

## Tech Bulletin TB00265: Operating System Image Requirements for ClearCube® Blade PCs

### Overview and Environment

If you are re-imaging a ClearCube® Blade PC or VM (*blade* from this point forward) or are installing a custom image on a device, note that blades require specific firmware, motherboard chipset drivers, device drivers, and more.

**NOTE:** To ensure that your devices support drivers and firmware, only use drivers and firmware obtained from ClearCube.

### Procedure 1: Install Drivers

The following procedure details steps and items required when imaging and configuring ClearCube blades, and it assumes you are using Windows® 7 operating system. The menu options specified here might be different in other operating systems.

See *PC-over-IP® System User's Guide* at [www.clearcube.com/support/](http://www.clearcube.com/support/) for instructions about connecting zero clients and blades.

**NOTE:** Ensure that you perform steps and install components in the order listed below. Failure to do so can cause unsupported behavior.

Step	Action
1	Be sure to obtain drivers for blades from the ClearCube Support site at <a href="http://www.clearcube.com/support/">www.clearcube.com/support/</a> . All drivers and downloads cited in this procedure are available on the Support site.
2	Connect to the blade you are imaging. See the Quick Start Guide for your zero client or blade or see <i>PC-over-IP System User's Guide</i> for details. <b>For R-series blade models R3080D and lower:</b> If you do not have a C/Port or have display issues, see <i>Tech Bulletin TB00264, Video Configuration When Powering on R-Series Blades for the First Time (OOBE)</i> . (From the Support site, select the R-series blade you are imaging. From the blade's home page, click <b>Tech Bulletins</b> .)
3	After connecting to a blade, install a supported operating system.
4	Install the Intel chipset driver appropriate for your blade.
5	Install the Intel network adapter driver appropriate for your blade.

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## Tech Bulletin TB00265: Operating System Image Requirements for ClearCube® Blade PCs, Continued

**Procedure 1:  
 Install Drivers  
 (continued)**

Step	Action								
6	Optionally, install an appropriate RAID driver.								
7	<b>For A-series blades only:</b> Install the BMC driver.								
8	Optionally, install the Intel AMT driver. Note that AMT support typically requires BIOS-level configuration.								
9	Install the video driver in your blade's driver download. Note that driver downloads are categorized according to blade, video, and operating system configurations.								
10	Install PCoIP Host Software on blades and VMs. The version of the PCoIP Host Software must match the host card and the zero client firmware versions. <b>Blades with model V5140 quad host cards do not support this driver.</b>								
11	Install drivers for any additional peripherals or hardware.								
12	<p><b>For blades using PCoIP technology only:</b> Connected to the blade you are imaging, install zero-client-specific drivers.</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Install the Realtek HD Audio driver.</td> </tr> <tr> <td>2</td> <td>Install the DB9 driver if your client has a DB9 port.</td> </tr> <tr> <td>3</td> <td>Install the Common Access Card (CAC) driver if the zero client contains an internal CAC reader.</td> </tr> </tbody> </table>	Step	Action	1	Install the Realtek HD Audio driver.	2	Install the DB9 driver if your client has a DB9 port.	3	Install the Common Access Card (CAC) driver if the zero client contains an internal CAC reader.
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**Next step:** configure PCI Express® power management options on the blade.

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## Tech Bulletin TB00265: Operating System Image Requirements for ClearCube® Blade PCs, Continued

### Procedure 2: PCI Express Settings

The steps below show how to configure PCI Express power settings from the operating system Control Panel.

Step	Action
1	Click <b>Start &gt; Control Panel &gt; Power Options</b> . (If the Control Panel <b>View by</b> option is set to <b>Category</b> , click <b>Start &gt; Control Panel &gt; Hardware and Sound &gt; Power Options</b> ).
2	Select any power plan (you must perform this procedure on all power plans) and click <b>Change plan settings &gt; Change advanced power settings</b> to display the Power Options dialog box.
3	Expand the <b>PCI Express</b> item. From the <b>Link State Power Management</b> drop-down menu, select <b>Off</b> . Click <b>OK</b> to save your changes, close the window, and return to the Edit Plan Settings window. (Note that you have saved your PCI Express settings even though Cancel is the only option available in the Edit Plan Settings window. This is normal behavior.)
4	Be sure to specify this setting for all power plans.

### Next Steps and Additional Information

See the following documents for instructions about how to perform tasks related to image creation.

- **Viewing Windows® Welcome (OOBE) on R-series blades**  
 See *TB00264: Video Configuration When Powering on R-Series Blades for the First Time (OOBE)*.
- **Viewing pre-OS video and using BIOS configuration screens**  
 See the “Viewing Pre-OS Video (BIOS Configuration) and USB Input” section of *PC-over-IP System User’s Guide*.

**Contacting  
Support**

The table below shows how to contact ClearCube Support.

<b>Web</b>	<a href="http://www.clearcube.com/support/">www.clearcube.com/support/</a>
<b>E-mail</b>	<a href="mailto:support@clearcube.com">support@clearcube.com</a>
<b>Toll-free</b>	(866) 652-3400
<b>Direct</b>	(512) 652-3400