



User Manual

(Fiddlehead Version 2.1)



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Warranty

For Limited Warranty information, go online at www.myfiddlehead.com or contact the Fiddlehead Group at:

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FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this product are not authorized by Fiddlehead and could void the FCC Certification and negate your authority to use this product.

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Patents Pending






Prerequisites – What to know before you Start!

Step 1: Fiddlehead Machine Requirements

Fiddlehead 2 head Product	Fiddlehead 4 head Product
<ul style="list-style-type: none">- Minimum Specifications<ul style="list-style-type: none">o Core2Duo Machineo 2gb of Memoryo 80gb Hard drive- Recommend Specifications<ul style="list-style-type: none">o Core2Duo Machine w/VT Extensionso 4gb of Memoryo 160gb Hard drive	<ul style="list-style-type: none">- Minimum Specifications<ul style="list-style-type: none">o Quad Core Machineo 4gb of Memoryo Dual Hard drives of at least 80gb each- Recommend Specifications<ul style="list-style-type: none">o Quad Core Machine w/VT Extensionso 4gb of Memoryo Dual Hard drives of at least 160gb each

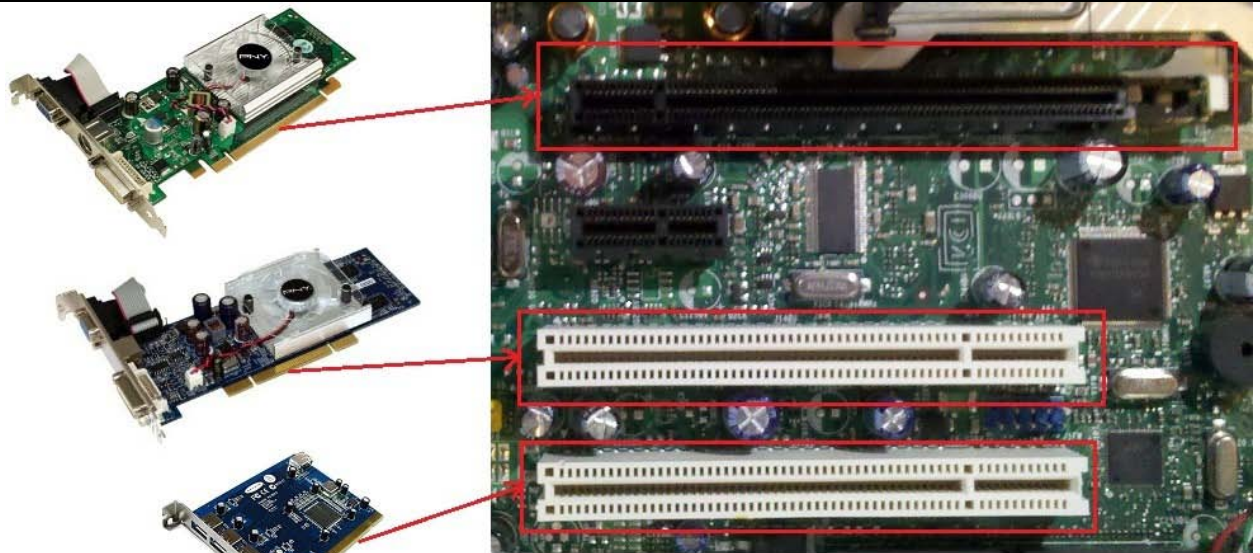
Please note if you are using your own machine you will also be responsible to provide the Keyboards, Mice, & Monitors

Step 2: What's in the kit! Make sure you know what you're installing.

Fiddlehead 2 head Product	Fiddlehead 4 head Product
<p><u>Static Mapping 2 Head Kit</u></p> <ul style="list-style-type: none"> ○ Installation CD ○ Add-on CD 	<p><u>Standard 4 Head Kit</u></p> <ul style="list-style-type: none"> ○ Installation CD ○ Add-on CD ○ 2x Mini USB Cables for Green Cubes  <p>(Note: USB Hubs may use Mini USB cables as well if they do you will have 4 not 2.)</p>
<p><u>Standard 2 Head Kit</u></p> <ul style="list-style-type: none"> ○ Installation CD ○ Add-on CD ○ Mini USB Cable for Green Cube  <p>(Note: USB Hubs may use Mini USB cables as well if they do you will have 2 not 1.)</p>	<p><u>Complete 4 Head Fiddlehead Cluster</u></p> <ul style="list-style-type: none"> ○ A Computer tower with recommended 4 Head specifications ○ A Standard 4 Head Kit Box  <p>4x→</p>
<p><u>Complete 2 Head Fiddlehead Cluster</u></p> <ul style="list-style-type: none"> ○ A Computer tower with recommended 2 Head specifications ○ A Standard 2 Head Kit Box or Static mapping Kit Depending on your order  <p>2x→</p>	<p><i>*Note: Model, Manufacture, shape, and color of products and connection type of Add-on cards may vary*</i></p>

Step 3: Add-on card installation

Add on card installation



(Image of inside the fiddlehead cluster after removing the cover)

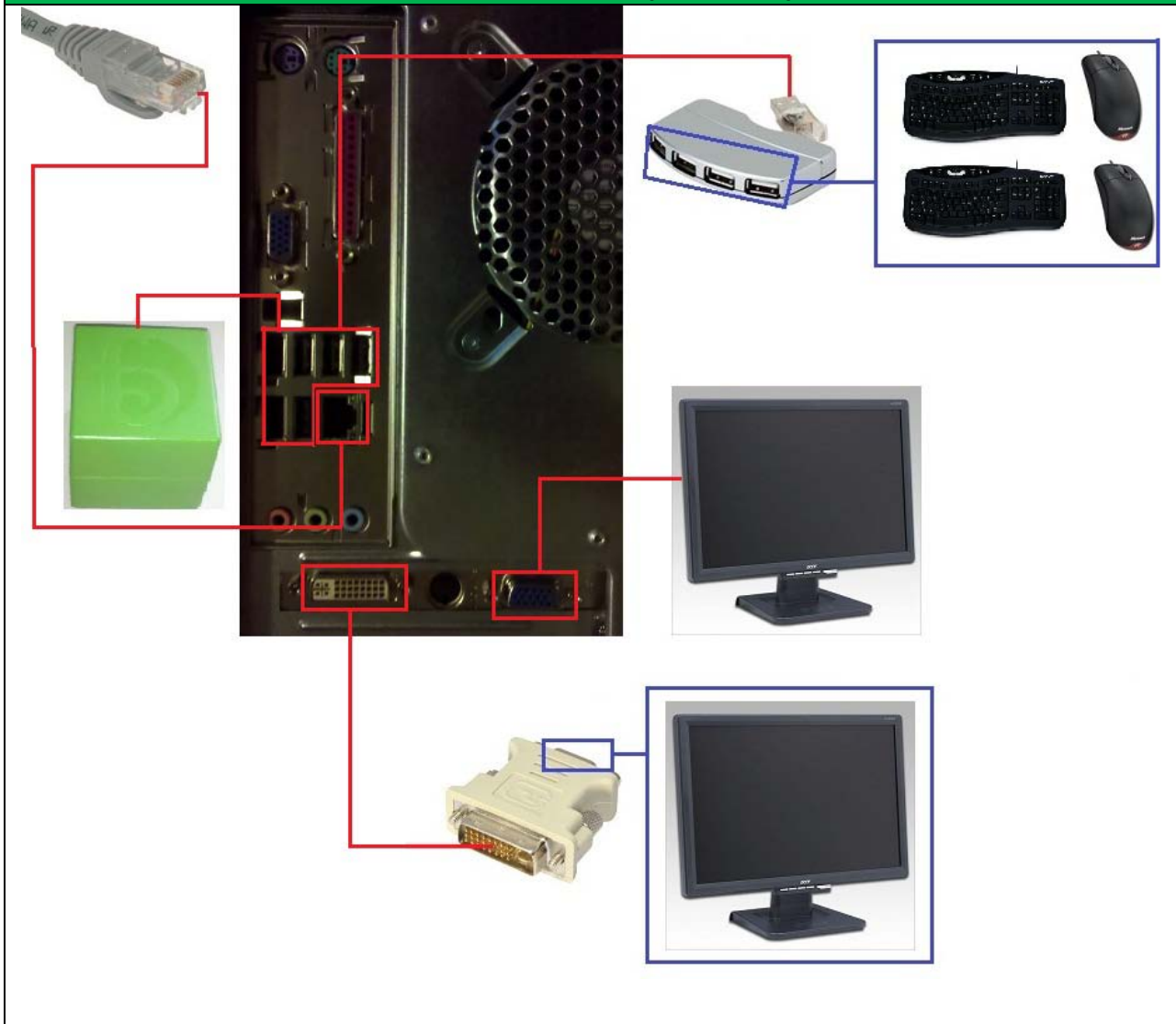


Note: One of your graphics card or USB cards may have a X1 connector instead of the standard PCI connector. Two headed clusters will only have to install one PCIe-x16 graphics card in most cases

Make sure all cards are properly installed. There will be 1 card for a 2 head installation and 3 cards for a 4 head installation.

