IBM

Technical Update

Important information about the Remote Supervisor Adapter II and Red Hat Linux version 7.3 or SuSE Linux version 8.0

This Technical Update supplements the information in your IBM® Remote Supervisor Adapter II documentation.

General information for all supported Linux operating system configurations

Read the following general information for all supported Linux operating systems:

- If the Remote Supervisor Adapter II is installed in a server that is running either the Red Hat Linux or SuSE Linux operating system, make sure that the Linux operating system is selected in the Remote Supervisor Adapter II settings in the server basic input/output system (BIOS). Complete the following steps to set Linux as the operating system in the server BIOS:

  1. Turn on or restart the server. When the message `Press F1 for Configuration/Setup` appears, press F1.
  2. Select **Advanced Setup** and then select **RSA II Settings**.
  3. In the **OS USB selection** field, select **Linux**.
  4. Select **Save Values and Reboot RSA II**.

- After you make the configuration changes that are listed in this document, if you run an automated X Windows System configuration utility, you must repeat the configuration changes in this document.

- If the SuSE Linux or Red Hat Linux operating system is already installed and configured to run in text mode and will never use the X Window System, no additional configuration is required for the Remote Supervisor Adapter II to function correctly. Follow the instructions in the *Remote Supervisor Adapter II Installation Guide* to install the Remote Supervisor Adapter II.

Mounting a remote disk with Linux operating systems

In the SuSE Linux and Red Hat Linux operating systems, to use the remote disk feature in the Remote Supervisor Adapter Web interface and assign to the server a USB diskette drive that is on your computer, complete the steps in the following sections. For detailed information about the remote disk feature, see the *Remote Supervisor Adapter User's Guide* on the IBM *Documentation* CD.

Mounting a diskette drive

Complete the following steps to mount a diskette drive:

1. In the Remote Supervisor Adapter II Web interface, in the **Remote Disk** area of the Remote Control window, mount the USB diskette drive. For more information, see the *Remote Supervisor Adapter II User's Guide*.
2. Create a directory where the drive will be mounted. For example, type `mkdir /mnt/usbfloppy`.
3. From an xterm window or GUI interface, add the following text to the /etc/fstab file:

   `/dev/sdb /mnt/usbfloppy auto defaults, noauto 0 0`

4. From a command prompt, type

   `mount /mnt/usbfloppy`

5. The remote disk diskette drive is now accessible at the mount point /mnt/usbfloppy.

Note: You need to perform step 2 only once.

Mounting a CD-ROM drive using SuSE Linux

Complete the following steps to mount a CD-ROM drive using SuSE Linux:

1. In the Remote Supervisor Adapter II Web interface, in the **Remote Disk** area of the Remote Control window, mount the USB diskette drive. For more information, see the *Remote Supervisor Adapter II User's Guide*.

2. From a command prompt, type

   ```
   mount /media/sr0
   ```

3. The remote disk CD-ROM drive is now accessible at the mount point /media/sr0.

Mounting a CD-ROM drive using Red Hat Linux

Complete the following steps to mount a CD-ROM drive using Red Hat Linux:

1. In the Remote Supervisor Adapter II Web interface, in the **Remote Disk** area of the Remote Control window, mount the USB diskette drive. For more information, see the *Remote Supervisor Adapter II User's Guide*.

2. The CD-ROM drive mounts automatically.

SuSE Linux GUI mode considerations

The following sections provide configuration information to enable the SuSE Linux operating system to use the X Window System and the remote control features of the Remote Supervisor Adapter II.

If the SuSE Linux operating system is installed and configured to run in GUI mode with the X Window System, to enable the remote control features, you must make the following changes to the configuration files:

- Change the video device driver from the default ATI RADEON device driver to the VESA (Video Electronics Standard Association) driver. The VESA video device driver enables the remote control screen and the local screen to display the same information (clone mode).

  Note: The default video device driver names are different, depending on whether the Remote Supervisor Adapter II is installed before or after the operating system is installed.

- Set the correct color depth and desktop display size in SuSE Linux for Remote Supervisor Adapter II remote control sessions
- Enable mouse support

The following sections provide detailed instructions for making the modifications to the configuration file.

