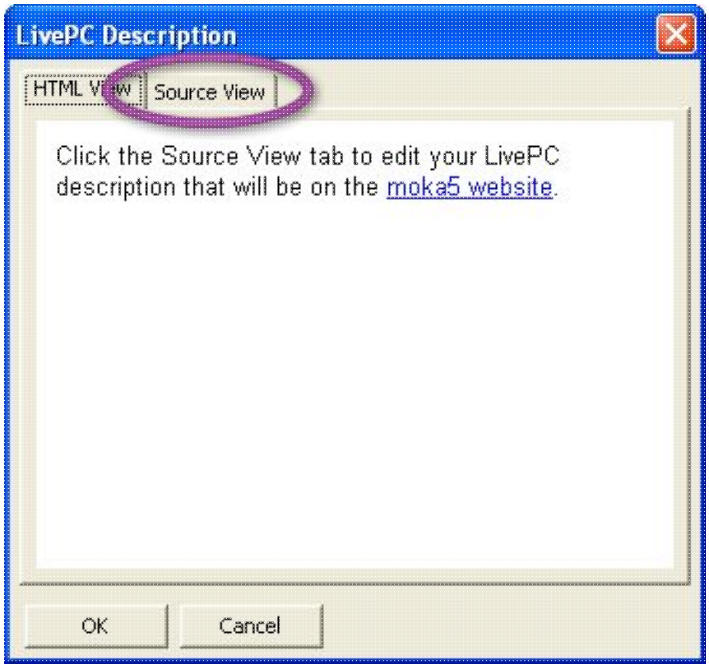
NOTE: If you are sharing a LivePC we recommend you subscribe to the one you upload. You will then share the experience of your users. There will be no confusion as your local settings will not potentially differ from those you uploaded.

There are five or six tabs/buttons for different LivePC aspects. The sixth tab is only available for Windows based LivePC images.

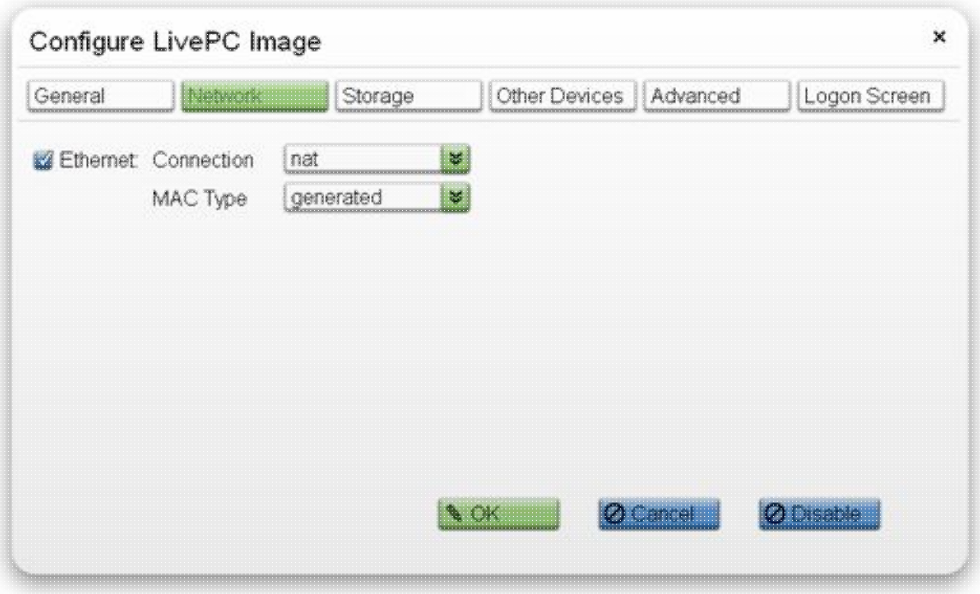
General



- **Title**: The name of the LivePC that will be displayed to users.
- **Logo (URL or local path on local file system)**: Path to logo that the LivePC will use.
- **Memory**: The amount of memory that this LivePC will use. It is dependent on the operating system of the LivePC, the number of applications that will be run, and the number of documents that may be open at a time. One method for determining a reasonable estimated value would be to set the default memory to a high value. Run the LivePC opening every application and a reasonable number of windows for each. Then check your memory usage. If you plan to share your LivePC you should consider the amount of memory you expect your users to have available. The size is dependent on the number and size of applications you will install but some suggested values would be:
    - ♦ Windows XP and below should have at least 256MB, Linux may be set lower.
    - ♦ 512 MB would be a reasonable minimum for a LivePC with games
- **Edit Description**: Click to set a description for the LivePC. A 'LivePC Description' window will open. Click on the 'Source View' tab to enter an html description.