Step 4a: How and where to plug everything in on your machine

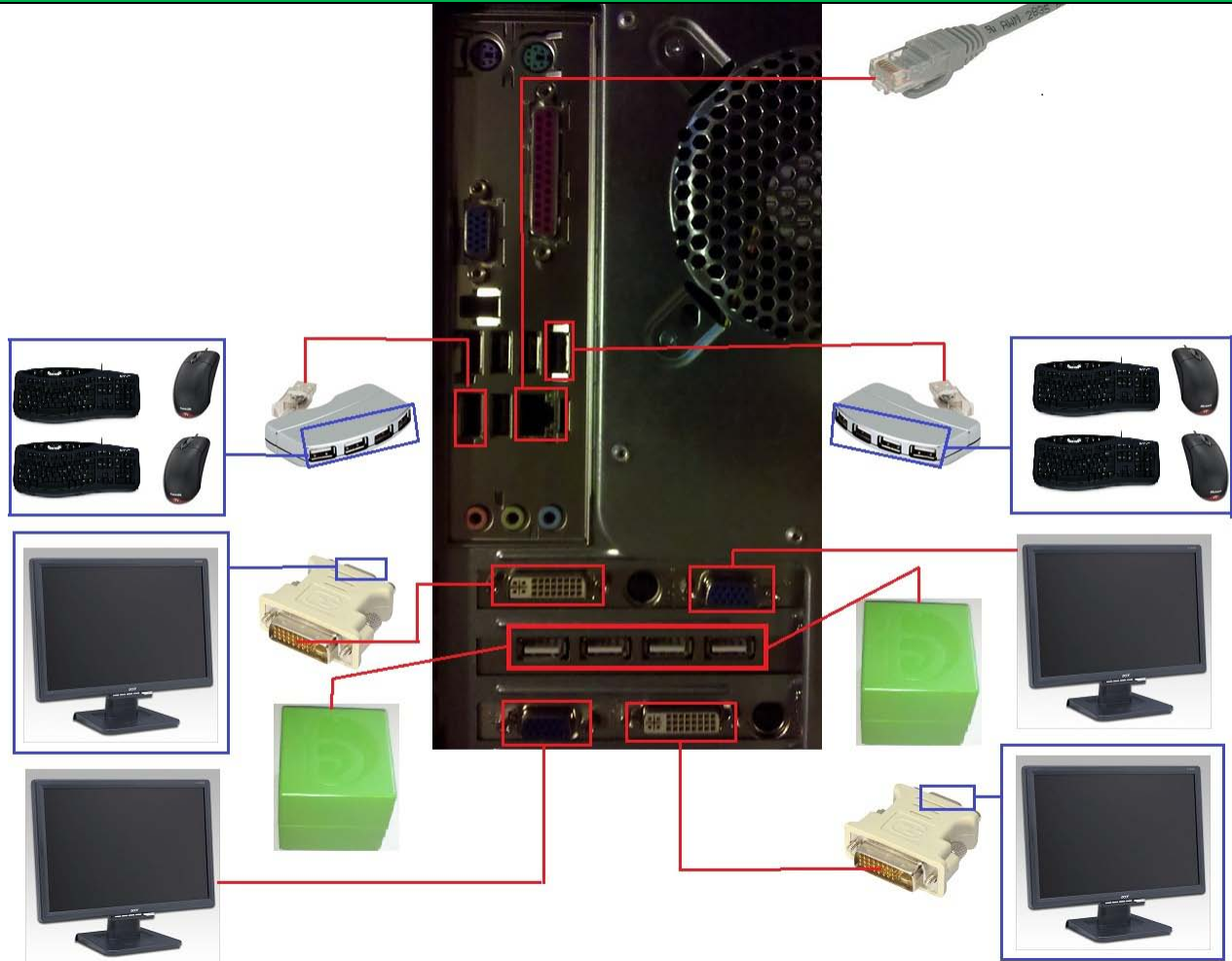
Two Head Cluster (Standard)



Note: Make sure cubes & USB hubs are as far apart in the allocated plug in section as possible.

Step 4b:

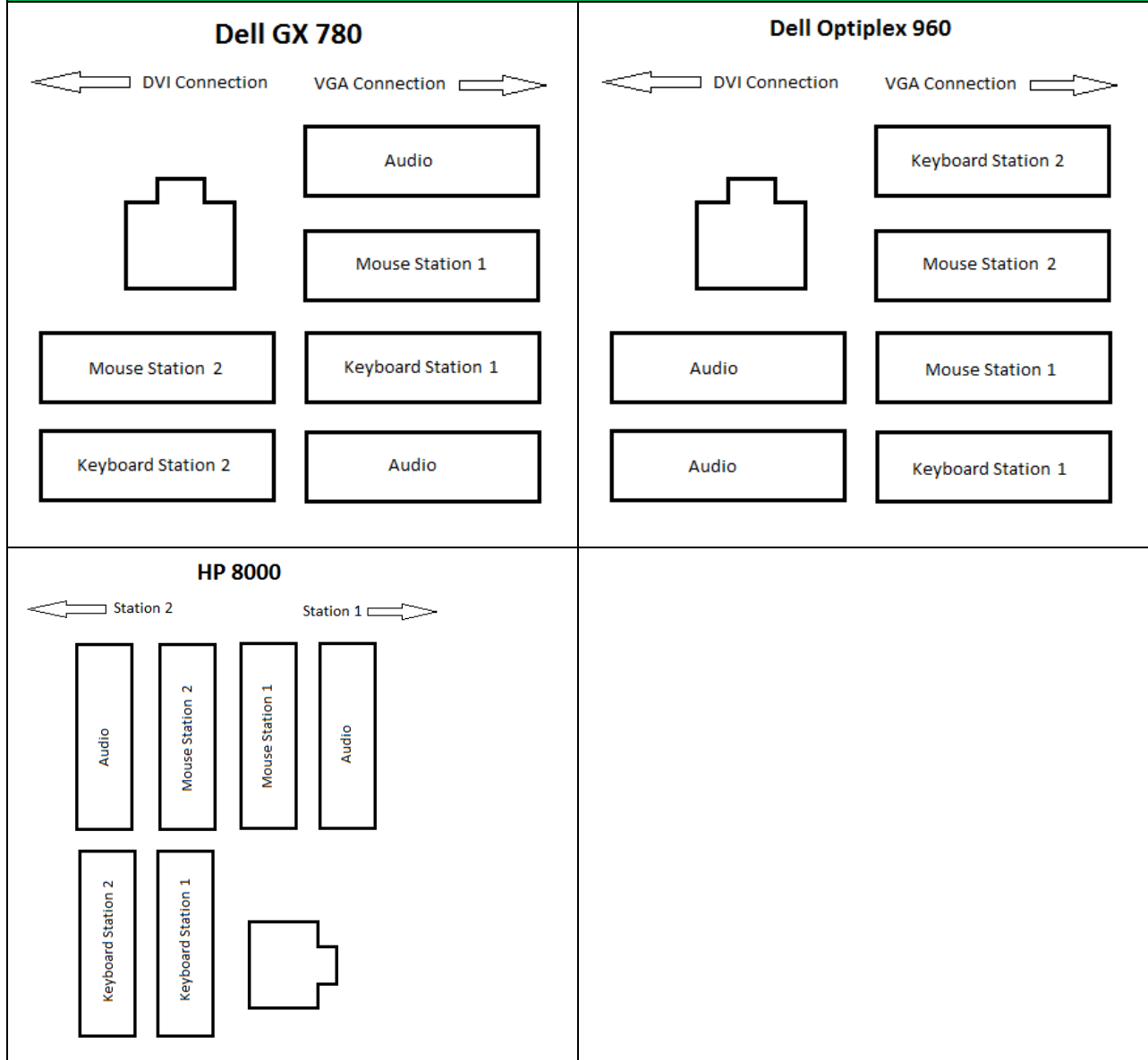
Four Head Cluster



Note: Make sure cubes & USB hubs are as far apart in the allocated plug in section as possible as shown in the diagram

Step 4c:

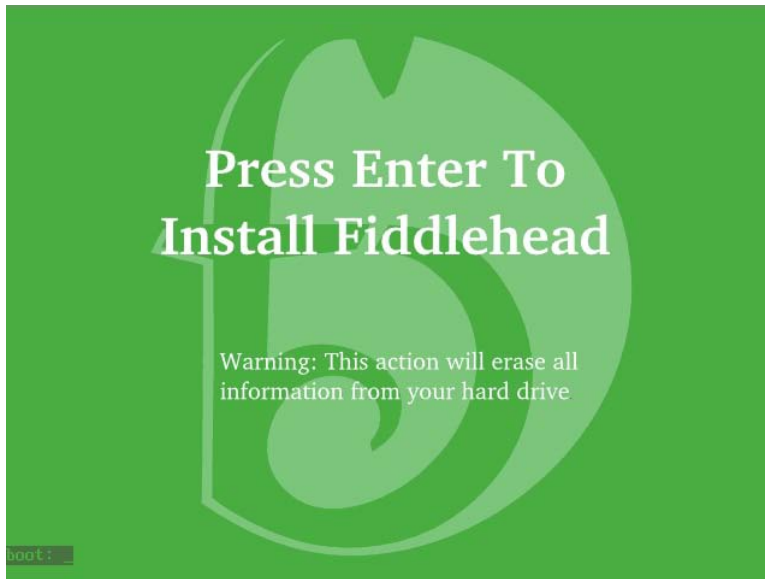
Two Head Cluster Static Mapping Setup (USB & Video Diagram)



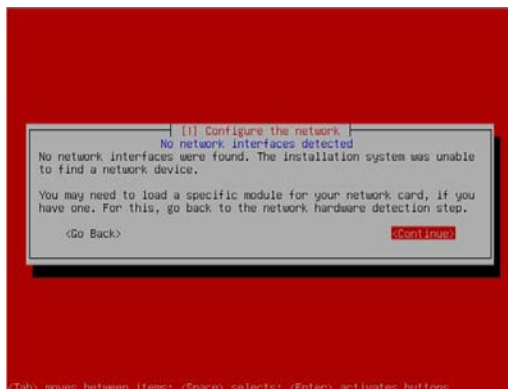
Installing Fiddlehead Control Kernel

Before starting please make sure the Installation CD is in the CD tray and the computer is in an off state. Start the machine and choose to boot from CD, this process varies on every computer. Please consult your documentation provided with the computer if you have any issues.