Special configuration information when SuSE Linux is installed and the Remote Supervisor Adapter II is not installed

If the SuSE Linux operating system is installed and configured to run in GUI mode with the X Window System, and the Remote Supervisor Adapter II is not installed, complete the following steps to change the video device driver:

1. Log in to a text screen.
2. In the /etc/X11/XF86Config file, search for the word "ati" and replace it with "vesa".
3. Go to "Setting the color depth and desktop display size in SuSE Linux" on page 3; then, return to step 4.
4. Shut down and turn off the server; then, install the Remote Supervisor Adapter II. For more information about installing the adapter, see the *Remote Supervisor Adapter II Installation Guide*. After the Remote Supervisor Adapter II is installed, continue with the configuration procedures in this document.

Special instructions for a new installation of SuSE Linux and the Remote Supervisor Adapter II

Complete the following steps for a new installation of the Remote Supervisor Adapter II and the SuSE Linux operating system:

1. Turn off the server and install the Remote Supervisor Adapter II. For more information, see the *Remote Supervisor Adapter II Installation Guide*.

2. In the server BIOS Configuration/Setup Utility program, make sure the settings for the Remote Supervisor Adapter II specify the Linux operating system (see "General information for all supported Linux operating system configurations" on page 1 for more information).

3. Before installing the operating system, go to "Video mode considerations during the installation of SuSE Linux" on page 4 for important information. Then, return to step 4.

4. Install the SuSE Linux operating system.

5. After the operating system installation is completed, log in to a text screen.

6. In the /etc/X11/XF86Config file, search for the word `"radeon"` and replace it with `"vesa"`.

7. Go to "Setting the color depth and desktop display size in SuSE Linux"; then, return to step 8.

8. Press Ctrl+Alt+Backspace to restart the X Window System.

Setting the color depth and desktop display size in SuSE Linux

You must set the color depth and desktop size in SuSE Linux for correct operation of the Remote Supervisor Adapter II. Complete the following steps to set the color depth and desktop size:

1. Log in to a text screen if you have not already done so.

2. In the /etc/X11/XF86Config file, under `Section "Screen"`, edit the file as follows:

```
Section "Screen"
  DefaultDepth 16
  SubSection "Display"
    Depth          16
    Modes          "1024x768"
  EndSubSection
  ⋮
```

   Be sure that the default depth is 16 (add the text line, if necessary) and the Display Modes value is "1024x768" only. Delete the other display mode values.

Enabling mouse support after SuSE Linux is installed

If the SuSE Linux operating system is configured to use a USB mouse, the remote control features of the Remote Supervisor Adapter II will function correctly. If the operating system is configured to use a local PS/2® mouse, configuration changes are required.

Complete the following steps to enable both PS/2 and USB mouse support:

1. To require the mousedev module to load, edit the /etc/init.d/boot.local file, and at the end of the file, add

   `/sbin/modprobe mousedev`

2. To add the description of the new input device to the X Window System configuration file, edit the /etc/X11/XF86Config file, and below the existing mouse configuration text lines, add the following text:

```
Section "InputDevice"
  Driver      "mouse"
  Identifier  "USB Mouse"
  Option      "Device" "/dev/input/mice"
```

```
     Option        "Name" "AutoDetected"
     Option        "Protocol" "IMPS/2"
     Option        "Vendor" "AutoDetected"
   EndSection
```

3. To add the second mouse under `Section "ServerLayout"` and specify that it sends core events, edit the /etc/X11/XF86Config file as follows:

```
 Section "ServerLayout"
    Identifier       "Layout[all]"
    InputDevice      "Keyboard[0]"  "CoreKeyboard"
    InputDevice      "Mouse[1]" "SendCoreEvents"  <--- Changed from "CorePointer" to "SendCoreEvents"
    InputDevice      "USB Mouse" "CorePointer"   <--- Added this line
    Screen           "Screen[0]"
 EndSection
```

4. Configure the mouse using the procedures in "Mouse support considerations with the Remote Control feature" on page 7.

Important: On the next restart of the server, the SuSE Linux operating system hardware detection service program (YaST2) might detect hardware changes. Do *not* enable YaST2 to make any configuration changes. Click **Cancel** when prompted.

Video mode considerations during the installation of SuSE Linux

Note: If the monitor that is connected to the video connector on the Remote Supervisor Adapter II is using Plug and Play technology, you do not need the information in this section.

Before you begin the installation of the SuSE Linux operating system, and if the Remote Supervisor Adapter II is installed, check the monitor type that is connected to the video connector on the Remote Supervisor Adapter II. Complete the procedure in this section if *one* of the following is true:

- The monitor that is connected to the Remote Supervisor Adapter II does not use Plug and Play technology.
- You do not know whether the monitor uses Plug and Play technology.
- No monitor is connected to the Remote Supervisor Adapter II.

