

KaVoom!TM

Software KVM Switch

User's Manual

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Version 5.0

Welcome to KaVoom! KVM

KaVoom! KVM is the easiest-to-use KVM (keyboard-video-mouse) software available today. Our software switch lets you operate all of your computers from a single keyboard, monitor, and mouse. KaVoom! KVM lets you eliminate extra keyboards and free up valuable desk space. You can even operate computers in another room without leaving your desk.

How It Works

Like a hardware KVM switch, KaVoom! KVM lets you operate two or more computers, switching between them instantly. The advantage of KaVoom! is that it connects your computers using your existing network connection (wired or wireless), instead of requiring extra hardware and cabling. Your key strokes and mouse movements are sent over the network to the computer that you're operating, and the video display from that computer is sent back.

The computer with the active keyboard, monitor, and mouse attached is called the "primary computer." A computer that is being remotely-operated is called a "secondary computer."

System Requirements

On each computer you need:

- Windows® Vista, XP, Server 2003, or 2000
- A user account with Administrator privileges¹
- 7 MB of free disk space

Your computers must be networked together—either wired (Ethernet) or wireless (Wi-Fi).

Any type of keyboard and mouse is fine: PS/2, USB, analog wireless, or BlueTooth.

Installing the Software

The easiest way to install KaVoom! KVM is to first install the software onto the primary computer. From there you can install it remotely onto each of the secondary computers.

Follow this procedure:

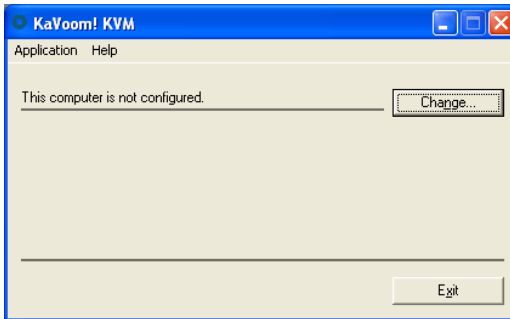
1. Log on to Windows using an account that has Administrator privileges. You will normally have Administrator privileges on your own computer; if you do not, the setup program will inform you that setup cannot continue.
2. Double-click on *KaVoomKVM5.0_Setup.exe*. (This is the file you downloaded from the KaVoom website. The version number might be different, if you downloaded a newer version.) You can run it from the same location where you saved it, even if it's on

¹ Administrator privileges are needed during installation so that installation information can be stored in the registry. They are also needed the first time that the software is run so that a Windows service can be installed. Thereafter, administrator privileges are not required until the software is uninstalled.

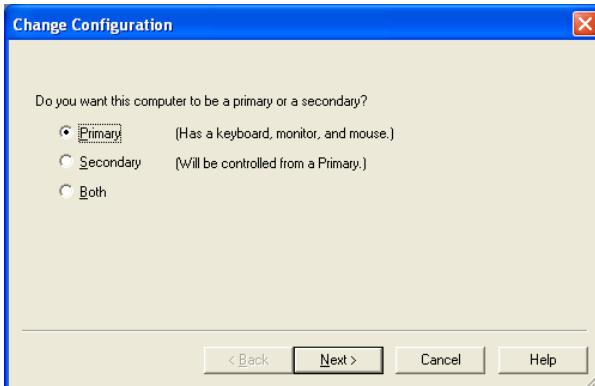
a different computer. Follow the prompts that appear.

3. Start the software. The setup program can do this for you automatically, or you can press the Windows **Start** button and select KaVoom! KVM from the **Programs** list.

The main KaVoom! KVM window will appear.



4. Press the **Change** button. The Change Configuration dialog will appear.



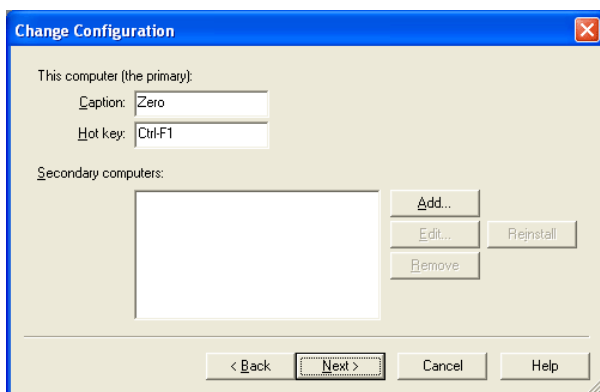
This window allows you to choose whether this computer will be a primary computer, a secondary, or both. A primary computer is any computer that you use to operate other computers, whereas a

secondary is a computer that is controlled remotely. A computer can be both a primary and secondary, meaning that sometimes you use it to operate other computers, and sometime you operate it remotely.

If you select *Primary* (or *Both*) then later you will see a Switch window on your screen that will allow you to choose which computer you want to control.

