



北京四通管理软件技术有限公司  
Beijing Stone Software Technology Co., Ltd



## POC标准化实施指南

### 基础环境

#### 01 虚拟主机基础环境安装

版本: v1.0

## 目 录

修正历史 .....	2
第 1 章 主要步骤.....	3
第 2 章 安装配置一览表.....	3
第 3 章 XenServer 的基本安装.....	3
3.1 XenServer 的安装.....	3
3.2 XenServer 补丁的安装.....	19
3.3 XenServer 启用多路径支持.....	25
3.4 XenServer dom0 优化 .....	27
第 4 章 基本操作系统模板的制作.....	28
4.1 ISO Library 挂载.....	28
4.2 操作系统模版制作流程.....	32
4.3 从模板创建新虚拟机.....	46
第 5 章 基础环境安装完成检查.....	52
产品版本 .....	53

## 修正历史

修正	改变说明	更新者	日期
V1.0	新建	陈余南、李申君、 孙凌、杨华	2014年7月11日

## 第1章 主要步骤

本章节介绍了安装XenServer虚拟主机基础构架的基本过程。其包括了：

- XenServer的基本安装
- 存储、网络基本配置
- ISO库的配置
- 基本操作系统模板的准备

在开始本LAB前，请根据简介及环境准备章节中的POC准备检查单，仔细检查所需要的准备工作是否已经完备。

## 第2章 安装配置一览表

下表为XenServer环境安装使用的配置表，具体参数，如IP地址等，请根据具体环境自行修改。

XenServer 主机名	XenServer-test	备注
IP 地址配置	Static IP: 192.168.10.1 Mask: 255.255.255.0 Gateway:192.168.10.254	已实际实验环境为准
Root 密码	123456	可以自行设定密码
时间和时区	按实际设置	注意务必设定正确的时区和时间。
NTP 服务器	不设置	使用 Manual 手工设置时间
存储	本地磁盘	
ThinProvisioning	Enable	
ISO Library 地址	\\server\share	将 ISO 安装介质 copy 到你的 Windows 工作站，然后 share 出来，记录 Share 的 UNC 路径

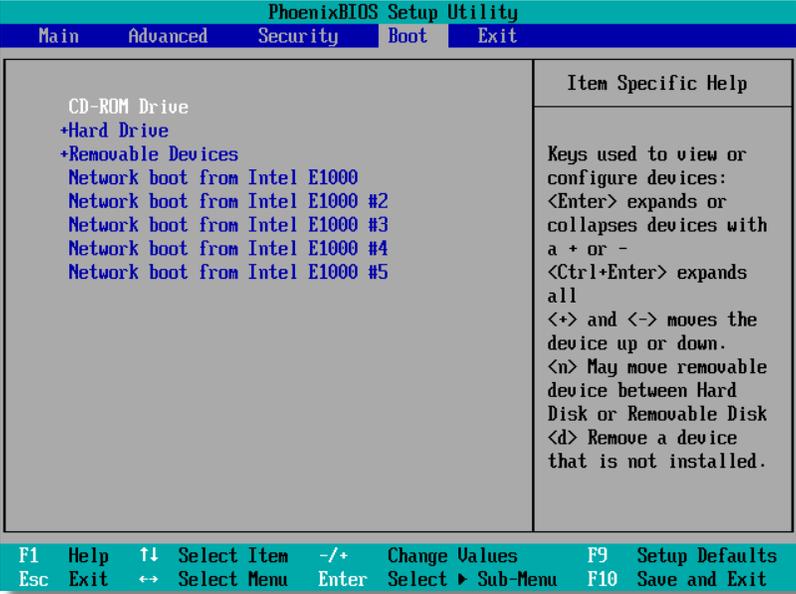
## 第3章 XenServer 的基本安装

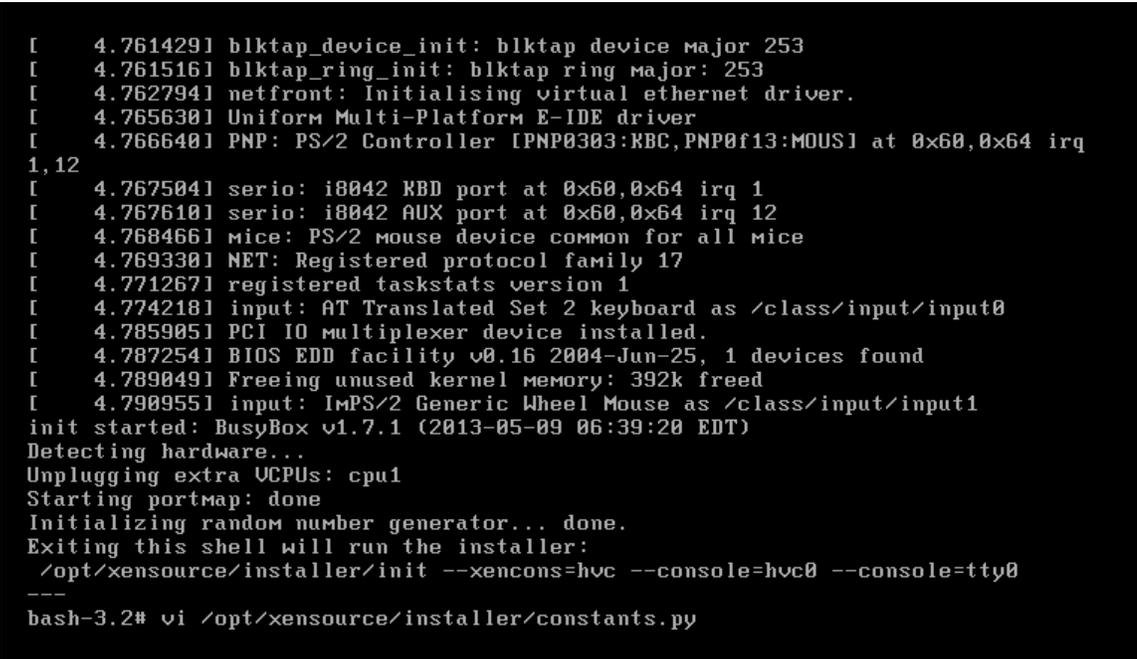
- XenServer的高级安装请参考工具包所附 <Xen400渠道培训-XenServer.ppt>中的XenServer 安装章节
- 安装XenServer，配置XenServer网络，及基本的安装设置
- 在管理工作站安装XenCenter，连接到XenServer，用以管理XenServer
- XenServer补丁安装、优化及启用多路径支持

### 3.1 XenServer 的安装

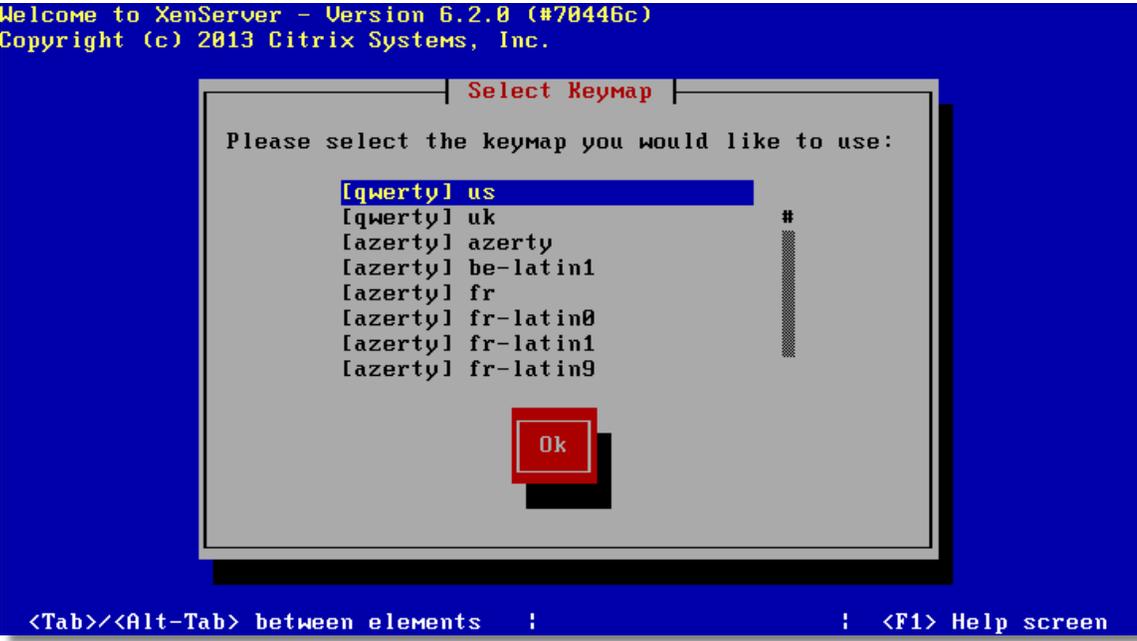
步骤	操作
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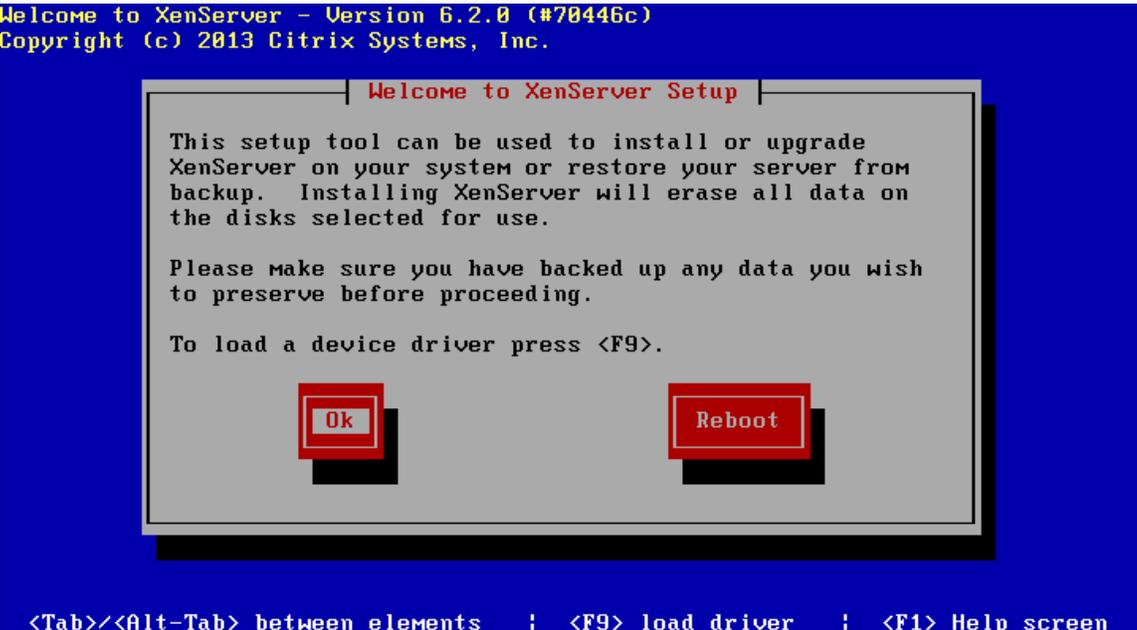
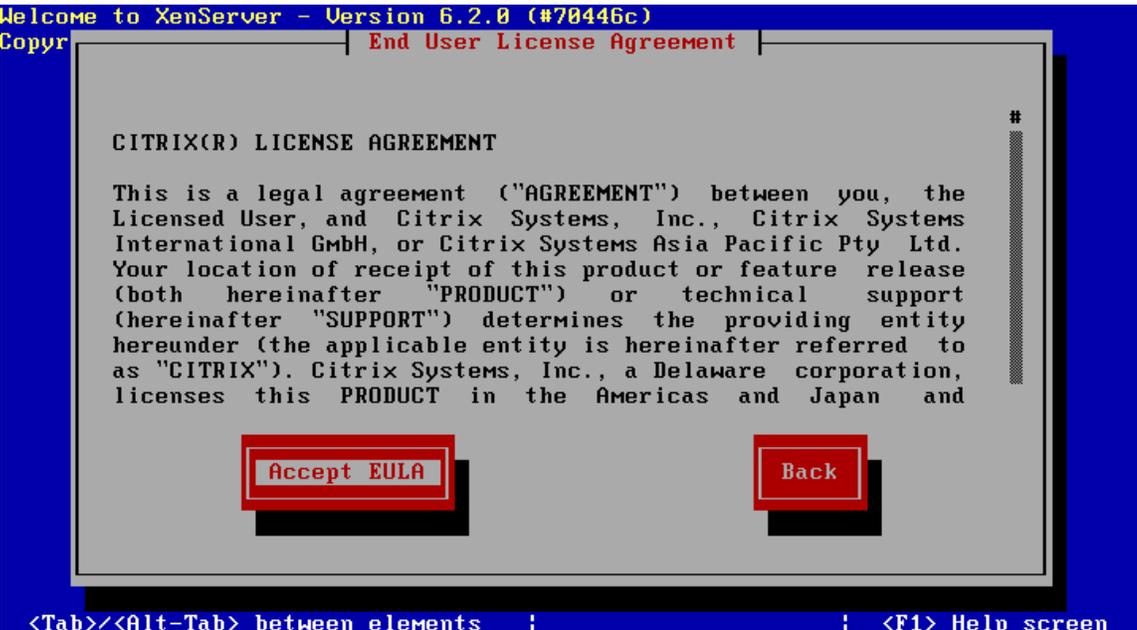
步骤	操作
<p>1.</p>	<p>注意，XenServer 属于 Type-1 的 Hypervisor，是直接安装在硬件上的，不需要底层操作系统的支持，下图说明了两种 Hypervisor 的区别</p> <h3 style="text-align: center;">Type-1 和 Type-2 Hypervisor</h3> <p>The diagram illustrates two types of Hypervisors:</p> <ul style="list-style-type: none"> <li><b>类型 1 (Type-1):</b> Shows a Host (宿主) containing two Virtual Machines (虚拟机 (VM) 1 and 虚拟机 (VM) 2) running on top of a Hypervisor (虚拟机监视器 (Hypervisor)). The Hypervisor is installed directly on the Computer Hardware (计算机硬件 (Hardware)). Examples listed are Xen, VMware ESX, and Microsoft Hyper-V.</li> <li><b>类型 2 (Type-2):</b> Shows a Host (宿主) containing two Virtual Machines (虚拟机 (VM) 1 and 虚拟机 (VM) 2) running on top of an Operating System (操作系统 (OS)). The OS is installed on top of the Hypervisor (虚拟机监视器 (Hypervisor)), which is installed on the Computer Hardware (计算机硬件 (Hardware)). An Application (应用) is also shown running on the OS. Examples listed are VMware Workstation, Oracle VirtualBox, QEMU, KVM, and Moka!</li> </ul>
<p>2.</p>	<p>服务器 BIOS 典型设置</p> <ul style="list-style-type: none"> <li>• BIOS 恢复出厂默认设置</li> <li>• 调准系统时钟</li> <li>• Enable VT or AMD/V, Disable VT-D</li> <li>• Disable C-state, Turbo mode</li> <li>• Disable executive lock bit</li> <li>• Enable remote console(if IBM server)</li> <li>• Boot Manager-&gt;Add Boot Option-&gt;选 Legacy only ( if IBM Server)</li> <li>• Disable Multi-thread (XD 项目需要的话开启)</li> <li>• 本地磁盘设置成 RAID1 或 RAID 1/0</li> <li>• 如果磁盘以前安装过 VMware 或其它 OS, 重新初始化 RAID 10</li> <li>• BIOS Power Regulator for Maximum Performance</li> </ul>

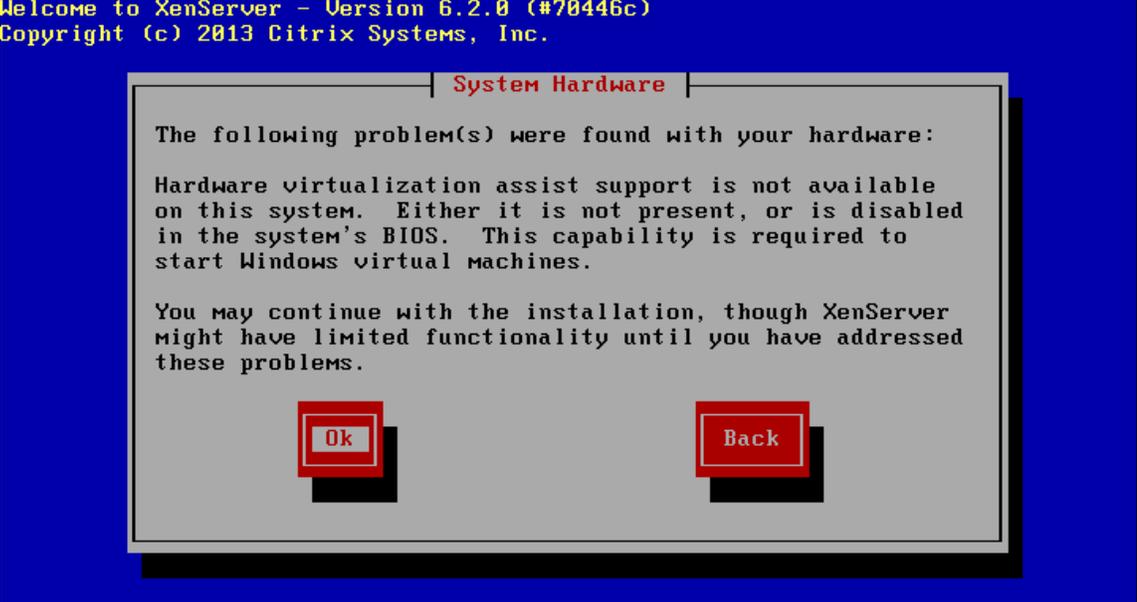
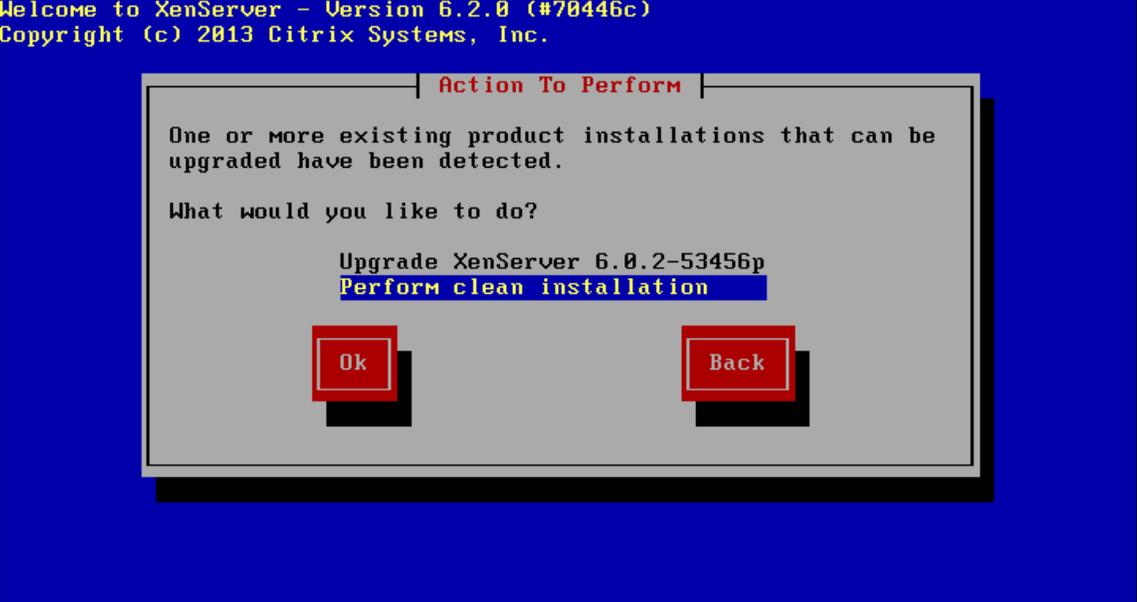
步骤	操作
<p>3.</p>	<p>将光盘放入主机驱动器，并从光盘启动 BIOS 设置光盘启动</p>  <p>The screenshot shows the PhoenixBIOS Setup Utility interface. At the top, there are tabs for Main, Advanced, Security, Boot, and Exit. The Boot menu is active, displaying a list of boot options: CD-ROM Drive (selected), Hard Drive, and Removable Devices. Under Removable Devices, there are five network boot options from Intel E1000. To the right of the list is an 'Item Specific Help' box containing instructions on how to navigate and configure devices. At the bottom, a legend lists function keys: F1 Help, Esc Exit, ↑ Select Item, ↔ Select Menu, -/+ Change Values, Enter Select Sub-Menu, F9 Setup Defaults, and F10 Save and Exit.</p>
<p>4.</p>	<p>启动按 F2，进入高级模式安装</p>  <p>The screenshot shows the XenServer installation screen. At the top, the Citrix logo and 'XenServer™' are displayed. Below the logo, the text reads 'Welcome to XenServer.' followed by '- To install or upgrade press the &lt;ENTER&gt; key.' At the bottom, there are instructions for keyboard shortcuts: '[F1-Standard] [F2-Advanced] [F3-XCP mode]' and a 'boot: _' prompt.</p>

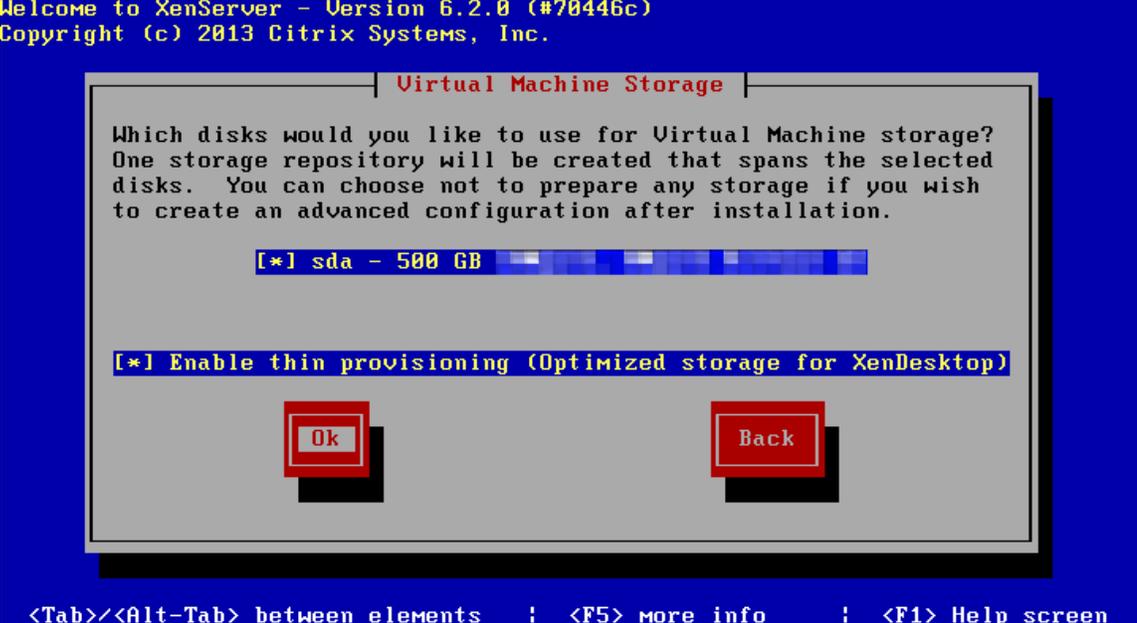
步骤	操作
5.	<p>键入 shell 进入高级安装模式命令行</p>  <pre> Welcome to XenServer.  - To install or upgrade press the &lt;ENTER&gt; key. - To install or upgrade without a serial console, type   no-serial &lt;ENTER&gt;. - To install or upgrade in safe mode, type safe &lt;ENTER&gt;. - To install or upgrade to a multipathed root disk, type multipath &lt;ENTER&gt;. - To boot into a shell prompt, type shell &lt;ENTER&gt;.   (This is an advanced option and should be used with care and as   directed by a Technical Support Representative.) - To perform a memory test, type memtest &lt;ENTER&gt;.  [F1-Standard] [F2-Advanced] [F3-XCP mode] boot: shell_ </pre>
6.	<p>调整磁盘 GPT 支持和 root 分区大小。输入命令，编辑文档 vi /opt/xensource/installer/constants.py</p>  <pre> [ 4.761429] blkmap_device_init: blkmap device major 253 [ 4.761516] blkmap_ring_init: blkmap ring major: 253 [ 4.762794] netfront: Initialising virtual ethernet driver. [ 4.765630] Uniform Multi-Platform E-IDE driver [ 4.766640] PNP: PS/2 Controller [PNP0303:KBC,PNP0f13:MOUS] at 0x60,0x64 irq 1,12 [ 4.767504] serio: i8042 KBD port at 0x60,0x64 irq 1 [ 4.767610] serio: i8042 AUX port at 0x60,0x64 irq 12 [ 4.768466] mice: PS/2 mouse device common for all mice [ 4.769330] NET: Registered protocol family 17 [ 4.771267] registered taskstats version 1 [ 4.774218] input: AT Translated Set 2 keyboard as /class/input/input0 [ 4.785905] PCI IO multiplexer device installed. [ 4.787254] BIOS EDD facility v0.16 2004-Jun-25, 1 devices found [ 4.789049] Freeing unused kernel memory: 392k freed [ 4.790955] input: ImPS/2 Generic Wheel Mouse as /class/input/input1 init started: BusyBox v1.7.1 (2013-05-09 06:39:20 EDT) Detecting hardware... Unplugging extra VCPUs: cpu1 Starting portmap: done Initializing random number generator... done. Exiting this shell will run the installer: /opt/xensource/installer/init --xencons=hvc --console=hvc0 --console=tty0 --- bash-3.2# vi /opt/xensource/installer/constants.py </pre>