On the first installation screen that is displayed during the SuSE Linux installation, there are several choices for the video mode that can be used during the installation process:

```
1.  F2=text mode
2.  F3=640x480
3.  F4=800x600  <--- Do not select this mode.
4.  F5=1024x768
```

Do not select the 800 x 600 video mode, which is the default mode when a monitor that is not using Plug and Play technology is connected to the Remote Supervisor Adapter II or if no monitor is connected. If the 800 x 600 video mode is selected, the remote video screen for the Remote Supervisor Adapter II will not be updated after the SuSE Linux installation switches to the 800 x 600 video mode. The remote video screen will lock up at the initial SuSE Linux installation screen.

You must change the video mode selection before the SuSE Linux installation program times out after 8 seconds. Otherwise, the default 800 x 600 video mode is selected.

Red Hat Linux GUI mode considerations

The following sections provide configuration information to enable the Red Hat Linux operating system to use the X Window System and the remote control features of the Remote Supervisor Adapter II.

If the Red Hat Linux operating system is installed and configured to run in GUI mode with the X Window System, to enable the remote control features, you must make the following changes to the configuration file:

- Change the video device driver from the default ATI RADEON device driver to the VESA (Video Electronics Standard Association) device driver. The VESA video device driver enables the remote control screen and the local screen to display the same information (clone mode). If the VESA selection is not available, accept the ATI RADEON VE selection and you can edit the X configuration later.
- Set the correct color depth and desktop display size in Red Hat Linux for Remote Supervisor Adapter II remote control sessions
- Enable mouse support

The following sections provide detailed instructions for making the modifications to the configuration file.

Important: Failure to change the video driver on servers running the Red Hat Linux 7.3 operating system can result in `CPU x Internal Error` errors, which result in a server shutdown. To correct `CPU x Internal Error` errors, you must turn off the server and disconnect all power cords from the power source.

Special instructions for a new installation of Red Hat Linux and the Remote Supervisor Adapter II

Important: To avoid problems with the installation, you *must* use the instructions in this section to install the Remote Supervisor Adapter II and the Red Hat Linux operating system.

Complete the following steps to install the Remote Supervisor Adapter II and the Red Hat Linux operating system:

1. Install the Remote Supervisor Adapter II. For more information, see the *Remote Supervisor Adapter II Installation Guide*.
2. In the server BIOS Configuration/Setup Utility program, make sure the settings for the Remote Supervisor Adapter II specify the Linux operating system (see "General information for all supported Linux operating system configurations" on page 1 for more information).
3. Before installing the Red Hat Linux operating system, read the information in "Mouse support considerations before installing Red Hat Linux" on page 6; then, return to 4.
4. Install the Red Hat Linux operating system using text mode. Follow the operating system installation instructions that are available for your server from http://www.ibm.com/pc/support/. Complete the following steps during the installation:
   a. From the startup installation screen, at the startup prompt, type `text` to use the text mode installation option.
   b. In the Video Card Configuration screen, change the video card from **ATI RADEON VE** to **VESA driver (generic)**.
   c. In the Monitor Configuration screen, accept the detected values or configure the monitor to match the hardware.
   d. In the X Customization screen, if you want your operating system to start in GUI mode, select the following options:

      Default Login Graphical

      ColorDepth 16 bits

      Desktop Size 1024x768 (do not select other modes)
5. To enable the mouse functions, see "Enabling mouse support with Red Hat Linux" on page 6.

Special configuration information when Red Hat Linux is installed and the Remote Supervisor Adapter II is not installed

If the Red Hat Linux operating system is installed and configured to run in GUI mode with the X Window System and the Remote Supervisor Adapter II is not installed, complete the following steps to change the video device driver:

1. Log in to a text screen.
2. In the /etc/X11/XF86Config-4 file, search for the word `"ati"` and replace it with `"vesa"`.
3. In the Monitor section, set the option `"dpms"`to `"off"`.
4. Go to "Setting the color depth and desktop display size in Red Hat Linux"; then, return to step 5.
5. Shut down and turn off the server; then, install the Remote Supervisor Adapter II. For more information, see the *Remote Supervisor Adapter II Installation Guide*. After the Remote Supervisor Adapter II is installed, continue with the configuration procedures in this document.