1. Press Enter to Install Fiddlehead

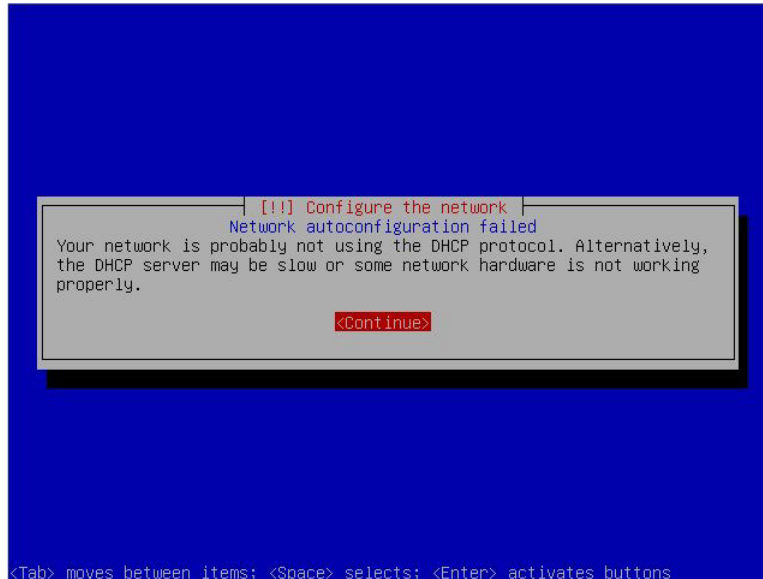


2. You will see a black screen with white text scrolling followed by a blue screen with a loading bar
3. If your Ethernet card is not detected you may get one of the following screen or both. Please Click "Continue" if you get the error with a red background select "no ethernet card" and press enter if you get the "Detect network hardware" screen

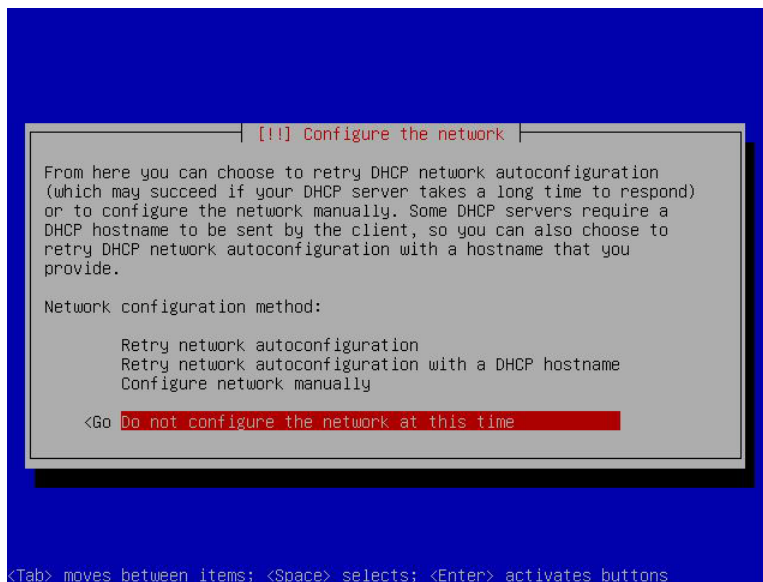


4. Static IP and Unplugged Ethernet only

- a. You will get a “Network Autoconfiguration Failed” Click “Continue”

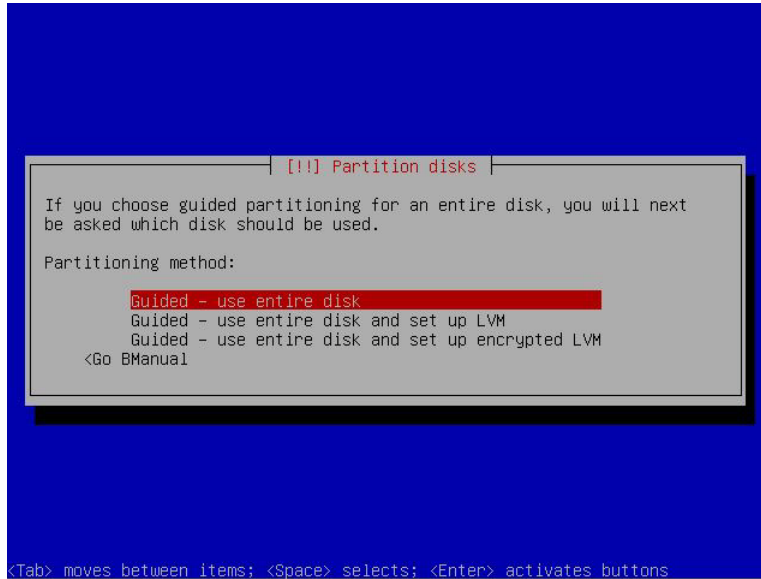


- b. Select “Do Not Configure the network at this time” and hit enter

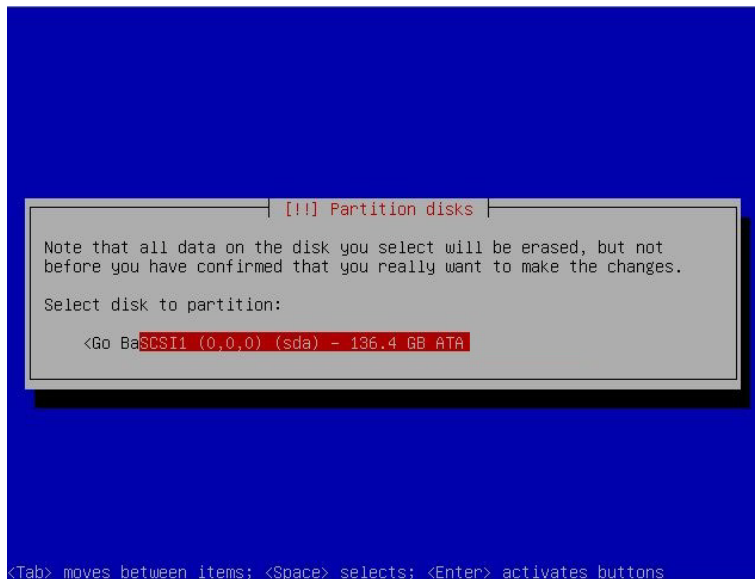


Note: The reason that we do not configure this at the current time is because the installation adds proper drivers later.

5. The Next Prompt will be Partition Disk
 - a. Select “Guided – Use entire Disk” and hit enter

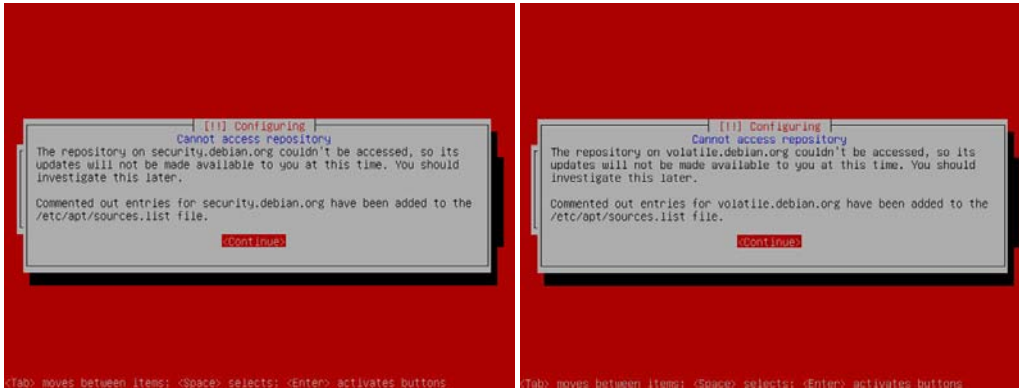


- b. Depending on your Cluster type the next part of Partition Disk may show more than one device. Default for 2 head clusters is one disk, for a 4 head cluster it should be two.
ALWAYS select the device that is at the top of the list.