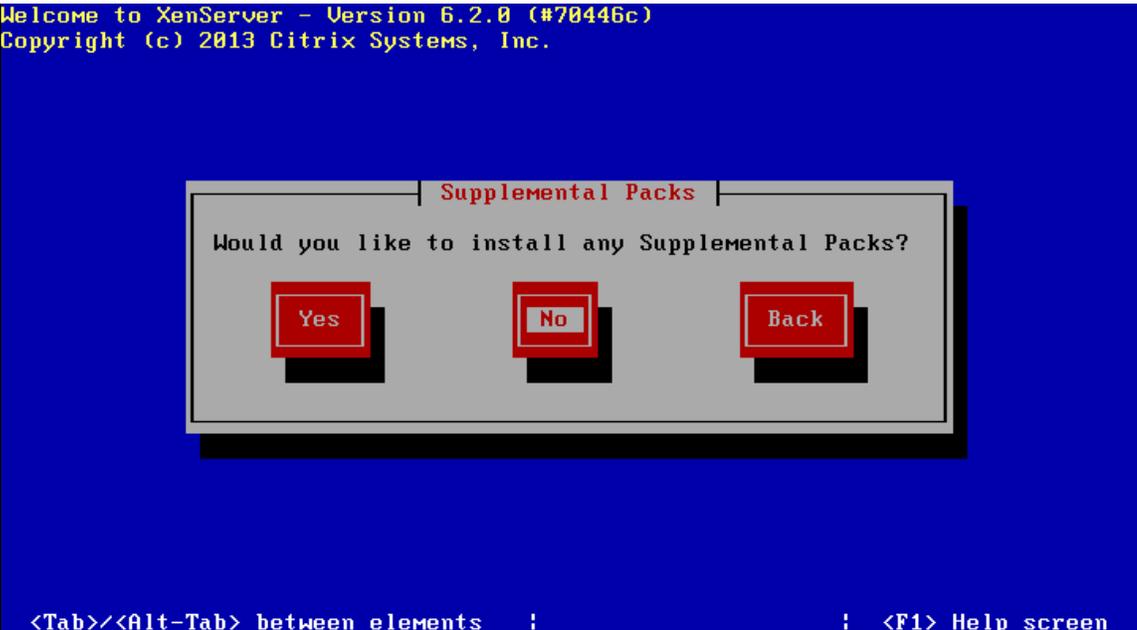
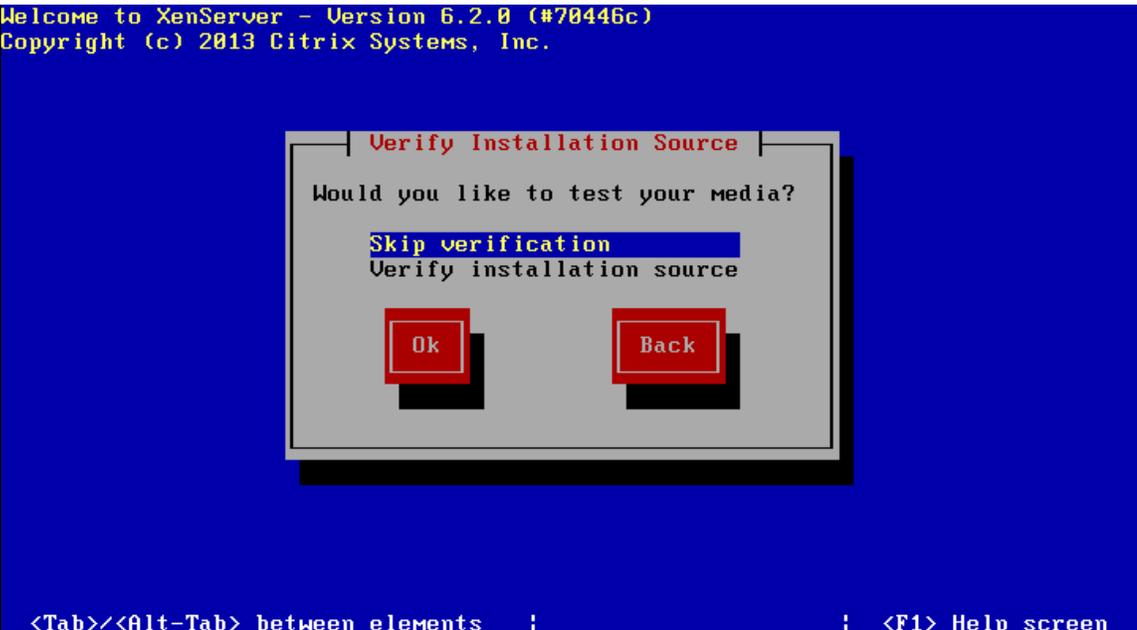
步骤	操作
7.	<p>按↓或向下滚动鼠标，一直浏览到大约 60%，找到红色框线的值</p> <pre> if with_hd:     return ERROR_STRING[ERROR_STRING_UNKNOWN_ERROR_WITH_HDI] % (logname, else:     return ERROR_STRING[ERROR_STRING_UNKNOWN_ERROR_WITHOUT_HDI] % lognam else:     return ERROR_STRING[ERROR_STRING_KNOWN_ERROR] % error  # minimum hardware specs: # memory checks should be done against MIN_SYSTEM_RAM_MB since libxc # reports the total system ram after the Xen heap. The UI should # display the value given by MIN_SYSTEM_RAM_MB_RAW. min_primary_disk_size = 12 #GB max_primary_disk_size_dos = 2047 #GB MIN_SYSTEM_RAM_MB_RAW = 1024 # MB MIN_SYSTEM_RAM_MB = MIN_SYSTEM_RAM_MB_RAW - 100  # Change this to True to enable GPT partitioning instead of DOS partitioning GPT_SUPPORT = True  XEN_MEM=1024 #GB XEN_WATCHDOG_TIMEOUT=300 #seconds  # filesystems and partitions (sizes in MB): root_size = 4096 - /opt/xensource/installer/constants.py 89/144 61% </pre>
8.	<p>修改成下面的值  GPT_SUPPORT = False #用来关闭对 GPT 磁盘的支持，使用 MBR 磁盘  root_size = 20480 #把默认的 root 分区 4096 默认值修改成 20480MB</p> <pre> if with_hd:     return ERROR_STRING[ERROR_STRING_UNKNOWN_ERROR_WITH_HDI] % (logname, else:     return ERROR_STRING[ERROR_STRING_UNKNOWN_ERROR_WITHOUT_HDI] % lognam else:     return ERROR_STRING[ERROR_STRING_KNOWN_ERROR] % error  # minimum hardware specs: # memory checks should be done against MIN_SYSTEM_RAM_MB since libxc # reports the total system ram after the Xen heap. The UI should # display the value given by MIN_SYSTEM_RAM_MB_RAW. min_primary_disk_size = 12 #GB max_primary_disk_size_dos = 2047 #GB MIN_SYSTEM_RAM_MB_RAW = 1024 # MB MIN_SYSTEM_RAM_MB = MIN_SYSTEM_RAM_MB_RAW - 100  # Change this to True to enable GPT partitioning instead of DOS partitioning GPT_SUPPORT = False  XEN_MEM=1024 #GB XEN_WATCHDOG_TIMEOUT=300 #seconds  # filesystems and partitions (sizes in MB): root_size = 20480 I /out/xensource/installer/constants.py [Modified] 95/144 65% </pre>

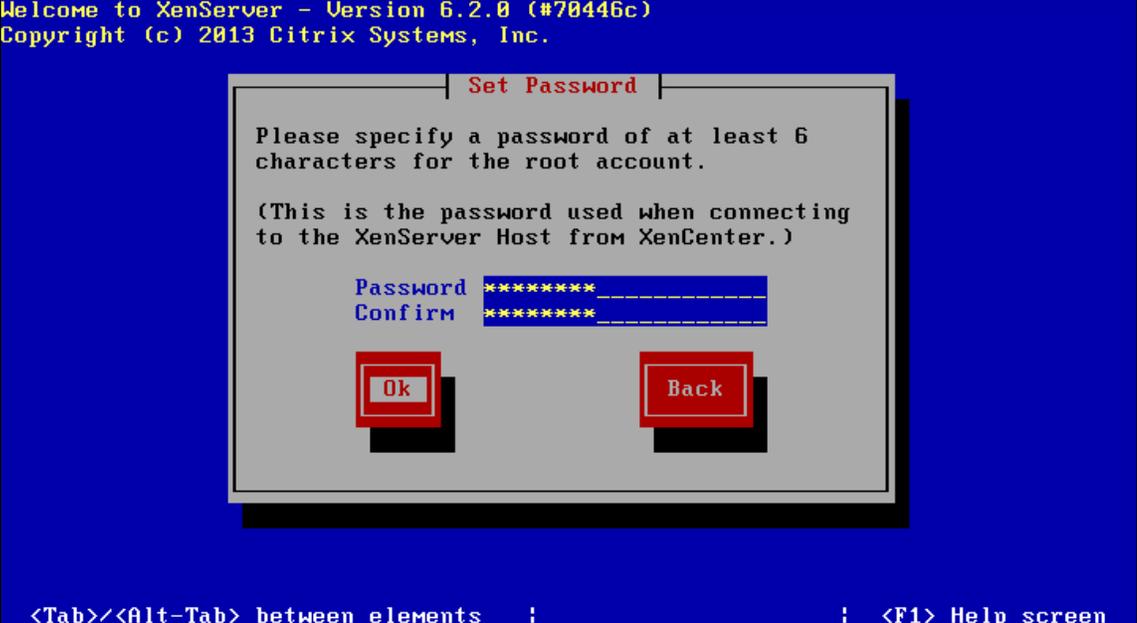
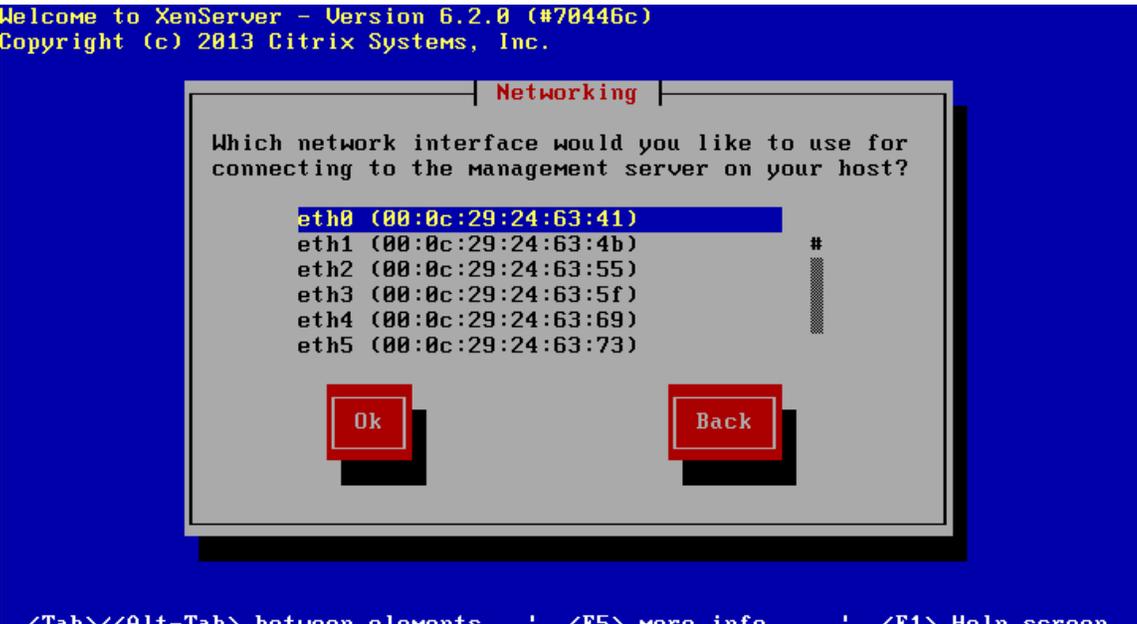
步骤	操作
<p>9.</p>	<p>按 ESC, 输入如下文本 :wq! 保存并退出</p> <pre> else:     return ERROR_STRINGS[ERROR_STRING_KNOWN_ERROR] % error  # minimum hardware specs: # memory checks should be done against MIN_SYSTEM_RAM_MB since libxc # reports the total system ram after the Xen heap. The UI should # display the value given by MIN_SYSTEM_RAM_MB_RAW. min_primary_disk_size = 12 #GB max_primary_disk_size_dos = 2047 #GB MIN_SYSTEM_RAM_MB_RAW = 1024 # MB MIN_SYSTEM_RAM_MB = MIN_SYSTEM_RAM_MB_RAW - 100  # Change this to True to enable GPT partitioning instead of DOS partitioning GPT_SUPPORT = False  XEN_MEM=1024 #GB XEN_WATCHDOG_TIMEOUT=300 #seconds  # filesystems and partitions (sizes in MB): root_size = 20480 rootfs_type = 'ext3' rootfs_label = "root-%s" % "".join([random.choice(string.ascii_lowercase)                                      for x in range(8)]) swap_location = '/var/swap/swap.001' :wq!_                     </pre>
<p>10.</p>	<p>输入 exit, 回到安装界面, 选择[qwerty] us</p>  <p>Welcome to XenServer - Version 6.2.0 (#70446c) Copyright (c) 2013 Citrix Systems, Inc.</p> <p>Select Keymap</p> <p>Please select the keymap you would like to use:</p> <ul style="list-style-type: none"> <li>[qwerty] us</li> <li>[qwerty] uk</li> <li>[azerty] azerty</li> <li>[azerty] be-latin1</li> <li>[azerty] fr</li> <li>[azerty] fr-latin0</li> <li>[azerty] fr-latin1</li> <li>[azerty] fr-latin9</li> </ul> <p>Ok</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>

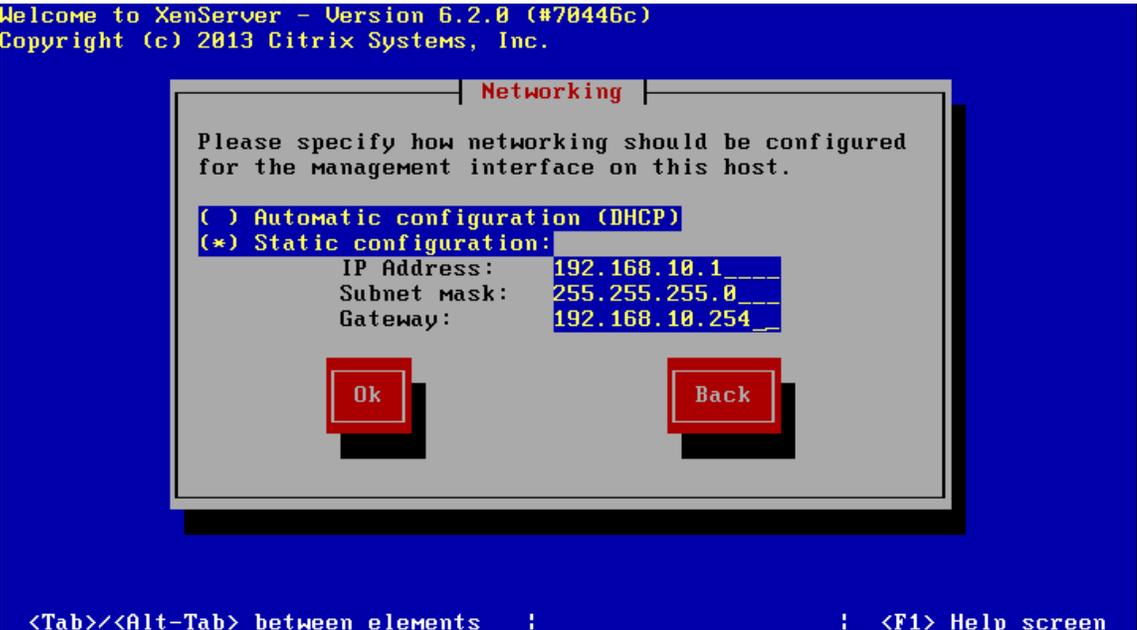
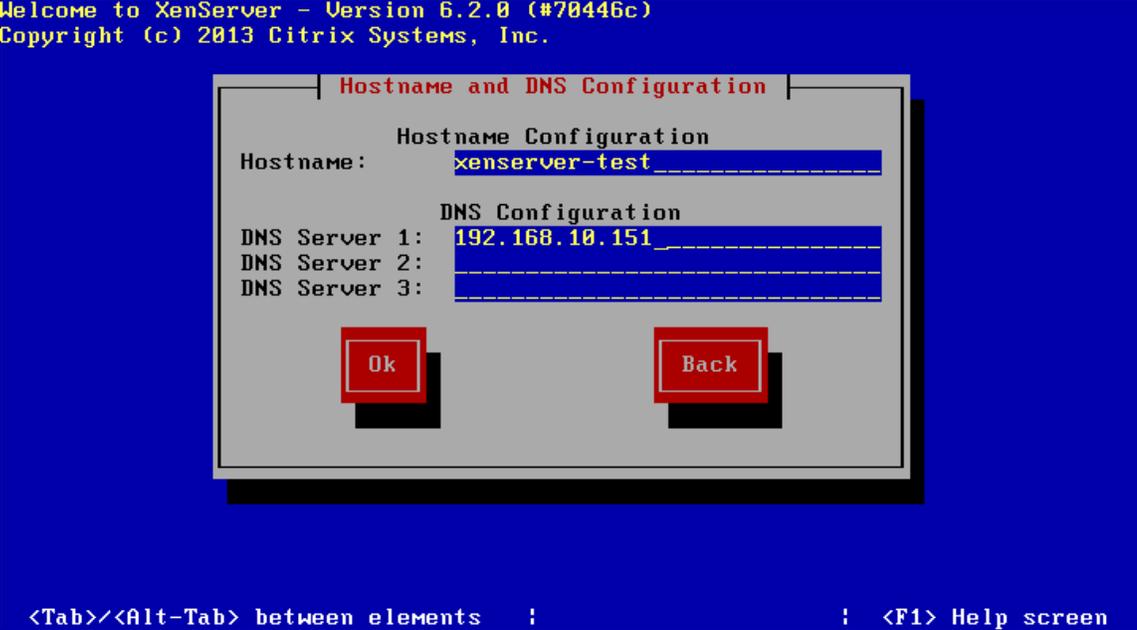
步骤	操作
11.	<p>点 OK</p>  <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; &lt;F9&gt; load driver ; &lt;F1&gt; Help screen</p>
12.	<p>点 Accept EULA</p>  <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; ; &lt;F1&gt; Help screen</p>

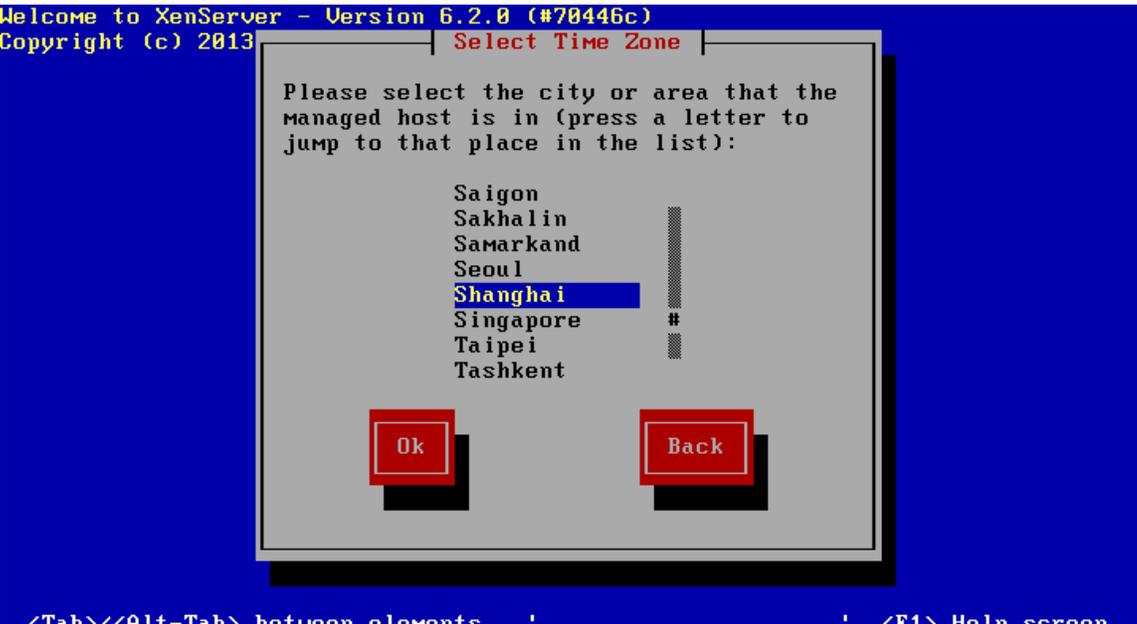
步骤	操作
<p>13.</p>	<p>如果出现这个警告，不必理会，点 OK</p>  <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>
<p>14.</p>	<p>如果之前安装过其他版本的 XenServer，选择“Perform clean installation”</p>  <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; &lt;F5&gt; more info ; &lt;F1&gt; Help screen</p>

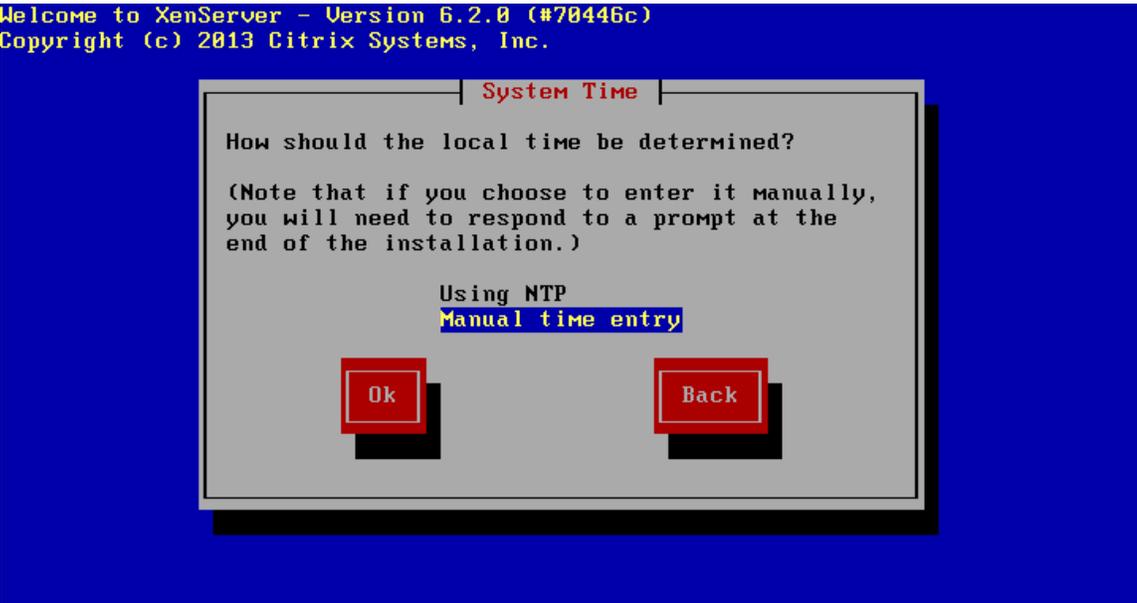
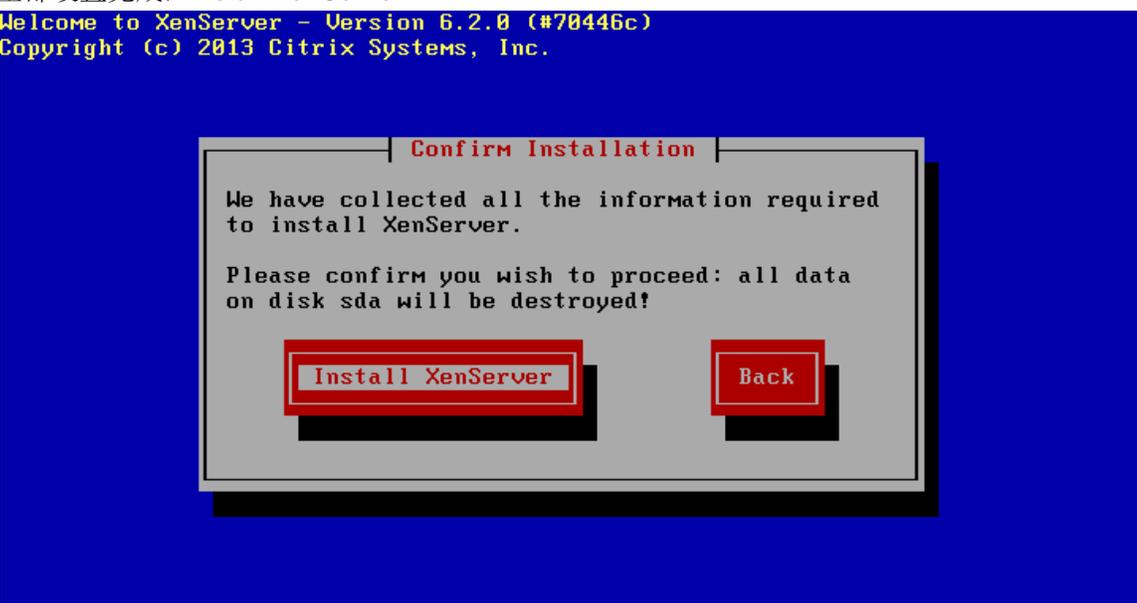
步骤	操作
<p>15.</p>	<p>选择 Enable thin provisioning(使用空格键选择), 为 XenDesktop 部署做优化</p>  <p>Which disks would you like to use for Virtual Machine storage? One storage repository will be created that spans the selected disks. You can choose not to prepare any storage if you wish to create an advanced configuration after installation.</p> <p>[*] sda - 500 GB</p> <p>[*] Enable thin provisioning (Optimized storage for XenDesktop)</p> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; &lt;F5&gt; more info ; &lt;F1&gt; Help screen</p>
<p>16.</p>	<p>选择 Local media</p>  <p>Please select the type of source you would like to use for this installation</p> <p>Local media HTTP or FTP NFS</p> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; ; &lt;F1&gt; Help screen</p>

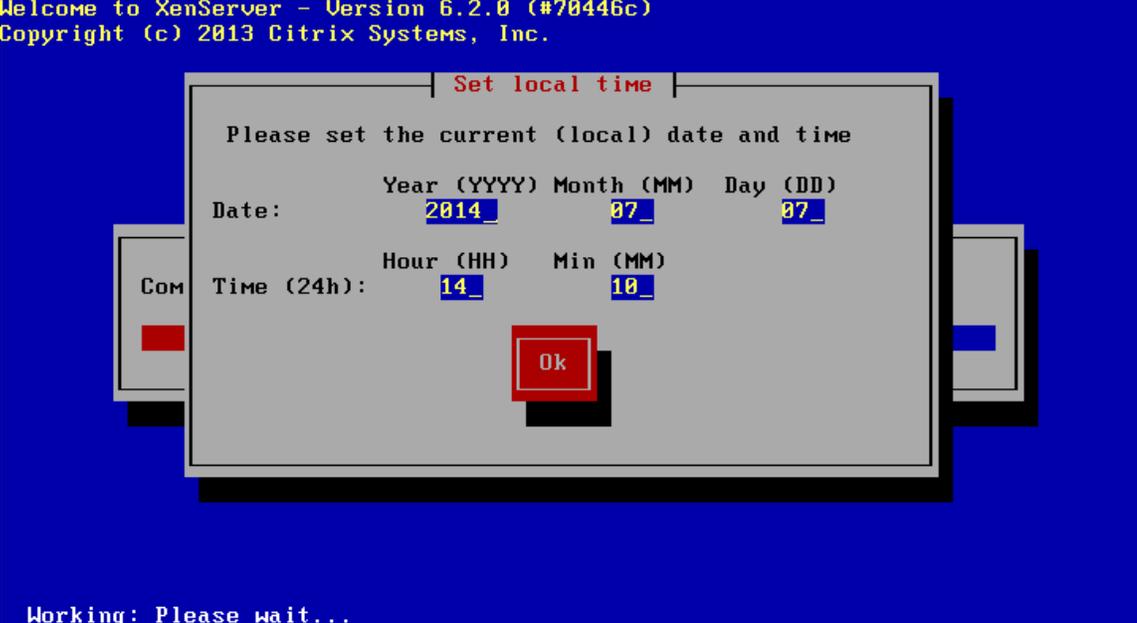
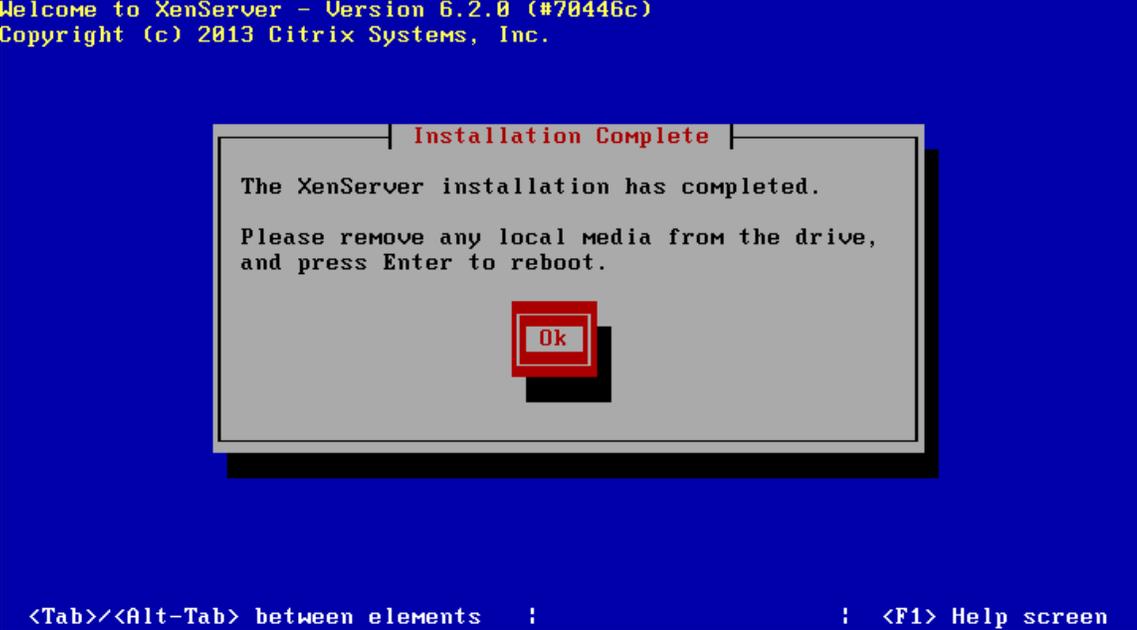
步骤	操作
<p>17.</p>	<p>Supplemental Packs 选择 No, 不安装帮助文档</p>  <p>                     Welcome to XenServer - Version 6.2.0 (#70446c)                      Copyright (c) 2013 Citrix Systems, Inc.                 </p> <p>                     Supplemental Packs                      Would you like to install any Supplemental Packs?                      Yes No Back                 </p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>
<p>18.</p>	<p>选择 Skip verification, 跳过安装介质检测</p>  <p>                     Welcome to XenServer - Version 6.2.0 (#70446c)                      Copyright (c) 2013 Citrix Systems, Inc.                 </p> <p>                     Verify Installation Source                      Would you like to test your media?                      Skip verification                      Verify installation source                      Ok Back                 </p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>