Setting the color depth and desktop display size in Red Hat Linux

You must set the color depth and desktop size in Red Hat Linux for correct operation of the Remote Supervisor Adapter II. Complete the following steps to set the color depth and desktop size:

1. If necessary, log in to a text screen.
2. In the /etc/X11/XF86Config-4 file, search for the word `"radeon"` and replace it with `"vesa"`.
3. In the /etc/X11/XF86Config-4 file, under `Section "Screen"`, edit the file as follows:

   ```
   Section  "Screen"
   .
   .
   .
       DefaultDepth 16
       Subsection "Display"
           Depth 16
           Modes "1024x768"
       EndSubSection
   EndSection
   ```

   a. Be sure that the default depth is 16 (add the text line, if necessary) and that the Display Modes value is "1024x768" only. Delete the other display mode values.
   b. In the section `"Monitor"`, change `"dpms"`to `"off"`.

Mouse support considerations before installing Red Hat Linux

Important: The Red Hat Linux operating system installation is limited to a single type of mouse during the installation process. After the installation, the operating system is configured for that mouse only. The Remote Supervisor Adapter II implements a USB mouse and a USB keyboard for its remote control function. Under this configuration, the Red Hat Linux operating system will use the USB mouse (and any USB mouse connected locally), and ignores any local PS/2 mouse. To use a PS/2 mouse during the installation of the Red Hat Linux operating system on a local server in which the Remote Supervisor Adapter II is installed, disconnect the USB cable from the Remote Supervisor Adapter II for the duration of the operating-system installation. After installing the operating system using the instructions in this document, reconnect the USB cable to the Remote Supervisor Adapter II, and if you plan to run the Red Hat Linux operating system in GUI mode with the X Window System, follow the instructions in "Enabling mouse support with Red Hat Linux" to enable both USB and PS/2 mouse functions.

Enabling mouse support with Red Hat Linux

If the Red Hat Linux operating system is configured to use a USB mouse, the remote control functions of the Remote Supervisor Adapter II will function correctly. If the operating system is configured to use a local PS/2 mouse, configuration changes are required.

Complete the following steps to enable both PS/2 and USB mouse support:

1. To add the second mouse under `Section "ServerLayout"` and specify that it sends core events, edit the /etc/X11/XF86Config-4 file as follows:

```
Section "ServerLayout"
    Identifier  "Anaconda Configured"
    Screen  0   "Screen0" 0 0
    InputDevice "USB_Mouse" "CorePointer"  <--- Added this line
    InputDevice "Mouse0" "SendCoreEvents"  <--- Changed from "CorePointer" to "SendCoreEvents"
EndSection
```

2. To add the description of the new input device to the X Window System configuration file, edit the /etc/X11/XF86Config-4 file as follows:

```
Section "InputDevice"
    Identifier "USB_Mouse"
    Driver     "mouse"
    Option     "Protocol" "IMPS/2"
    Option     "Device" "/dev/input/mice"
EndSection
```

3. Configure the mouse using the procedures in "Mouse support considerations with the Remote Control feature."

4. Press Ctrl+Alt+Backspace to restart the X Window System.

Important: On the next restart of the server, the Red Hat Linux operating-system hardware detection service program (Kudzu) might detect hardware changes. The following table lists the Kudzu queries and suggested user responses.

Kudzu query	User response
ATI Rage XL has been removed	Select **Keep Configuration**
Generic USB Mouse has been added	Select **Ignore**
ATI RADEON has been added	Select **Ignore**
Generic USB keyboard has been added	Select **Ignore**

Mouse support considerations with the Remote Control feature

The ability of the applet to accurately track the location of the mouse cursor in a Linux X Window System session depends on the configuration of the X Window System.

Complete the procedures in the following sections to configure a Linux operating system and the X Window System for accurate mouse tracking. Type the commands through the remote console or at the keyboard attached to the server. Note that the changes require root privileges.

Providing resolution information to the mouse handler

To track the remote mouse cursor correctly using a Linux operating system, the mouse handler (mousedev) must get the correct resolution information. If the host server monitor resolution is not 1024 x 768, complete the following steps to provide the correct resolution data to the mouse handler:

1. Open an xterm window or switch to a virtual terminal.

2. To switch to text mode, if necessary, type `-init 3`.

3. To unload the mouse driver module, type `-rmmod mousedev`.

4. To notify the mouse driver of the video resolution, add the following statement to the /etc/modules.conf file:
   `options mousedev xres=X yres=Y`, where X and Y specify the video resolution.