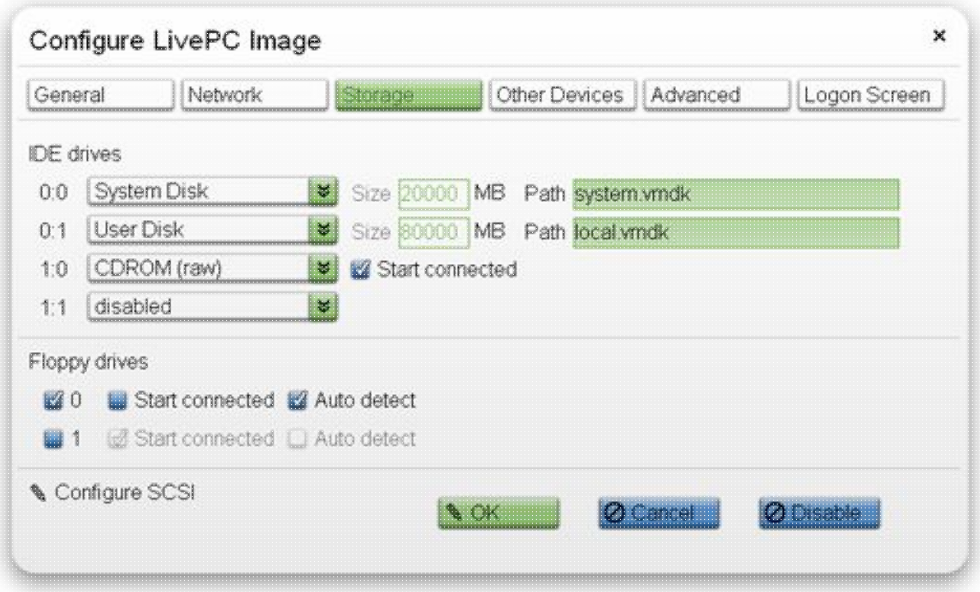
Network



- **Ethernet**: Controls whether the LivePC has a network interface. When checked it makes ethernet available in the VMware menu bar.
- **Connection**:
  - **nat**: Hides the virtual machine behind the host machine.
  - **bridged**: Exposes LivePCs along with host. Store user documents using a Windows share does not work with a bridged connection, set to nat to enable user sharing.
- **MAC type**: There is no single setting for Ethernet address type that will work in all situations. The following guidelines may help determine the best choice for your LivePC.

- **generated**: Default setting. The MAC address will be generated when you create the LivePC or when you download one. It will be different from the MAC address of the host machine.
- **static**: May be useful in using a software license in a portable solution.

Storage



IDE drives

The default drive type supported is IDE. If you are using SCSI drives you can configure them by clicking on the pencil for 'Configure SCSI' at the bottom of the page. By default a new LivePC will have a System Disk and User Disk to keep system and user state and data separate and independent. Also a CDROM drive will be enabled for access by the LivePC. You can edit the size of the default disks or add another Disk.

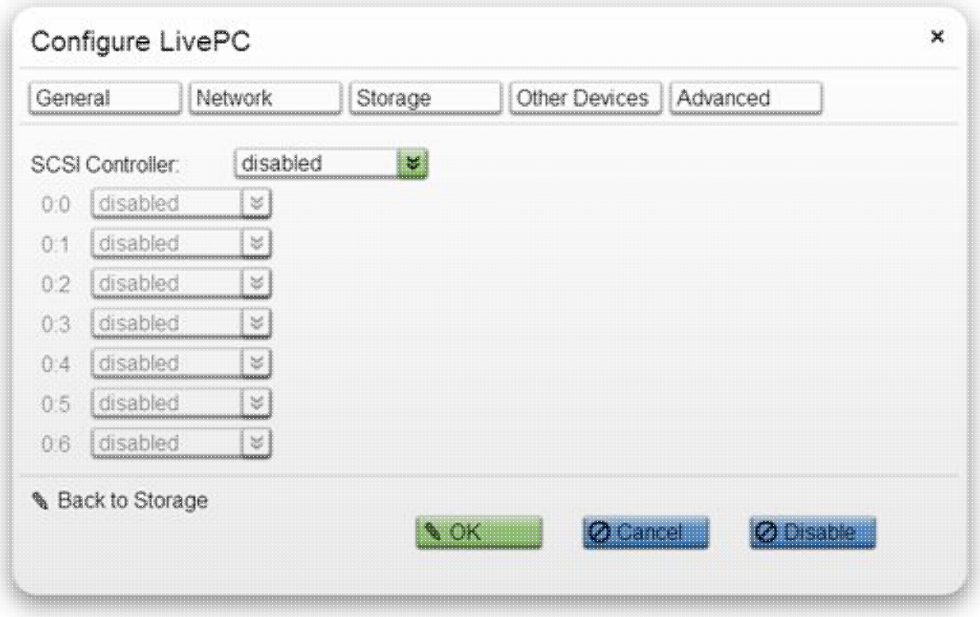
- **System Disk**: The LivePC operating system and programs are stored in system.vmdk. It is not set to persistent so that they are reset on each re-launch of the LivePC. Swap files should also not be persistent.
- **User Disk**: The persistent information for user state is stored in local.vmdk.
  - **Size (MB)**: These are set to reasonable defaults for most operating systems. A smaller disk size is appropriate when the LivePC is to be used on a USB drive.
  - **Path**: These are pre-populated with standard names.
- **disabled**: Not in use.
- **CDROM (raw)**: Allows access to the host computer's CD tray. CDROM will show in the LivePC. LivePC will auto detect CD insertion. One of the disks should be set for CDROM (raw) to allow installation of an operating system from the computer's CDROM drive. If you are using a .iso to install the guest OS you should select CDROM (iso).
- **CDROM (iso)** : ISO file disk image
  - **Start Connected**: When checked it will be available to the LivePC and show in the VMware menu bar.
  - **Path**: Set during auto detection. It can be manually assigned. Clicking on the pencil opens a browse window.
- **CDROM (atapi)**: Alternative option if CDROM (raw) fails. Utilizes an older CDROM drive emulator.

- **Start Connected**: When checked it will be available to the LivePC and show in the VMware menu bar.

Floppy drives

- **Drive number**: Identifies the drive as available.
- **Start connected**: Checking this box will start a connection to the drive on booting the LivePC.
- **Auto detect**: Preferred option. The system will automatically search for and map to the drive
- **Path**: If you disable auto detection you can click on the pencil icon to open a browse window to set the path.