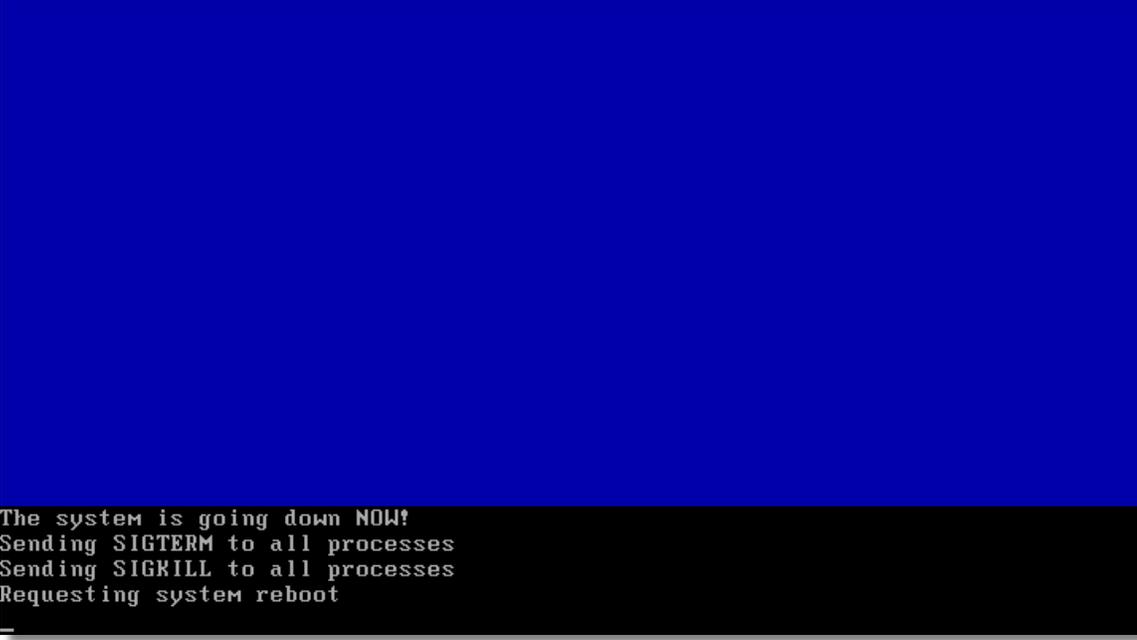
步骤	操作
<p>19.</p>	<p>输入并设置 XenServer 登录密码</p>  <p> <code>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; ; &lt;F1&gt; Help screen</code> </p>
<p>20.</p>	<p>选择第一个网卡作为管理网口</p>  <p> <code>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; &lt;F5&gt; more info ; &lt;F1&gt; Help screen</code> </p>

步骤	操作
<p>21.</p>	<p>输入 IP 地址、掩码及网关</p>  <p>Welcome to XenServer - Version 6.2.0 (#70446c) Copyright (c) 2013 Citrix Systems, Inc.</p> <p><b>Networking</b></p> <p>Please specify how networking should be configured for the management interface on this host.</p> <p>( ) Automatic configuration (DHCP) (* ) Static configuration:</p> <p>IP Address: 192.168.10.1 Subnet mask: 255.255.255.0 Gateway: 192.168.10.254</p> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>
<p>22.</p>	<p>输入 Host-name: XenServer-test, DNS Server 1: 192.168.10.151 192.168.10.151 是规划中的 DNS, 也是 AD 域控的地址</p>  <p>Welcome to XenServer - Version 6.2.0 (#70446c) Copyright (c) 2013 Citrix Systems, Inc.</p> <p><b>Hostname and DNS Configuration</b></p> <p>Hostname Configuration</p> <p>Hostname: xenserver-test</p> <p>DNS Configuration</p> <p>DNS Server 1: 192.168.10.151 DNS Server 2: DNS Server 3:</p> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; : &lt;F1&gt; Help screen</p>

步骤	操作
23.	<p>选择 Asia</p>  <p>                     Welcome to XenServer - Version 6.2.0 (#70446c)                      Copyright (c) 2013 C                 </p> <p>Select Time Zone</p> <p>Please select the geographical area that your XenServer Host is in:</p> <ul style="list-style-type: none"> <li>Antarctica</li> <li>Arctic</li> <li><b>Asia</b></li> <li>Atlantic #</li> <li>Australia</li> <li>Europe</li> <li>Indian</li> <li>Pacific</li> </ul> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; ; &lt;F1&gt; Help screen</p>
24.	<p>选择 Shanghai</p>  <p>                     Welcome to XenServer - Version 6.2.0 (#70446c)                      Copyright (c) 2013 C                 </p> <p>Select Time Zone</p> <p>Please select the city or area that the managed host is in (press a letter to jump to that place in the list):</p> <ul style="list-style-type: none"> <li>Saigon</li> <li>Sakhalin</li> <li>Samarkand</li> <li>Seoul</li> <li><b>Shanghai</b></li> <li>Singapore #</li> <li>Taipei</li> <li>Tashkent</li> </ul> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements ; ; &lt;F1&gt; Help screen</p>

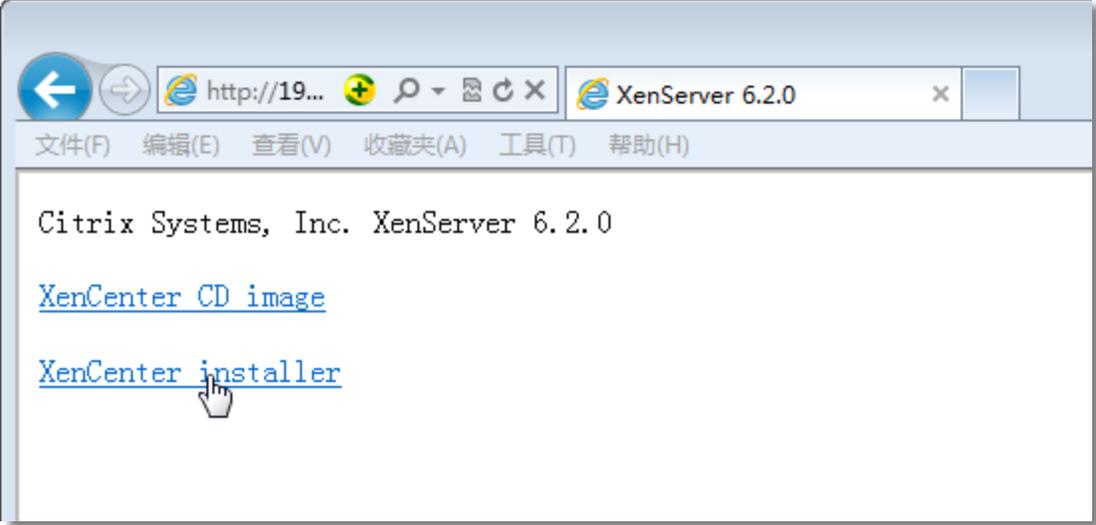
步骤	操作
<p>25.</p>	<p>选择 Manual time entry</p>  <p> <code>Welcome to XenServer - Version 6.2.0 (#70446c)</code>  <code>Copyright (c) 2013 Citrix Systems, Inc.</code> </p> <p> <b>System Time</b> </p> <p>How should the local time be determined?</p> <p>(Note that if you choose to enter it manually, you will need to respond to a prompt at the end of the installation.)</p> <p>Using NTP  <b>Manual time entry</b></p> <p>Ok Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements : : &lt;F1&gt; Help screen</p>
<p>26.</p>	<p>全部设置完成, Install XenServer</p>  <p> <code>Welcome to XenServer - Version 6.2.0 (#70446c)</code>  <code>Copyright (c) 2013 Citrix Systems, Inc.</code> </p> <p> <b>Confirm Installation</b> </p> <p>We have collected all the information required to install XenServer.</p> <p>Please confirm you wish to proceed: all data on disk sda will be destroyed!</p> <p>Install XenServer Back</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements : : &lt;F1&gt; Help screen</p>

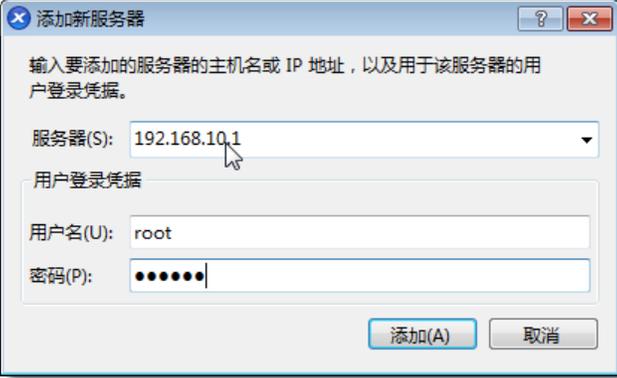
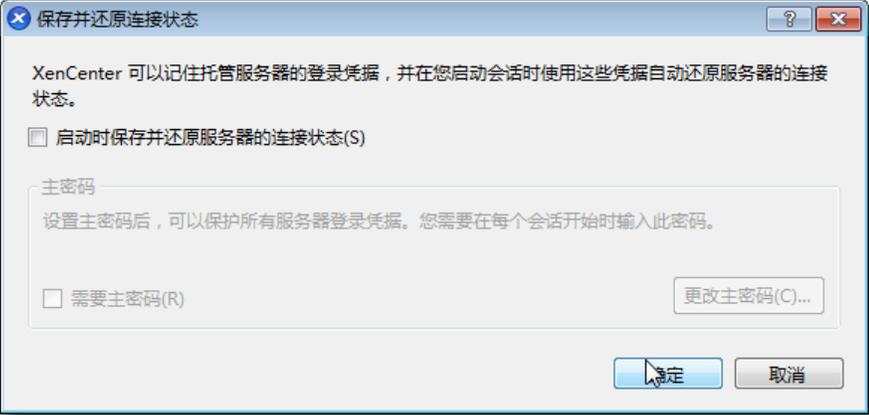
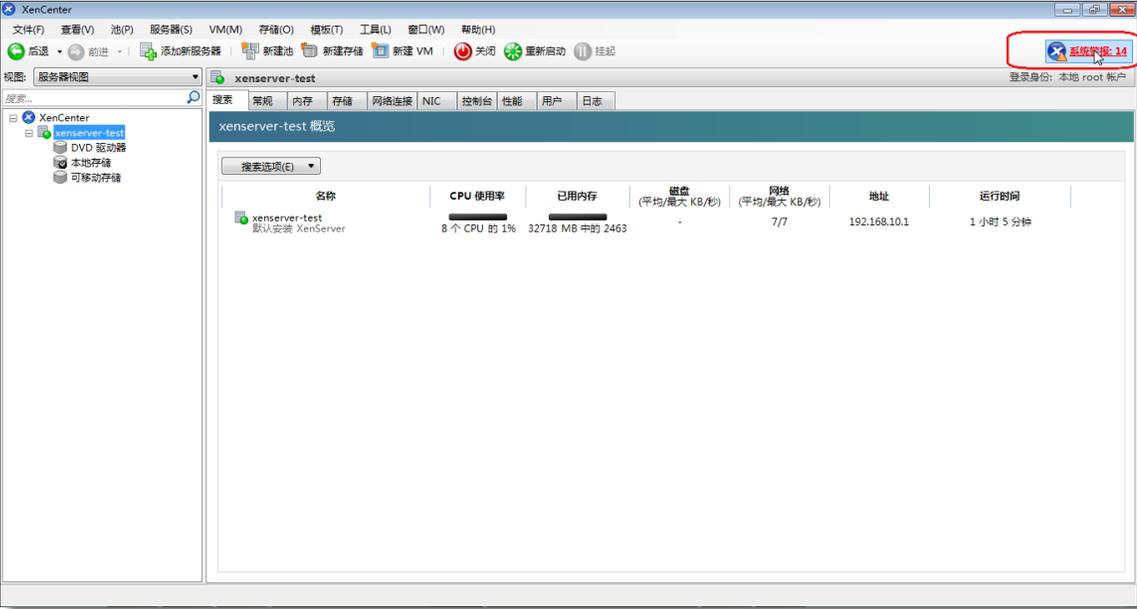
步骤	操作
<p>27.</p>	<p>安装接近尾声时，设置正确的时间</p>  <p>Welcome to XenServer - Version 6.2.0 (#70446c) Copyright (c) 2013 Citrix Systems, Inc.</p> <p><b>Set local time</b></p> <p>Please set the current (local) date and time</p> <p>Date: Year (YYYY) Month (MM) Day (DD) 2014 07 07</p> <p>Time (24h): Hour (HH) Min (MM) 14 10</p> <p>Ok</p> <p>Working: Please wait...</p>
<p>28.</p>	<p>点击 OK</p>  <p>Welcome to XenServer - Version 6.2.0 (#70446c) Copyright (c) 2013 Citrix Systems, Inc.</p> <p><b>Installation Complete</b></p> <p>The XenServer installation has completed.</p> <p>Please remove any local media from the drive, and press Enter to reboot.</p> <p>Ok</p> <p>&lt;Tab&gt;/&lt;Alt-Tab&gt; between elements : : &lt;F1&gt; Help screen</p>

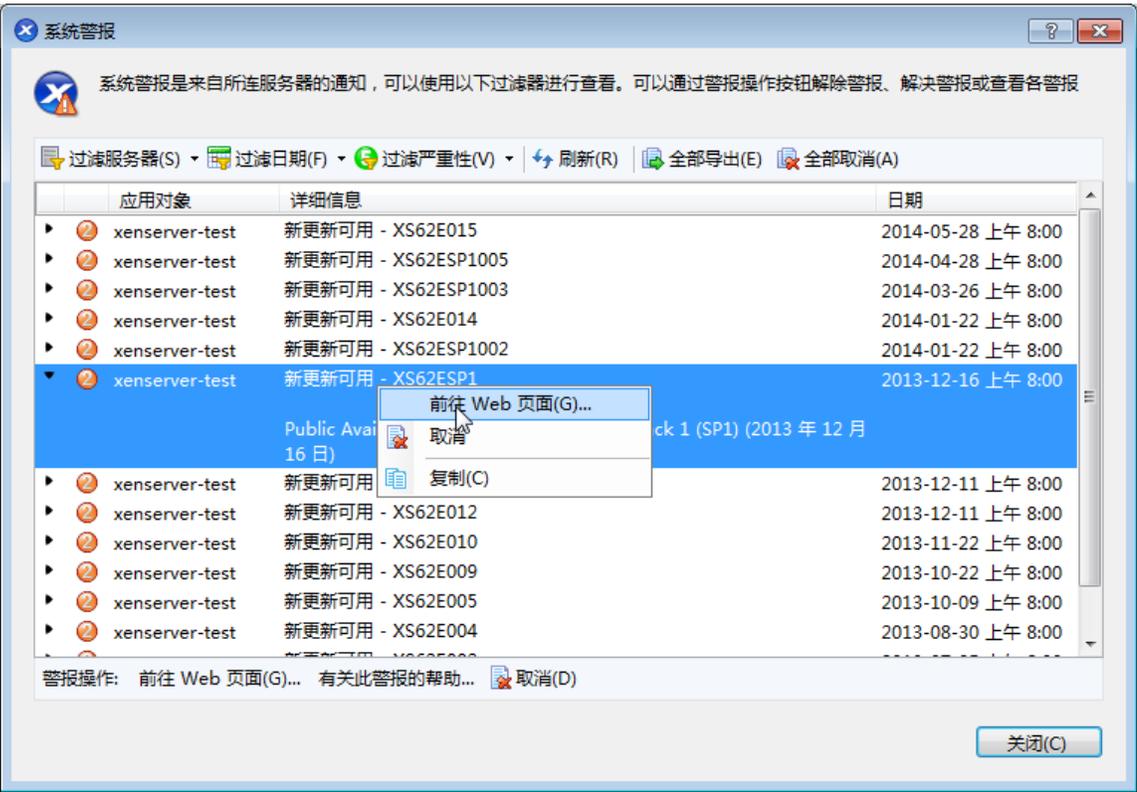
步骤	操作
29.	<p>等待完成，重启。至此，XenServer 服务器安装完成</p>  <pre>The system is going down NOW! Sending SIGTERM to all processes Sending SIGKILL to all processes Requesting system reboot</pre>

## 3.2 XenServer 补丁的安装

在完成了 XenServer 的安装以后，我们可以在任意一台 PC 上安装 XenCenter 来管理 XenServer。

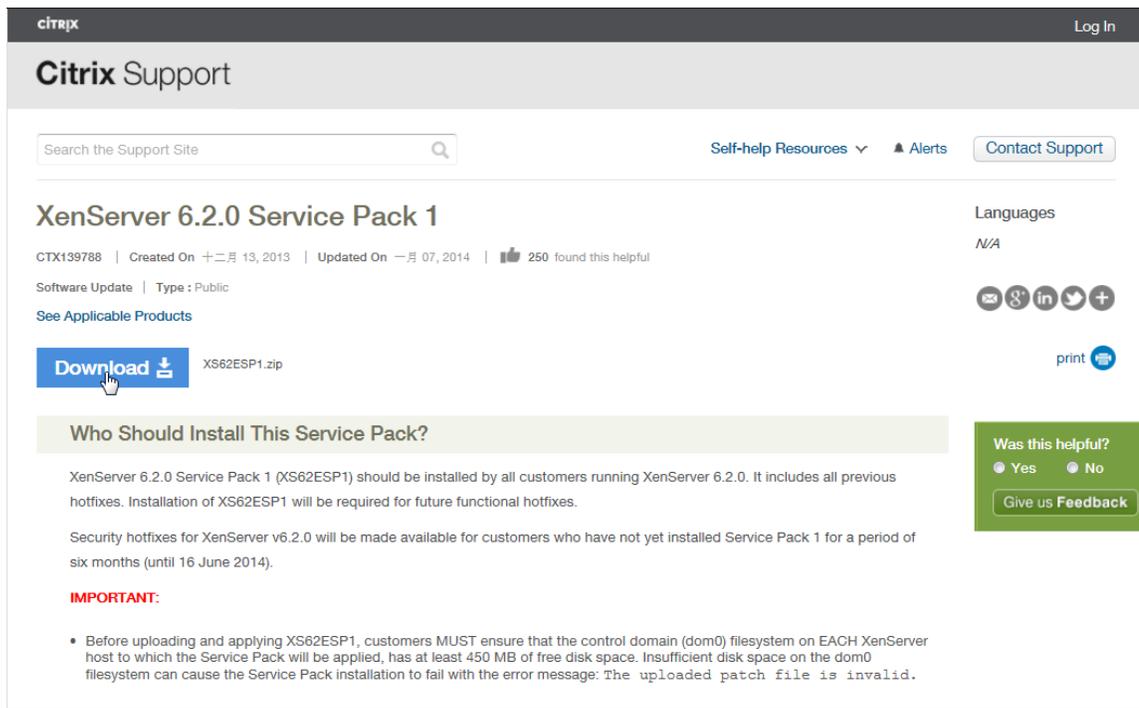
步骤	操作
1.	<p>XenCenter 中文版可以到 Citrix 的 Sharefile 下载（vGPU 项目不适用此版本 XenCenter）  <a href="https://citrix.sharefile.com/download.aspx?id=af9ba826d0c844c3">https://citrix.sharefile.com/download.aspx?id=af9ba826d0c844c3</a>                      或者直接输入 <a href="http://192.168.10.1/">http://192.168.10.1/</a> 下载 XenCenter installer（英文版）</p> 
2.	<p>运行 msi 文件，安装 XenCenter，过程略。</p>
3.	<p>打开 XenCenter，点击“添加服务器”</p> 

步骤	操作														
4.	<p>输入服务器地址，填写用户名，root，和密码</p> 														
5.	<p>点击确定</p> 														
6.	<p>如果用来管理 XenServer 的 PC 可以连接 internet，那么在 XenCenter 启动后，XenCenter 会自动连接 Internet 查找更新。在 XenCenter 的右上角，点击“系统警报”</p>  <table border="1" data-bbox="516 1465 1442 1518"> <thead> <tr> <th>名称</th> <th>CPU 使用率</th> <th>已用内存</th> <th>磁盘 (平均/最大 KB/秒)</th> <th>网络 (平均/最大 KB/秒)</th> <th>地址</th> <th>运行时间</th> </tr> </thead> <tbody> <tr> <td>xenserver-test</td> <td>8 个 CPU 的 1%</td> <td>32718 MB 中的 2463</td> <td>-</td> <td>7/7</td> <td>192.168.10.1</td> <td>1 小时 5 分钟</td> </tr> </tbody> </table>	名称	CPU 使用率	已用内存	磁盘 (平均/最大 KB/秒)	网络 (平均/最大 KB/秒)	地址	运行时间	xenserver-test	8 个 CPU 的 1%	32718 MB 中的 2463	-	7/7	192.168.10.1	1 小时 5 分钟
名称	CPU 使用率	已用内存	磁盘 (平均/最大 KB/秒)	网络 (平均/最大 KB/秒)	地址	运行时间									
xenserver-test	8 个 CPU 的 1%	32718 MB 中的 2463	-	7/7	192.168.10.1	1 小时 5 分钟									

步骤	操作
7.	<p>右键点击 XS62ESP1，前往 Web 页面</p>  <p>The screenshot shows the '系统警报' (System Alerts) window. At the top, there is a header with a search icon and a close button. Below the header is a descriptive text: '系统警报是来自所连服务器的通知，可以使用以下过滤器进行查看。可以通过警报操作按钮解除警报、解决警报或查看各警报'.</p> <p>Below the text are several filter buttons: '过滤服务器(S)', '过滤日期(F)', '过滤严重性(V)', '刷新(R)', '全部导出(E)', and '全部取消(A)'. The main area is a table with columns: '应用对象', '详细信息', and '日期'. The table contains several rows of alerts, all from 'xenserver-test'. The row for '新更新可用 - XS62ESP1' is selected and highlighted in blue. A right-click context menu is open over this row, showing options: '前往 Web 页面(G)...', '取消', and '复制(C)'. At the bottom of the window, there is a '警报操作:' section with '前往 Web 页面(G)...', '有关此警报的帮助...', and '取消(D)'. A '关闭(C)' button is located at the bottom right of the window.</p>

步骤 操作

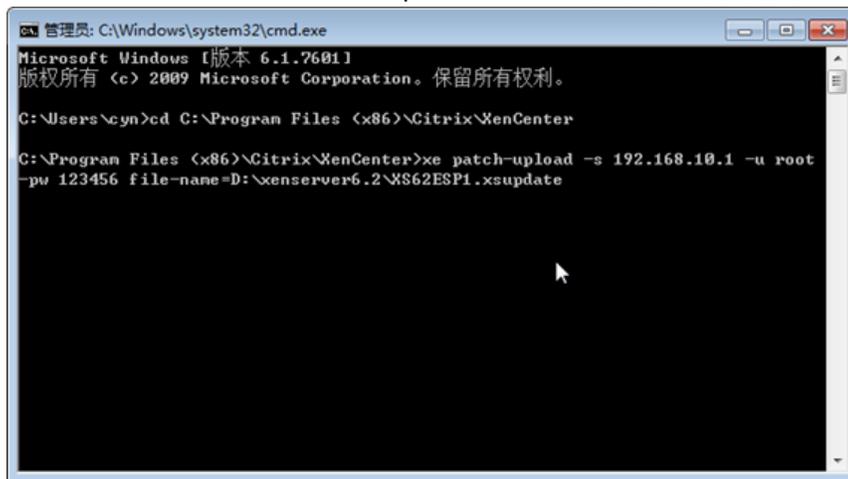
8. 下载补丁



下载完成后大小大约 200mb，放到 d:\XenServer6.2 目录

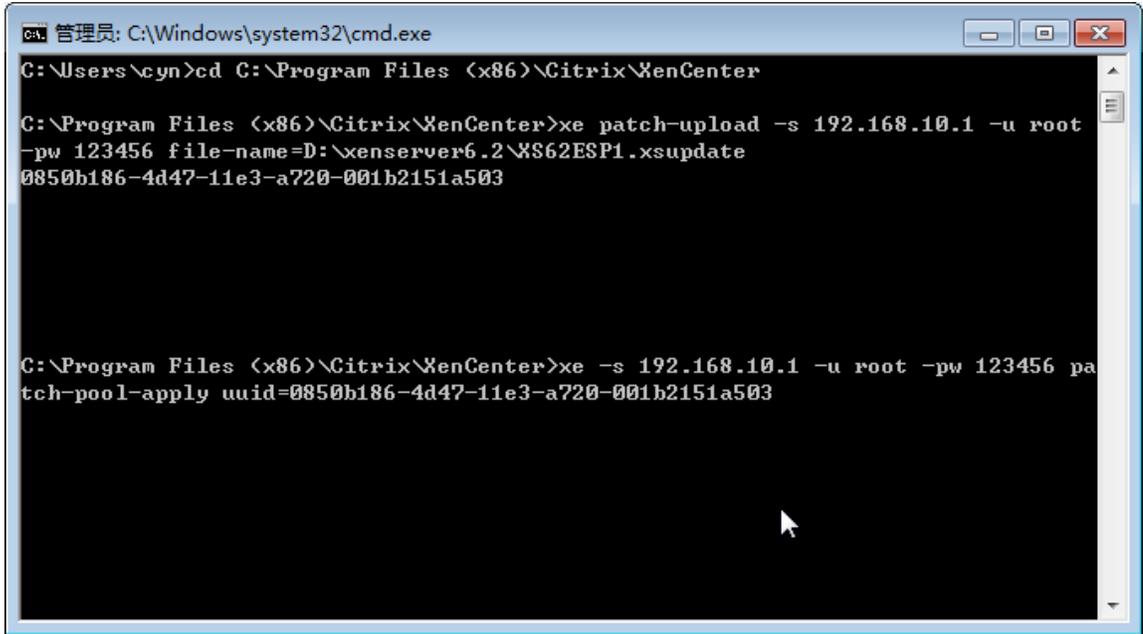
名称	修改日期	类型	大小
XS62ESP1.xsupdate	2013-12-10 12:58	XenServer Upda...	213,477 KB

9. 使用命令：`xe patch-upload -s 192.168.10.1 -u root -pw 123456 file-name=D:\XenServer6.2\XS62ESP1.xsupdate`  
 注：  
 192.168.10.1 #XenServer 的 IP 地址  
 root #XenServer 的登录用户名  
 123456 #XenServer 的登录密码  
 D:\XenServer6.2\XS62ESP1.xsupdate #补丁在上传计算机上的路径



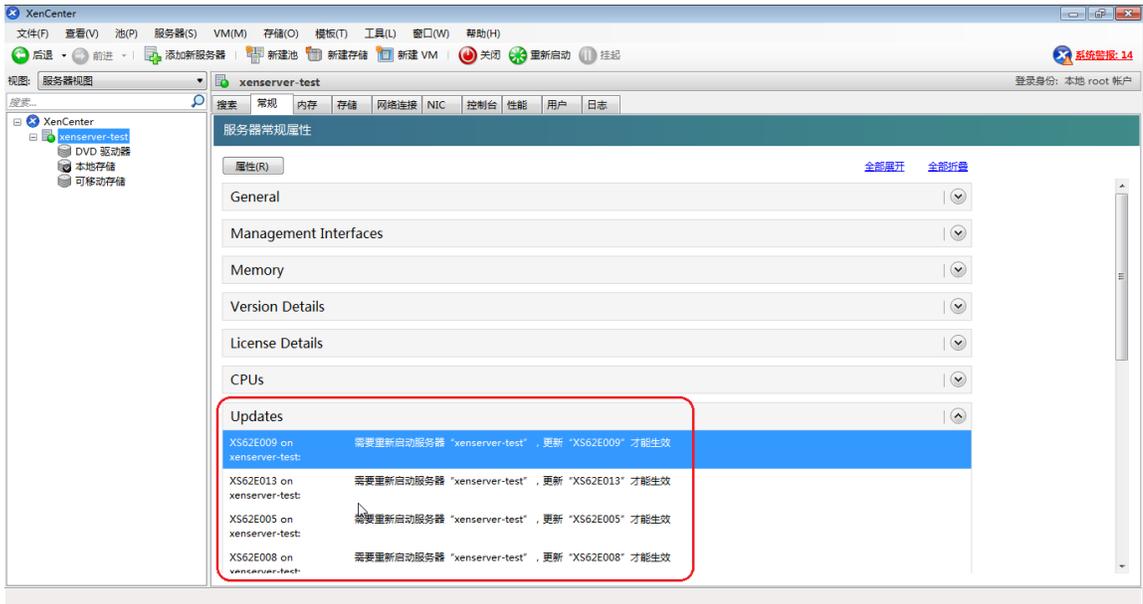
步骤	操作
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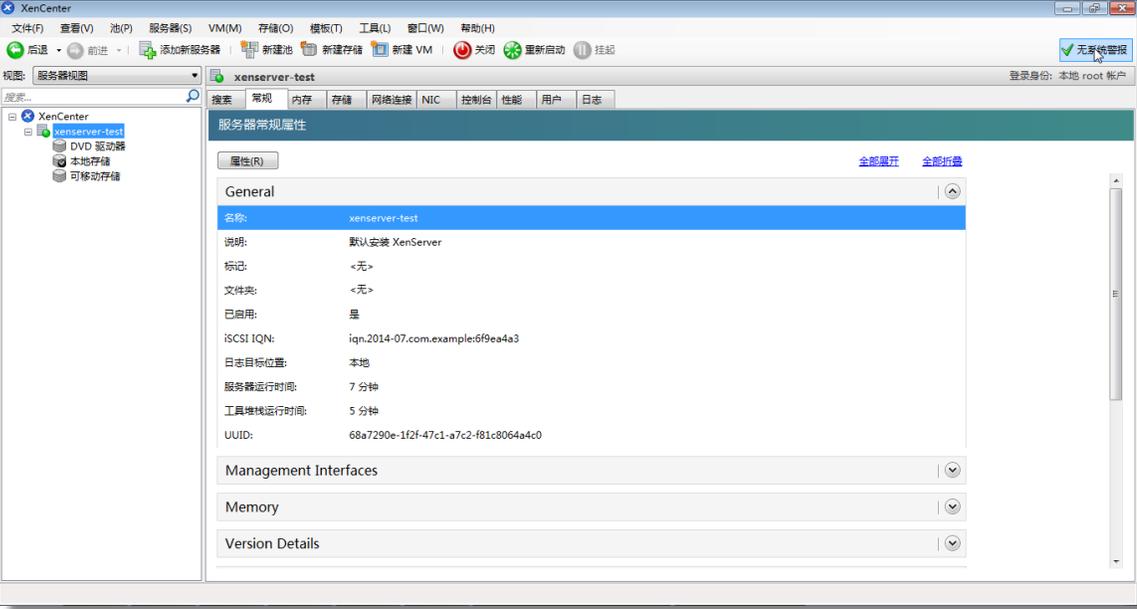
10. 上传完成后可以获得一串 UUID 号，如：0850b186-4d47-11e3-a720-001b2151a503  
通过命令行打补丁  
xe -s 192.168.10.1 -u root -pw 123456 patch-pool-apply uuid=0850b186-4d47-11e3-a720-001b2151a503