5. To reload the mouse driver module, type `insmod mousedev`.

6. To return to GUI mode, if necessary, type `init 5`.

Changing pointer speed settings

To enable the remote mouse to track properly in the SuSE and Red Hat Linux operating systems, you must change the mouse acceleration and threshold values to 1. To change the mouse acceleration and threshold values for *only* the current session, open a terminal window and type `xset m 1 1` and press Enter.

To change the mouse acceleration and threshold values and save these changes between sessions, use the procedures for your desktop interface in the following sections.

Graphical login screen (XDM)

To change the pointer speed settings if you are in the X display manager (XDM) or graphical login screen, follow the procedure for your operating system.

For SuSE Linux:

Complete the following steps to set the mouse acceleration and threshold values:

1. To change to mode 3, if necessary, type `init 3`.
2. Open the Xsetup file under /etc/X11/xdm/ and add the following line at the end of the file (before the exit 0 line)

   `$xset m 1 1` (note the dollar sign [$] symbol in front of xset)
3. Save the file.
4. To change to mode 5, type `init 5`.

The remote cursor is now aligned on the login screen.

For Red Hat Linux:

Complete the following steps to set the mouse acceleration and threshold values:

1. To change to mode 3, if necessary, type `init 3`.
2. Open the Xsetup_0 file under /etc/X11/xdm/ and add the following line at the end of the file (before the exit 0 line)

   `xset m 1 1`
3. Save the file.
4. To change to mode 5, type `init 5`.

The remote cursor is now aligned on the login screen.

Graphical desktop

To change the pointer speed settings if you are in a Linux graphical desktop, follow the procedure for your desktop.

GNOME: Complete the following steps to set the mouse acceleration and threshold values if you are using the GNOME desktop:

1. Using the keyboard, press Alt+F1 or Ctrl+Esc to open a menu on the desktop.
2. From the menu, select **Programs → Settings→ Session → Session Properties & Startup Programs** or **Extras → Preferences → Sessions** (depending on the Linux version).
3. Select the **Startup Programs** tab; then, select **Add** to open another window.
4. On the command line, type `xset m 1 1` and click **OK** to save this command.
5. Click **Apply** and then click **OK** to exit this window. Log out from this session and be sure to check the **Save current setup** check box on the Log out window.

The next time you log in, the remote and local mouse are synchronized.

K desktop environment (KDE): Complete the following steps to set the mouse acceleration and threshold values if you are using the KDE:

1. Using the keyboard, press Alt+F1 or Ctrl+Esc to open a menu on the desktop.
2. From the menu, select **Preferences → Peripherals→ Mouse**.
3. Select the **Advanced** tab and change the **Pointer Acceleration** and **Threshold** values to 1.
4. Log out from this session and be sure to check the **Save current setup** check box in the Log out window.

The next time you log in, the remote and local mouse are synchronized.

WindowMaker: Complete the following steps to set the mouse acceleration and threshold values if you are using WindowMaker.

Note: It might be easier to make changes with the local keyboard and mouse.

1. Using the keyboard, press F12 to open a menu on the desktop.
2. Select **WindowMaker** and then **WPrefs** to open the WindowMaker Preferences Utility.
3. Select the Mouse Preference icon and change the acceleration and threshold values to 1and change the Pointer Acceleration and Threshold values to 1.
4. Save the changes and close the window.
5. Log out from this session and be sure to check the **Save Workspace State** check box on the Log out window.

The next time you log in, the remote and local mouse are synchronized.

MWM:

Note: It might be easier to make changes with the local keyboard and mouse.

To set the mouse acceleration and threshold values if you are using MWM, open a terminal window and type `xset m 1 1` and press Enter.

For additional help, see the instructions in"Synchronizing the remote and local mouse for remote control sessions" on page 10.

Note: This change is not saved between sessions; therefore, you will have to repeat this process each time you log in.

TWM:

Note: It might be easier to make changes with the local keyboard and mouse.

To set the mouse acceleration and threshold values if you are using TWM, open a terminal window and type `xset m 1 1` and press Enter.

For additional help, see the instructions in"Synchronizing the remote and local mouse for remote control sessions" on page 10.

Note: This change is not saved between sessions; therefore, you will have to repeat this process each time you log in.