Select *Secondary* (or *Both*) only if you plan on operating this computer remotely. If you do not select *Secondary* then you can be assured that no one else will be able to remotely operate your computer using KaVoom! KVM.

5. Press the **Next** button. The following window appears only if you selected *Primary* (or *Both*) in the dialog above. Otherwise, skip down to step 8.



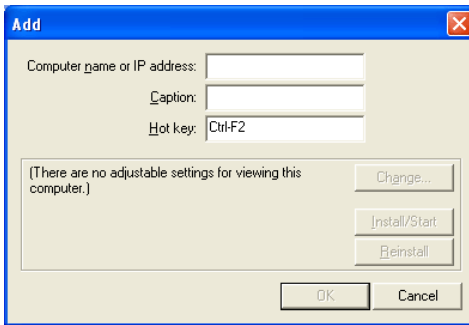
This window allows you to enter the names, captions, and hot keys for your secondary computers. The caption and hot key of the primary computer can also be changed.

A *caption* is the name that appears as a button label on the Switch window. By default, the caption is set to the computer name, but if your computer has a computer-generated name then you might

want to enter a more “friendly” name as the caption.

A hot key is the key stroke that you can press to switch to the computer, instead of using buttons on the Switch window. Hot keys are optional. The default hot key for the primary is **Ctrl+F1**, but you can change this here if you like.

6. For each secondary computer, press the **Add** button and you will see this dialog.



Enter the name or IP address, caption, and hot key (optional) for the secondary computer. We recommend using the computer name rather than the IP address because IP addresses can change from time to time.

To find a computer's name or IP address, run KaVoom! KVM on the computer in question, configure it as a secondary, and then look on the main KaVoom! KVM window.

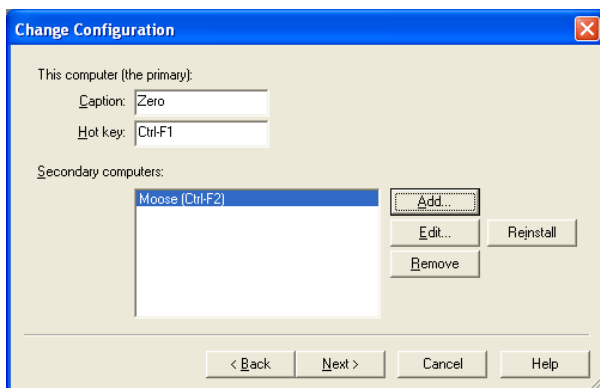
At this point you have the option of remotely installing the KaVoom! KVM software on the secondary computer. To do so, press **Install/Start**, which will install the software if necessary, or else just start it if it has already been installed.

(The **Reinstall** button forces the software to be installed, even if it was already installed. This is useful if you want to reinstall a corrupted installation, or if you know that the version of the software on the primary computer is newer and you want to force a software upgrade.)

Remote installation of the software is not possible in the following cases:

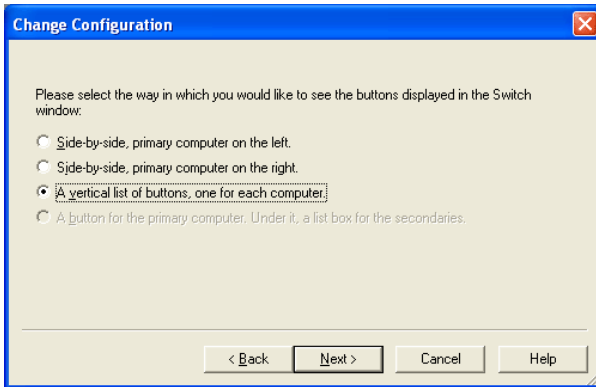
- The secondary computer is running Windows XP Home Edition. You must install the software locally.
- The secondary computer is running Windows Vista or XP, and is not part of a domain. You must install the software locally. However, when you enable the computer as a secondary, KaVoom! KVM will give you the option of enabling remote installation in the future (e.g., for software upgrades).

When you're done, press **OK**. You will see that the secondary computer has been added to the list.



Add any additional secondary computers by pressing **Add**.

- Once you've added all your secondary computers to the list, press **Next**.



This window allows you to choose the style for the Switch window.



Side-by-side



Vertical list



Drop-down list

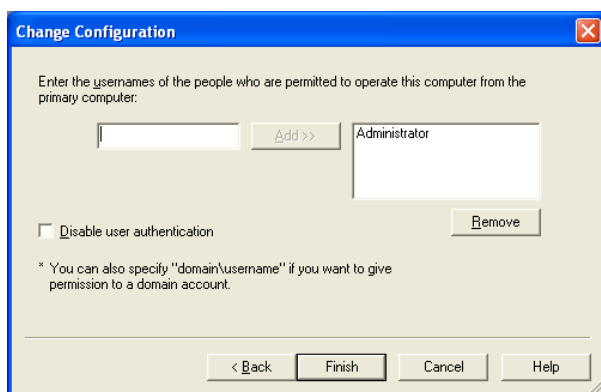
The side-by-side orientation is available only for groups of two (e.g., one primary and one secondary).