Storage (Configure SCSI)

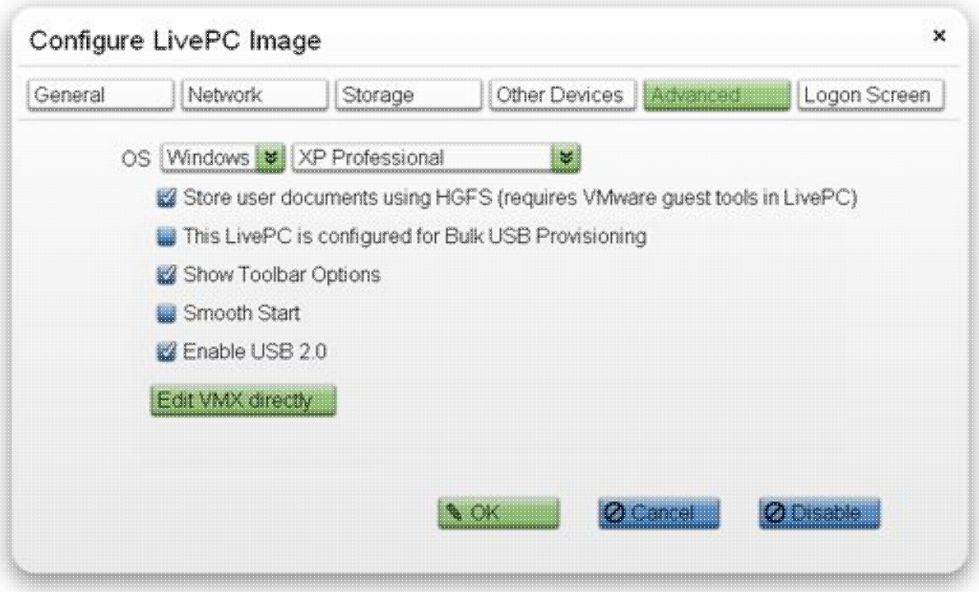


- **SCSI Controller**: Unless using a SCSI drive simply leave set to disabled.
  - **disabled**: No SCSI controller is configured for use within the LivePC.
  - **BusLogic**: Older driver for SCSI drive. You must install the BusLogic driver.
  - **LSILogic**: Newer driver for SCSI drive. You must install the LSILogic driver.

Other Devices

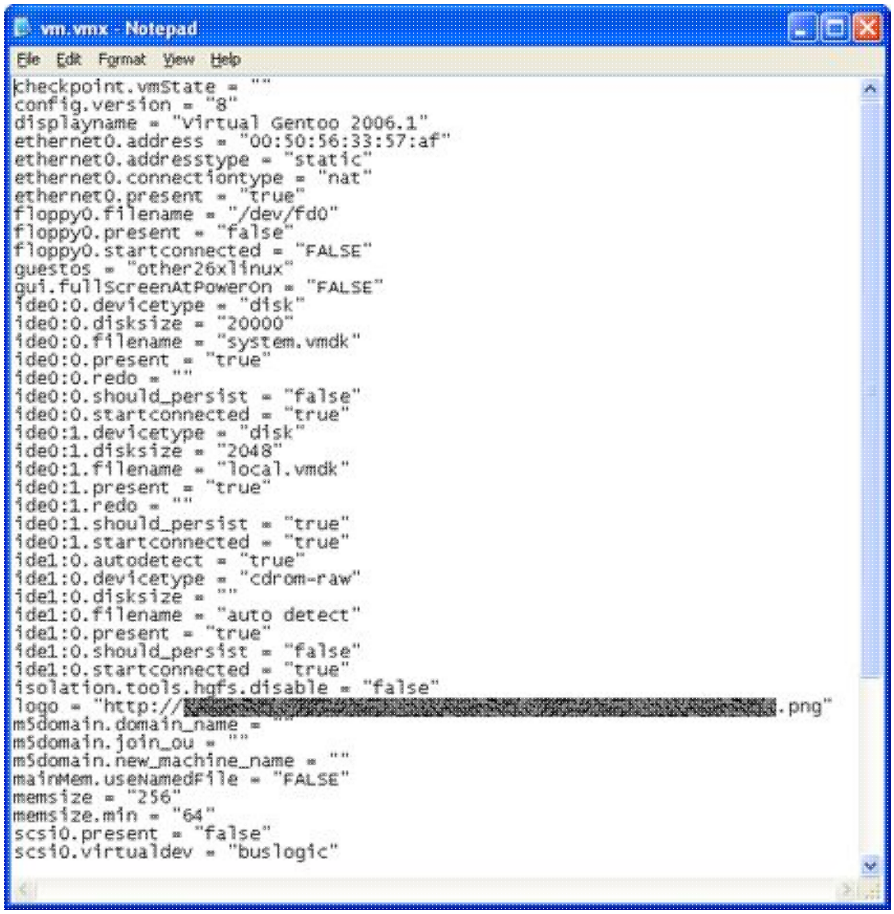
- **Sound Controller**:
  - **disabled**: Makes sound unavailable to the LivePC and in the VMware menu bar.
  - **Ensoniq ES 1371**: generally works with both Windows and Linux based LivePCs.
  - **Creative SB16**: appropriate for LivePCs based on DOS or other systems without a driver.
  - **Start connected**: When checked sound is available on starting the LivePC.
- **Auto connect new devices**: Will make connection and show USB devices in menu bar on insertion to the PC.