关于通过命令行为 XenServer 安装补丁，请参考  
<http://support.citrix.com/article/CTX132791>

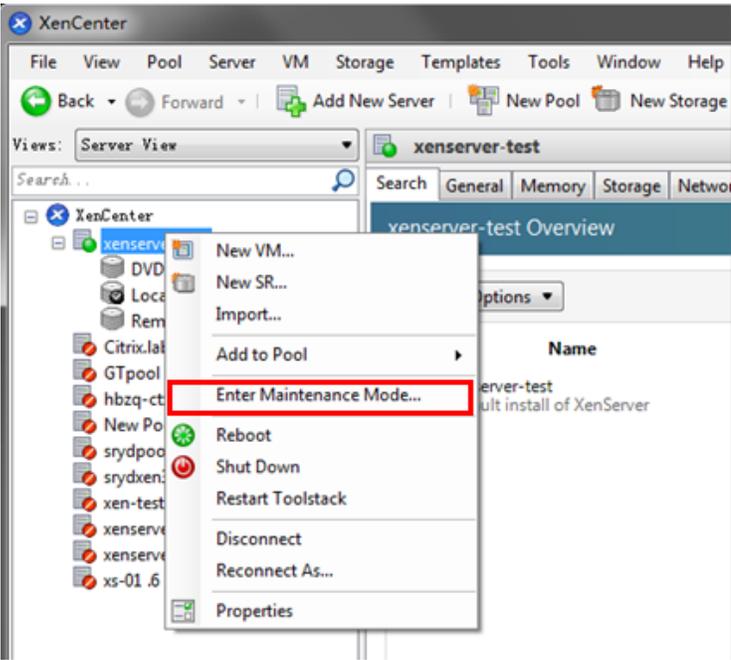
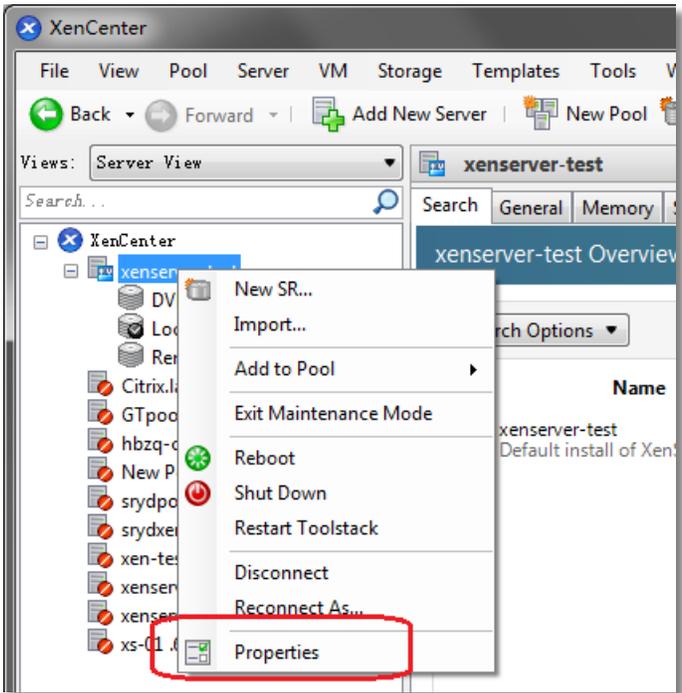
11. 回到 XenCenter，可以看到补丁已经安装完毕，需要重启使补丁生效

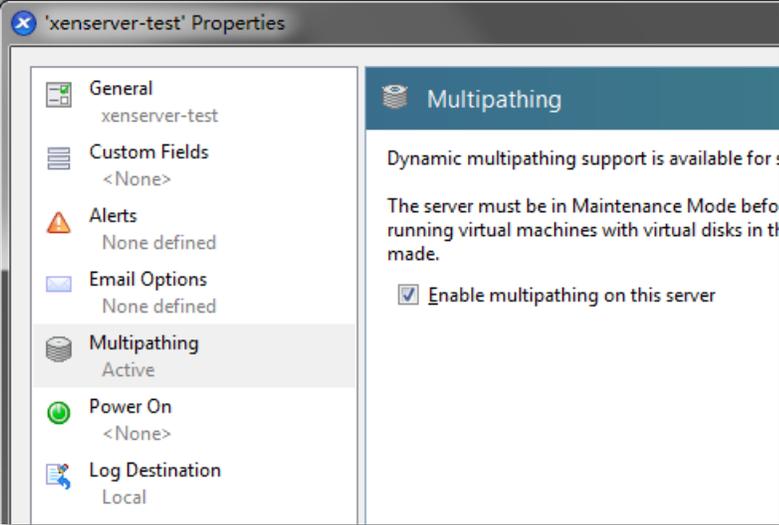
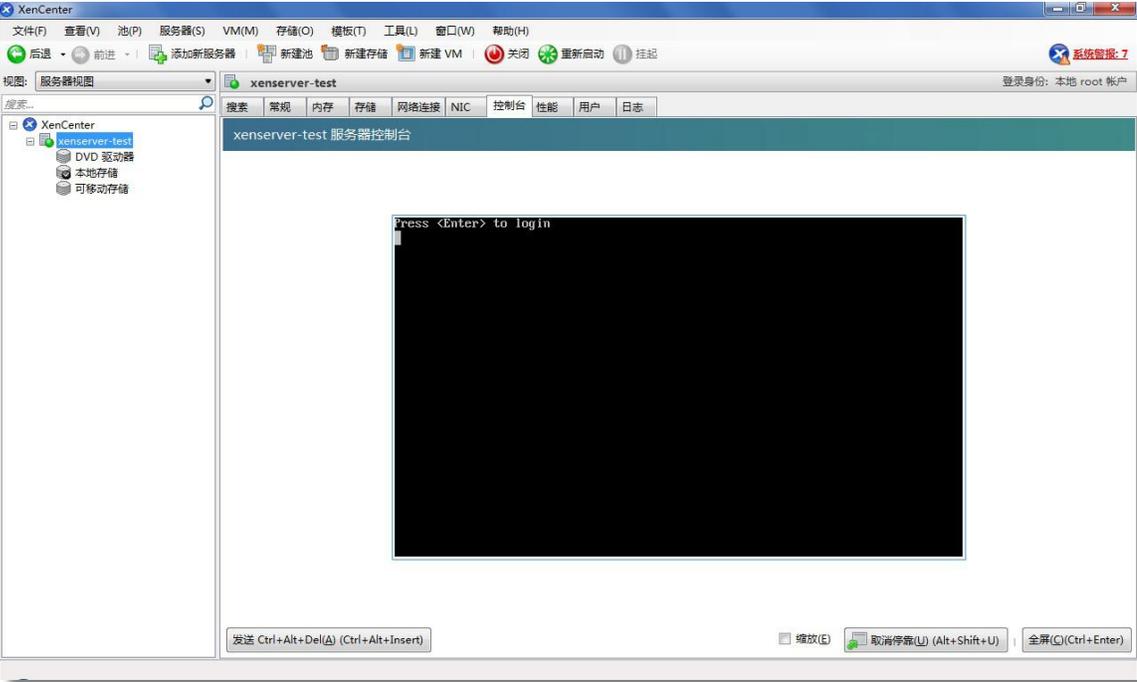


步骤	操作
12.	<p>重启后，看到右上角没有告警。如还有其他补丁请参考以上步骤安装补丁，也可等后续导入 lic 后使用 XenCenter 直接来安装补丁。</p> 

至此，XenServer补丁安装及优化完成。

### 3.3 XenServer 启用多路径支持

步骤	操作
1.	<p>在图形界面启用 DMP 多路径支持 进入维护模式（Enter Maintenance Mode）</p>  <p>The screenshot shows the XenCenter interface with a context menu open over a server. The menu items include: New VM..., New SR..., Import..., Add to Pool, Enter Maintenance Mode... (highlighted with a red box), Reboot, Shut Down, Restart Toolstack, Disconnect, Reconnect As..., and Properties.</p>
2.	<p>点属性</p>  <p>The screenshot shows the XenCenter interface with a context menu open over a server. The menu items include: New SR..., Import..., Add to Pool, Exit Maintenance Mode, Reboot, Shut Down, Restart Toolstack, Disconnect, Reconnect As..., and Properties (highlighted with a red box).</p>

步骤	操作
<p>3.</p>	<p>找到如下项，勾选“Enable multipathing on this server” 完成后会重新扫描存储。在创建虚拟机之前记得退出维护模式!!</p> 
<p>4.</p>	<p>备注：如果是 LSI 的存储，还需要增加在命令行下配置启用多路径支持 点击控制台，进入命令行控制台</p>  <p>键入命令</p> <pre># /opt/xensource/libexec/mpp-rdac -enable</pre> <pre>[root@xenserver-test /]# /opt/xensource/libexec/mpp-rdac --enable</pre> <pre>[root@xenserver-test /]# _</pre> <p>注意</p> <p>mpp-rdac --enable 是启用 MPP 多路径，这种多路径只是对 LSI 的存储起作用，所以只有在 LSI 存储的情况下才需要同时做两种配置。</p>

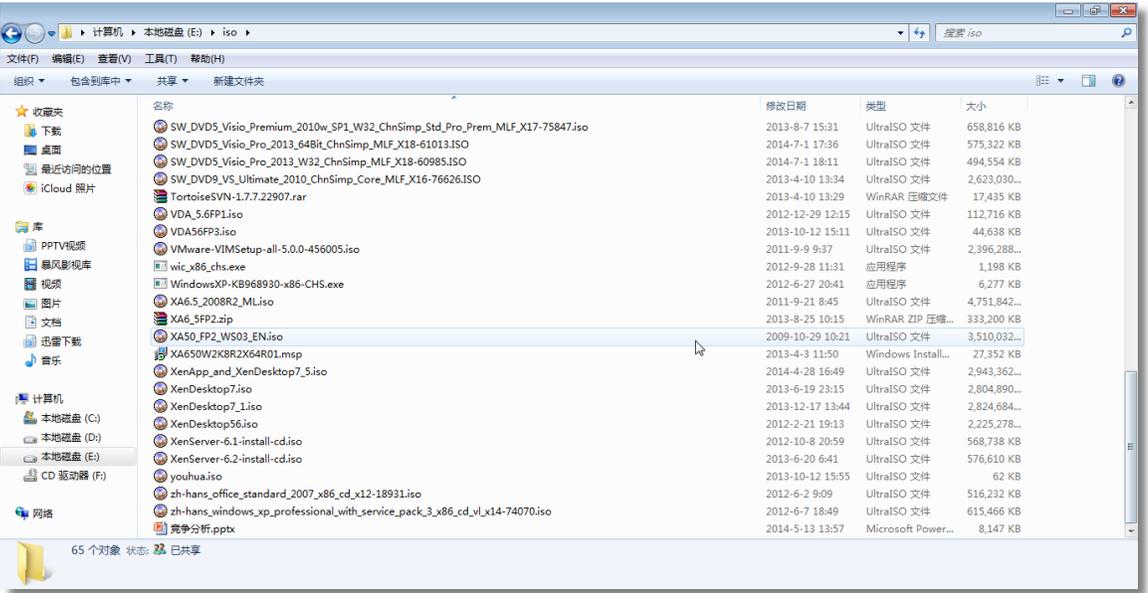
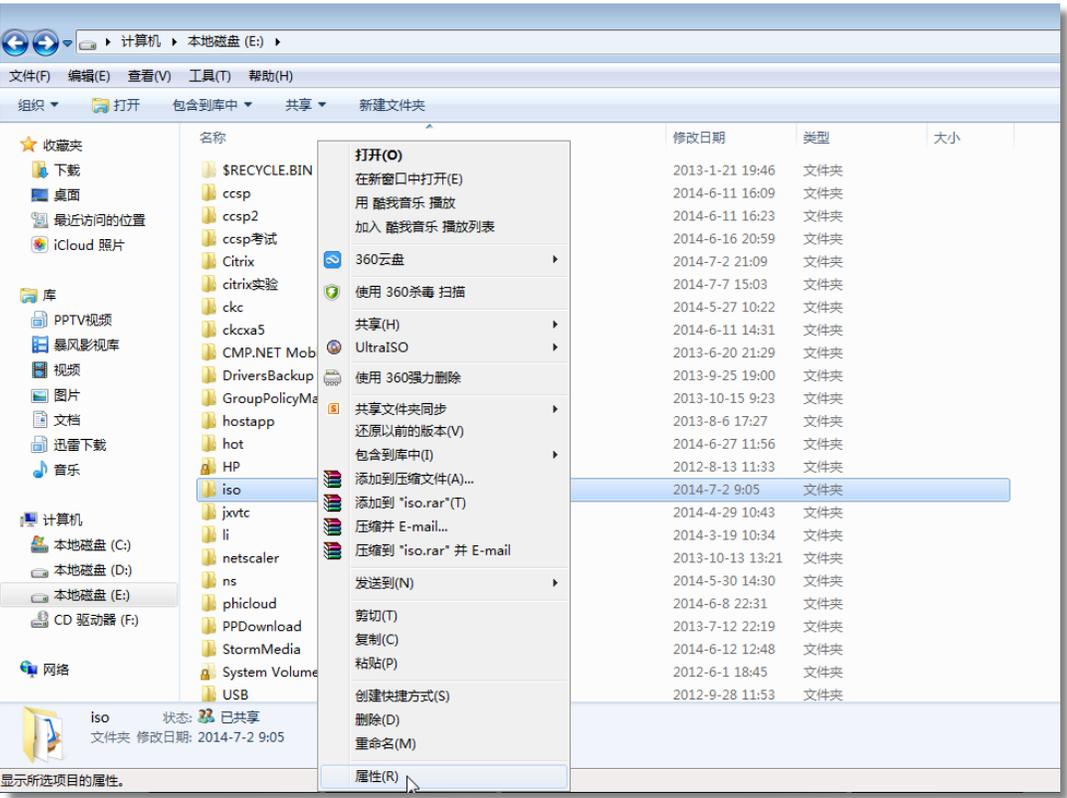
### 3.4 XenServer dom0 优化

Dom0 是用于控制和管理 XenServer，在某些情况下，XenServer 上虚拟机负载过大时，有可能导致 Dom0 出问题，所以，需要增加 Dom0 的运算性能，这时候可以增加 Dom0 vCPUs 数量来提高 XenServer 稳定性。

步骤	操作
1.	<p>登录 XenServer 控制台，使用 <code>/usr/lib/xen/bin/host-cpu-tune advise</code> 查看 XenServer 推荐的 Dom0 的 vCPU</p> <pre>[root@xenserver-test ~]# /usr/lib/xen/bin/host-cpu-tune advise Citrix recommends assigning 4 vCPUs to dom0, not using pinning. This can be achieved by running:  /usr/lib/xen/bin/host-cpu-tune set 4 nopin  [root@xenserver-test ~]#</pre>
2.	<p>本 PoC 中，命令提示推荐使用 4 个 VCPU。</p> <pre>[root@xenserver-test ~]# /usr/lib/xen/bin/host-cpu-tune advise Citrix recommends assigning 4 vCPUs to dom0, not using pinning. This can be achieved by running:  /usr/lib/xen/bin/host-cpu-tune set 4 nopin  [root@xenserver-test ~]#</pre>
3.	<p>使用 <code>/usr/lib/xen/bin/host-cpu-tune set 4 nopin</code> 命令设置 4 个 vCPU            详细请参考 <a href="http://support.citrix.com/article/CTX139714">http://support.citrix.com/article/CTX139714</a></p> <pre>[root@xenserver-test ~]# /usr/lib/xen/bin/host-cpu-tune set 4 nopin Configuration successfully applied. Reboot this host NOW. [root@xenserver-test ~]#</pre>
4.	<p>完成后重启服务器            输入 <code>reboot</code> 重启</p> <pre>[root@xenserver-test ~]# reboot</pre>

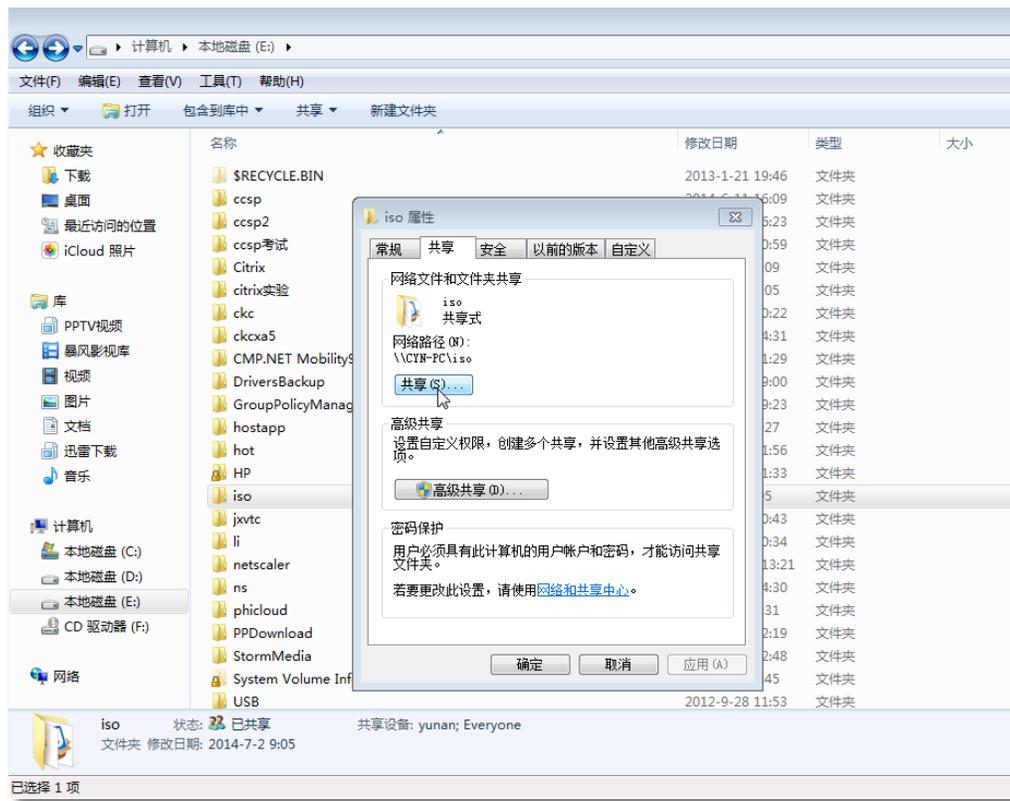
## 第4章 基本操作系统模板的制作

### 4.1 ISO Library 挂载

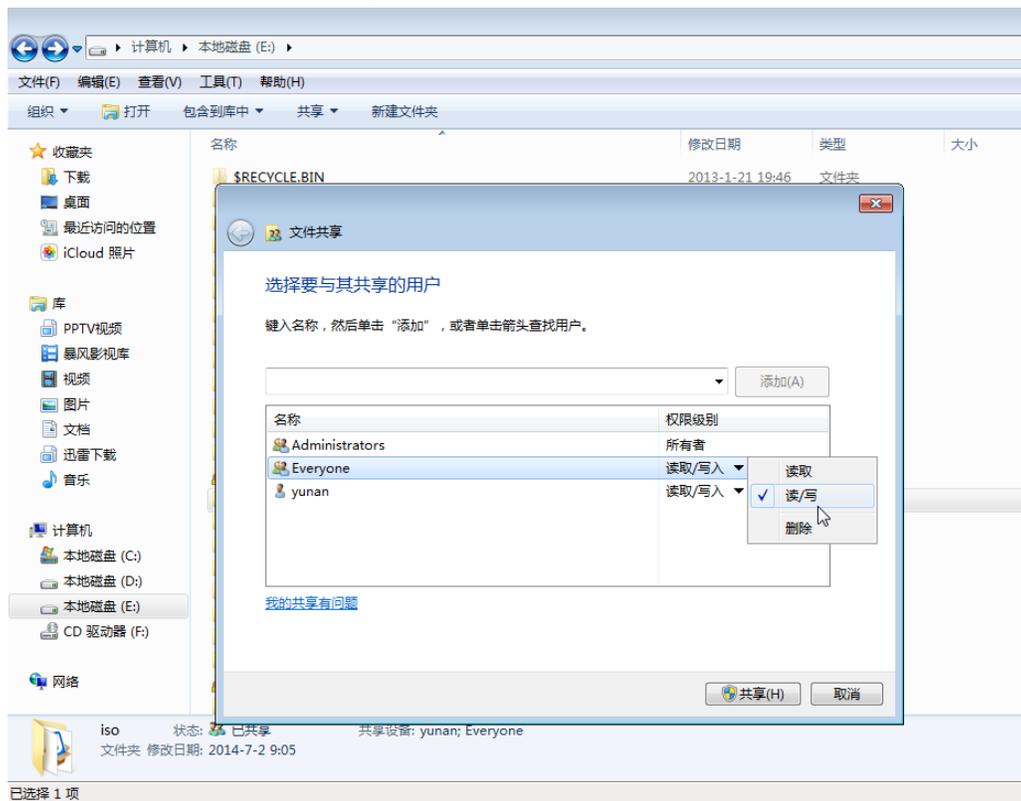
步骤	操作
5.	<p>将需要使用的镜像放入文件夹中</p>  <p>The screenshot shows a Windows Explorer window titled 'iso' on drive E:. The address bar shows '计算机 &gt; 本地磁盘 (E:) &gt; iso'. The left sidebar shows the navigation pane with '本地磁盘 (E:)' selected. The main pane displays a list of files and folders. The files include several ISO files such as 'SW_DVD5_Visio_Premium_2010w_SP1_W32_ChnSimp_Std_Pro_Prem_MLF_X17-75847.iso', 'SW_DVD5_Visio_Pro_2013_64Bit_ChnSimp_MLF_X18-61013.ISO', 'SW_DVD5_Visio_Pro_2013_W32_ChnSimp_MLF_X18-60985.ISO', 'SW_DVD9_VS_Ultimate_2010_ChnSimp_Core_MLF_X16-76626.ISO', 'TortoiseSVN-1.7.7.22907.rar', 'VDA_5.6FP1.iso', 'VDA56FP3.iso', 'VMware-VIMSetup-all-5.0.0-456005.iso', 'wic_x86_chs.exe', 'WindowsXP-KB968930-x86-CHS.exe', 'XA6_5_2008R2_ML.iso', 'XA6_5FP2.zip', 'XA50_FP2_WS03_EN.iso', 'XA650W2K8R2X64R01.msp', 'XenApp_and_XenDesktop7_5.iso', 'XenDesktop7.iso', 'XenDesktop7_Liso', 'XenDesktop56.iso', 'XenServer-6.1-install-cd.iso', 'XenServer-6.2-install-cd.iso', 'youhua.iso', 'zh-hans_office_standard_2007_x86_cd_x12-18931.iso', 'zh-hans_windows_xp_professional_with_service_pack_3_x86_cd_vl_x14-74070.iso', and '竞争分析.pptx'. The file sizes range from 62 KB to 658,816 KB. The status bar at the bottom indicates '65 个对象 状态: 已共享'.</p>
6.	<p>右键保存镜像文件夹，点击属性</p>  <p>The screenshot shows a Windows Explorer window with the 'iso' folder selected. The context menu is open, showing various options. The '属性(R)' option is highlighted at the bottom. The menu items include: '打开(O)', '在新窗口中打开(E)', '用 酷我音乐 播放', '加入 酷我音乐 播放列表', '360云盘', '使用 360杀毒 扫描', '共享(H)', 'UltraISO', '使用 360强力删除', '共享文件夹同步', '还原以前的版本(V)', '包含到库中(I)', '添加到压缩文件(A)...', '添加到 "iso.rar"(T)', '压缩并 E-mail...', '压缩到 "iso.rar" 并 E-mail', '发送到(N)', '剪切(T)', '复制(C)', '粘贴(P)', '创建快捷方式(S)', '删除(D)', '重命名(M)', and '属性(R)'. The status bar at the bottom indicates 'iso 文件夹 修改日期: 2014-7-2 9:05'.</p>