For the vertical list format, the primary computer always appears at the top of the list, and the secondaries appear in alphabetical order based on the caption (which can be different than the computer name if you want). If you want your

computers to appear in a particular order, give them captions such as "1. ...", "2. ...", etc. which will sort in the desired order.

The drop-down list style is good if you have a large number of secondary computers and having a separate button for each one would take up too much space.

8. Press **Next**. The following dialog appears only if you selected *Secondary* (or *Both*) in the first dialog (see step 4).



Enter the user name for every person who is permitted to operate this computer remotely from a primary computer (see *Security* on page 24 for a discussion of permitted users).

Disable user authentication is an advanced option that eliminates the need to type in a password every time you want to operate the computer from the primary. Only check this box if your computers are located on a secure network. Checking this box permits anyone with KaVoom! KVM software to control the computer.

Press the **Finish** button to complete the installation. To start using KaVoom! KVM, see page 12.

Video Driver

[This section contains information that is not normally needed to successfully install and use KaVoom! KVM. If you are not interested in learning more about the video driver, you may skip to the next section.]

KaVoom! KVM uses a video driver on each secondary computer to capture video information from the secondary's screen to send to the primary. The video driver is installed when the computer is configured as a secondary. (You are notified when the video driver is about to be installed).

To see whether the video driver is installed:

1. Right-click on "My Computer" (either the icon on your desktop or in the Start menu) and select **Manage**.
2. Double-click on **Device Manager**, then double-click on **Display adapters**. If the video driver is installed, you will see an entry called "KaVoom! Video Driver."

The video driver is automatically uninstalled when you uninstall the KaVoom! KVM software. You should never need to uninstall the driver manually; the following instructions are provided simply for your information.

To uninstall the driver manually on Windows 2000:

1. Delete kavoomd.dll and kavoomd2.dll from the \Winnt\System32 directory.
2. Delete kavoomd.sys from \Winnt\System32\Drivers.
3. Restart the computer.
4. Go to the Device Manager, right-click on "KaVoom! Video Driver", and select **Uninstall**.

To uninstall the driver manually on Windows XP:

1. Go to the Device Manager, right-click on “KaVoom! Video Driver”, and select **Uninstall**.
2. Restart the computer.

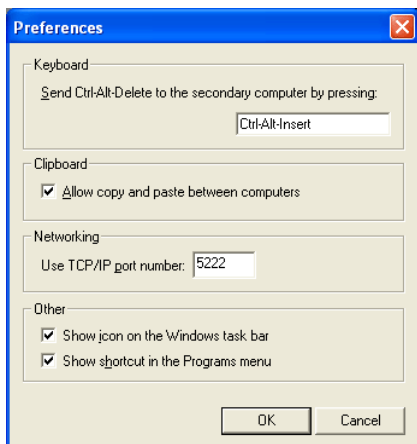
TCP/IP Port

[This section contains technical information that is not normally needed to successfully install and use KaVoom! KVM.]

The TCP/IP port is the channel through which the computers communicate with each other. All computers must use the same port number (one that is not used by any other application), otherwise the KaVoom! KVM software will not be able to connect.

By default, KaVoom! KVM uses port number 5222. The only reason to change this number is if another program on your computer uses the same port number.

To change the TCP/IP port number, select **Preferences** from KaVoom! KVM's **Application** menu and enter the desired number.



Firewalls

Personal firewall programs monitor and control how your computer accesses the Internet. They can prevent unauthorized computers from gaining access to your computer, and they can also prevent your own computer from connecting to other computers without your permission.

Personal firewall software can interfere with KaVoom! KVM because KaVoom! KVM needs to create network connections between your primary and secondary computers. Specifically, the program *KaVoom.exe* must have access to the network.

If your firewall software makes a distinction, you must allow *KaVoom.exe* to act as both a "server" and a "client." Consult your firewall user manual for more information.

If your firewall lets you configure individual TCP/IP ports, be aware that KaVoom! KVM uses port number 5222 by default. See *TCP/IP Port* on page 10 for more information.

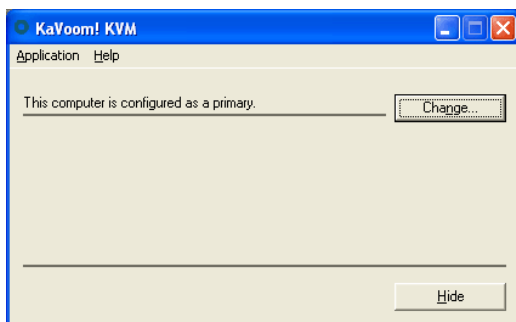
The most common example of personal firewall software is Windows Firewall. It comes standard on every Windows computer that is running XP Service Pack 2 and later. See the KaVoom Software website for detailed information about using KaVoom! KVM with Windows Firewall.