Advanced

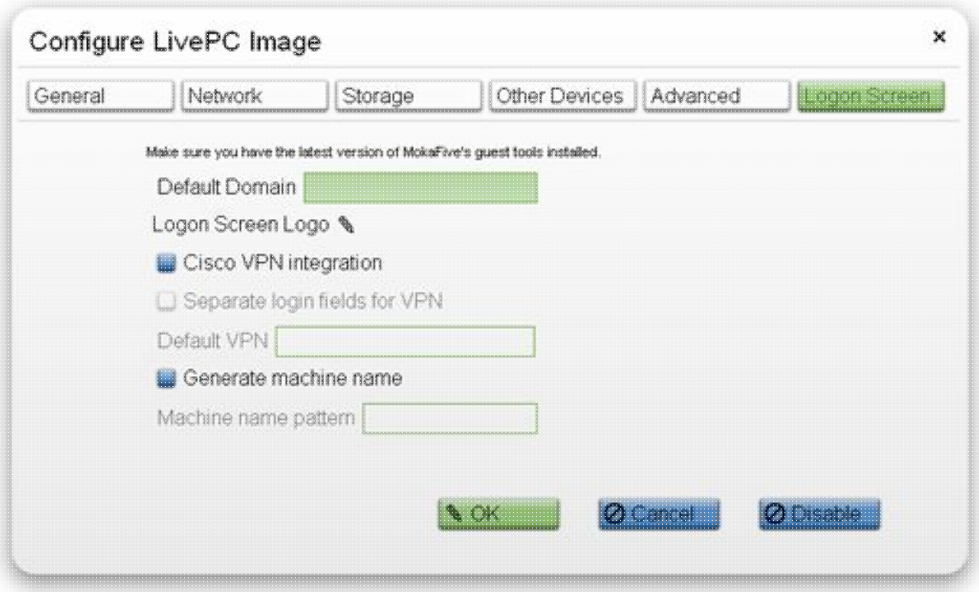


- **OS**: First select the general operating system that you plan to install on the LivePC and then the specific version. This will improve the performance of your LivePC by modeling the specific characteristics of the OS.

- **Store user documents using HGFS (requires VMware guest tools in the LivePC)**: Check this box to make your Windows LivePC compatible when used with the Mac OS X MokaFive Player or Creator. For more information see the section on HGFS user files.
- **This LivePC is configured for Bulk USB Provisioning**: Only enable if LivePC configuration to support Bulk USB Provisioning has been done. Contact MokaFive support if you need bulk USB provisioning.
- **Show Toolbar Options**: Displays the standard VMware options menus.
- **Smooth Start**: Will keep the VMware window minimized until the desktop is open.
- **Enable USB 2.0** : Enables USB 2.0 within VMware and your LivePC.
- **Edit VMX directly**: If you are an advanced user with special needs you can edit the VMX file for the LivePC directly. You can use this option to add support for a second graphics card for example. Please be cautious. You could also break your LivePC.



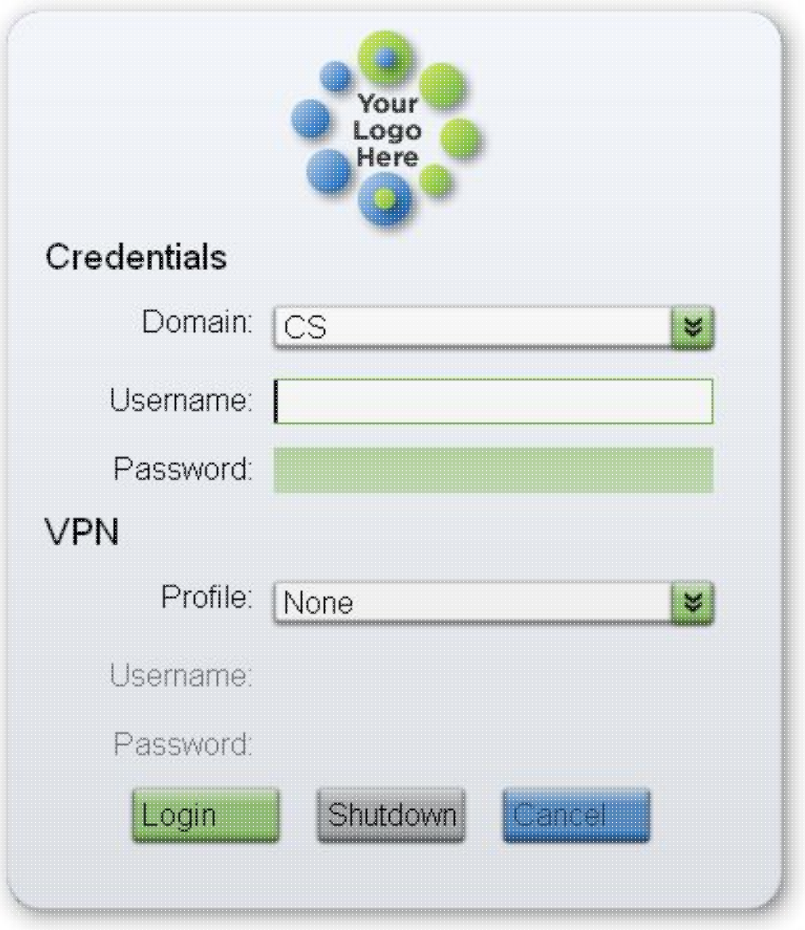
Logon Screen (Windows LivePC images only)



The 'Logon Screen' tab is only available for Windows LivePC images. It provides a single screen sign on login screen for active directory joins. This requires MokaFive guest tools installed in the LivePC image. Please see the section on MokaFive tools for full support.