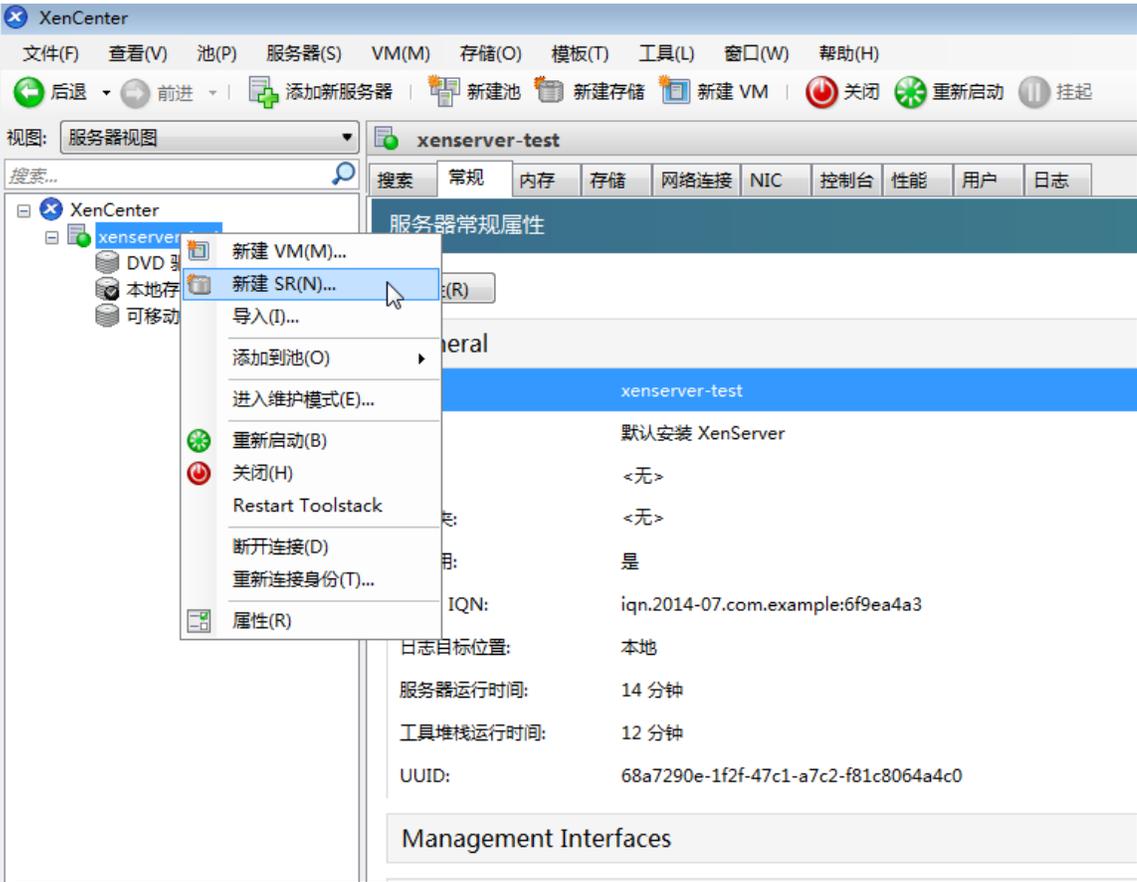
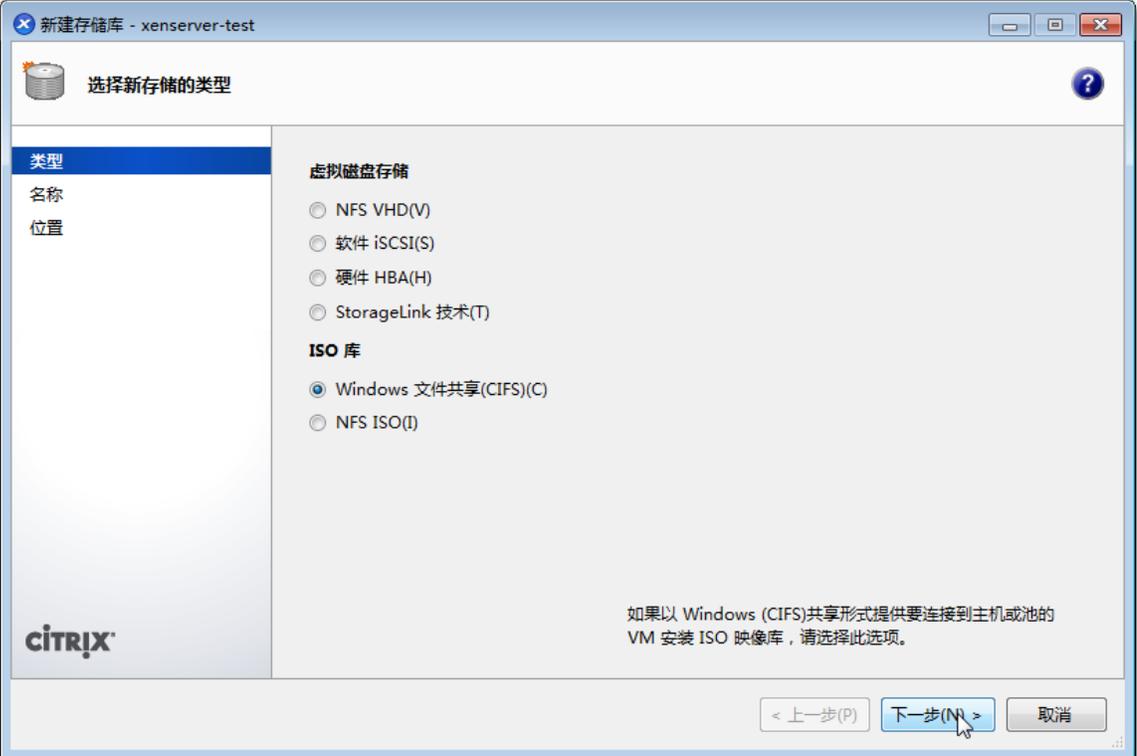
步骤 操作

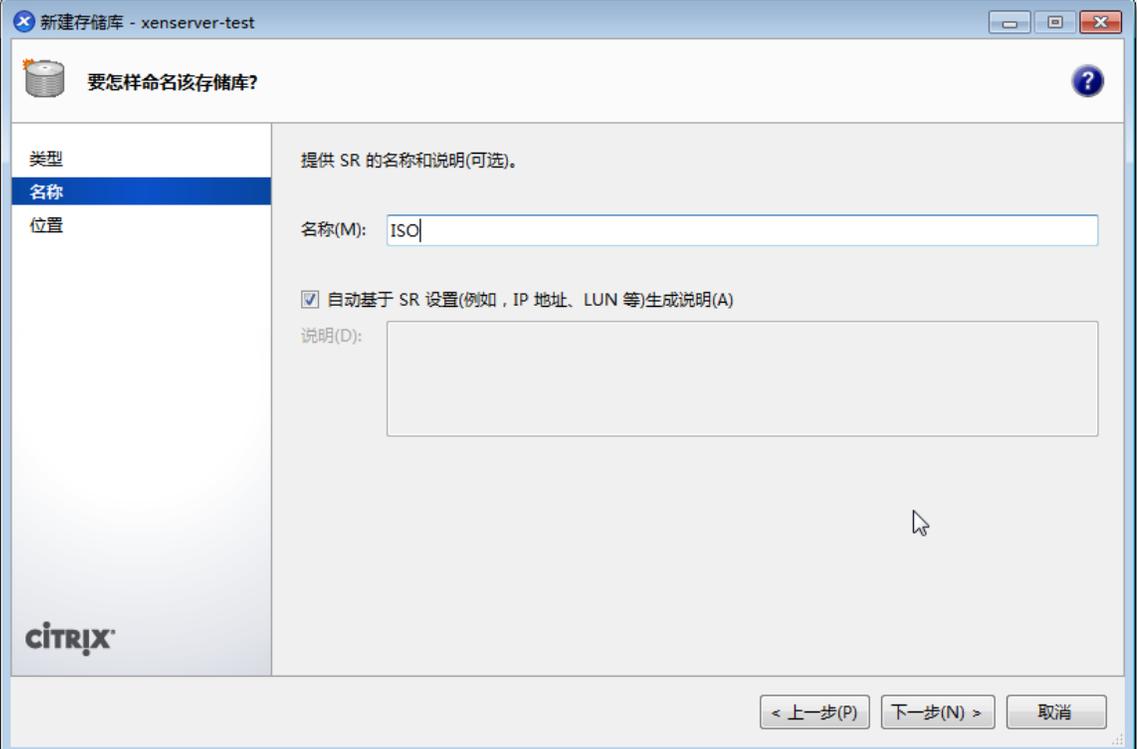
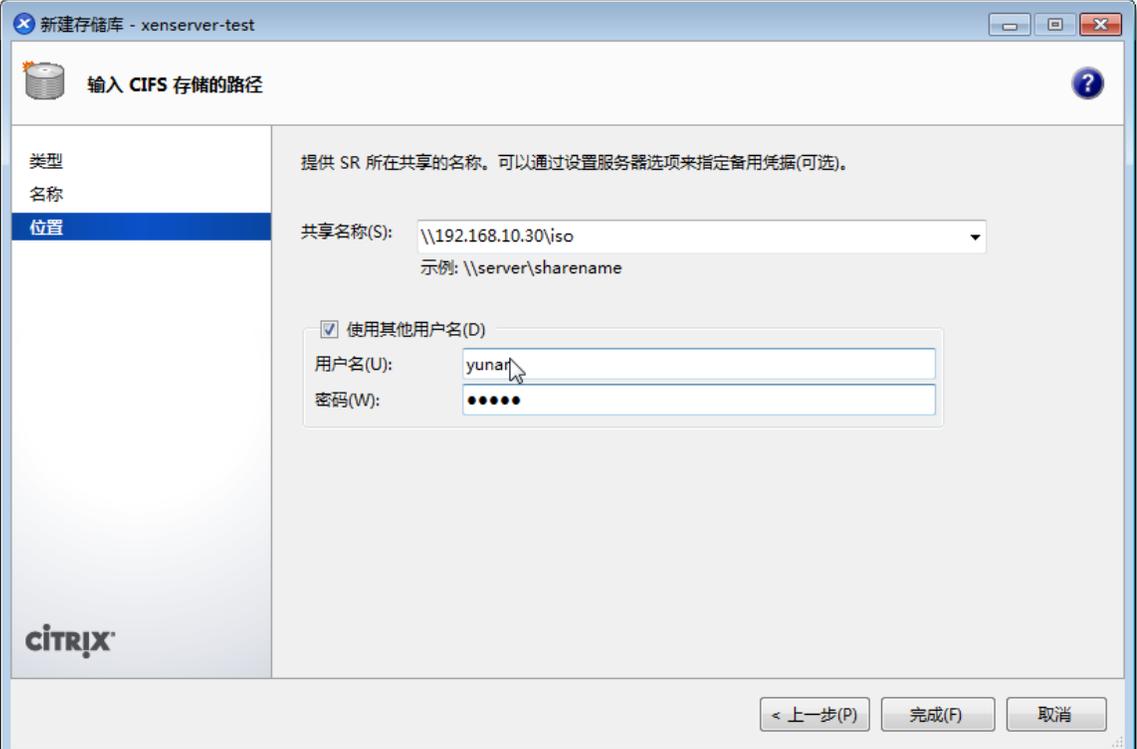
7. 在“共享”选项卡中，点击共享按钮

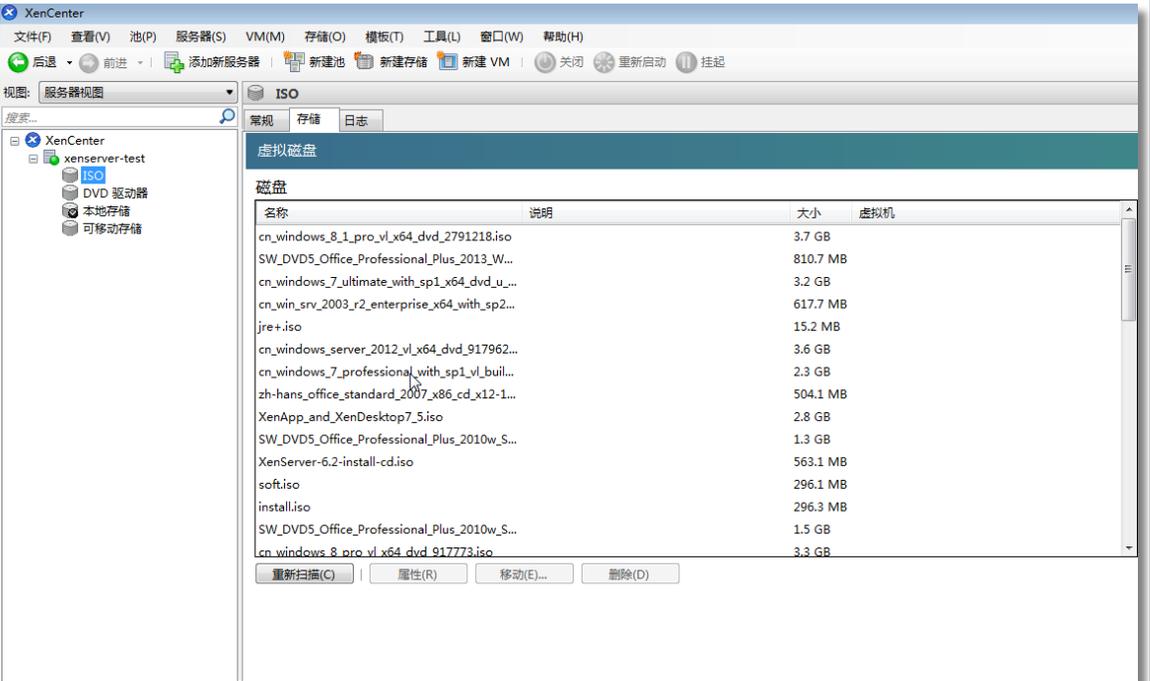


8. 在文件共享窗口中键入“Everyone”，并在权限级别中选择“读取/写入”

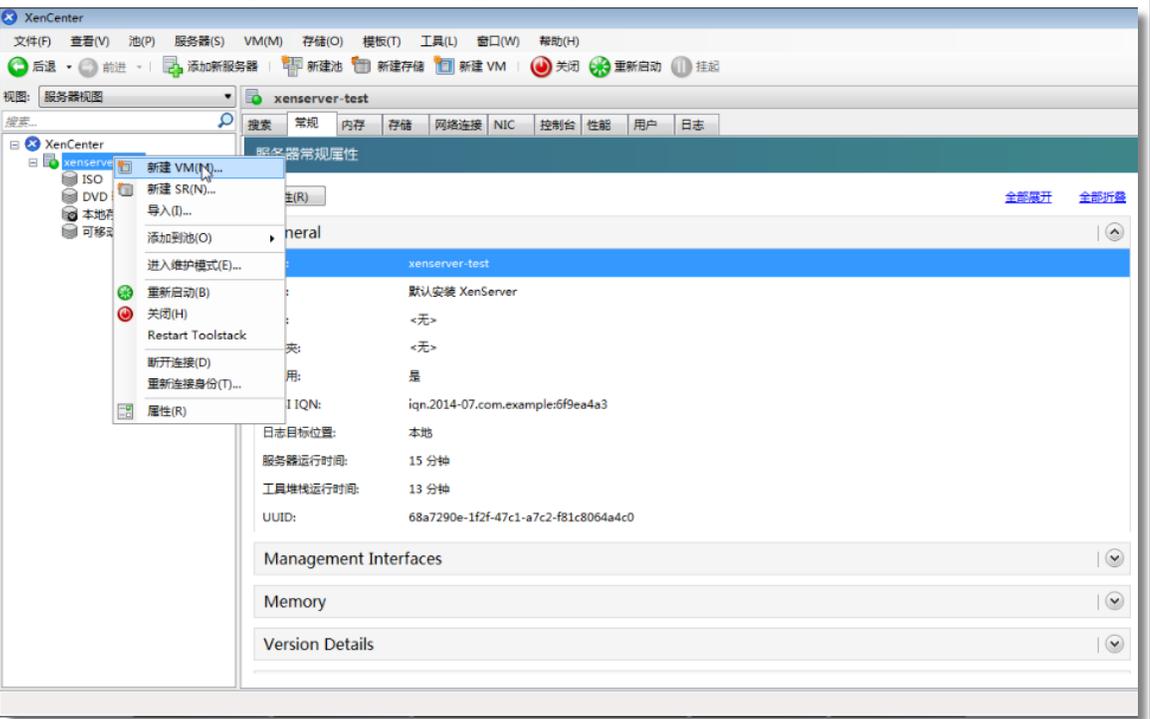


步骤	操作
9.	<p>在 XenCenter 中右键 XenServer-test，点击“新建 SR”</p>  <p>The screenshot shows the XenCenter application window. The 'xenserver-test' server is selected in the left-hand tree view. A right-click context menu is open, and the option '新建 SR(N)...' (New Storage Repository) is highlighted by the mouse cursor. The main pane shows the '服务器常规属性' (Server General Properties) for 'xenserver-test', including details like '默认安装 XenServer', '日志目标位置: 本地', '服务器运行时间: 14 分钟', and '工具堆栈运行时间: 12 分钟'.</p>
10.	<p>选择“Windows 文件共享 (CIFS)”，点击下一步</p>  <p>The screenshot shows a dialog box titled '新建存储库 - xenserver-test' (New Storage Repository - xenserver-test). The dialog is titled '选择新存储的类型' (Select the type of new storage). It has two main sections: '虚拟磁盘存储' (Virtual Disk Storage) and 'ISO 库' (ISO Library). Under '虚拟磁盘存储', there are four radio button options: 'NFS VHD(V)', '软件 iSCSI(S)', '硬件 HBA(H)', and 'StorageLink 技术(T)'. Under 'ISO 库', there are two radio button options: 'Windows 文件共享(CIFS)(C)' (which is selected) and 'NFS ISO(I)'. At the bottom right, there are three buttons: '&lt; 上一步(P)' (Previous), '下一步(N) &gt;' (Next), and '取消' (Cancel). A note at the bottom states: '如果以 Windows (CIFS) 共享形式提供要连接到主机或池的 VM 安装 ISO 映像库，请选择此选项。' (If you provide a VM installation ISO image library in Windows (CIFS) share format to connect to a host or pool, select this option.)</p>

步骤	操作
<p>11.</p>	<p>编辑存储库名称，点击下一步</p>  <p>新建存储库 - xenserver-test</p> <p>要怎样命名该存储库?</p> <p>提供 SR 的名称和说明(可选)。</p> <p>名称(M): ISO</p> <p><input checked="" type="checkbox"/> 自动基于 SR 设置(例如, IP 地址、LUN 等)生成说明(A)</p> <p>说明(D):</p> <p>&lt; 上一步(P) 下一步(N) &gt; 取消</p>
<p>12.</p>	<p>共享名称中输入共享文件夹路径，并输入镜像文件所在计算机的用户名和密码，点击完成</p>  <p>新建存储库 - xenserver-test</p> <p>输入 CIFS 存储的路径</p> <p>提供 SR 所在共享的名称。可以通过设置服务器选项来指定备用凭据(可选)。</p> <p>共享名称(S): \\192.168.10.30\iso 示例: \\server\sharename</p> <p><input checked="" type="checkbox"/> 使用其他用户名(D)</p> <p>用户名(U): yunar</p> <p>密码(W): ●●●●</p> <p>&lt; 上一步(P) 完成(F) 取消</p>

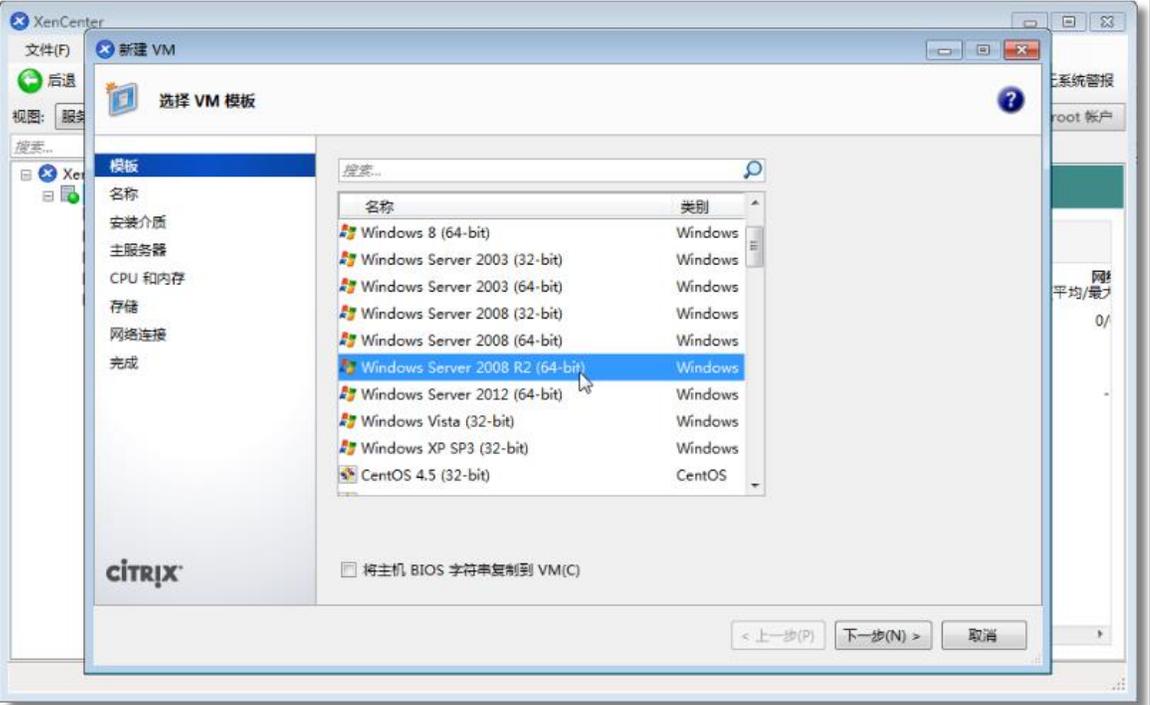
步骤	操作																																																																
13.	<p>在 XenCenter 中确认存储库已经挂载完成</p>  <table border="1"> <caption>虚拟磁盘列表</caption> <thead> <tr> <th>名称</th> <th>说明</th> <th>大小</th> <th>虚拟机</th> </tr> </thead> <tbody> <tr><td>cn_windows_8_1_pro_vl_x64_dvd_2791218.iso</td><td></td><td>3.7 GB</td><td></td></tr> <tr><td>SW_DVD5_Office_Professional_Plus_2013_W...</td><td></td><td>810.7 MB</td><td></td></tr> <tr><td>cn_windows_7_ultimate_with_sp1_x64_dvd_u...</td><td></td><td>3.2 GB</td><td></td></tr> <tr><td>cn_win_srv_2003_r2_enterprise_x64_with_sp2...</td><td></td><td>617.7 MB</td><td></td></tr> <tr><td>jre+.iso</td><td></td><td>15.2 MB</td><td></td></tr> <tr><td>cn_windows_server_2012_vl_x64_dvd_917962...</td><td></td><td>3.6 GB</td><td></td></tr> <tr><td>cn_windows_7_professional_with_sp1_vl_buil...</td><td></td><td>2.3 GB</td><td></td></tr> <tr><td>zh-hans_office_standard_2007_x86_cd_x12-1...</td><td></td><td>504.1 MB</td><td></td></tr> <tr><td>XenApp_and_XenDesktop7_5.iso</td><td></td><td>2.8 GB</td><td></td></tr> <tr><td>SW_DVD5_Office_Professional_Plus_2010w_S...</td><td></td><td>1.3 GB</td><td></td></tr> <tr><td>XenServer-6.2-install-cd.iso</td><td></td><td>563.1 MB</td><td></td></tr> <tr><td>soft.iso</td><td></td><td>296.1 MB</td><td></td></tr> <tr><td>install.iso</td><td></td><td>296.3 MB</td><td></td></tr> <tr><td>SW_DVD5_Office_Professional_Plus_2010w_S...</td><td></td><td>1.5 GB</td><td></td></tr> <tr><td>cn_windows_8_pro_vl_x64_dvd_917773.iso</td><td></td><td>3.3 GB</td><td></td></tr> </tbody> </table>	名称	说明	大小	虚拟机	cn_windows_8_1_pro_vl_x64_dvd_2791218.iso		3.7 GB		SW_DVD5_Office_Professional_Plus_2013_W...		810.7 MB		cn_windows_7_ultimate_with_sp1_x64_dvd_u...		3.2 GB		cn_win_srv_2003_r2_enterprise_x64_with_sp2...		617.7 MB		jre+.iso		15.2 MB		cn_windows_server_2012_vl_x64_dvd_917962...		3.6 GB		cn_windows_7_professional_with_sp1_vl_buil...		2.3 GB		zh-hans_office_standard_2007_x86_cd_x12-1...		504.1 MB		XenApp_and_XenDesktop7_5.iso		2.8 GB		SW_DVD5_Office_Professional_Plus_2010w_S...		1.3 GB		XenServer-6.2-install-cd.iso		563.1 MB		soft.iso		296.1 MB		install.iso		296.3 MB		SW_DVD5_Office_Professional_Plus_2010w_S...		1.5 GB		cn_windows_8_pro_vl_x64_dvd_917773.iso		3.3 GB	
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## 4.2 操作系统模版制作流程

步骤	操作
1.	<p>在 XenCenter 中右键“XenServer-test”选择“新建 VM”</p> 

**步骤**    **操作**

2.    选择 Windows Server 2008 R2 (64-bit)，点击下一步

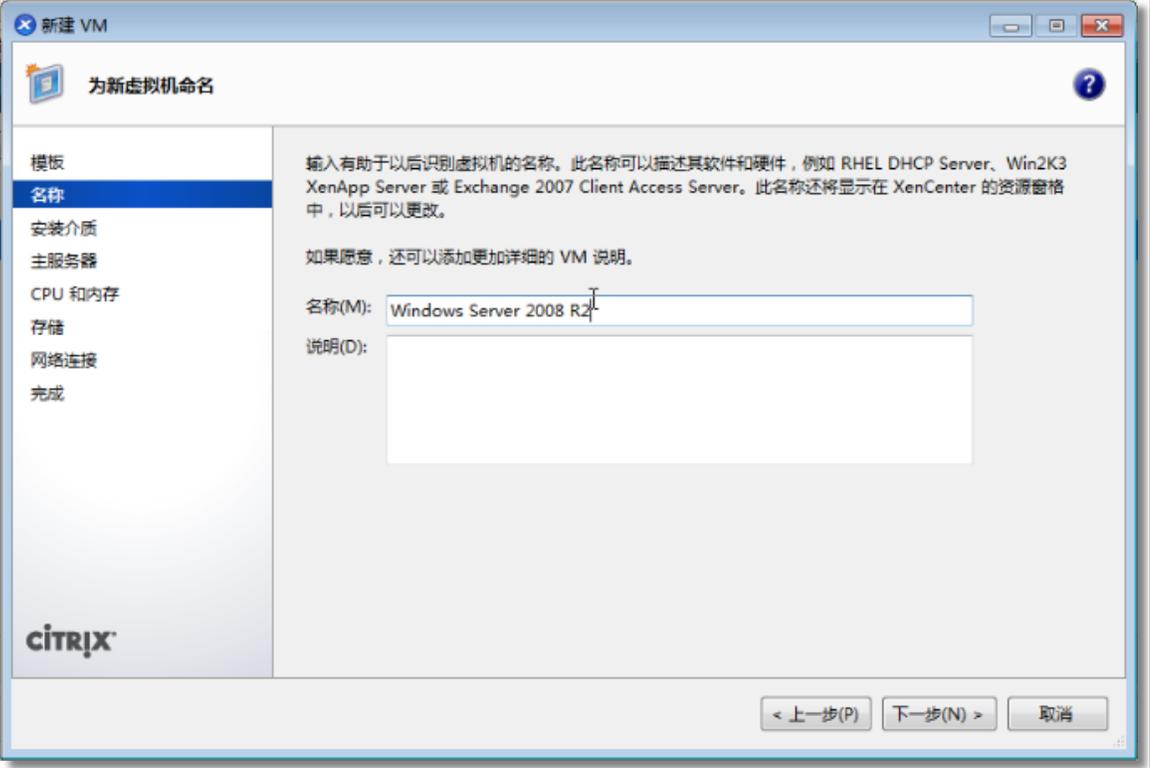


The screenshot shows the 'New VM' wizard in XenCenter. The 'Select VM Template' step is active. On the left, a sidebar lists configuration steps: Name, Installation Medium, Host Server, CPU and Memory, Storage, Network Connection, and Complete. The main area shows a table of templates:

名称	类别
Windows 8 (64-bit)	Windows
Windows Server 2003 (32-bit)	Windows
Windows Server 2003 (64-bit)	Windows
Windows Server 2008 (32-bit)	Windows
Windows Server 2008 (64-bit)	Windows
Windows Server 2008 R2 (64-bit)	Windows
Windows Server 2012 (64-bit)	Windows
Windows Vista (32-bit)	Windows
Windows XP SP3 (32-bit)	Windows
CentOS 4.5 (32-bit)	CentOS

At the bottom, there is a checkbox for '将主机 BIOS 字符串复制到 VM(C)' and navigation buttons: '< 上一步(P)', '下一步(N) >', and '取消'.