Configuring the X Window System to use a USB mouse

Complete the following steps if you did not configure USB mouse support in a previous procedure in this document:

1. To require the mousedev module to load, edit the /etc/init.d/boot.local file and add the following line at the end:

   `"/sbin/modprobe mousedev"`

2. To add the description of the new input device to the X Window System configuration file, edit the /etc/X11/XF86Config file:

```
Section "InputDevice"
Driver       "mouse"
Identifier   "USB Mouse"
Option       "Device" "/dev/input/mice"
Option       "Name" "AutoDetected"
Option       "Protocol" "IMPS/2"
Option       "Vendor" "AutoDetected"
EndSection

Section "ServerLayout"
Identifier   "Layout[all]"
InputDevice  "Keyboard[0]" "CoreKeyboard"
InputDevice  "Mouse[1]" "SendCoreEvents"   <--- Changed from "CorePointer" to "SendCoreEvents"
InputDevice  "USB Mouse" "CorePointer"     <--- Added line
Screen       "Screen[0]"
EndSection
```

Synchronizing the remote and local mouse for remote control sessions

At the beginning of a remote session, if the remote and local mouse are not synchronized properly, for example, there is a constant offset between them on the remote client window, move the mouse toward the bottom right corner of the video screen in the client window. Then, move the local mouse back into the window. This will correct the alignment between the two mice.

If the offset between the remote and local mouse is not too great, you can correct it on the Remote Console window. Click, the **Preferences** link; then click the **Mouse Sync** tab to enable synchronization. If the mouse synchronization mechanism is used to compensate for differences that are too great, it becomes impossible to remotely move the mouse cursor all the way to the edges of the server screen. If that occurs, close the Remote Control window and start Remote Control again.

Correcting mouse cursor and click-related issues

Some versions of the Red Hat Linux and SuSE Linux operating systems might not start (boot) into GUI mode if the operating system cannot detect a mouse during startup. For example, KVM is not assigned to the server while it is starting up. In this case, one of the problems in the following section might occur. Use the procedure in the associated solution to correct the problem.

For Red Hat Linux

- There is no mouse cursor or single clicks from a remote mouse do not work.

  To correct this problem, complete the following steps using your keyboard:

  1. Open a terminal window.
  2. Type setup and press Enter.
  3. Select the **Mouse configuration** option.
  4. Scroll down to select **Generic Mouse (USB)** or **Generic 3-Button Mouse (USB)**; then, select **OK**.
  5. Select **OK** to update the X Configuration.
  6. Exit the utility.
  7. Press Ctrl+Alt+Backspace to exit the X Window system.

The next time you log in to the X Window System, the remote mouse will work correctly.

For SuSE Linux

- There is no mouse cursor.

  To correct this problem, complete the following steps using your keyboard:

  1. Open a terminal window.
  2. Type `sax2 -F mouse` and press Enter.

     The utility will start and display auto-detected values and the mouse will work correctly.
  3. Select **Apply** then, select **Finish**.
  4. On the next screen, select **Start** to test the settings. The utility displays a test screen with current settings.
  5. Select **Save Configuration**.
  6. Exit the utility.

- Single clicks from a remote mouse are not working.

  To correct this problem, complete the following steps using your keyboard:

  1. If you need to switch to GUI mode, type `sax2 -F mouse` and press Enter.
  2. In GUI mode, open a terminal window.
  3. Select **Remove** to delete the mouse settings.
  4. Select **Finish** and **Save Configuration**.
  5. Exit the utility.
  6. Restart the server.
  7. Log in using text mode because a pointing device is not defined.
  8. Type `sax2` and press Enter.

     In the SaX2 utility, a screen with auto-detected values is displayed and the mouse will work.
  9. To change settings (for example, resolution), select **Alter** and then select **Change Configurations**. Do *not* use any previous configuration files detected by the server.
  10. Select **Next** to change settings. Do not change settings for devices that are working correctly, for example, Mouse.
  11. After making changes, select **Finish** and then select **Start** to test the new settings. The utility displays a test screen with the new settings.
  12. Select **Save Configuration**.
  13. Exit the utility.
  14. Type `startx` at the prompt for the changes to take effect.

- The mouse was not detected during the operating system installation.

  The SuSE Linux operating system might not detect the local or remote mouse during the operating system installation process. Before the installation program starts, a summary of the server devices and options are displayed on the screen. Using the keyboard, select the mouse option and configure it as a USB mouse. Test and apply the change. The local or remote mouse will now work correctly.