- **Default Domain**: Set the default domain you'd like your users to log onto.
- **Logon Screen Logo**: You can set an image for your logon screen. If you leave this blank no space will be left for a logo.
- **Cisco VPN integration**: Check to support Cisco VPN.
    - **Separate login fields for VPN**: If your domain credentials are not the same as those used for your VPN connection check this box. It will provide separate login user name and password fields for both the domain and the VPN connection.
    - **Default VPN:** Set the default domain. If on launch the user is within the domain and the VPN connection is not necessary the selection will default to none.
- **Generate machine name**: Check this to generate different machine names on first launch for LivePC images without 'Keep my changes' set. It will replace each '?' character with an ascii character for each user launching the downloaded machine image.
    - **Machine name pattern**: Define a pattern for the machine name. Each '?' will be replaced. Only valid characters will be accepted. If a character does not display when typed it is not acceptable. For a company of 100 employees we'd recommend three question marks, for one with 1000 employees we'd suggest four. You may begin or end with '?'s or put them in the middle.

Your users will see the following login screen:



Tools for Windows XP LivePCs

NOTE: MokaFive Guest Tools is automatically installed when using the unattended install option when creating a new Windows XP LivePC. (The unattended install option is not available for the Mac OS Platform.)

The following information is available for those who choose to create a LivePC manually. **NOTE**: We highly recommend using our unattended install to create Windows XP LivePCs. During an unattended install folder sharing is supported automatically. The 'My Documents' folder in the guest is shared with the LivePC 'Local Documents' for the LivePC on the host. If you do not do an unattended install the MokaFive Guest Tools allows for shared folders in Windows XP SP2 LivePCs.

Install MokaFive Guest Tools

Installing MokaFive Guest Tools is easy. Uninstall any current versions of the MokaFiveTools in your LivePC by going to the Add/Remove Programs Control Panel of the Windows XP LivePC. In the LivePC, download the latest guest tools version from http://downloads.mokafive.com/1.5/MokaFiveTools-105-latest-Win.msi and double click to install it in the Windows XP LivePC (**NOT** the host machine). You will likely get a warning from Windows File Protection. Cancel any Windows File Protection dialog that appears.

Shared folders between the LivePC and the host

In MokaFive Creator click on the gear icon for the LivePC and select 'Configure'. Click on the 'Advanced' tab. Put a check in the box beside 'Store user documents using a Windows Share'

In the LivePC, edit the value RedirectUsers at the registry key HKLM\Software\Moka5\GINA. Add the user account name of the user who should see the shared folders.

Repair MokaFiveTools after unattended install

During an unattended install of an XP LivePC onto an XP host it is possible that the guest tools will not function correctly. While running the LivePC you can fix this by repairing the MokaFive LivePC Tools:

1. In the LivePC click on the 'Start' button and select 'Control Panel' from under 'Settings'.
2. Select 'Add or Remove Programs'.
3. Select 'MokaFive LivePC Tools' and click on 'Click here for support information.'
4. In the 'Support Info' window click on the 'Repair' button.
5. Close the 'Support Info', 'Add or Remove Programs', and 'Control Panel' windows.

Restore auto-login after installing MokaFiveTools

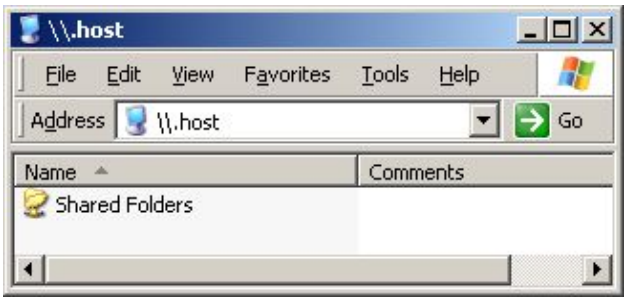
MokaFiveTools installs a GINA DLL which disables the Windows XP welcome screen. To re-establish auto-login, use regedit to add the string value AutoAdminLogon and string data 1 at key HKLM\Software\Microsoft\Windows NT\CurrentVersion\WinLogon. Ensure the string values DefaultUserName and DefaultPassword exist and are correct.

HGFS User Files

HGFS (Host Guest File System) will allow files to be shared between the guest LivePC and the host PC regardless of the operating system of either.

To set HGFS user files open MokaFive Creator. Click on the gear icon for the LivePC and select 'Configure'. Click on the 'Advanced' tab. Put a check in the box beside 'Store user documents using HGFS'. For LivePCs created with earlier MokaFive (or Moka5) applications you will need to run the current version of the MokaFive Guest Tools to support HGFS User files.

After HGFS is configured, the shared documents can be accessed on the host by clicking on the gear drop down icon beside the LivePC in MokaFive Player or Creator. In the opened LivePC settings menu select the 'Browse Document Folder' option. The shared documents folder can be accessed from within a Windows LivePC by typing \\.host at the run line or the address bar of a 'My Computer' window, and in Linux at /mnt/hgfs/Private LivePC Documents.



Compatibility NOTE: The MokaFive HGFS user files option is compatible with host Windows machines with either VMware Player 2.x or VMware Workstation 6.x installed. VMware Workstation 5.5 and VMware Player 1.0 are not compatible with HGFS support for LivePCs.