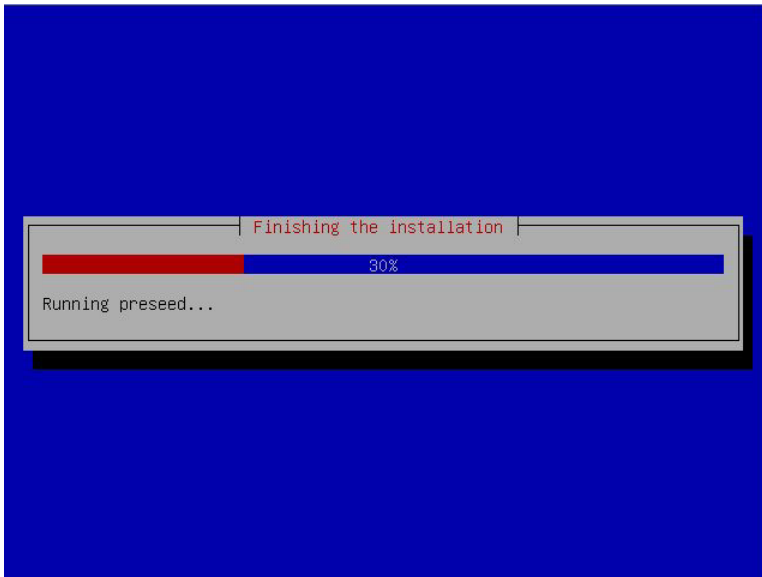
6. Systems with a previous installation of another OS before fiddlehead may get an error after step five. If you do simply turn off the machine and start from step one again to resolve.

7. If step 3 did not detect an Ethernet card, you will see the following error:



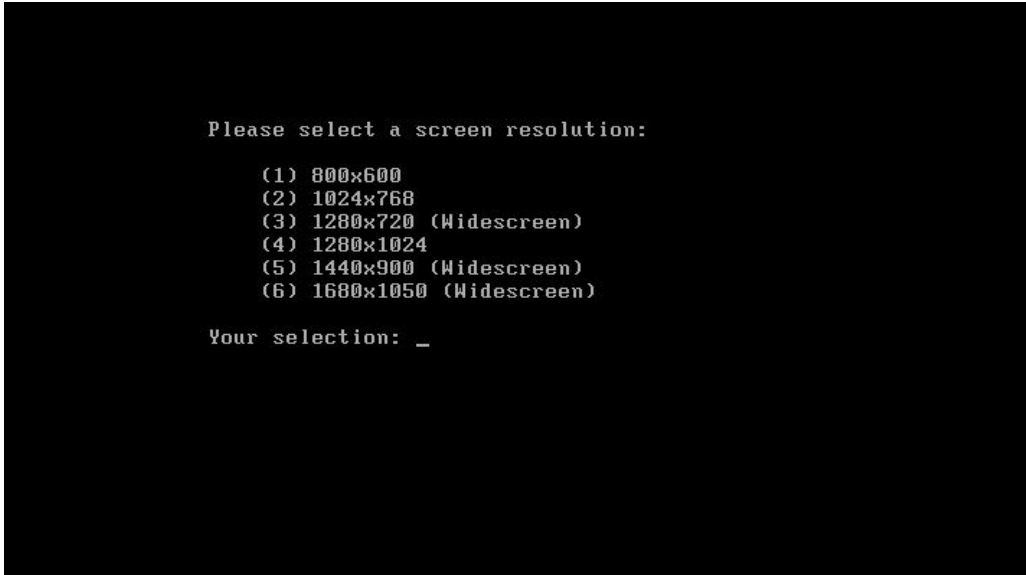
Simply press enter at each error.

8. The next portion will not require you to do anything but when it gets to “Running Preseed” it will reboot after.



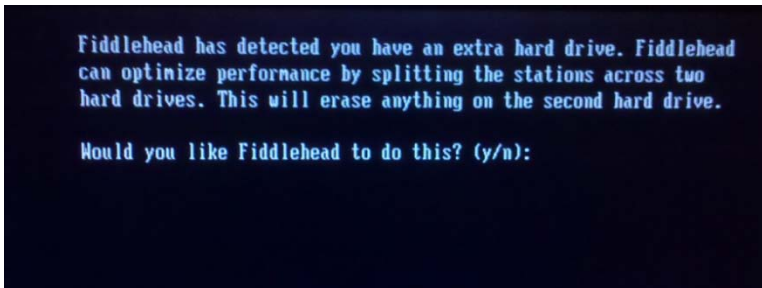
If you do not remove the CD when it is ejected during the reboot process the computer will try to start to reload Fiddlehead from the beginning again if it is set to boot from CD first. If you see the screen from Step 1 again please remove the Installation CD from the computer, and restart the PC.

9. After the system successfully reboots you will see some scrolling text on a black background again it will eventually load into the "Screen Resolution" Section.



Please select your Resolution using the numbers below your Function Keys. Do not use the number pad during any of the following steps as it may not recognize your input from the number pad.

10. On certain cluster with more than one hard drive you will see the Optimization Notification. If you only have one hard drive move to step 11. Otherwise Press "Y" and enter.



11. Selecting how large you want each stations hard drive to be.

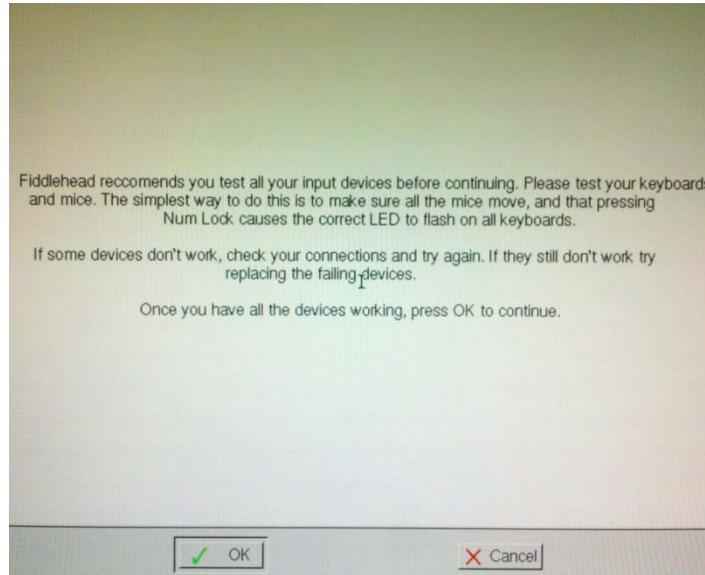
```
Fiddlehead needs to allocate disk space for each of the stations.  
How much disk space would you like to allocate?  
  
Note: The maximum amount you can allocate to each station is 22 GB  
  
Disk Space (in GB): _
```

It will prompt you to verify hard drive size and allocated space for virtual CDs after you enter the size.

Note: It is suggested that you select close to maximum size available and use a tool such as GParted to make the partition inside of them smaller later on. Remember once the size of the hard drive is selected it cannot be changed unless a complete reinstall of fiddlehead is done on the machine. By making it the largest size available you can always use a partition manager to set the size your guest OS is later on.

12. After pressing enter in step 11 you will see the following:
 - a. For a two head machine
 - i. 1 card(s) Detected, with a total of 2 outputs
 - b. For a four head machine
 - i. 2 card(s) Detected, with a total of 4 outputs
 - ii. If you see "1 card(s) Detected, with a total of 2 outputs" Please turn off your machine and open your case and assure both graphics cards are securely in place (See before you start section step 3) After assuring they are both in place restart instructions from step 1.
 - c. If for some reason it does not recognize your card it may prompt you to input how many heads the card supports. Please enter 2 if it asks you that question.
13. You will be prompted to register the cluster with an Enterprise Server, if you are unsure if you are using an enterprise server contact your system administrator. Select Yes or No by pressing Y or N respectively than press enter.

14. If you have a Statically Mapped version of our product the following step does not apply
- You will see scrolling white text on a black background for a short while followed by a gray screen coming up on all Stations. If any stations do not come up at this point, please make sure all wires are connected. One of the screens should be displaying a white box with text as shown below.



Follow the instructions on screen carefully

- After click OK you will be prompted to map each station to its keyboard, mouse, USB and sound. For this portion you will need a USB stick to map sound and USB. Do not enter the USB stick until prompted to do so and remove it after "device detected" shows. Follow the instructions on screen and use the key and image below to assist you. If you are working with a 4 head version will have a 2nd cube for stations 3 & 4.



- F1 = Station One
- F2 = Station Two
- F3 = Station Three (4 Head Cluster Only)
- F4 = Station Four (4 Head Cluster Only)

15. Congratulations the Fiddlehead control kernel is now properly installed you should see a screen like below on every station. In the next section we will be installing a guest OS such as Windows XP or Windows 7 on the fiddlehead control kernel.



Administration

Welcome to the administration section. In the following sections we will cover every option encountered in the Administration console of your cluster and the Teacher control panel installed with guest additions on each station.