See *Troubleshooting* on page 25 for specific information about using KaVoom! with the Zone Alarm personal firewall.

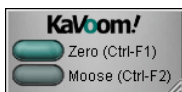
Using KaVoom! KVM

Once you have configured KaVoom! KVM on the primary and secondary computers, you are ready to start using your software KVM switch.

On the primary computer, press the Windows **Start** button and select **KaVoom! KVM** from the **Programs** list. The main KaVoom! KVM window will appear:



You will also see the Switch window:



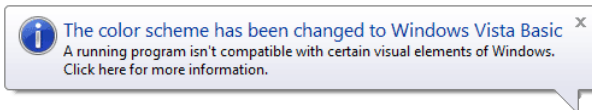
To switch between computers, press the button on the Switch window or press the hot key sequence shown beside the button. The contents of the clipboard are transferred between computers, allowing you to copy from one and paste to another.

You can change a button's name or hot key through the Change Configuration dialog (press the **Change** button on the KaVoom! KVM main window, then press **Next** then **Edit**).

The Switch window can be moved on the screen anywhere within the bounds of the monitor that it controls.

Windows Vista users:

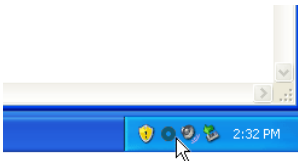
If you are running Vista on the secondary computer and using the Aero color scheme (i.e., the translucent windows and other graphical effects), Windows will automatically turn off the color scheme while you are operating the computer from the primary. You will see the following message.



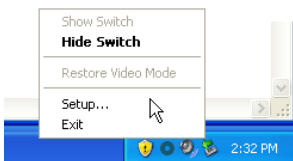
This is normal behavior. The graphical effects are turned off to improve performance when operating the computer over the network.

The KaVoom! KVM Icon in the Notification Area

The "Windows Notification Area" is the group of icons in the lower-right corner of your desktop, beside the clock. The KaVoom! KVM icon (the green circle) appears in the notification area once the software has been installed.



Right-clicking on the KaVoom! KVM icon reveals the KaVoom! menu.



The **Show Switch** and **Hide Switch** menu items allow you to toggle the Switch window on and off. When it's off,

the only way to switch from one computer to another is using hot keys. This is a useful feature if you find that the Switch window obstructs your other windows.

Double-clicking on the KaVoom! icon is another way to toggle the Switch window on and off.

Restore Video Mode changes your computer's video mode back to its original state, as of when KaVoom! KVM first started. This command is available if the computer is acting as a secondary and the video mode has been changed to match the mode of the primary (see the sections *Single-Monitor Usage* and *Multi-Monitor Usage* below for more information about video mode changes).

The **Setup** menu item opens the KaVoom! main window so that you can change the configuration of the computer.

Hot Keys

A "hot key" is a key or key sequence (such as F5, Ctrl-F1, Alt-Shift-1, or any other sequence you like) that replaces pressing an on-screen button.

Once you are proficient with KaVoom! KVM you may prefer to use hot keys to switch between computers instead of using the Switch window. In this case, you can hide the Switch window by selecting **Hide Switch** (right-click on the KaVoom! icon in the Windows notification area).

To assign a unique hot key for a computer, press the **Change** button in main KaVoom! KVM window on the primary computer, then press **Next** then **Edit**.

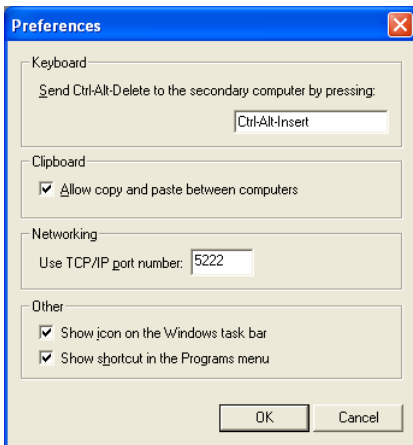
When choosing a key sequence, do not choose a sequence that is used by another application. KaVoom! KVM takes priority and will not pass the key sequence to any other program.

Ctrl-Alt-Delete

The Ctrl-Alt-Delete key sequence is reserved (by Windows) for special Windows functions. If you press **Ctrl-Alt-Delete** on the primary computer when you are operating a secondary computer, it will return you to the primary computer's desktop.

To perform a Ctrl-Alt-Delete on a secondary computer when operating it from the primary, you must press **Ctrl-Alt-Insert** instead. This tells KaVoom! KVM to simulate a Ctrl-Alt-Delete on the secondary computer.

To change Ctrl-Alt-Insert to a key sequence of your choice, select **Preferences** from KaVoom's **Application** menu and enter the desired sequence in the Preferences dialog.



Copy and Paste

KaVoom! KVM allows you to copy and paste data from one computer to another using the Windows clipboard, just as you copy and paste data from one application to another on an individual computer.