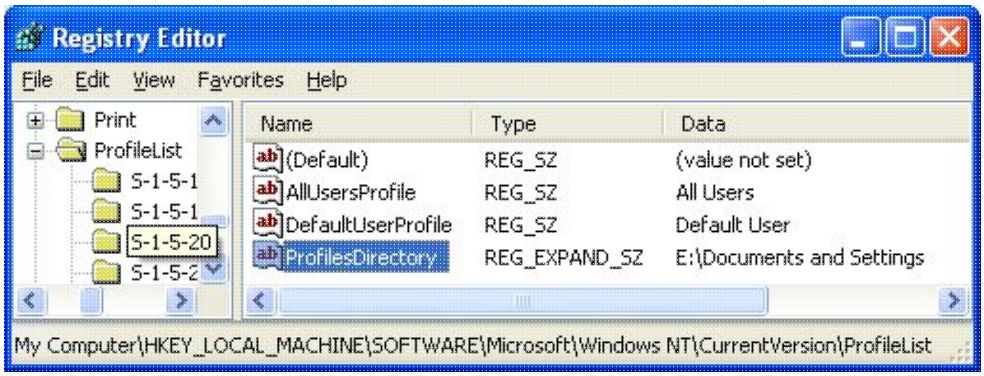
Install VMware Tools

VMware Tools comes with the drivers and utilities needed to optimize your Windows LivePC. For Windows XP and Vista LivePCs the VMware guest tools can be downloaded from here. If the LivePC has no network access you can burn the tools to CD to install them on the LivePC. Run setup.exe.

Separate System and User State

The System and User state can be separated automatically for a Windows XP LivePC installation by using the unattended install feature in MokaFive Creator. If unattended install was not used to create the Windows XP LivePC, the system and user state can be manually separated by following these steps:

1. Confirm the LivePC has a user disk configured:
    1. Click on the gear drop down icon to open the LivePC option menu.
    2. Ensure 'Keep my changes' is selected and click on 'Configure'.
    3. Under the 'Storage' tab check that there is a path for a 'User Disk' under IDE drives.
2. Make sure the user disk is formatted inside the XP LivePC. The disk usually appears as the E: drive inside the LivePC.
3. We will call a normal user 'UserX'. Log in as an administrator, NOT as 'UserX'.
4. Edit the registry to point the 'Documents and Settings' folder to the user disk (local.vmdk)
    1. Click Start > run > type regedit > press enter
    2. Navigate to: HKEY_LOCAL_MACHINE\Software\Microsoft\Windows NT\CurrentVersion\ProfileList
    3. Change the ProfilesDirectory value data from %SystemDrive%\Documents and Settings\ to E:\Documents and Settings (for our example in this case)



5. Copy three folders from C:\Documents and Settings to E:\Documents and Settings (in this example) to the new 'Documents and Settings' location on the E: drive (in this example):

    - The 'All Users' folder
    - The hidden 'Default User' folder
    - The 'UserX' folder

1. Gracefully shut down the LivePC to save your changes. You must do a graceful shutdown to save your changes – not a restart.

2. Start the LivePC.
3. Test your changes:
    1. Log in as a new user or 'UserX'.
    2. Try saving a file on the desktop; check that the new file is in E:\Documents and Settings\UserX\Desktop (for this example).
    3. Bring up a command prompt; there should be an E:\ in the command prompt instead of C:\.

SDelete

SDelete is a sysinternal from Microsoft which fully removes deleted files. MokaFive recommends running sdelete to zero out unused blocks prior to packaging and uploading a Windows LivePC. Running sdelete creates a smaller package and allows a faster upload. To run sdelete from inside a LivePC:

1. Inside the LivePC download and install SDelete from Microsoft.
2. Run SDelete in the LivePC by opening a command prompt and typing:

```
sdelete –c c:
```

Enable LivePC 'Local Documents' in your Linux LivePC

If you're the creator of a Linux LivePC, then you can make files available outside the LivePC through the 'Documents' folder. This is implemented by using the smbfs kernel file system to mount an SMB file share from the host.

To support this feature in MokaFive Creator click on 'Configure' in the drop down options menu for the LivePC. The LivePC can not be running or suspended at the time and must have 'Keep my changes' set. In the 'Configure LivePC' window click on the 'Advanced' tab and unselect the 'User files' check box. Press 'OK'.

The next step is to ensure that your Linux LivePC has the appropriate software. The Linux LivePC needs a kernel with the smbfs file system; most distributions have this by default. In addition, the LivePC needs the smbmount program to be installed. In RedHat and SuSE, this program is in the samba-client package. In Ubuntu, it's in the smbfs package. In Gentoo, it's in the samba package.

You'll also need to install the vmcmd utility. It is used for reading the parameters needed to mount the SMB shares. You can find a copy of this utility at http://downloads.mokafive.com/guest/vmcmd. You should place it in /usr/bin or /bin.

The next step is to decide where to mount the "Local LivePC Documents". If the default account is called me and the account's home directory is `/home/me`, then it may make sense to put the files into directories `/home/me/livepc-local-documents`.

Finally, you will need to insert script code into the boot process that actually mounts the files. Where to do this depends on your distribution. It is best to do this before the user is automatically logged in. In Gentoo, we placed it in `/etc/conf.d/local.start`.

```
DEFAULT_ACCOUNT="me"
LOCAL_MNT="/home/me/livepc-local-documents"

SHARE=`vmcmd 'info-get guestinfo.userprofile.sharename' | tr '\\' /`
if [ -n "$SHARE" ]; then
   mkdir -p "$LOCAL_MNT"
```

```
   USER=`vmcmd 'info-get guestinfo.userprofile.username'`
   PASSWD=`vmcmd 'info-get guestinfo.userprofile.password'`
   export PASSWD
   smbmount "$SHARE" "$LOCAL_MNT" -o \
    "rw,uid=$DEFAULT_ACCOUNT,username=$USER,port=445"
else
   rmdir "$LOCAL_MNT"
fi
```

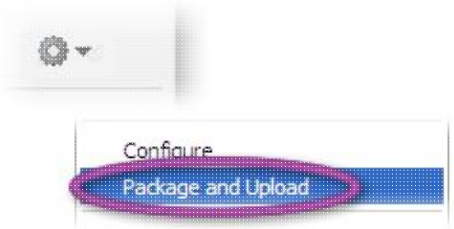
Restart your LivePC and make sure everything works.