Default Usernames/Passwords

Designation	Username	Default Password	Description
Administration Console	admin	admin (Changeable)	Used to access the administration console from the green screen.
Restart	reboot	reboot (Changeable)	Used to restart the cluster from the green screen.
Shutdown	shutdown	shutdown (Changeable)	Used to shutdown the cluster from the green screen.
Teacher Console	teacher	teacher (Changeable)	Used to access teacher console from within windows with guest additions installed. (Not accessible from green screen)
Fiddlehead Key mapping	*	fiddlehead (Changeable)	Used for when you need to remap keyboards, mice, USB & sound to their respective stations. (Not accessible from green screen)

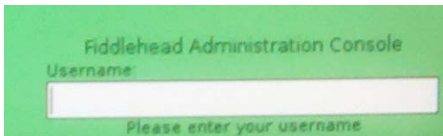
How to get into the Administration Console

1. Before starting make sure you are at the green screen.



If you have a guest OS loaded up on all stations you will need to shut one of them down to access the green screen.

2. Locate the Fiddlehead Administration Console and enter the Username "admin" and press enter. It will then prompt you for the password which by default is "admin" unless it was switched by your system administrator.



```
Main Menu
(1) Clone Workstations
(2) Copy VirtualCD Library
(3) Advanced Options
(4) Install a Guest Operating System
(5) Lock Workstations
(6) Shutdown a Specific Station
(7) Shutdown the Fiddlehead Cluster
(8) Change Fiddlehead Passwords
(9) About This Cluster
(0) Quit
Enter your selection: █
```

Option 1 – Clone Workstation

Detailed information on Cloning Workstation located on (Pg 21)

This option is used for spanning an image from one station to all other stations on a cluster or pulling an image on another cluster that is already setup the way you want referred to as the “Golden image”

Option 2 – Copy VirtualCD Library

Detailed information on Copying VirtualCD Library located on (Pg 24)

This option is used to clone your CDs created using teacher console from one cluster to another. During a remote clone in option 1 you are also asked if you would like to copy the virtualCD library.

Option 3 – Advanced Options

Detailed information on Advanced Options located on (Pg 25)

Many things are covered in this section Automatic Shutdown, Screen Resolution, Network Settings and more.

Option 4 – Install a Guest operating System

Detailed information on Installing Guest operating System located on (Pg 27-34)

This option is used to install Operating Systems like Windows XP & Vista in addition to Fiddlehead Guest Additions which allow USB, Teacher Console and Sound to work properly inside of windows.

Option 5 – Lock Workstations

Lock Workstation is self explanatory. When a station is locked the following occurs:

While the system is on you will be able to make any change you are allowed to but turn off the station and press the “Click here to start” button and all changes are gone. You can even install another OS or format the stations hard drive, turn off the station and start it back up, the changes will be reverted. Great for stopping viruses just shutdown all machines affected then start the stations back up!

(Lock Workstation MUST be disabled if automatic certificate revoke options are enabled on your domain.)

Option 6 – Shutdown a Specific Station

If a station is unresponsive you can use the tools in here to shut them down.

Option 7 – Shutdown the Fiddlehead Cluster

Used to reboot or shut down the cluster. You may also use the username “shutdown” and password “shutdown” or username “reboot” and password “reboot” to accomplish the same thing from the green screen. Passwords are changeable so the default passwords listed above may have been changed by you administrator.

Option 8 – Change Fiddlehead Passwords

This section is where you would go to change all passwords the fiddlehead clusters utilize.

Option 9 – About this Cluster

Important - This section provides vital information about your cluster. Information including the cluster IP address, the current version of Fiddlehead installed & processor information. This information is needed to properly clone and utilize some of our remote features.

Option 0 – Quit

This returns you to the green screen so you can launch the station.

Cloning Workstations

Preparing for Network cloning

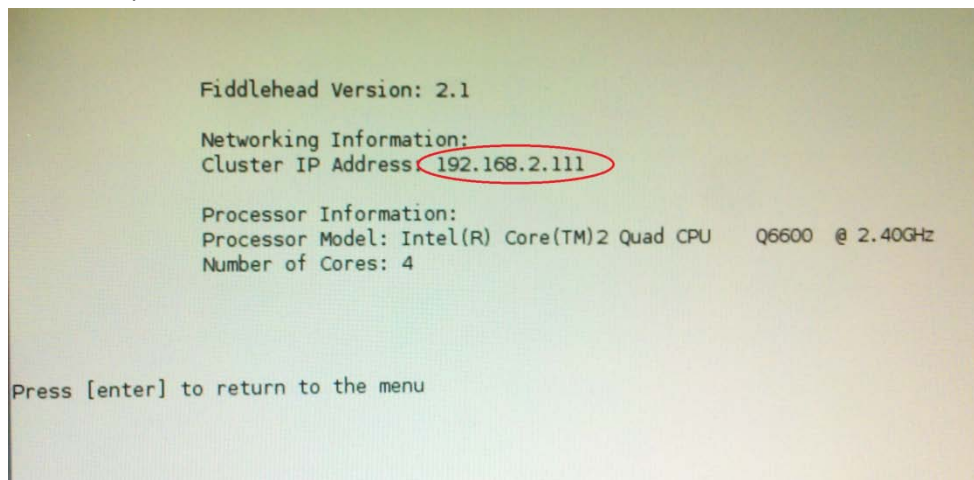
It is suggested you use a partitioning tool such as GParted (<http://gparted.sourceforge.net/>) to check your hard drive and partition sizes on the stations involved. Your source image station MUST have a partition equal in size or smaller than your target stations hard drive and MUST be located at the beginning of the hard drive. Please contact your partitioning software's documentation for how to properly utilize them.

Warning: If you decide to use a GParted Live CD you must be at the green screen and using the "Click here to start" button. DO NOT shut down the cluster and boot from the GParted live CD from the off state.

How to clone a station images locally and over the network

You must be in the "Main Menu" of the administration console to continue if you are unsure how to get into the "Main Menu" see "How to get into the Administration Console". Once you are in the "Main Menu" you may continue.

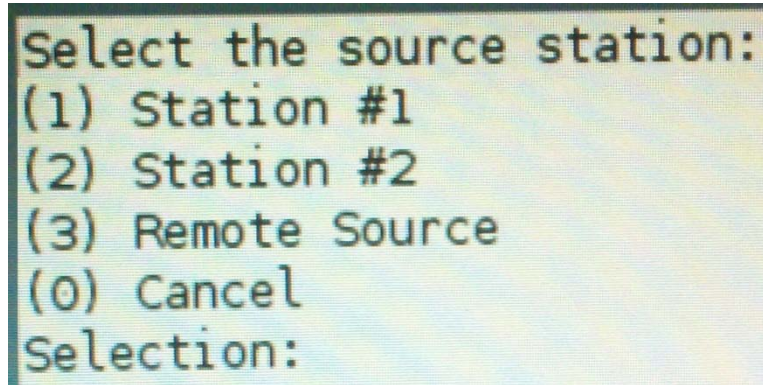
1. All Stations MUST BE SHUT DOWN and at the green screen on ALL clusters involved in this process.
2. If you are going to clone remotely over the network using our network cloning, first visit the machine you are using for the source of the image to be cloned. You will need to make note of the station which the image is located on and also need the IP address of the cluster located "Option 9 – About this Cluster"



```
Fiddlehead Version: 2.1
Networking Information:
Cluster IP Address: 192.168.2.111
Processor Information:
Processor Model: Intel(R) Core(TM)2 Quad CPU Q6600 @ 2.40GHz
Number of Cores: 4
Press [enter] to return to the menu
```

If there is no IP address check your network cable. If using DHCP & cable is plugged in an IP address should be available. If the cluster is not displaying an IP address and you use static IP addressing you will see "None". Please visit Network configuration.

3. From the cluster you wish to put a image on (target) enter option one from the Main Menu “(1) Clone Workstation”
4. You should see an image similar to below. Make note if a cluster is only four heads you will have two more options displaying. This is where we select where or source image is located.



- Local Clone - If you are cloning locally and not using the network, select the station number of the corresponding station in which you have already installed your O.S. on.
 - i. For example if you installed Windows XP on station 2 and Configured it the way your organization wanted it, than Station #2 should be your source
 - ii. Hint: When you know the O.S. is set up properly you will see a number in the upper right hand corner indicating the station number.



- Network Clone – You will be selecting “Remote Source”.

5. Selecting your Target Station.

You will be asked if you want to clone your image to just one station or all stations. Select accordingly.

- Local Clone - If you are cloning locally you will see which station is your source, this station will be left exactly as it is if you do a clone of All. Please skip to step 7
- Network Clone – After Selecting where you would like to clone you will be prompted for the IP address of your source. Please enter the IP obtained in step 2 and press enter.

6. Selecting Your Remote Source (Network install Only)

- a. You will be asked to select your source from the remote machine. This is the station number you determined in step 2.
- b. After selecting this you will be asked if you would like to copy the Virtual CD library utilized by teachers Select yes or no and hit enter.

For information on VirtualCD library please visit the Teacher Console section.