Files on disk can always be copied, regardless of the data that they store. For more information, see *Copying Files* below.

The other types of data that can be copied across the network using the Windows clipboard include:

- Text – Plain text, Unicode text, RTF (Rich Text Format), and HTML (Hypertext Markup Language) can all be copied from one computer to another. HTML often contains images, which are stored separately from the HTML text itself. In such cases the images are not copied—you must copy them separately. It's usually easier to use RTF instead.
- Device Independent Bitmaps – Photos and other graphics can be copied from one application to another as Device Independent Bitmaps. Plain-old Bitmaps cannot be copied—use Device Independent Bitmaps instead.
- Application objects – Many applications such as Microsoft Word and Excel place data on the clipboard in their own special formats (such as "Microsoft Word Document Object"). These objects can usually be copied from one computer to another.

Many applications, such as Microsoft Word, have a **Paste Special** menu item in the **Edit** menu, which allows you to see all the formats that are available for the data that was copied to the clipboard most recently. When you open the Paste Special dialog box, you will see that one of the formats is selected. This is the format that would have been pasted by default if you had selected the regular **Paste** menu item. If you do not get the desired results by pasting the default data format, try one of the others.

Pictures (and Enhanced Metafiles, both of which are vector-based graphics formats) cannot be copied from one computer to another. As a workaround, you can either

paste the graphic as a Device Independent Bitmap, or save the graphic to disk and copy it as a file using Explorer.

If you do not want copying any pasting on one computer to affect the clipboard of your other computers, you can disable the copy and paste functionality entirely. Select **Preferences** from KaVoom's **Application** menu and uncheck the box that says "Allow copy and paste between computers."

Copying Files

To copy files from one computer to another using KaVoom!, use the Copy and Paste functions of Explorer. Copying and pasting files is just like copying and pasting any other type of data.

In order for the copy to be successful, the file must reside in a directory that is shared and is accessible from the other computer. For example, to copy C:\MyPhotos\photo.jpg, either C:\ (the root directory) or C:\MyPhotos must be shared. If both are shared, KaVoom! uses the longest one, i.e., the share point closest to the file being copied. KaVoom! will display a helpful error message if you attempt to copy a file that is not being shared.

Files can be copied from primary to secondary, secondary to primary, or secondary to secondary.

The copy will fail if the user who is logged in on the destination computer does not have access to the shared directory on the source computer.

Removing your Keyboard, Monitor, and Mouse

After you have installed KaVoom! KVM on a secondary computer, you might wish to disconnect the extra keyboard, monitor, and mouse to use them somewhere else, or just to free up space. There are a few limitations to be aware of.

Some computers will generate an error soon after they are turned on if a keyboard is not connected. You can usually disable this error message via a BIOS setting. To access the BIOS settings, press a certain key (often F1 or Delete; check your computer's user manual) soon after the computers starts.

Do not disconnect the mouse from a secondary computer running Windows 2000 (or 2000 Server). If there is no mouse present when Windows 2000 starts, Windows will not display the pointer. There is no work-around for this. Having any cheap mouse plugged in will avoid the problem.

Some video cards are "smart" in that they will disable themselves if a monitor is not plugged in. This can make a dual-monitor computer behave like a single-monitor computer after you have unplugged the monitors.

Not having a keyboard, monitor, and mouse plugged in makes it impossible to inspect or modify the computer's BIOS settings, or to select an operating system from a dual-boot menu. If these capabilities are important to you then you should keep your hardware connected.

The remote-installation feature of KaVoom! KVM makes it possible to install or upgrade the software without having a keyboard, monitor, and mouse plugged in. See *Reinstalling or Upgrading KaVoom! KVM* on page 28 for details.

Single-Monitor Usage

Let's suppose that you have a single-monitor primary computer and a single monitor secondary computer. (For a discussion of multi-monitor configurations, see the next section.)

Your computers can operate in a variety of video modes depending on the resolutions supported by the video cards and the resolutions supported by the monitors. (As per common practice, we are using the term "resolution" to

refer to the number of pixels, rather than the number of pixels per inch. This unfortunate use of terminology is widespread.) For example, some common resolutions are 1024 x 768 pixels and 1280 x 1024 pixels. Larger monitors typically support higher resolutions. Video cards capable of higher resolutions cost more because they require more memory. The choice of resolution being displayed on your computer is referred to as the *video mode*. (*Video mode* also includes the color-depth, such as 16 bits-per-pixel or 32 bits-per-pixel, but that is irrelevant for this discussion.)

The simplest scenario is where your secondary computer is operating in the same video mode as the primary. In this case, KaVoom! KVM can display the secondary computer on the primary computer's monitor exactly as it would appear if you were sitting in front of it. The image fills the screen exactly.

However, another common scenario is where you've spent some extra money on a larger monitor (with higher resolution) for your primary computer. If KaVoom! displays the secondary computer as-is on the primary computer's monitor, it does not fill the entire screen; the image is centered and is surrounded by a black border.