3.    在名称中输入“Windows Server 2008 R2”，点击下一步



The screenshot shows the 'Name the new virtual machine' step of the 'New VM' wizard. The left sidebar is the same as in the previous step. The main area contains instructions and input fields:

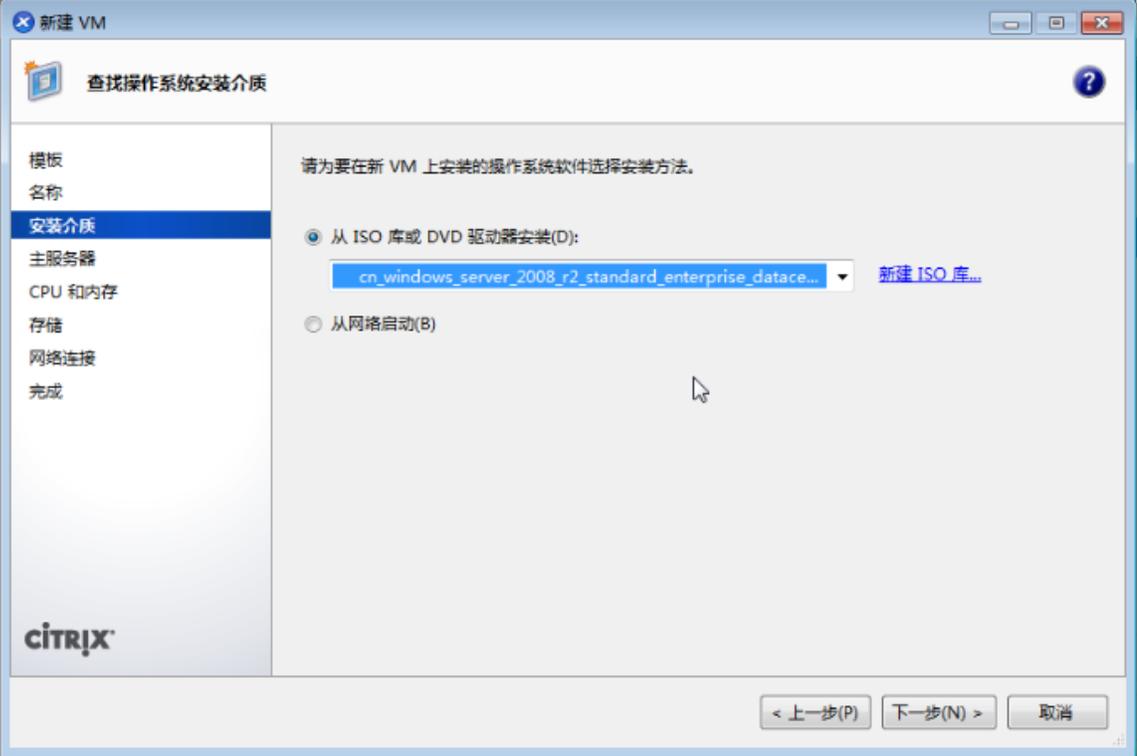
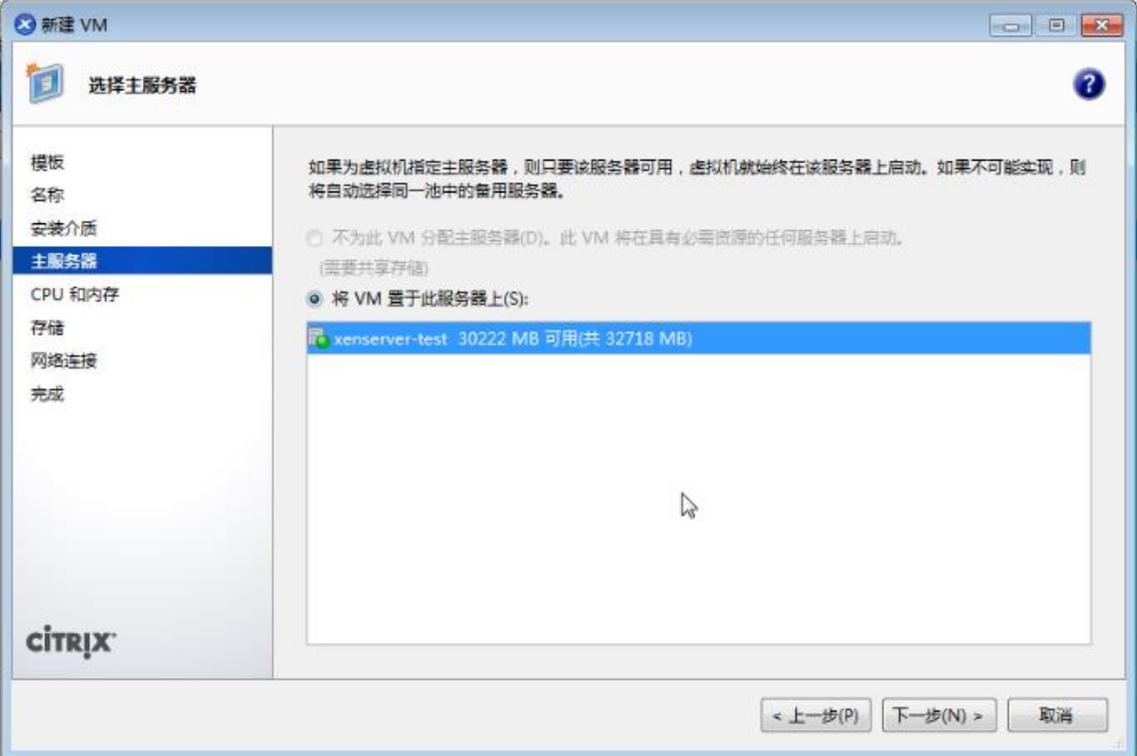
输入有助于以后识别虚拟机的名称。此名称可以描述其软件和硬件，例如 RHEL DHCP Server、Win2K3 XenApp Server 或 Exchange 2007 Client Access Server。此名称还将显示在 XenCenter 的资源窗格中，以后可以更改。

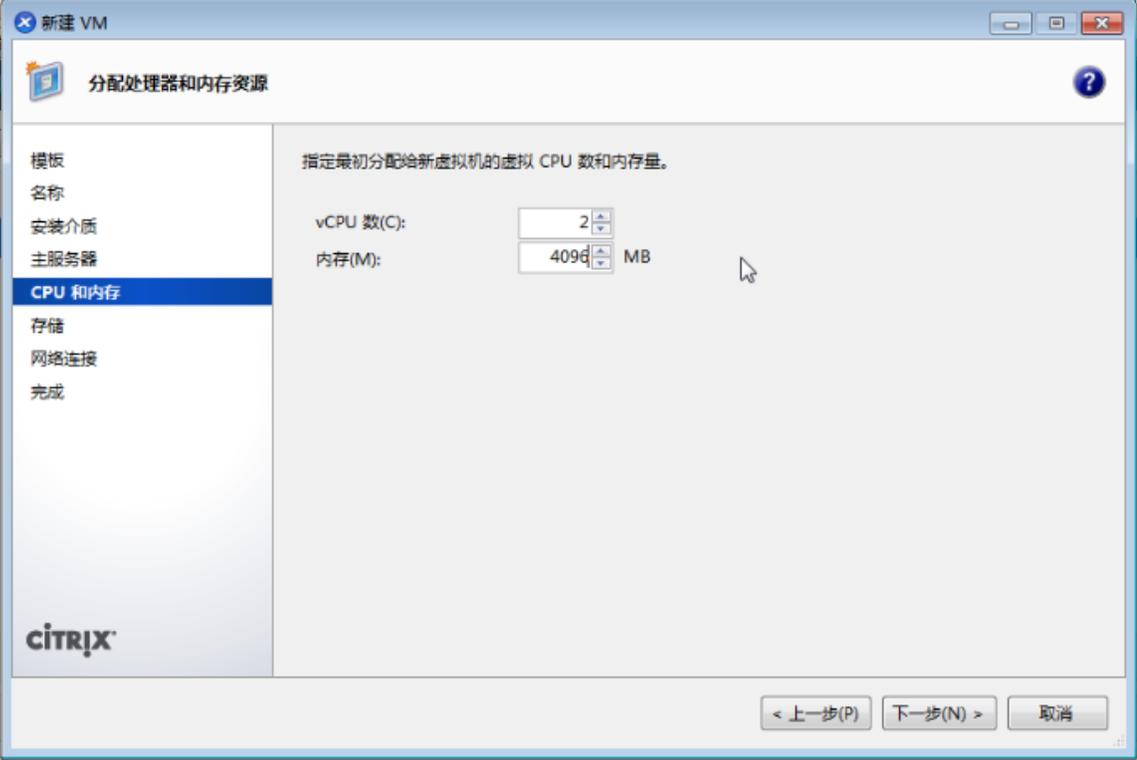
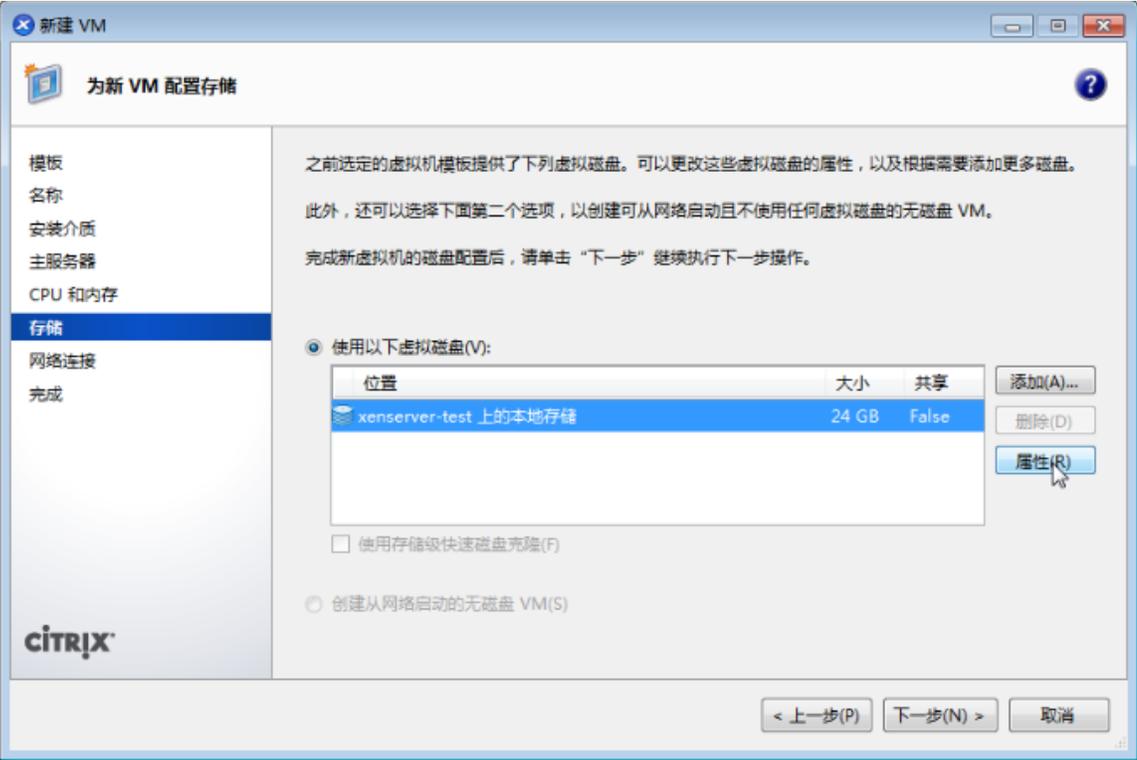
如果愿意，还可以添加更加详细的 VM 说明。

名称(M):

说明(D):

At the bottom, there are navigation buttons: '< 上一步(P)', '下一步(N) >', and '取消'.

步骤	操作
4.	<p>选择“从 ISO 库或 DVD 驱动器安装”，在下拉菜单中选择 Windows 2008 R2 安装镜像，点击下一步</p> 
5.	<p>选择“将 VM 置于此服务器上”，选择“XenServer-test”，点击下一步</p> 

步骤	操作						
6.	<p>设置 vCPU 数量和内存大小，点击下一步</p>  <p>The screenshot shows the 'New VM' wizard window with the title '新建 VM'. The current step is '分配处理器和内存资源'. On the left sidebar, 'CPU 和内存' is selected. The main area contains the following text: '指定最初分配给新虚拟机的虚拟 CPU 数和内存量。'. Below this, there are two input fields: 'vCPU 数(C):' with a value of '2' and '内存(M):' with a value of '4096' and 'MB' next to it. At the bottom right, there are three buttons: '&lt; 上一步(P)', '下一步(N) &gt;', and '取消'.</p>						
7.	<p>点击“属性”</p>  <p>The screenshot shows the 'New VM' wizard window with the title '新建 VM'. The current step is '为新 VM 配置存储'. On the left sidebar, '存储' is selected. The main area contains the following text: '之前选定的虚拟机模板提供了下列虚拟磁盘。可以更改这些虚拟磁盘的属性，以及根据需要添加更多磁盘。此外，还可以选择下面第二个选项，以创建可从网络启动且不使用任何虚拟磁盘的无磁盘 VM。完成新虚拟机的磁盘配置后，请单击“下一步”继续执行下一步操作。'. Below this, there are two radio button options: '使用以下虚拟磁盘(V):' (selected) and '创建从网络启动的无磁盘 VM(S)'. Under the selected option, there is a table with the following data:</p> <table border="1" data-bbox="634 1444 1287 1606"> <thead> <tr> <th>位置</th> <th>大小</th> <th>共享</th> </tr> </thead> <tbody> <tr> <td>xenserver-test 上的本地存储</td> <td>24 GB</td> <td>False</td> </tr> </tbody> </table> <p>To the right of the table are three buttons: '添加(A)...', '删除(D)', and '属性(R)'. Below the table, there is a checkbox '使用存储级快速磁盘克隆(F)' which is unchecked. At the bottom right, there are three buttons: '&lt; 上一步(P)', '下一步(N) &gt;', and '取消'.</p>	位置	大小	共享	xenserver-test 上的本地存储	24 GB	False
位置	大小	共享					
xenserver-test 上的本地存储	24 GB	False					

**步骤**    **操作**

8.    将磁盘大小修改成 40GB，点击确认

为新建 VM 配置存储

模板  
名称  
安装介质  
主服务器  
CPU 和内存  
**存储**  
网络连接  
完成

输入虚拟磁盘的名称、说明和大小。磁盘大小及磁盘所归属任何 VM 的主服务器设置将影响可用的存储位置。

名称(N): Windows Server 2008 R2 0  
说明(D): Created by template provisioner

大小(S): 40,000 GB

位置(L): xenserver-test 上的本地存储 可用空间 195.16 GB，总空间 195.34 GB

确定 取消

< 上一步(P)    下一步(N) >    取消

9.    点击下一步

为新建 VM 配置存储

模板  
名称  
安装介质  
主服务器  
CPU 和内存  
**存储**  
网络连接  
完成

之前选定的虚拟机模板提供了下列虚拟磁盘。可以更改这些虚拟磁盘的属性，以及根据需要添加更多磁盘。

此外，还可以选择下面第二个选项，以创建可从网络启动且不使用任何虚拟磁盘的无磁盘 VM。

完成新虚拟机的磁盘配置后，请单击“下一步”继续执行下一步操作。

使用以下虚拟磁盘(V):

位置	大小	共享
xenserver-test 上的本地存储	40 GB	False

使用存储级快速磁盘克隆(F)

创建从网络启动的无磁盘 VM(S)

添加(A)...  
删除(D)  
属性(R)

< 上一步(P)    下一步(N) >    取消

**步骤**    **操作**

**10.**    选择网络点击下一步

模板  
名称  
安装介质  
主服务器  
CPU 和内存  
存储  
网络连接  
完成

所选虚拟机模板提供了下列虚拟网络接口。可以在此处配置或删除默认的虚拟网络接口，以及根据需要添加更多虚拟网络接口。

Windows Server 2008 R2 上的虚拟网络接口

MAC	网络
<自动生成的 MAC>	网络 0

添加(A)...  
删除(D)  
属性(R)

① 如果使用默认模板，则在 VM 创建过程中可以配置多达 4 个虚拟网络接口。要配置 4 个以上的虚拟网络接口，请创建一个自定义模板，或者在创建新 VM 后从“网络”选项卡添加额外的虚拟网络接口。

< 上一步(P)    下一步(N) >    取消

**11.**    点击立即创建

模板  
名称  
安装介质  
主服务器  
CPU 和内存  
存储  
网络连接  
完成

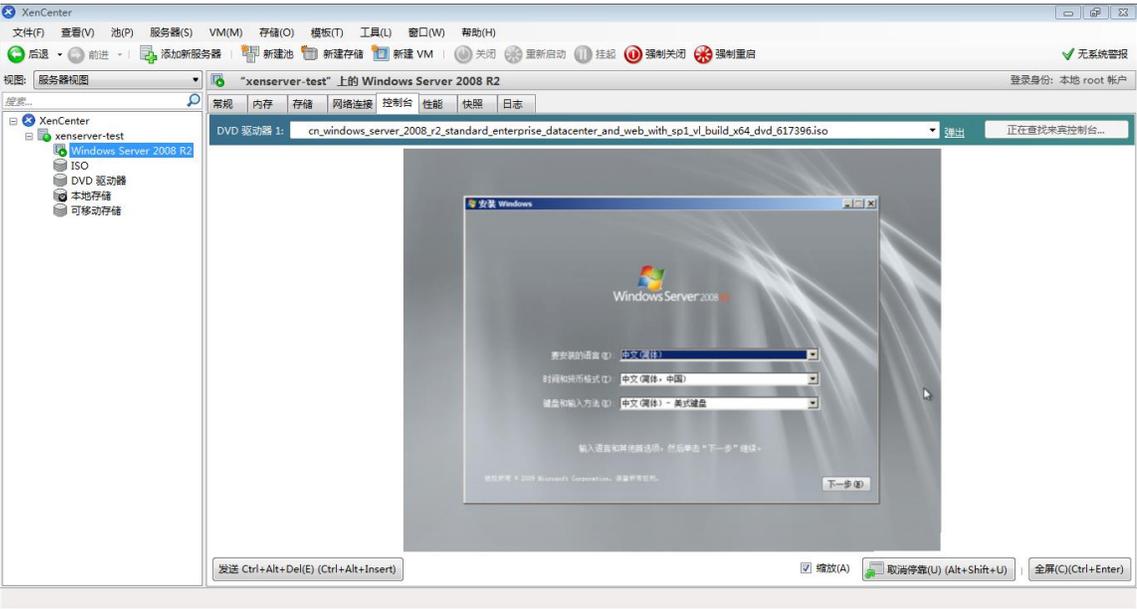
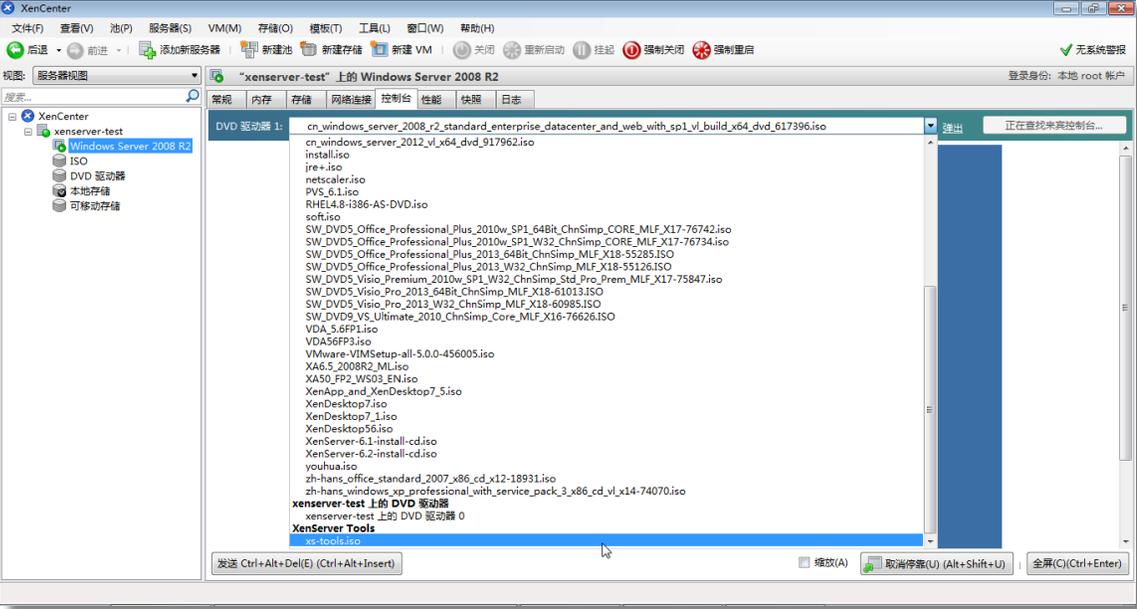
已收集完所有必需信息，向导可以使用如下设置置备新虚拟机。

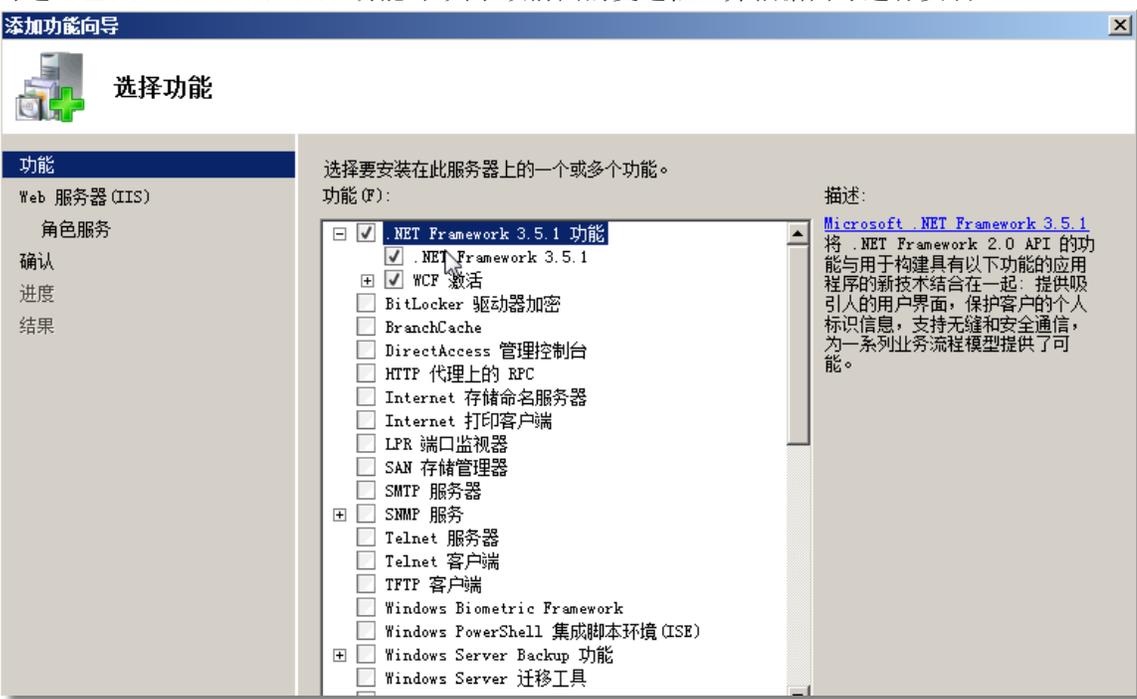
请检查这些设置，如果需要更改任何设置，请单击“上一步”。否则，请单击“立即创建”创建新 VM。创建新 VM 可能需要几分钟时间。

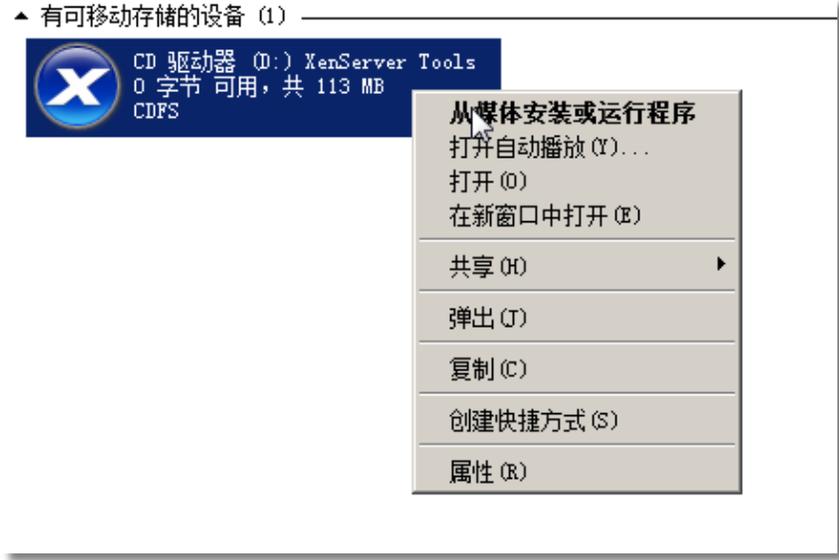
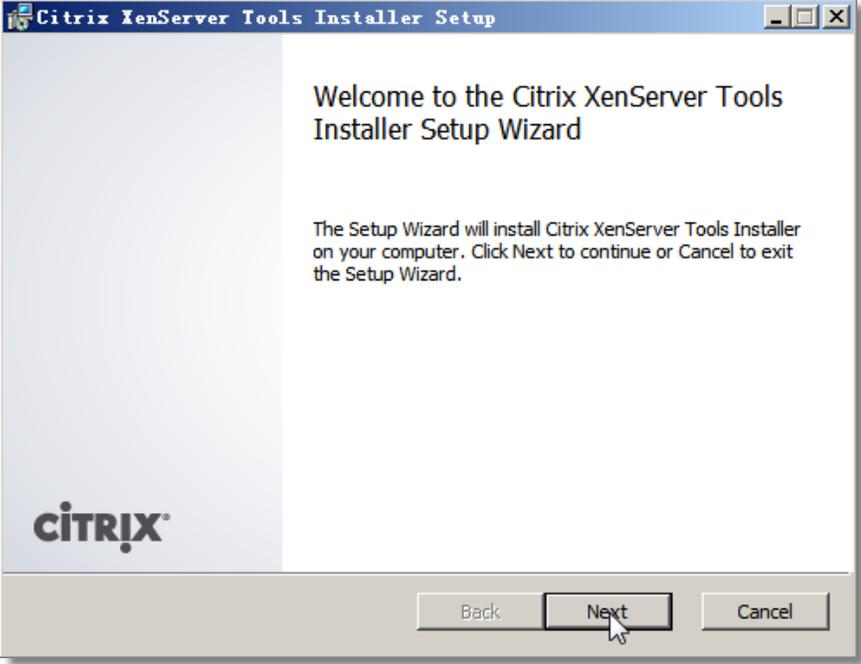
模板    Windows Server 2008 R2 (64-bit)  
名称    Windows Server 2008 R2  
安装方法    CD  
安装源    cn\_windows\_server\_2008\_r2\_standard\_enterprise\_datacenter\_and\_web\_with\_sp1\_vl...  
主服务器    xenserver-test  
vCPU    2  
内存    4096 MB  
磁盘 0    40 GB

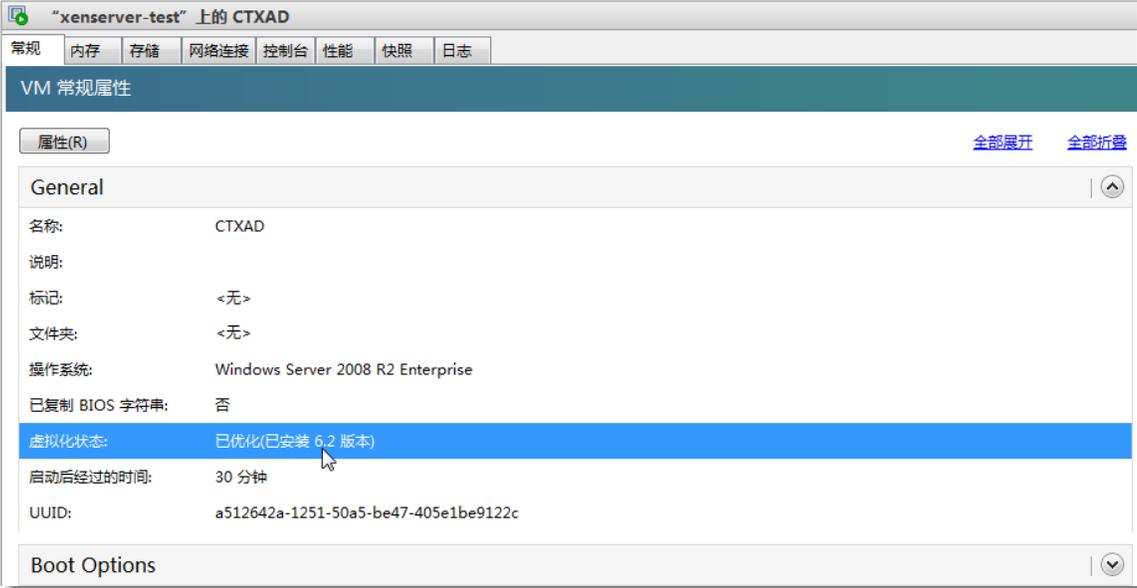
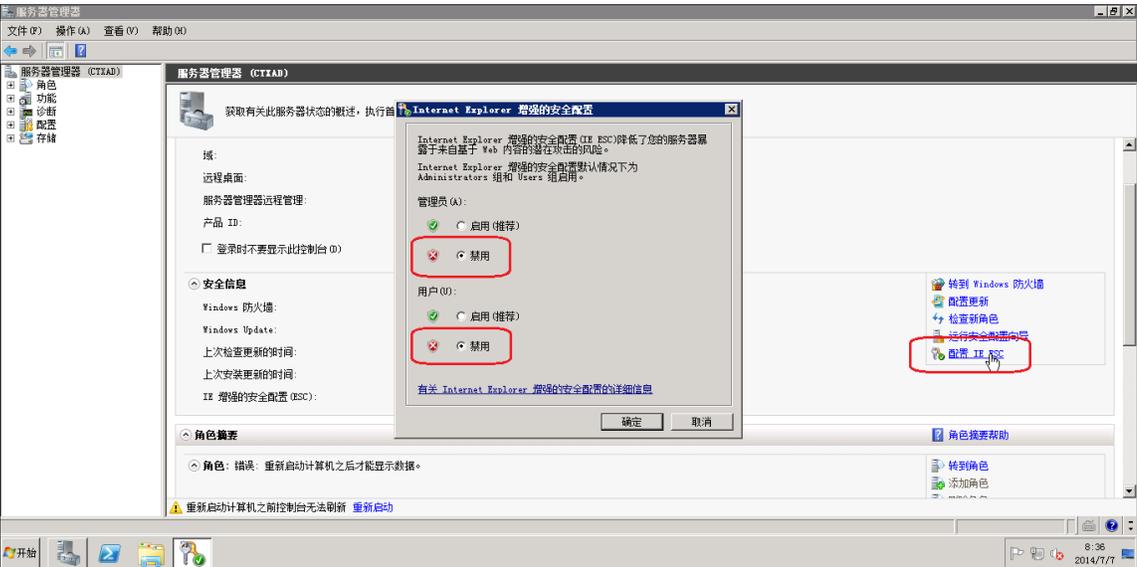
自动启动新 VM(S)