- c. If at any point the remote cloning has –stalled- next to it, please be aware that network issues may be the cause. Please attempt to restart the cloning process from step 1 and if that fail use a router separate from your network with new ethernet cables.

7. You may receive a warning about allocated space on each machine after the image is cloned over if you do be sure that you have followed the guidelines on preparing your image to clone.

- a. Network Cloning - Only after you are absolutely sure that you have the correct partition size explained in the guidelines on both machines is it safe to proceed, doing so without assuring this could have undesirable effects.
- b. Local cloning – you may ignore this warning and continue if you get it.

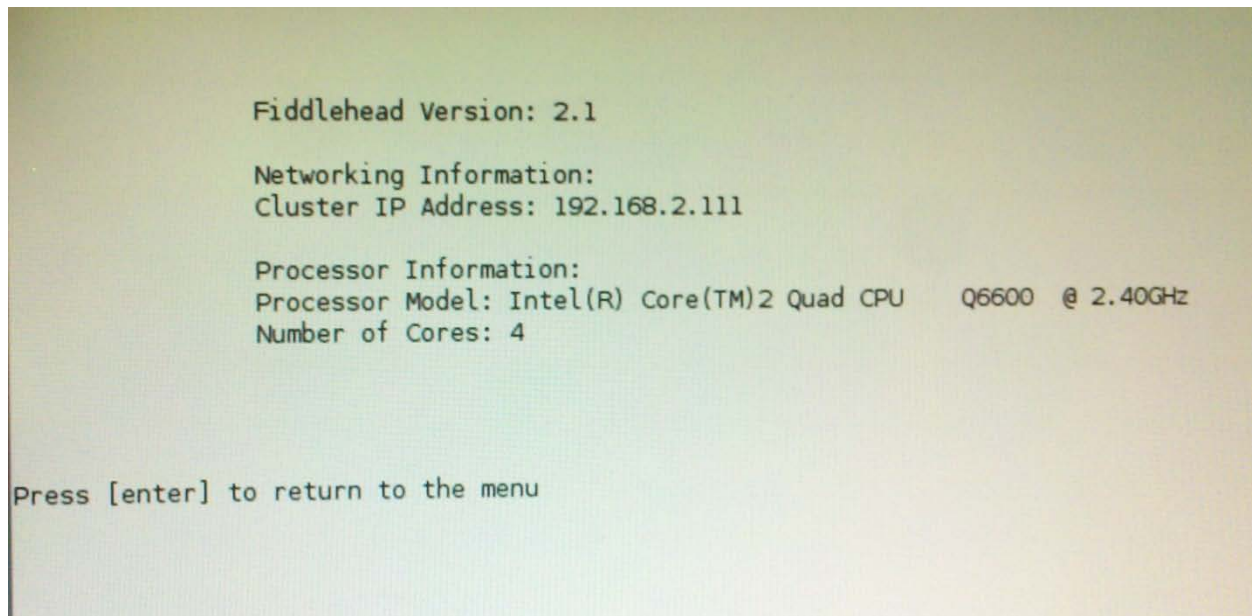
8. After the clone completes you will be back at the “Main Menu”. Simply press “0” to exit to the green screen and start up each station that was cloned to assure they are working properly.

9. Congratulations you have successfully cloned your system.

Copy VirtualCD Library

We will explain how to utilize administrator's ability to copy virtually stored CDs in this section. You must be in the "Main Menu" of the administration console on all clusters involved to continue if you are unsure how to get into the "Main Menu" see "How to get into the Administration Console". Once you are in the "Main Menu" you may continue.

1. Please visit the machine you are using for the source of your virtualCD Library to be copied. You will need to make note of the IP address of the cluster located "Option 9 – About this Cluster".



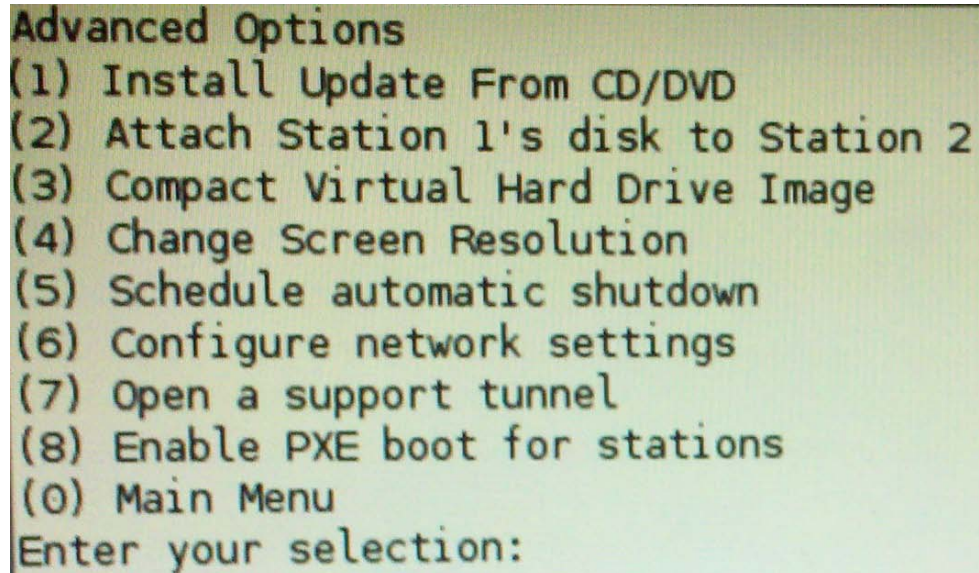
```
Fiddlehead Version: 2.1

Networking Information:
Cluster IP Address: 192.168.2.111

Processor Information:
Processor Model: Intel(R) Core(TM)2 Quad CPU    Q6600 @ 2.40GHz
Number of Cores: 4

Press [enter] to return to the menu
```

2. On the machine you wish to copy the virtualCD Library to choose Option 2.
3. You will be prompted for an IP address, please enter the IP address from step 1.
4. When it finishes copy the CD Library over it will return to the "Main Menu".
5. Select option 0 to exit the "Main Menu"
6. Congratulations your virtual Library has copied over successfully.

A screenshot of a terminal window showing a menu of advanced options. The text is as follows:

```
Advanced Options
(1) Install Update From CD/DVD
(2) Attach Station 1's disk to Station 2
(3) Compact Virtual Hard Drive Image
(4) Change Screen Resolution
(5) Schedule automatic shutdown
(6) Configure network settings
(7) Open a support tunnel
(8) Enable PXE boot for stations
(0) Main Menu
Enter your selection:
```

Advanced Option 1 – Install Update from CD/DVD

Currently this is not in use but in the future it will.

Use this feature to install manufacturers' software updates that can be accessed online at www.myfiddlehead.com and then burned to a CD.

Advanced Option 2 – Attach Station 1's disk to Station 2

DO NOT USE THIS FEATURE unless specifically specified by a fiddlehead technician.

Advanced Option 3 – Compact Virtual Hard Drive Image

This feature is used after you utilize container compressor from within windows. Container compressor will not be available unless guest additions were properly installed. When both Container Compressor and Compact Virtual Hard Drive are used it can make your Golden Image smaller for quicker remote cloning. These two tools are not recommended for use on small cloning projects as it can take upwards of two hours to run both in some cases and the average clone takes less than thirty minutes.

Please note the station must be shut off and either in the Administration Console or at the green screen for Compact Virtual Hard Drive to work.

Advanced Option 4 – Change Screen Resolution

If you would like to change the resolution of a cluster you must change it here and in windows. This will require a restart when you change the resolution and you must also change it on the guest OS such as windows once the system reboots. (Many installations of windows will automatically detect and prompt you with a tooltip to change the resolution upon first loading)

Advanced Option 5 – Schedule automatic shutdown

This feature allows you to set your clusters to automatically shutdown at a specific time every day. Great for making sure your clusters aren't on when they don't need to be. You will also be prompted for a automatic start up time when you use this feature. This starts each station in headless mode so that windows updates and such can be deployed during off hours. Please note the cluster will not automatically turn on this is to be used in conjunction with wake on LAN.

Advanced Option 6 – Configure network settings

This option is where you set your connection type either static or DHCP.

Advanced Option 7 – Open a support tunnel

If you are having an issue with your cluster that you just cannot figure out a technician may ask you to use this feature so we may access your machine and help you remotely. We can never contact your machine until you initiate it.

Note: Firewalls and security settings may need to be adjusted to allow this service to work.

Advanced Option 8 – Enable PXE Boot for stations

If you prefer to use PXE booting on your network this feature allows you to use PXE inside of each station on fiddlehead. Etherboot PXE is used so Intel PXE boot environments may not be supported.

Installing a Guest Operating system

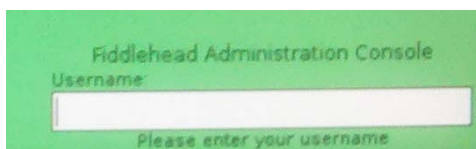
There are two ways in which a Guest OS(Operating System) can be installed. One method is with our preseed in the administration menu and the other is to use your own CD and our Guest additions CD/Preseed. These Guest Additions allow sound, USB and Teacher Control panel to work properly. If you already have prepared an Image on a separate cluster or have your image stored on a Fiddlehead Enterprise Server you may proceed to the cloning section.