The reverse scenario is also possible, where the secondary's video mode is larger than the primary.

KaVoom! KVM offers options for changing the video mode of your secondary computer in order to optimize fit it exactly onto your primary monitor.

The scenarios are summarized below:

Single-Monitor Computers – Same Size

The primary and secondary computers have matching resolutions. The secondary computer can be displayed perfectly.

Single-Monitor Computers – Larger Primary

The primary computer has a higher resolution than the secondary. With no mode change, the secondary computer appears centered on the primary monitor, surrounded by a black border.

KaVoom! KVM gives you the option of changing the video mode of your secondary (i.e., using a higher resolution) to match the primary. This option should be exercised with caution because your secondary's monitor probably cannot support a higher resolution (otherwise it would be using it). Some manufacturers warn that a monitor can be damaged by sending it a signal at too-high a resolution. However, on some computers the monitor will switch itself off and you can continue to operate the computer from the primary.

Single-Monitor Computers – Smaller Primary

The primary computer has a lower resolution than the secondary. With no mode change, the secondary computer fills the primary monitor and the image scrolls when you move the mouse pointer near the edge. This is fine as a temporary measure, but you probably don't want to work this way on a regular basis.

KaVoom! KVM gives you the option of changing the video mode of your secondary (i.e., using a lower resolution) to match the primary. Unfortunately, this will give you a suboptimal display if you return to working on the secondary computer directly.

Whenever you choose to change the video mode on the secondary computer, you can restore the video mode by right-clicking on the KaVoom! KVM icon in the notification area on the secondary computer.



Select **Restore Video Mode** and your secondary computer will be returned to its original video mode.

Multi-Monitor Usage

[Dual-monitor and multi-monitor support is an optional feature of KaVoom! KVM. If you have not purchased a license that includes multi-monitor support, talk to your KaVoom! sales representative about upgrading. If you run KaVoom! KVM without a multi-monitor license, you only get a single Switch window (for your primary monitor) regardless of how many monitors you have.]

KaVoom! KVM supports dual and multi-monitor displays², on your primary computer, secondary computer, or both. However, some configurations work better than others.

The scenarios are describe below.

Multi-Monitor Computers – Exact Match

The primary and secondary are both multi-monitor computers, and the monitors have the exact same layout (i.e., same resolutions and same relative positions). KaVoom! KVM puts a Switch window on each monitor and allows you to switch each monitor independently. This is a great configuration.

² A multi-monitor computer is a computer with multiple video cards and/or video cards that have jacks for more than one monitor, giving you a much larger workspace and allowing you to see more windows at the same time. Dual-monitor video cards are most common, which double the size of your desktop. Quad-monitor video cards are also common. Adding a second video card to your computer is possible, although most computers these days have just a single AGP (advanced graphics port) slot, so your second video card must be a PCI card instead.

Multi-Monitor Primary – Single-Monitor Secondary

The primary computer has multiple monitors and the secondary has just one. When you first configure KaVoom!, you will see a Switch window on each monitor, and the secondary computer's name appears on each Switch window. The first time that you select the secondary computer on one of the switches, its name is removed from the remainder of the switches (which then disappear if there are no other secondary computers to list on them).

This is a very nice configuration because you get to choose which monitor to view the secondary, and you can make a choice for each secondary computer independently.

If the video mode of the secondary computer does not exactly match the resolution of the monitor that you have chosen, the situation is the similar to that described in *Single-Monitor Usage* above, where the secondary's resolution does not match the primary computer. You have the option of changing the video mode of the secondary computer to match the monitor on the primary.

As stated above, once you have made your choice, buttons will disappear off Switch windows, and some Switch windows themselves might disappear. If you would like to change your choice, go to the KaVoom! KVM main window and select **Change**. Go through the entire sequence until you press **Finish**, at which point KaVoom! will restore all your Switch windows and you can choose again.

Multi-Monitor Computers – Mismatch

The primary and secondary computers are both multi-monitor, but the monitors do not have the exact same layout (i.e., the resolution or the relative positions are different). In this case, KaVoom! shows the entire virtual desktop of the secondary computer on whichever monitor you select. It treats the secondary computer as if it has a single large monitor. This is not a very desirable configuration because the secondary computer probably

won't fit properly onto the chosen monitor and you'll have to scroll with the mouse to see it all. Your best option is to find a way to change the configuration of the secondary computer to match the primary.

See *Troubleshooting* on page 25 for some specific issues relating to multi-monitor computers.

Sharing Computers

KaVoom! KVM gives you an effective way to share computers among a group of people. This is a very useful feature for server administrators who share responsibility over a group of servers, or for any other computer professional who shares access to special software or hardware located on a particular computer.