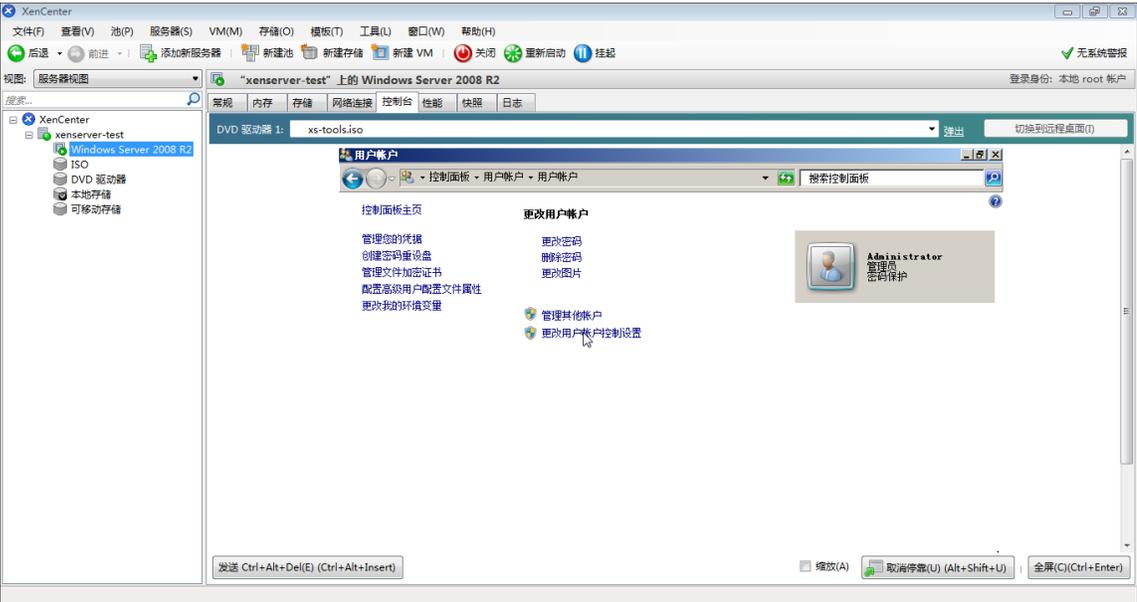
< 上一步(P)    立即创建(C)    取消

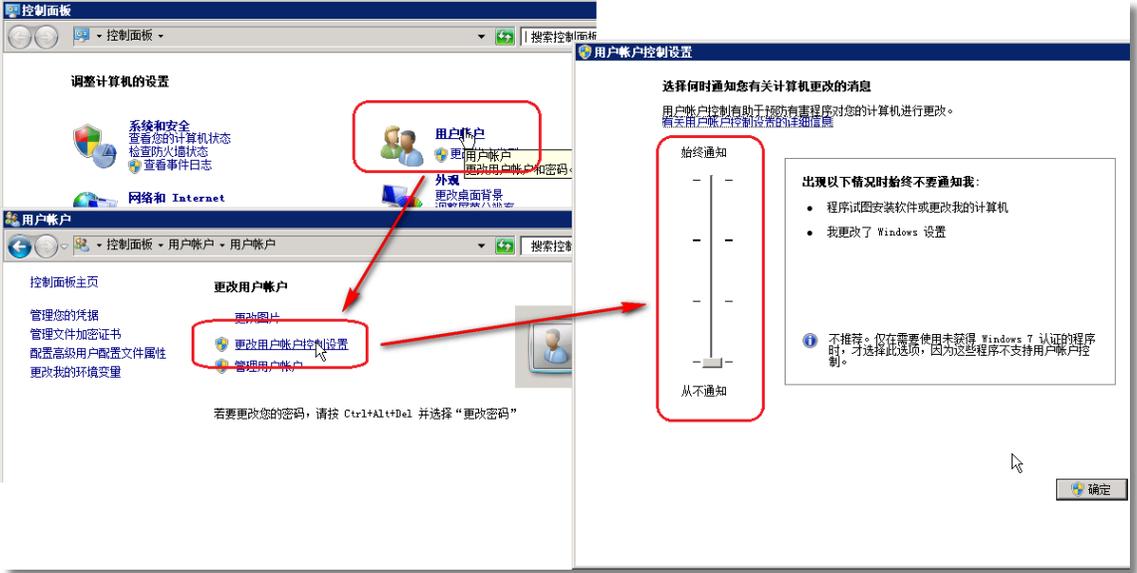
步骤	操作
12.	<p>在 XenCenter 控制台中安装 Windows 操作系统</p> 
13.	<p>操作系统安装完成后，访问 WindowsUpdate 或通过企业专有服务器安装相应的补丁和 Service Pack。 安装常用软件，如 office，过程略。</p>
14.	<p>安装 XenTools</p> <p>在 XenCenter 控制台中的“DVD 驱动器”下拉菜单中选择“xs-tools.iso”。将 XenServer Tools 安装文件挂载到虚拟机上</p> 

步骤	操作
15.	<p>打开服务器管理器，右键“功能”选择“添加功能”</p>  <p>The screenshot shows the Server Manager console. The left pane shows the 'Features' folder selected. A context menu is open over the 'Features' folder, with 'Add Features' highlighted. The main pane shows the 'Features' page with a 'Features Summary' section indicating 0 installed features out of 42 total. There are buttons for 'Add Features' and 'Remove Features'.</p>
16.	<p>勾选“.NET Framework 3.5.1 功能”及其子项前面的复选框。并根据向导进行安装</p>  <p>The screenshot shows the 'Add Features Wizard' window. The title bar says '添加功能向导'. The main area is titled '选择功能' (Select Features). On the left, there are navigation buttons: '功能' (Features), 'Web 服务器 (IIS)', '角色服务' (Role Services), '确认' (Confirm), '进度' (Progress), and '结果' (Results). The main area contains a list of features to be installed. The following features are checked:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> .NET Framework 3.5.1 功能             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> .NET Framework 3.5.1</li> <li><input checked="" type="checkbox"/> WCF 激活</li> </ul> </li> </ul> <p>Other features in the list include BitLocker 驱动器加密, BranchCache, DirectAccess 管理控制台, HTTP 代理上的 RPC, Internet 存储命名服务器, Internet 打印客户端, LPR 端口监视器, SAN 存储管理器, SMTP 服务器, SNMP 服务, Telnet 服务器, Telnet 客户端, TFTP 客户端, Windows Biometric Framework, Windows PowerShell 集成脚本环境 (ISE), Windows Server Backup 功能, and Windows Server 迁移工具. A description for the selected feature is shown on the right:</p> <p>描述:  <a href="#">Microsoft .NET Framework 3.5.1</a>      将 .NET Framework 2.0 API 的功能与用于构建具有以下功能的应用程序的新技术结合在一起: 提供吸引人的用户界面, 保护客户的个人标识信息, 支持无缝和安全通信, 为一系列业务流程模型提供了可能。</p>

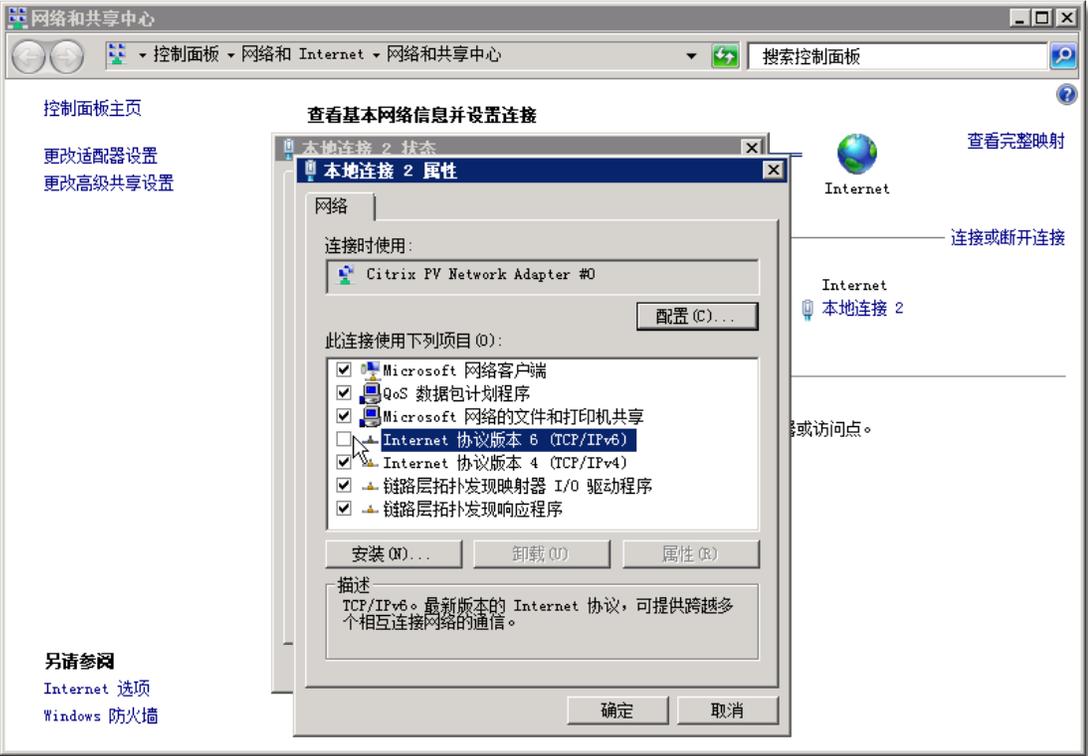
步骤	操作
17.	<p>右键虚拟机光驱中图标，选择“从媒体安装或运行程序”</p>  <p>▲ 有可移动存储的设备 (1)</p> <p>CD 驱动器 (D:) XenServer Tools 0 字节 可用，共 113 MB CDFS</p> <p>从媒体安装或运行程序 打开自动播放 (A)... 打开 (O) 在新窗口中打开 (E) 共享 (H) ▶ 弹出 (J) 复制 (C) 创建快捷方式 (S) 属性 (R)</p>
18.	<p>点击“Next”。</p>  <p>Citrix XenServer Tools Installer Setup</p> <p>Welcome to the Citrix XenServer Tools Installer Setup Wizard</p> <p>The Setup Wizard will install Citrix XenServer Tools Installer on your computer. Click Next to continue or Cancel to exit the Setup Wizard.</p> <p>CITRIX®</p> <p>Back Next Cancel</p>

步骤	操作
19.	<p>在 XenCenter 的常规选项卡中查看虚拟化状态，显示“已优化（已安装 6.2 版本）”表示 XenServer Tools 已安装完成</p>  <p>The screenshot shows the 'VM 常规属性' (VM General Properties) window in XenCenter. The '虚拟化状态' (Virtualization Status) is highlighted in blue and shows '已优化(已安装 6.2 版本)' (Optimized (6.2 version installed)). Other details include Name: CTXAD, OS: Windows Server 2008 R2 Enterprise, and UUID: a512642a-1251-50a5-be47-405e1be9122c.</p>
20.	<p>对模板进行一些设置优化 配置 IE 安全</p>  <p>The screenshot shows the Server Manager console for '服务器管理器 (CTXAD)'. An 'Internet Explorer 增强的安全配置' (Internet Explorer Enhanced Security Configuration) dialog box is open. Under '管理员 (A):' (Administrators), the '禁用' (Disable) radio button is selected. Under '用户 (U):' (Users), the '禁用' (Disable) radio button is also selected. The '配置 IE ESC' (Configure IE ESC) link is highlighted in the bottom right of the dialog.</p>

<p><b>步骤</b></p> <p>21.</p>	<p><b>操作</b></p> <p>关闭 UAC</p>	 <p>The screenshot shows the XenCenter interface for a Windows Server 2008 R2 virtual machine. The 'User Accounts' control panel window is open, displaying the 'Change User Account Control Settings' link under the 'Change user account' section. The Administrator user profile is visible on the right.</p>
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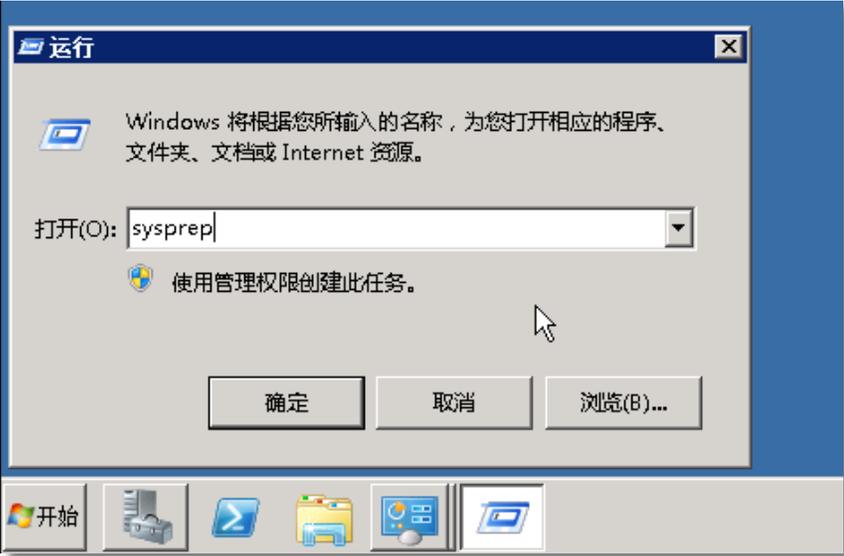
<p><b>步骤</b></p> <p>22.</p>	 <p>The screenshot shows the Windows 7 Control Panel 'User Accounts' window. A red box highlights the 'User Accounts' link. Another red box highlights the 'Change User Account Control Settings' link. A third red box highlights the 'Always notify' slider in the 'User Account Control Settings' dialog box, which is set to the top position. The dialog box also lists 'Programs that I want to allow to make changes to my computer' and 'Programs that I don't want to allow to make changes to my computer'.</p>
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<p><b>步骤</b></p> <p><b>23.</b></p>	<p><b>操作</b></p> <p>关闭 IPv6</p>
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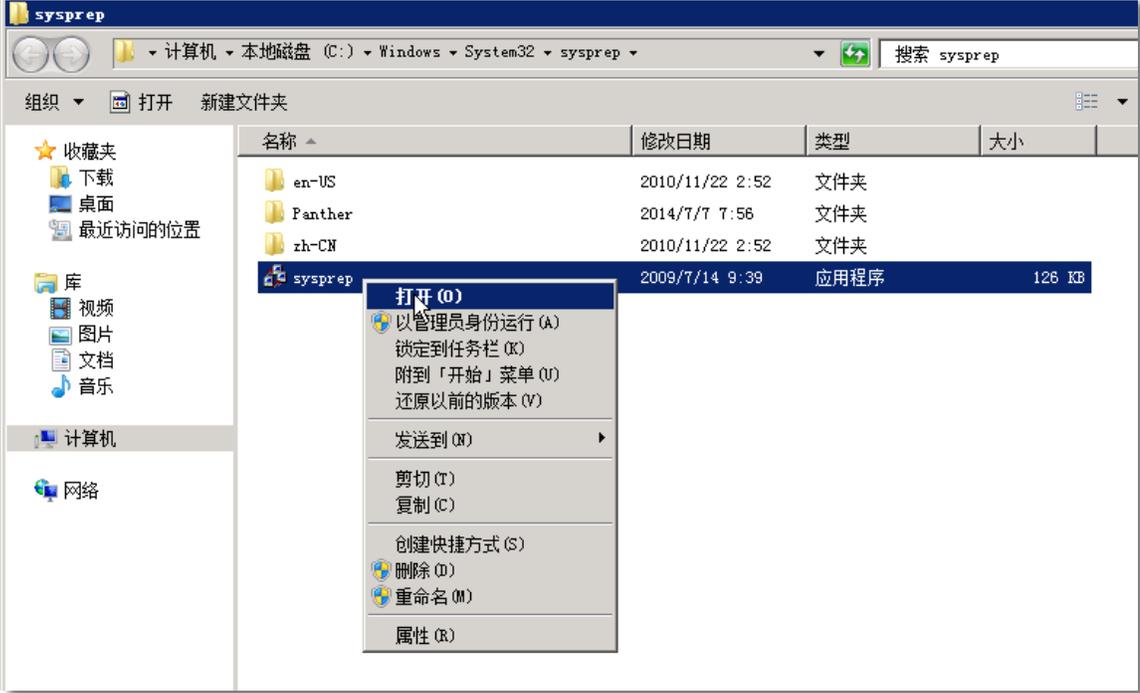


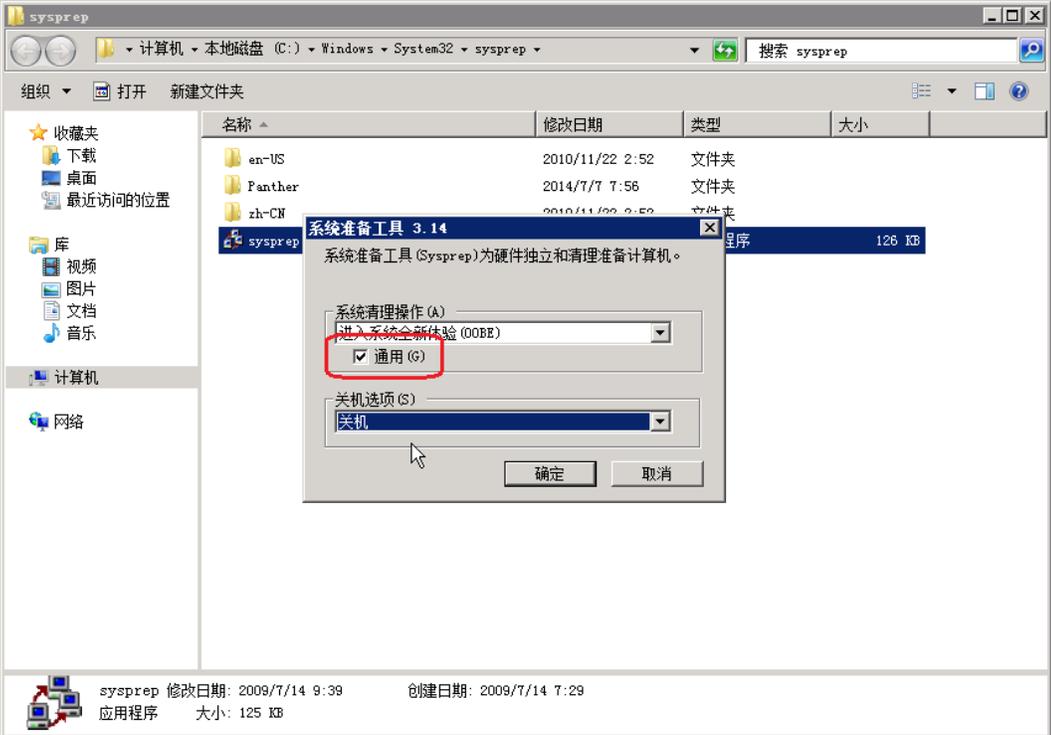
The screenshot shows the Windows Network and Sharing Center interface. A dialog box titled '本地连接 2 属性' (Local Area Connection 2 Properties) is open, displaying the '网络' (Networking) tab. Under '连接时使用' (Use the following connection), 'Citrix PV Network Adapter #0' is selected. In the '此连接使用下列项目' (This connection uses the following items) list, the checkbox for 'Internet 协议版本 6 (TCP/IPv6)' is unchecked, while other protocols like 'Microsoft 网络客户端' and 'Internet 协议版本 4 (TCP/IPv4)' are checked. The '确定' (OK) button is visible at the bottom of the dialog.

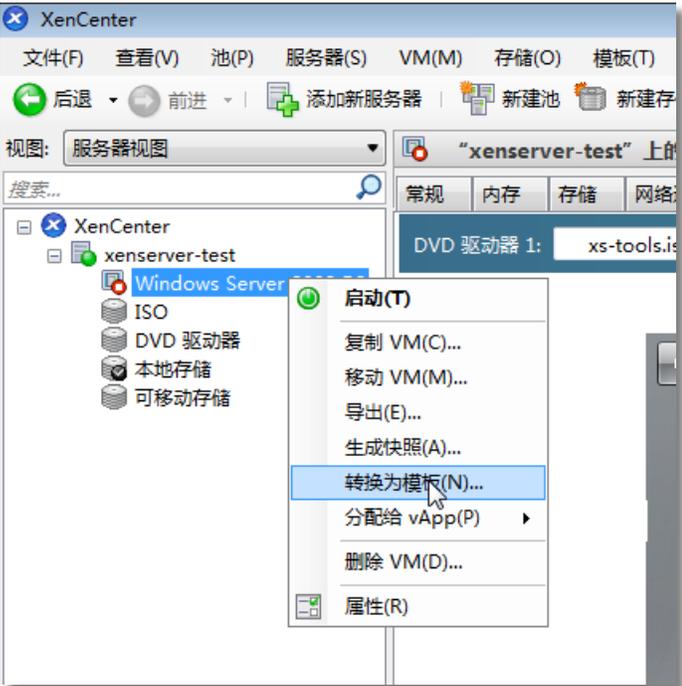
<p><b>24.</b></p>	<p>对系统模板进行标准化改造 为系统进行 sysprep</p>
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The screenshot shows the Windows '运行' (Run) dialog box. The text 'sysprep' is entered into the '打开(O):' (Open) field. Below the field, there is a checkbox for '使用管理权限创建此任务' (Create this task using administrative privileges), which is currently unchecked. The '确定' (OK) button is highlighted, indicating the next step in the process.

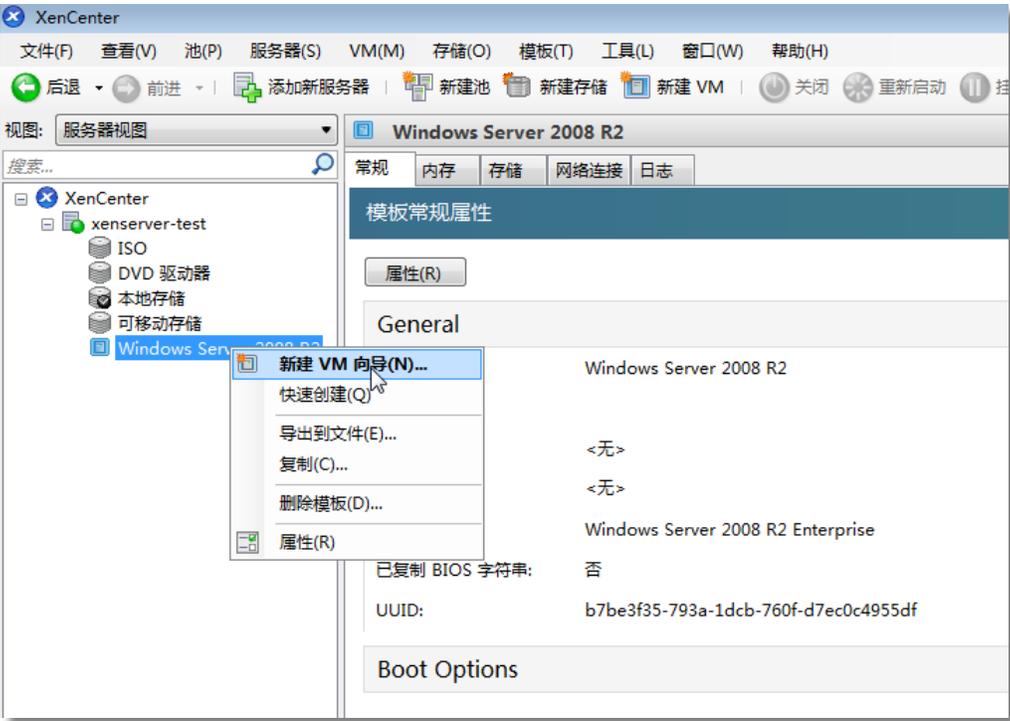
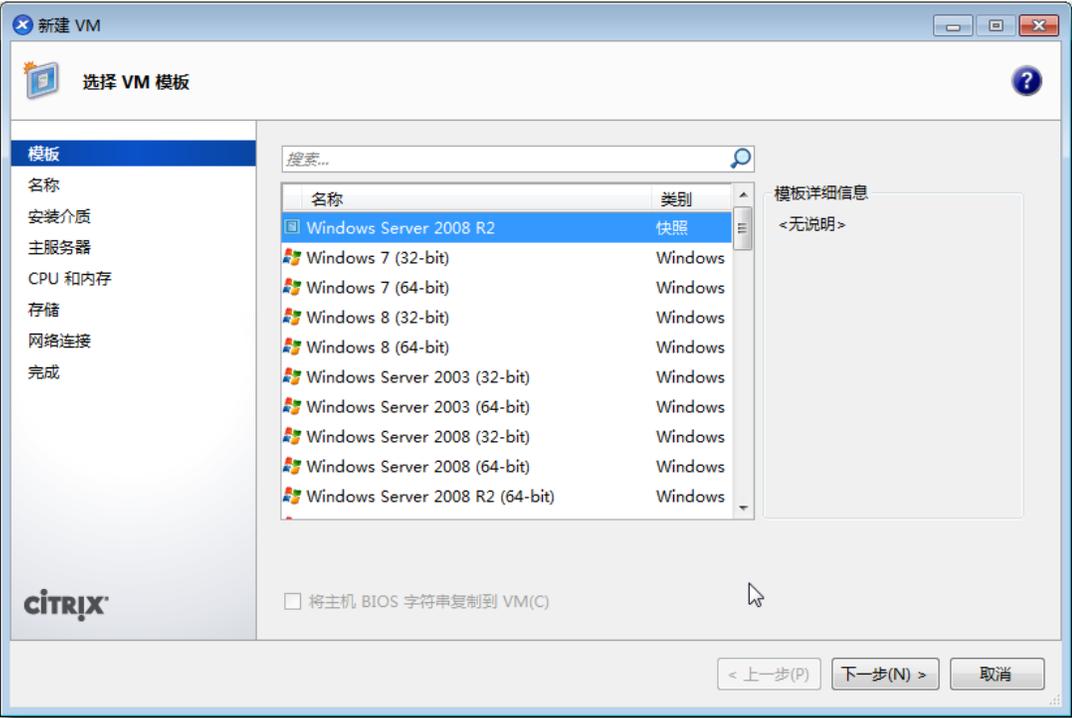
<b>步骤</b>	<b>操作</b>
25.	<p>右击打开</p>  <p>The screenshot shows a Windows Explorer window titled 'sysprep' with the address bar showing '计算机 &gt; 本地磁盘 (C:) &gt; Windows &gt; System32 &gt; sysprep'. The left sidebar shows '收藏夹' (Favorites) and '库' (Libraries). The main pane shows a list of files and folders: en-US, Panther, zh-CN, and sysprep. The 'sysprep' file is selected, and a context menu is open over it, with the '打开(O)' (Open) option highlighted.</p>