Installing the OS & Guest additions

1. Before starting make sure you are at the green screen.



2. Decide which way you are going to install the guest operating system. If you are going to use your own installation CD insert it into the CD tray now and Skip to step 8, if you're going to use our preseed proceed to step 3.
3. Locate the Fiddlehead Administration Console and enter the Username "admin" and press enter. It will then prompt you for the password which by default is "admin" unless it was switched by you system administrator.



4. After entering your password you should see the "Main Menu" please select option 4 as shown below by pressing 4 then hitting enter.

```
Main Menu
  (1) Clone Workstations
  (2) Copy VirtualCD Library
  (3) Advanced Options
  (4) Install a Guest Operating System
  (5) Lock Workstations
  (6) Shutdown a Specific Station
  (7) Shutdown the Fiddlehead Cluster
  (8) Change Fiddlehead Passwords
  (9) About This Cluster
  (0) Quit
Enter your selection: █
```

5. You will be in "Select Operating System Install" please select which OS you would like to install. We will be Using Windows XP for the next parts.

```
Select Operating System Installer:
(1) Preloaded Fiddlehead Windows XP Installer
(2) Preloaded Fiddlehead Windows Vista Installer
(3) Install Fiddlehead Guest Additions
(0) Cancel
Your selection:
```

6. You should see the menu to select which station you would like to install the OS on. Two head clusters will have two stations to choose from where four head will show four stations. Select appropriately and press enter.

```
Select the station you would like to install:
(1) Station #1
(2) Station #2
(0) Cancel
Selection: █
```

7. After selecting the station you would like you will be back at the “Main Menu”. Simply exit the menu at this point by pressing 0 then enter.
8. From the station you selected to install on Press the “Click here to start” button



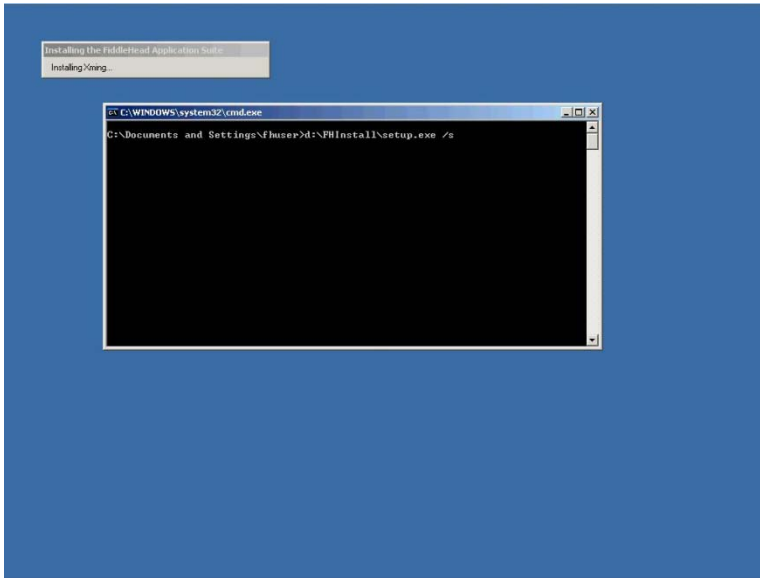
9. If this is your first time launching from the “Click here to start” button you will be prompted to accept a License Agreement, please read it than click “OK”
10. If you have a previously installed OS on the system you will have to “Press any key” to start the new OS Installation otherwise it will start automatically.

Note: The station you choose to install on doesn't matter but if you have a previous installation on that station it will wipe it out. If your Station is using our locking feature you will have to disable it.

11. Please Finish installing your OS and consult your OS vender instructions should you encounter any issues from this point on. Once your OS has completely installed and it's booting for the first time move to step 12.



12. If you used our preseed Fiddlehead Guest Additions will be automatically installed and the station will reboot after. If you used your own CD please see the following section for how to install “Guest additions”



13. Congratulations your Guest operating system is up and running you can begin to set up you Station the way you would like it to be. Once all your organizations applications are installed that need to be such as Office, Adobe reader, Etc you may move on to the cloning section. A System with properly installed guest additions should look like the image below.



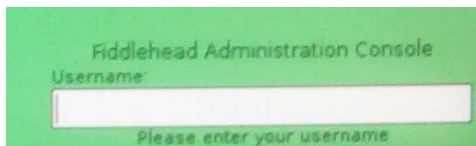
Using your own CD Guest additions

Please be sure you shut down the machine you want to work with so that it is at the green screen.

1. Before starting make sure you are at the green screen on the station you are installing guest additions on.



2. Locate the Fiddlehead Administration Console and enter the Username "admin" and press enter. It will then prompt you for the password which by default is "admin" unless it was switched by you system administrator.



3. After entering your password you should see the “Main Menu” please select option 4 as shown below by pressing 4 then hitting enter.

```
Main Menu
(1) Clone Workstations
(2) Copy VirtualCD Library
(3) Advanced Options
(4) Install a Guest Operating System
(5) Lock Workstations
(6) Shutdown a Specific Station
(7) Shutdown the Fiddlehead Cluster
(8) Change Fiddlehead Passwords
(9) About This Cluster
(0) Quit
Enter your selection: █
```

4. You will be in “Select Operating System Install” please select option 3 “Install Fiddlehead Guest Additions”.

```
Select Operating System Installer:
(1) Preloaded Fiddlehead Windows XP Installer
(2) Preloaded Fiddlehead Windows Vista Installer
(3) Install Fiddlehead Guest Additions
(0) Cancel
Your selection:
```

5. You should see the menu to select which station you would like to install the Guest Additions on. Two head clusters will have two stations to choose from where four head will show four stations. Select appropriately and press enter.

```
Select the station you would like to install:
(1) Station #1
(2) Station #2
(0) Cancel
Selection: █
```

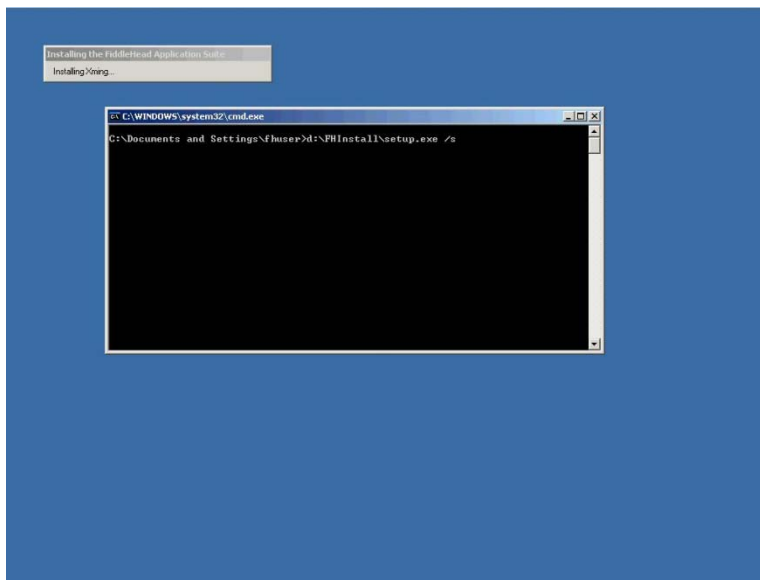
6. After selecting the station you would like you will be back at the “Main Menu”. Simply exit the menu at this point by pressing 0 then enter.

7. From the station you selected to install on Press the “Click here to start” button



Please do not press any buttons when prompted “please press here to start installation during initial boot. Wait till windows loads up.

8. Once windows is loaded, navigate to the CD-Rom drive and locate the folder FHInstall inside that folder will be a setup.exe please execute it.
9. You will see it install and initiate a reboot after.



Note: You may get warnings inside of windows 7 and Vista you MUST allow the installations to continue please read the warnings and respond accordingly to each.

10. Congratulations your Guest operating system is up and running you can begin to set up your Station the way you would like it to be. Once all your organizations applications are installed that need to be such as Office, Adobe reader, etc you may move on to the cloning section. A System with properly installed guest additions should look like the image below.

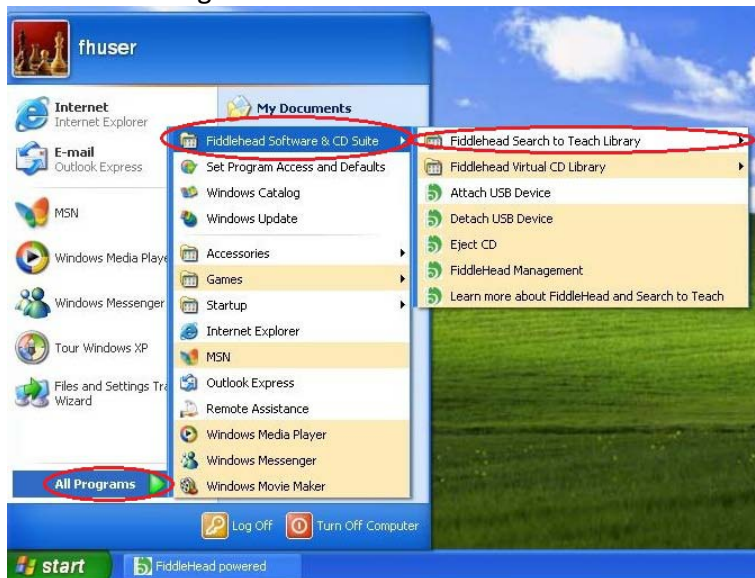


Teacher Console

Manage Search to Teach Library

Search to Teach is a powerful feature that allows free Linux programs to run within Windows. There is no need to dual boot or change operating systems, just access the Search to Teach library and open a program. Programs can be added or removed at any time by using the tools in the Fiddlehead Management console.