There are no special configuration options related to computer sharing. All you do is configure multiple primary computers, one for each person who wants to have access to the shared secondary computers. When you connect to a secondary, KaVoom! KVM notifies you immediately if someone else is using the computer with a message such as:

*The computer is currently being used by John on "Austin."
Last activity was 4 minutes ago.*

You can then decide whether or not to take control of the computer yourself. If you take control, the next time John tries to regain control of the computer, he will be notified that you are now using it with a similar message.

Licensing

Before you purchase KaVoom! KVM you may install the software on your computers for evaluation purposes. The software is fully functional for five computers (e.g., a

primary and four secondaries, or any other configuration with at most five computers), with a 30-day time limit. There is also a 30-minute time limit per session, but after the session expires you can restart the software and continue using it (for up to 30 days). The computers can be single- or multi-monitor.

Once you have made a decision to buy, select **Licensing** from the **Application** menu and follow the prompts. An Internet connection is required during the licensing procedure so the software can contact the KaVoom Software corporate license server. Once the software is successfully licensed, the Internet connection is no longer required.

KaVoom! KVM licenses are sold on a per-computer basis. After licensing the software on your computers, you may move the software to new computers at any time by first unlicensing the software on the original computers and then relicensing it on the new ones.

Security

Security on the Primary

There is no danger that an unauthorized person can remotely control your computer when you have it configured as a primary. KaVoom! KVM allows network connections only when it is configured as a secondary.

When you connect from the primary to a secondary, the password you type to connect is encrypted to reduce the chance of it being captured by an eavesdropper on your network. However, once you are connected to the secondary, the video information sent from the secondary to the primary is not encrypted, so any information that appears on the secondary screen could be seen by an eavesdropper with access to your network.

We do not recommend using KaVoom! KVM for sensitive work when untrusted individuals have access to the network between the secondary and primary computers.

Security on the Secondaries

When a computer is configured as a secondary, you want to be sure that only authorized people are able to operate it. To achieve this, you specify a list of permitted user names during configuration. You can change them at any time by pressing the **Change** button in the main KaVoom! KVM window.

User names are Windows account names, the same names used to log in to Windows. You can specify "domain\username" if you are working in an environment with a Windows domain controller (which is a special type of Windows server). KaVoom! KVM does not keep its own list of user names and passwords. Instead, it asks Windows to authenticate each user that tries to connect to a secondary.

People who work on secure networks often find it tedious to be continually entering passwords. In this situation, you can check the **Disable user authentication** checkbox. (See Installing the Software step 8 on page 8.)

Troubleshooting

If you encounter a problem that you cannot solve, please email help@kavoom.biz for assistance.

If the problem is technical in nature, a better option is to select **Report a Problem** from KaVoom! KVM's **Help** menu. A report will be emailed to KaVoom Software along with some technical information about your computer that we can use to solve the problem. We will respond to you by email once we have assessed the problem.

Some Known Issues

Remote Installation

KaVoom! KVM cannot always be installed remotely onto secondary computers, in which case you need to have a keyboard and monitor attached to your computer to install the software. See *Installing the Software* step 6 on page 5 for more information.

Multiple Users on Windows XP

If you have multiple user accounts on your Windows XP computer and two or more users are logged on simultaneously, KaVoom! will stop working temporarily after one of the users logs off. It will resume working once the next user logs on. This means that you must use the computer's local keyboard to log on the next user.

One work-around is to use the "Switch User" feature, rather than logging off. As long as all the users remain logged on, KaVoom! will continue to work fine.

Another work-around is to just have one user logged on at a time, and to log off whenever you want to switch users.

Logitech MouseWare

Logitech MouseWare is not fully compatible with KaVoom! Mouse buttons that have been reprogrammed using MouseWare do not function when you are operating a secondary computer.

Microsoft Terminal Services

When configuring KaVoom! to be a secondary on a computer that is also a Terminal Services server, you must do so at the local keyboard rather than trying to do it remotely.

KaVoom! KVM reports an error when you attempt to install the KaVoom! video driver if you are doing so from a Terminal Services client.

OpenGL

3-D graphics sometimes do not appear on the primary computer when you are running an application on the secondary that draws graphics using OpenGL. This is most common with 3-D screen savers. A workaround is to disable hardware acceleration on your video card. You can do this by selecting Control Panel – Display – Settings – Advanced – Troubleshooting.

DirectX (DirectDraw)

Some applications that do high-performance video rendering using the DirectX API are not compatible with KaVoom. A workaround might be to disable hardware acceleration on your video card (do this from Windows' Display Properties dialog), although the application may simply fail if a DirectX-compatible video device is not found on your computer.

Zone Alarm

The personal firewall software called “ZoneAlarm” has a security feature that prevents remote users from changing its security settings. This means that ZoneAlarm running on a secondary computer cannot be configured from the primary. (The keyboard and mouse will stop working while the ZoneAlarm window is open). You must configure ZoneAlarm from the actual computer on which it is running.