Package & Upload

Package and Upload your LivePC

Once you've created a LivePC you can package it for personal use or sharing. If you only plan to use your LivePC locally this step is unnecessary. However working from a hosted, packaged copy of your LivePC gives you all the security benefits of an assured clean copy of your environment with each fresh start. Before packaging a Windows LivePC you may wish to follow the steps to prepare a Windows LivePC for packaging.

To package your LivePC open your LivePC's options and click 'Package and Upload'.



The 'Package LivePC' window will open.

Publish to:

- **lab.mokafive.com**: This will upload and save your LivePC to the MokaFive website. The hosting is a free service for those who register at lab.MokaFive.com. Your LivePC will **NOT** be compatible with earlier versions of MokaFive applications. The MokaFive Engine, Player, or Creator version number will need to be greater than 1.0.8949 to run your LivePC. Please note that free hosting of LivePCs through MokaFive.com may be discontinued at any time.
- **Create package only**: This allows you to package a LivePC. If you are not hosting the LivePC you can mimic the benefits of rejuvenation by re-importing the image if your LivePC becomes corrupted. Selecting this option will change the window to display an option to set the package path. Click on the pencil icon to browse to the location where you would like to save your LivePC package.

Package type

- **Shallow copy**: The MokaFive Creator will package the differences of your LivePC versus the parent or original LivePC. This method depends on the parent LivePC continuing to exist on an HTTP server. Choose this option if you can ensure that the previous LivePC will be available for as long as the new LivePC, for example if the LivePC is based on a LivePC you previously created and do not plan to delete.
- **Deep copy**: The MokaFive Creator will package the entire LivePC so that your newly created LivePC is not dependent on any current LivePC. All new LivePCs are packaged using this method. Prior to packaging and uploading a deep copy you may wish to perform an SDelete.
- **Package path**: Only available when 'Create package only' has been selected. Click on the pencil icon to change the location for storing the package.

Upload mode (not available when using 'Create package only')

- **Create new LivePC**: Only option available when working with a LivePC you have created from scratch or from an existing LivePC created by someone else.
- **Update existing LivePC**: This option is only available when you are working with your own LivePC to which you have subscribed. You cannot update someone else's LivePC, only a LivePC you have previously uploaded. If you have modified an existing LivePC created by someone else you will need to use 'Create new LivePC' to upload it the first time.

MokaFive account (not available when using 'Create package only')

- **signup for account** : Click to create an account on the MokaFive servers for hosting your LivePC. Clicking 'signup here' will open a browser window.
- **Username**: Your MokaFive account username.
- **Password**: Your MokaFive account password.

Change log

- **Change log**: A required field for uploads. Please describe the changes you have made in this upload of your LivePC image.
- **Make Public**: If checked your LivePC will be publicly displayed for sharing and downloading by the MokaFive community. If unchecked your LivePC will only be available within your account and to those you share it with.

OK/Cancel

- Click 'OK' to package your LivePC or 'Cancel' to not package your LivePC.

Prepare a Windows LivePC for packaging

To create a clean copy of your LivePC we recommend the following prepackaging steps within the LivePC:

1. Set the paging file to system managed size for the C drive:
    1. Open the system properties window
    2. Select the 'Advanced' tab and click on 'Settings' under 'Performance'
    3. Select the 'Advanced' tab and click on 'Change' under 'Virtual memory'
    4. Check that the C: drive is selected and under 'Paging file size for selected drive' select the 'System managed size' button.
2. Delete temporary internet files from your browser.
3. Empty the trash can.
4. Run sdelete -c c:
5. Turn off automatic updates. You will manage updates to your LivePC.
    1. Open the system properties window
    2. Select the 'Automatic Updates' tab and click on 'Turn off Automatic Updates'
6. Set the screen resolution to 1024x768
7. Turn off System Restore. LivePCs rejuvinate after each reboot if 'Keep my changes' is not checked.
    1. Open the system properties window
    2. Select the 'System Restore' tab and check the box to 'Turn off System Resore on all drives'
8. Edit your LivePC's 'Description' in MokaFive Creator. The description will be used on your personal LivePC listing or a public one if you share your LivePC.
    1. In MokaFive Creator on the host computer click on the gear drop down icon for the LivePC settings menu.
    2. Click on 'Configure'. ('Keep my changes must be set.)
    3. Under the 'General' tab click on the 'Description' button.