1. Enter the Management Console



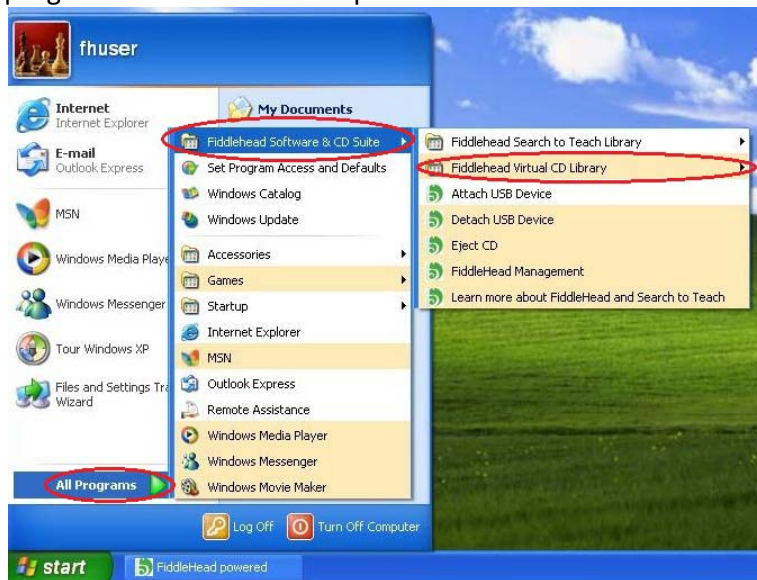
- The password is: **teacher**
- The password can be changed in the Administration Console

2. Choose option #2 “Manage Search to Teach Library”.
3. Choose to either add an application or remove one.
4. Choosing to add will bring you to a list of available programs
 - Contact Fiddlehead to access more programs
5. Go to the Fiddlehead Software and CD Suite and choose “Refresh Search to Teach Library”
 - The name of the program you just added will now appear in the library
6. Click the name of the program to start.

The above feature can be accessed by using the normal procedures in Windows for accessing programs. Below is an example from Windows XP.

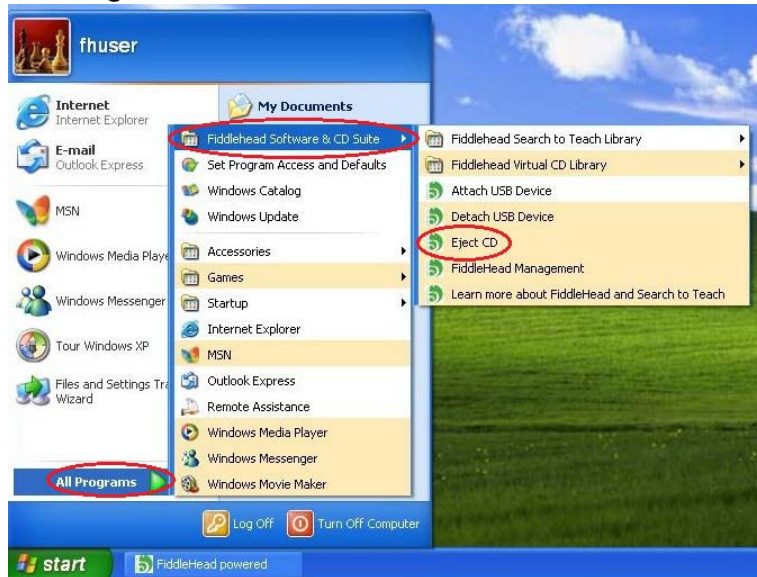
Access Fiddlehead VirtualCD Library

The above feature can be accessed by using the normal procedures in Windows for accessing programs. Below is an example from Windows XP.



Eject CD

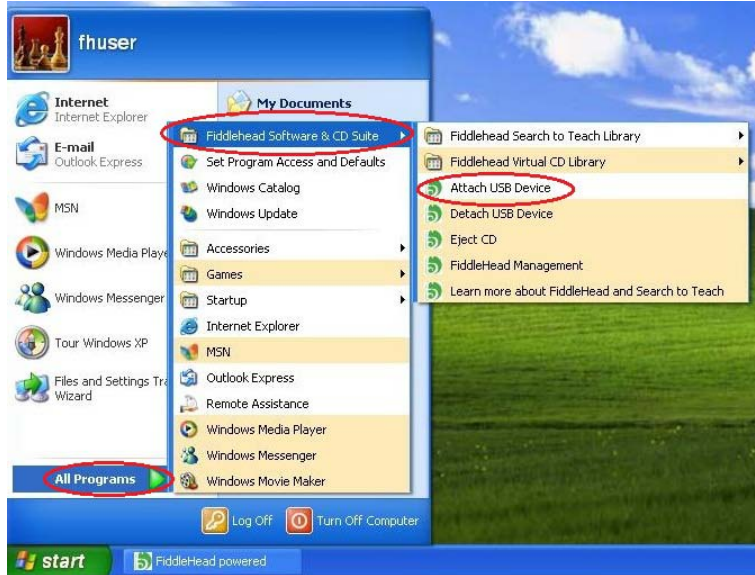
Since the CD/DVD tray is used by multiple users, the operation of the CD/DVD tray is performed by accessing the Fiddlehead Software and CD Suite menu as shown below.



USB

Each station has access to USB 2.0 via two ports located on the side of the respective cube. Activation of USB and sound must be accomplished during the initial mapping or the subsequent re-mapping of the stations.

1. To attach a USB device, go to the Fiddlehead Software and CD Suite menu as shown below.



Choose “Attach USB” every time you wish to connect a USB device, after the device has been inserted.

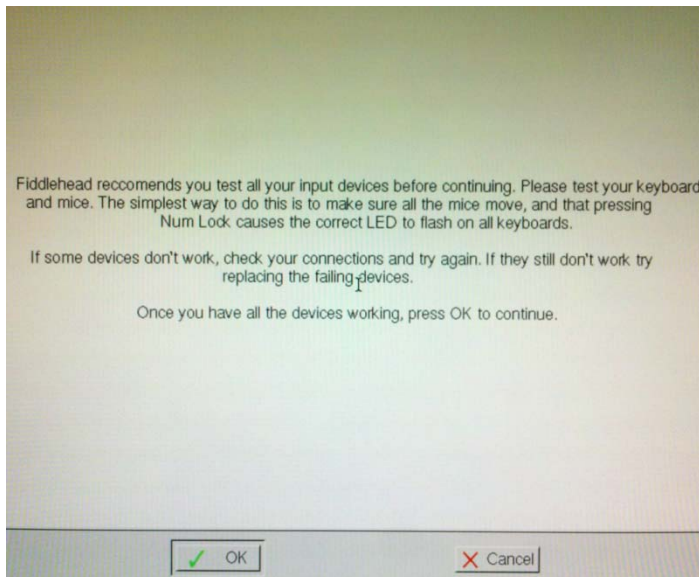
2. To access files, navigate to My Computer and look in the drive called “Volumes on ‘Vboxsrv’
3. Always, look in /save to the Device 1 Folder.
4. Always choose “Detach USB” to remove a USB device in Fiddlehead Software and CD Suite menu.

Re-Mapping

Re-Mapping keyboard, mice, USB, & sound

If any hardware becomes disconnected for any reason, a re-map of the hardware input devices is required.

1. Re-boot or start the host computer
2. When the initial load screen appears, there will be two choices:
 - **Normal Boot**
 - **Fix Keyboard/ Mouse Layouts**
3. Use the arrow key to select **Fix Keyboard/ Mouse Layouts**
4. Press "Enter"
5. You will see scrolling white text on a black background for a short while followed by a gray screen coming up on all Stations. If any stations do not come up at this point, please make sure all wires are connected. One of the screens should be displaying a white box with text as shown below.



Follow the instructions on screen carefully

6. After click OK you will be prompted to map each station to its keyboard, mouse, USB and sound. For this portion you will need a USB stick to map sound and USB. Do not enter the USB stick until prompted to do so and remove it after “device detected” shows. Follow the instructions on screen and use the key and image below to assist you. If you are working with a 4 head version will have a 2nd cube for stations 3 & 4.



- i. F1 = Station One
 - ii. F2 = Station Two
 - iii. F3 = Station Three (4 Head Cluster Only)
 - iv. F4 = Station Four (4 Head Cluster Only)
7. Congratulations the Fiddlehead control kernel is now properly mapped you should see a screen like below on every station.



**C&S Operations, Inc.
Fiddlehead Group
Contact Information**

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