When your computer restarts, Zone Alarm may be the last application to start, meaning that even though the Zone Alarm splash screen is no longer visible, the Zone Alarm icon still has the focus. This can prevent you from controlling the secondary computer immediately after a reboot. Workarounds include turning off Zone Alarm, having another application load *after* Zone Alarm, or using the secondary's mouse or keyboard to manually change focus to a different application window.

Copying Files

Using Windows Vista or XP, you cannot copy a file contained within a .zip file and paste it directly to another computer. Instead, paste it to a temporary location on the original computer, then cut and paste it to the other computer.

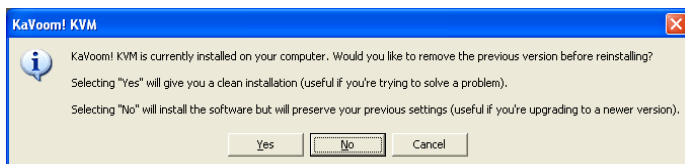
Unplugged the Mouse and Now it Doesn't Work

This problem happens on secondary computers running Windows 2000 or 2000 Server. See *Removing your Keyboard, Monitor, and Mouse* on page 17.

Reinstalling or Upgrading KaVoom! KVM

On the Local Computer

If you run the setup program (*KaVoomKVM5.0_Setup.exe*) after KaVoom! KVM has already been installed, you will be asked the following question.



You have the option to remove the old version first (which will erase your old settings and give you a clean installation) or to reinstall over top of the old version (to preserve your settings).

Windows Vista and XP users:

If you select **Yes**, you might be asked if you want to uninstall the KaVoom! video driver. Most of the time you can choose **No** because it is very rare for the video driver to change, and you will need it again after you reinstall the software. If you choose **Yes**, you must restart your computer before you reinstall the software.

Windows 2000 users:

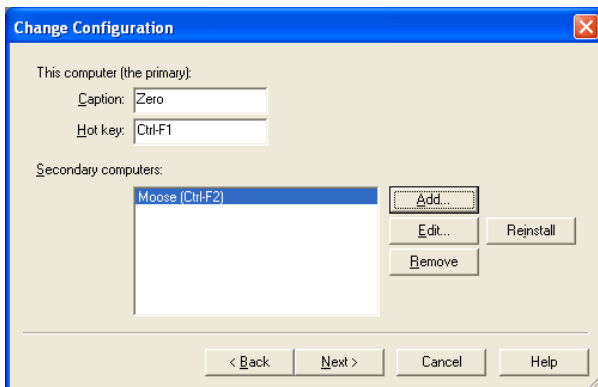
If you select **Yes**, the KaVoom! video driver will be removed, but you can go ahead and reinstall the software immediately. No restart is required.

If you are reinstalling KaVoom! KVM due to a software problem involving the video driver, we recommend that you uninstall the video driver and then restart the computer to completely erase the KaVoom! video driver from your system.

On a Secondary Computer

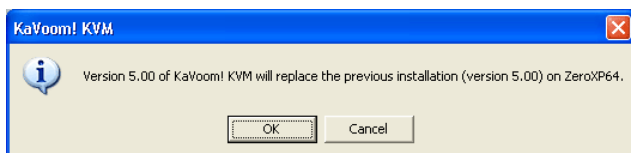
KaVoom! KVM has the ability to let you reinstall or upgrade the software on a secondary computer from the primary computer. This is very useful if you have disconnected the secondary computer's keyboard, monitor, and mouse.

From the KaVoom! KVM main window, press **Change** then **Next**.



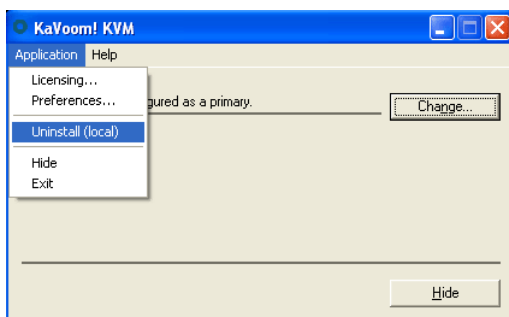
Select the secondary computer and then press **Reinstall**.

Follow the instructions that appear. During the process KaVoom! KVM will confirm the version numbers for you. This is a good opportunity to double-check that the software is doing what you expect.



Uninstalling KaVoom! KVM

You can remove KaVoom! KM from your computer by selecting **Uninstall (local)** from the **Application** menu.



Alternatively, you can uninstall it in the usual way that Windows software is uninstalled:

Windows Vista users:

1. Select **Start – Control Panel – Uninstall a Program** (look inside Programs and Features if you're using the classic view).
2. Find KaVoom! KVM in the list and select **Uninstall**. An administrator password is required.

Windows XP and 2000 users:

1. Log on to Windows using an account that has Administrator privileges.
2. Select **Start – Control Panel – Add/Remove Programs**.
3. Find KaVoom! KVM in the list and press the **Remove** button.