Upload complete / Next steps after packaging

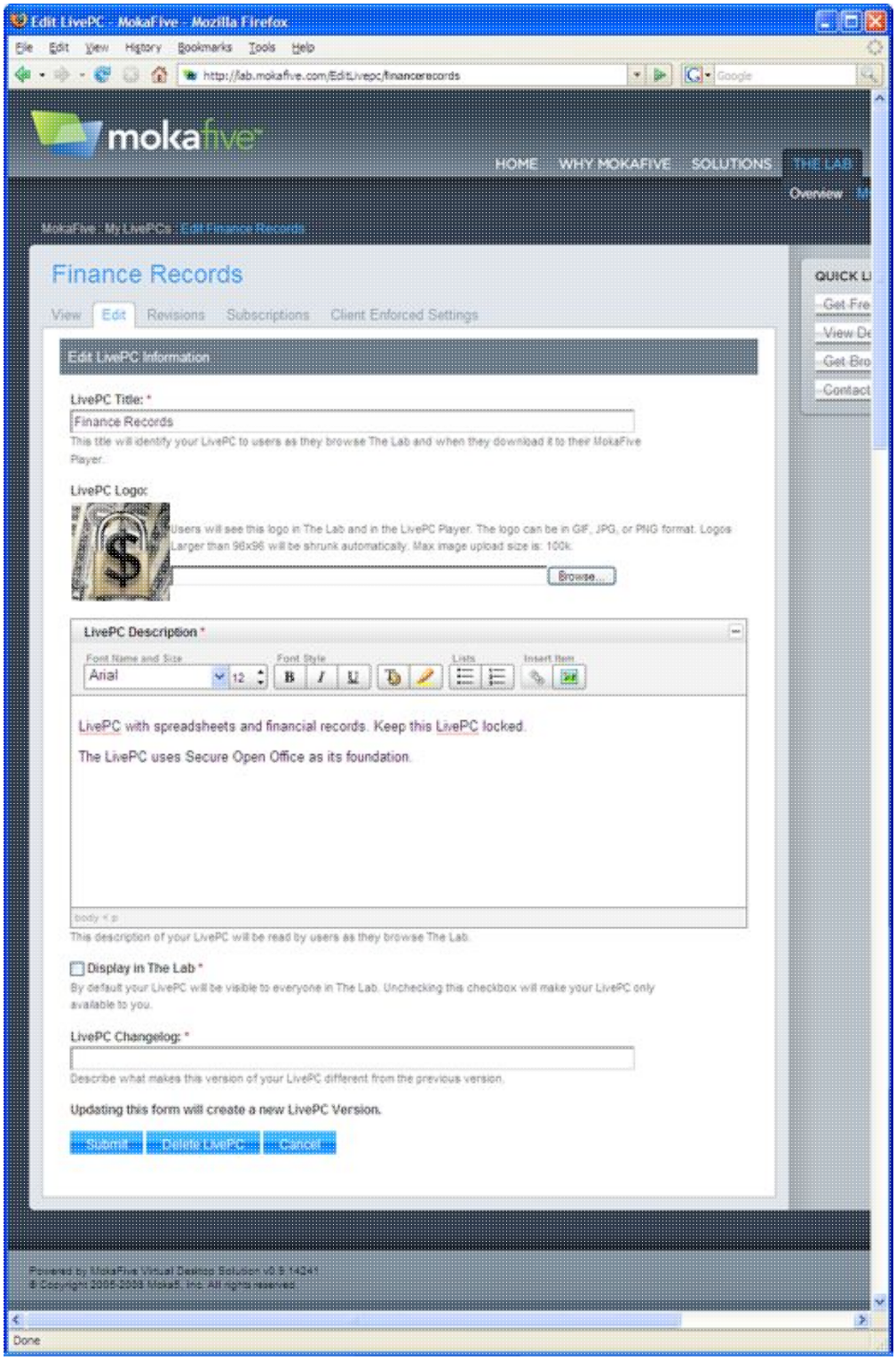
- **Host LivePC at MokaFive**: Once your LivePC has been successfully packaged you will see a confirmation dialog if it has uploaded successfully to MokaFive.com. Your browser will open to the page for your LivePC listing. You can log in to make changes to it. Use the login link at the top of the page.
- **Create package only**: Two windows will open: the directory where your package has been saved and an online page describing options for your package.

Edit your LivePC listing

Once you've packaged and hosted your LivePC on MokaFive.com you can modify its listing. You can add a personal logo and description.

You will need to login to MokaFive.com to edit your LivePCs. You can either go to lab.mokafive.com and login to view your LivePCs or from the MokaFive Creator click on 'Add New LivePC' and 'Browse the Lab'. Then select 'My LivePCs' in the lower menu bar. Click on the name or logo of the LivePC you wish to edit.

You can set a logo and description for your LivePC. MokaFive will shrink most logos to 96x96 pixels. If you wish to use a very large image you will need to pre-scale it to a smaller size. If you are updating your LivePC we recommend you add a changelog descriptions of the changes from the last version.



Subscribe to your LivePC in your MokaFive Creator

Click on 'THE LAB' or if you did not include your LivePC in the public ally in the Lab then click on 'My LivePCs' and click on 'Download' next to your LivePC. After subscribing, delete the local copy of your LivePC. This will ensure that you and your users are having an identical experience using the same LivePC.

Update your LivePC

You may wish to update your LivePC to add software or apply security fixes. To update your LivePC, go to the MokaFive Creator and open the options list for the LivePC by clicking on its gear icon. Make sure the box for 'Keep my changes' is checked. You can then install new applications while running the LivePC.

After updating and testing your LivePC you can package and share the new version. To update a LivePC you have submitted previously you can either go to lab.mokafive.com and login to view your LivePCs or from the MokaFive Creator click on 'Add New LivePC' and 'Browse the Lab'. Then select 'My LivePCs' in the lower menu bar. Click on the name or logo for the LivePC you have modified. Once you are under the 'Edit' tab you can update the changelog. You can track your revisions with the 'Revisions' tab.

Each time you edit your LivePC you may also change the name, logo and description. You should also include a 'Changelog' entry to describe the modifications you have made to the LivePC. Your users will see the new information the next time they exit and re-launch their LivePC. Drastic changes to the name and logo may prevent your users from recognizing your LivePC as the one they previously subscribed to.