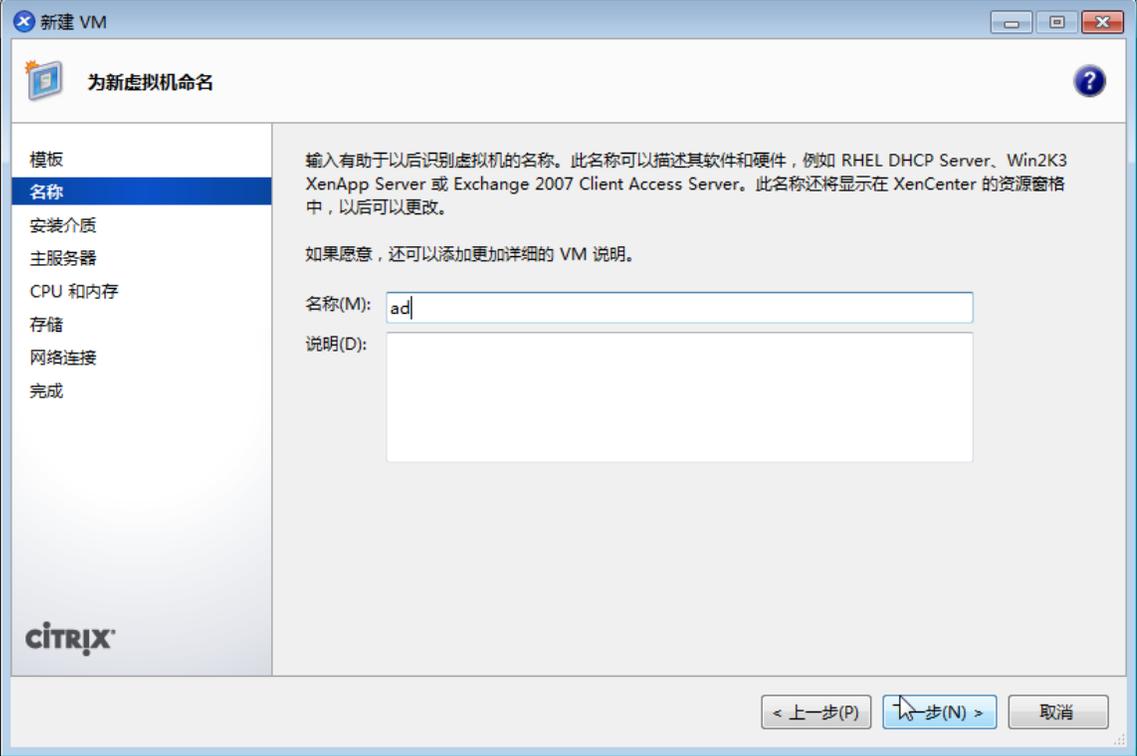
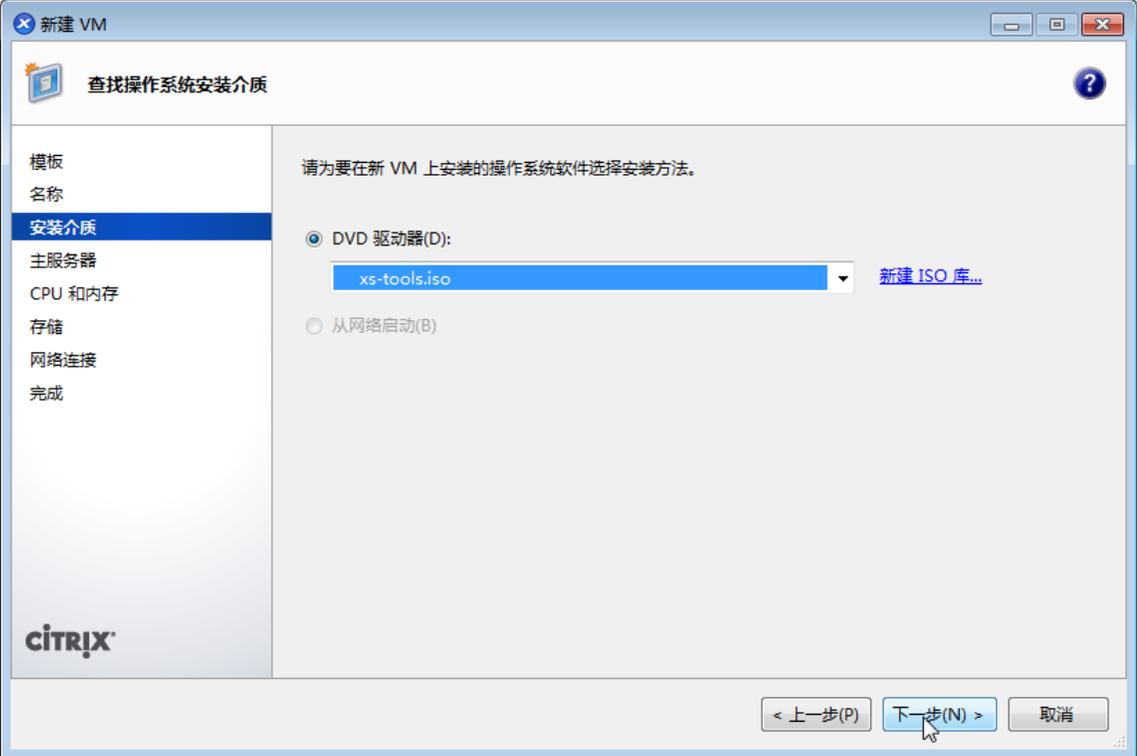
<b>步骤</b>	<b>操作</b>
26.	<p>保持关机状态，然后进行下一步模板转换 备注：必须勾选通用</p>  <p>The screenshot shows the '系统准备工具 3.14' (System Preparation Tool 3.14) dialog box. The title bar reads '系统准备工具 (Sysprep)为硬件独立和清理准备计算机。'. The '系统清理操作(A)' (System cleanup operations) section has a dropdown menu set to '进入系统全新体验(OOBE)'. The '通用(G)' (General) checkbox is checked and circled in red. The '关机选项(S)' (Shutdown options) section has a dropdown menu set to '关机' (Shutdown). The '确定' (OK) and '取消' (Cancel) buttons are at the bottom.</p>

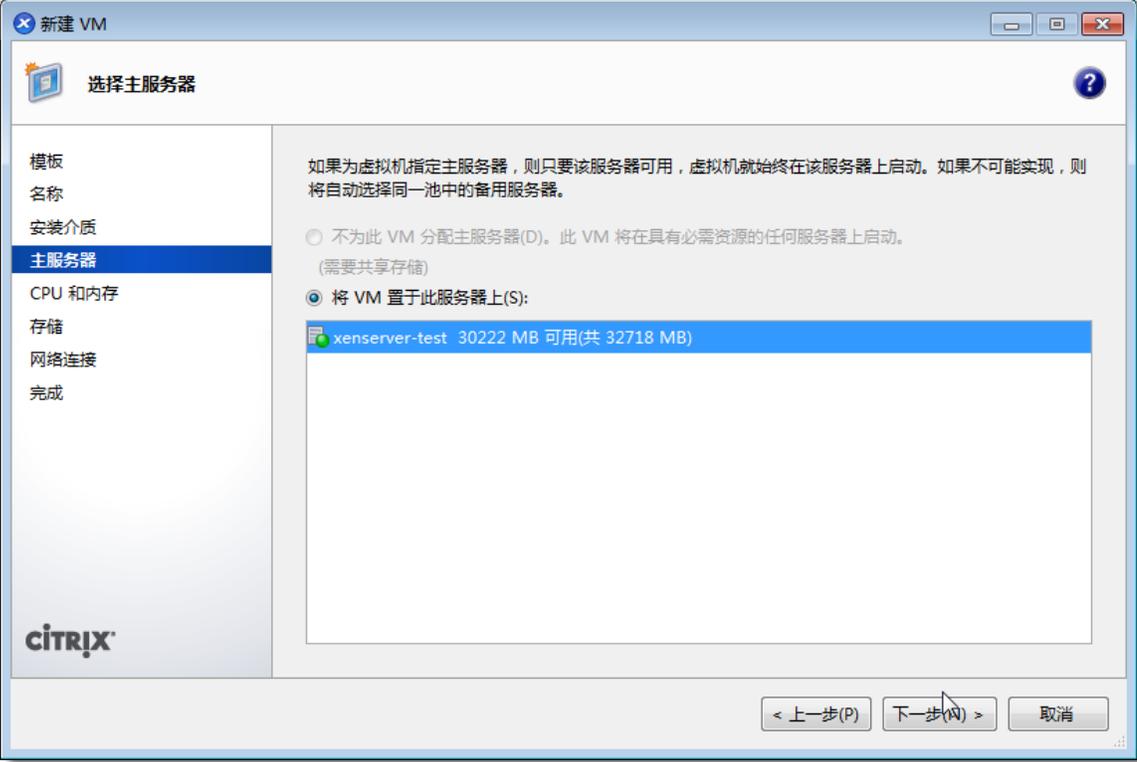
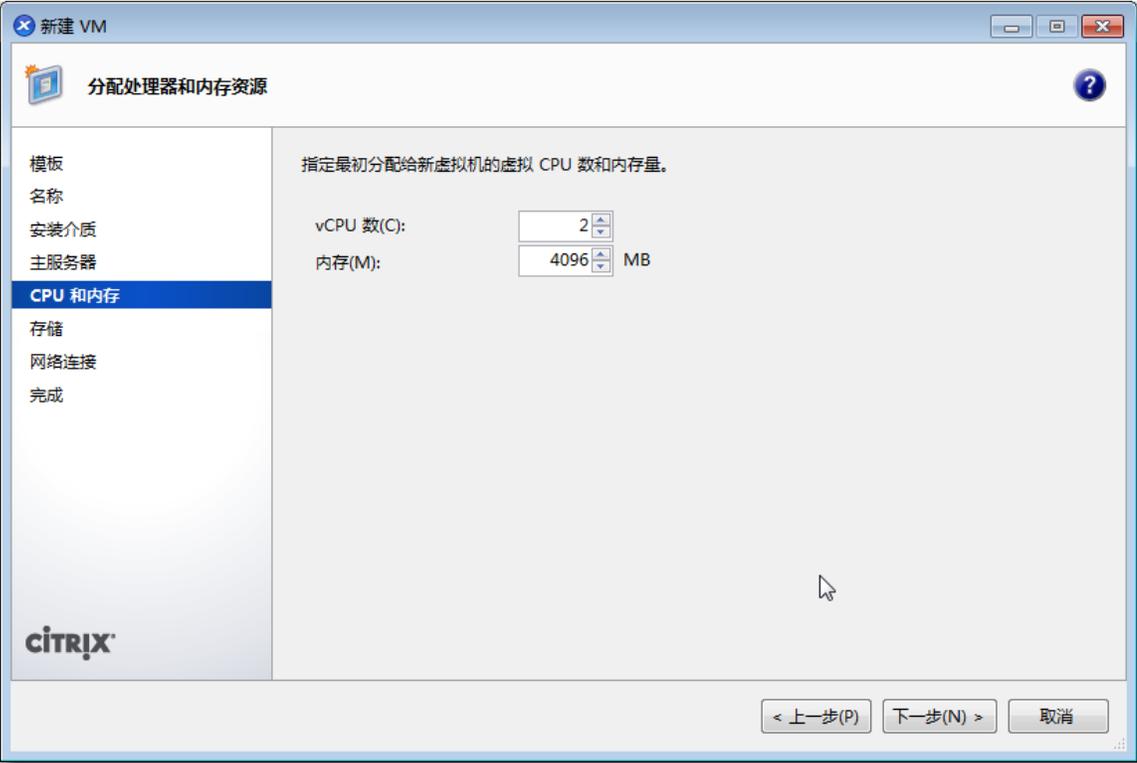
步骤	操作
27.	<p>将虚拟机转换成模板，右击转换为模版</p>  <p>The screenshot shows the XenCenter application window. The left pane displays a tree view with 'XenCenter' expanded to show a server named 'xenserver-test'. Underneath, a 'Windows Server' virtual machine is selected. A right-click context menu is open over the VM, with the option '转换为模板(N)...' (Convert to Template) highlighted. Other menu items include '启动(T)', '复制 VM(C)...', '移动 VM(M)...', '导出(E)...', '生成快照(A)...', '分配给 vApp(P)', '删除 VM(D)...', and '属性(R)'. The main pane shows the VM's configuration, including 'DVD 驱动器 1: xs-tools.is'.</p>

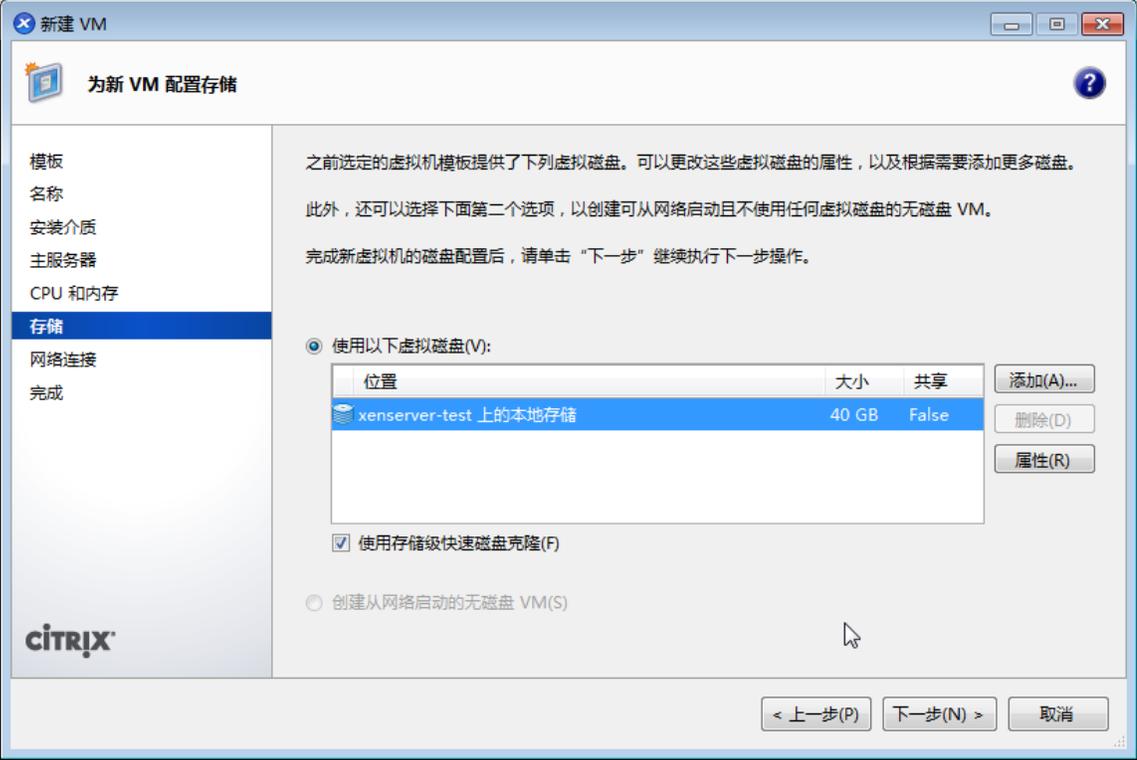
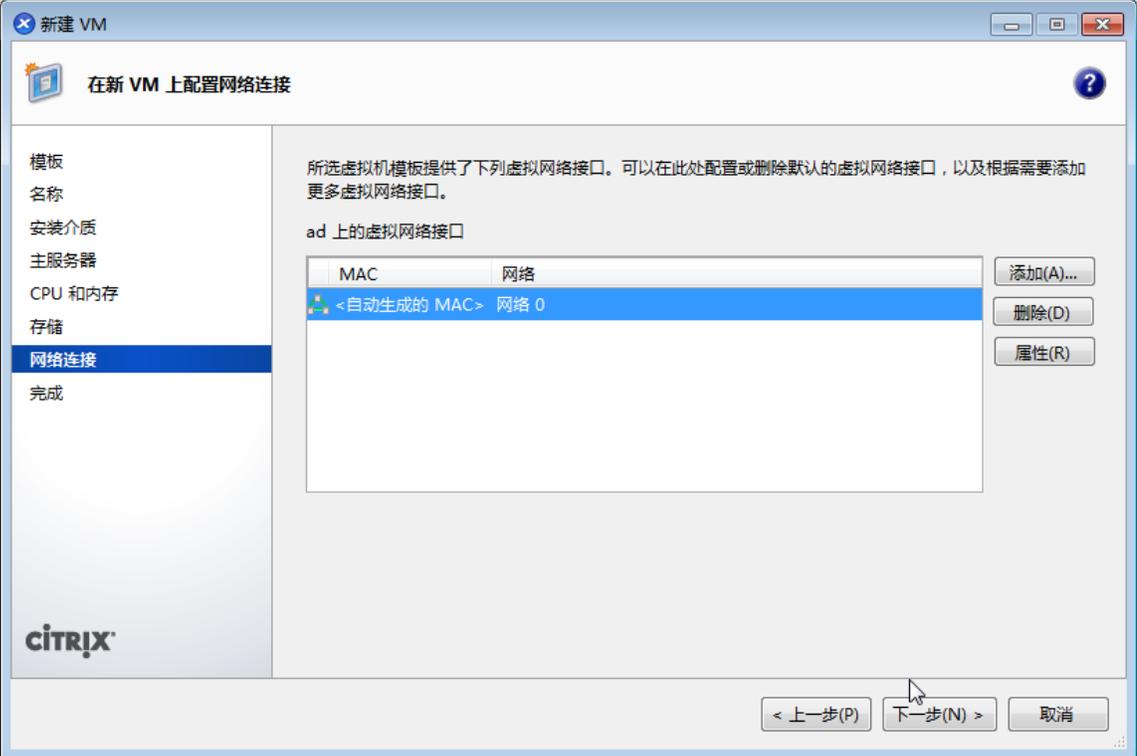
至此，系统模板制作完成。

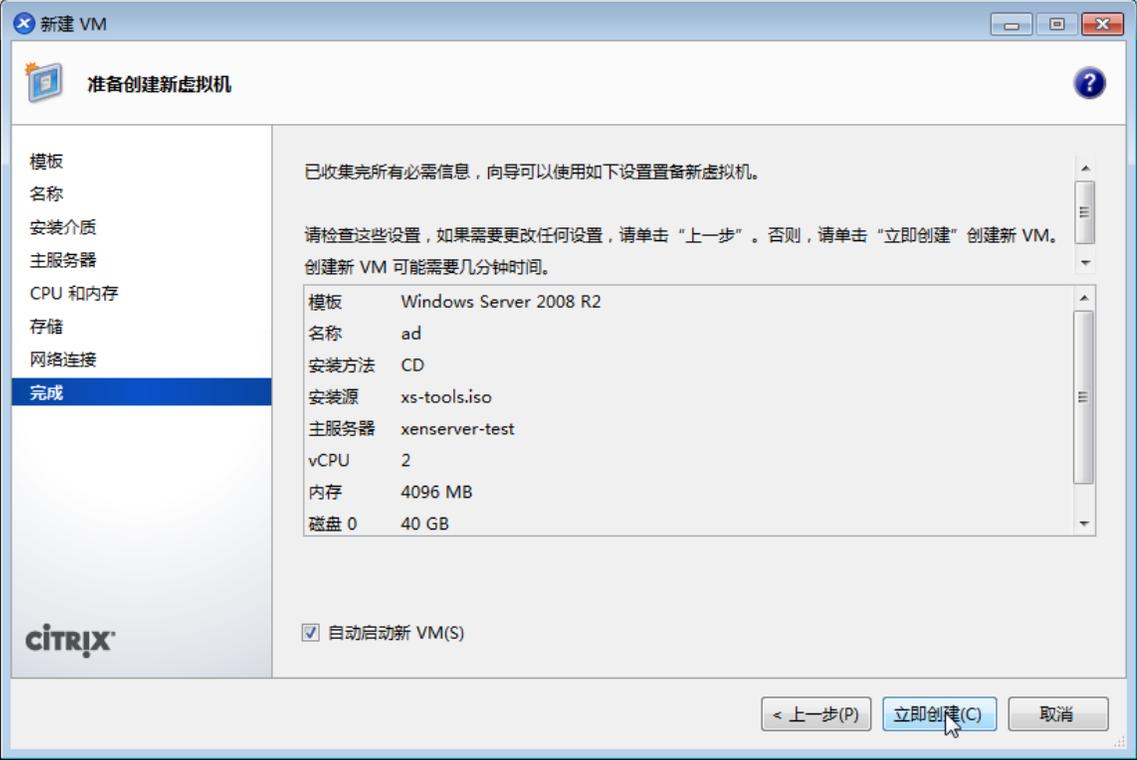
### 4.3 从模板创建新虚拟机

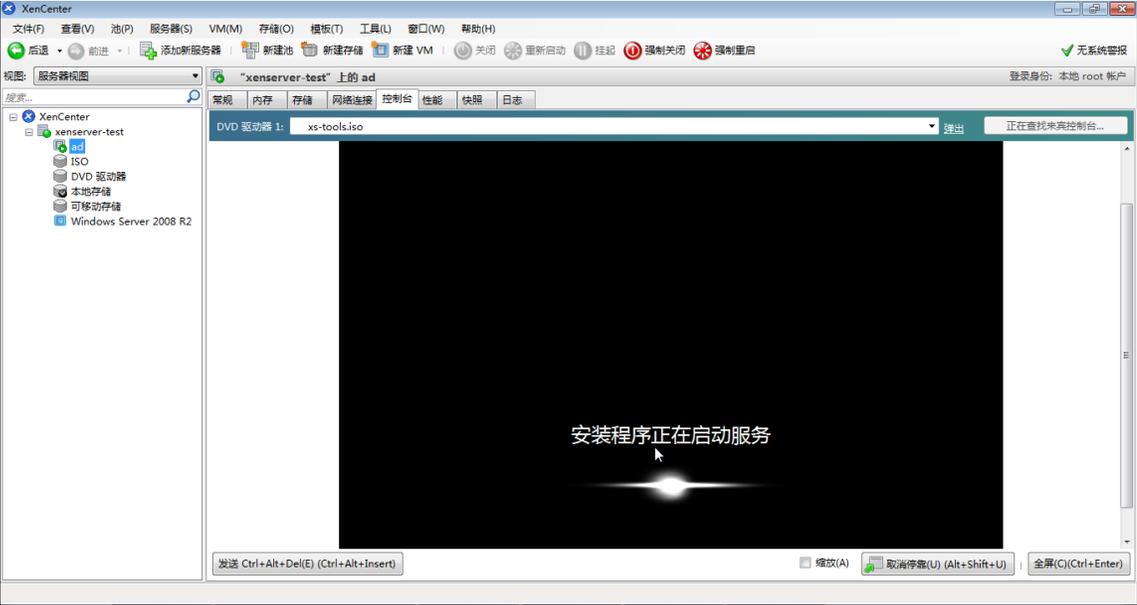
步骤	操作
1.	<p>右键点击新创建的模板，点击“新建 VM 向导”</p>  <p>The screenshot shows the XenCenter interface with a context menu open over the 'Windows Server 2008 R2' template. The menu items are: 新建 VM 向导(N)... (highlighted), 快速创建(Q), 导出到文件(E)..., 复制(C)..., 删除模板(D)..., and 属性(R). The background shows the 'General' tab of the template's properties, including fields for Name (Windows Server 2008 R2), Description, and UUID.</p>
2.	<p>选择刚刚创建的模板</p>  <p>The screenshot shows the '新建 VM' wizard at the '选择 VM 模板' (Select VM Template) step. A list of templates is displayed, with 'Windows Server 2008 R2' selected. The list includes various Windows and Windows Server versions (32-bit and 64-bit). The '类别' (Category) for the selected template is '快照' (Snapshot). The '模板详细信息' (Template Details) pane on the right shows '&lt;无说明&gt;' (No description). At the bottom, there is a checkbox for '将主机 BIOS 字符串复制到 VM(C)' (Copy host BIOS string to VM) and navigation buttons: '&lt; 上一步(P)', '下一步(N) &gt;', and '取消'.</p>

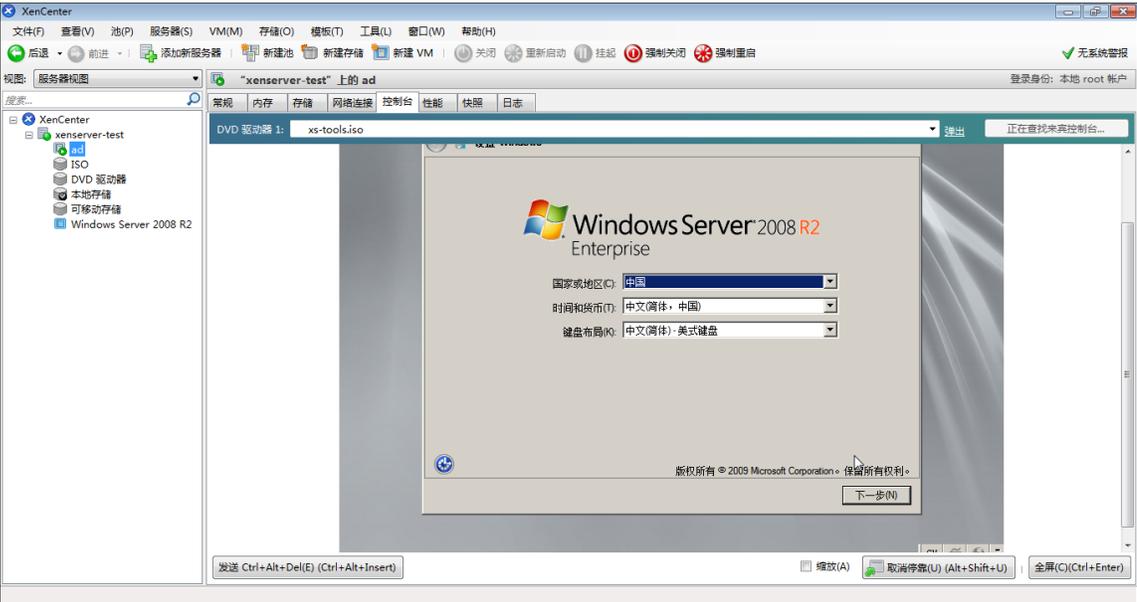
步骤	操作
3.	<p>为新虚拟机命名</p> 
4.	<p>DVD 驱动器建议选择 xs-tools.iso</p> 

步骤	操作
5.	<p>选择该虚拟机默认启动的服务器，下一步</p> 
6.	<p>根据需求调整 vCPU 数量，内存大小，下一步</p> 

步骤	操作
7.	<p>选择相应的存储，本 PoC 使用本地存储，下一步</p> 
8.	<p>选择 VM 使用的网络，下一步</p> 

步骤	操作																
9.	<p>点击立即创建</p>  <p>模板</p> <p>名称</p> <p>安装介质</p> <p>主服务器</p> <p>CPU 和内存</p> <p>存储</p> <p>网络连接</p> <p>完成</p> <p>已收集完所有必需信息，向导可以使用如下设置置备新虚拟机。</p> <p>请检查这些设置，如果需要更改任何设置，请单击“上一步”。否则，请单击“立即创建”创建新 VM。</p> <p>创建新 VM 可能需要几分钟时间。</p> <table border="1"> <tr><td>模板</td><td>Windows Server 2008 R2</td></tr> <tr><td>名称</td><td>ad</td></tr> <tr><td>安装方法</td><td>CD</td></tr> <tr><td>安装源</td><td>xs-tools.iso</td></tr> <tr><td>主服务器</td><td>xenserver-test</td></tr> <tr><td>vCPU</td><td>2</td></tr> <tr><td>内存</td><td>4096 MB</td></tr> <tr><td>磁盘 0</td><td>40 GB</td></tr> </table> <p><input checked="" type="checkbox"/> 自动启动新 VM(S)</p> <p>&lt; 上一步(P)    <b>立即创建(C)</b>    取消</p>	模板	Windows Server 2008 R2	名称	ad	安装方法	CD	安装源	xs-tools.iso	主服务器	xenserver-test	vCPU	2	内存	4096 MB	磁盘 0	40 GB
模板	Windows Server 2008 R2																
名称	ad																
安装方法	CD																
安装源	xs-tools.iso																
主服务器	xenserver-test																
vCPU	2																
内存	4096 MB																
磁盘 0	40 GB																

10.	<p>启动后，虚拟机进入初始化配置</p>  <p>XenCenter</p> <p>文件(F) 查看(V) 池(P) 服务器(S) VM(M) 存储(O) 模板(T) 工具(L) 窗口(W) 帮助(H)</p> <p>前进 后退 添加新服务器 新建池 新建存储 新建 VM 关闭 重新启动 挂起 强制关闭 强制重启</p> <p>无系统报错</p> <p>视图: 服务器视图</p> <p>搜索: "xenserver-test" 上的 ad</p> <p>登录身份: 本地 root 帐户</p> <p>常规 内存 存储 网络连接 控制台 性能 快照 日志</p> <p>DVD 驱动器 1: xs-tools.iso 弹出 正在查找来宾控制台...</p> <p>安装程序正在启动服务</p> <p>发送 Ctrl+Alt+Del(E) (Ctrl+Alt+Insert)    播放(A)    取消停靠(U) (Alt+Shift+U)    全屏(C)(Ctrl+Enter)</p>
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步骤	操作
11.	<p>启动完成后，可以看到虚拟机进入 OOB 系统初始化配置</p> 

至此，通过模板创建虚拟机完成

## 第5章 基础环境安装完成检查

请验证以下项目，确认 XenServer 基础环境以及搭建完毕。

- XenServer 启动及运行正常，网络、存储均已配置，ISO 库已建立。
- XenCenter 管理控制台连接及工作正常。
- 常用操作系统模板以及制作或者导入完成，从模板生成虚拟机工作正常。
- OS 模板已经正确进行了 Sysprep，以保证生成的操作系统未来加入域以后工作正常。

## 产品版本

产品	版本
XenDesktop	7.5
XenApp	7.5
XenServer	6.2 SP1
NetScaler	10.1