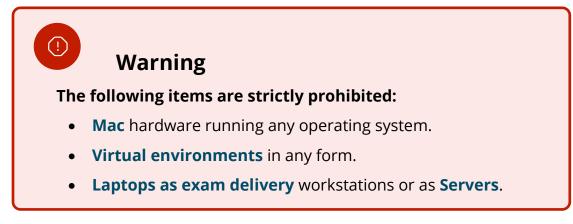


PVTC Select Technical Requirements

This document, effective **February 1, 2025**, describes the minimum requirements to which a test center must adhere, to become a Pearson VUE Authorized Test Center Select (PVTC Select). It lists the minimum system requirements for running the Pearson VUE Testing System software. It also includes information on the test center layout, test center admissions equipment, audio/visual equipment, and test center layout overview and recommendations.

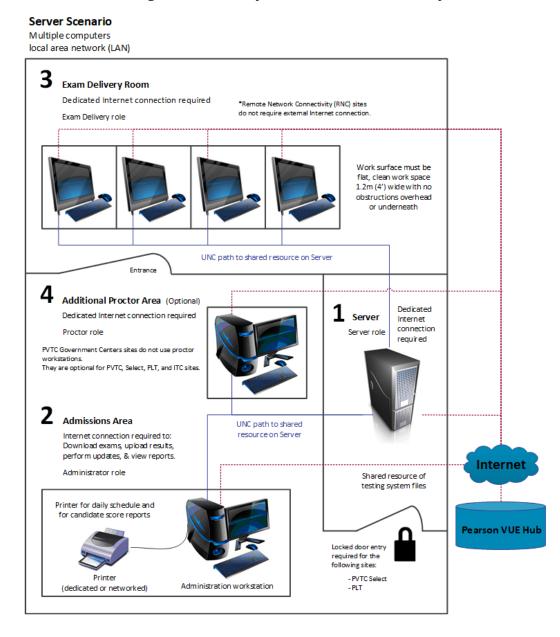
The Pearson VUE Testing System (VTS) software must be installed using the Server scenario configuration. The testing system hardware and software must meet Pearson VUE's minimum requirements as shown in <u>System</u> <u>requirements</u> on page 2.



Any Windows user account that interacts with the VTS software on the **Administration**, **Proctor**, or **exam delivery workstation** is **required** to have **local administrator rights** on that workstation. This includes both installing and running the VTS software.

About the server installation scenario

In a Server scenario installation, all exam delivery workstations are connected through a LAN, and a file server provides shared file storage. This is illustrated below. (Server scenario refers to a setup type and is not related to an Operating System.) The DVR or CMVR PC for recording candidates during exam delivery must also be added to your network.



System requirements

Pearson recommends purchasing equipment that meets or exceeds the Recommended Specifications. The minimum requirements will change periodically based on the needs of our exam sponsors.

VTS software configuration

The PVTC Selects are strictly prohibited from installing in a Workgroup scenario configuration. **PVTC Select sites MUST install using a Server scenario configuration.**

Hardware configuration

All-in-one PCs are permitted if they meet the minimum Technical Specification, and the Touch screen is disabled. Pearson VUE highly recommends that All-in-one PC's meet the Recommended Technical Specifications.

Software licenses

All test centers must have Windows operating systems that have completed online activation. Application software installed on exam delivery workstations must also have current licensing. Windows operating systems must pass Genuine Windows Validation.

Network configuration

Pearson VUE **strongly recommends** that all machines with VTS Software installed remain in the same domain or workgroup, VLAN, and subnet. Network configurations that do not follow this guideline may experience decreased exam delivery performance. You may be asked to make changes to your network configuration to comply with these guidelines as part of problem resolution.

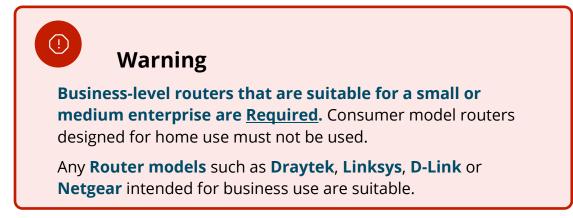
The following ports are also required to be open for the software to function properly:

4172, TCP 4172, UDP 80, TCP - HTTP 443, TCP - HTTPS

If your test center uses a firewall or web filter, please ensure that the following URL's and IP Ranges are on the allowlist to ensure that you can connect to Pearson VUE.

- Unrestricted access to http://*.pearsonvue.com and https://*.pearsonvue.com
- IP range 13.89.111.144/28 (13.89.111.144 13.89.111.159) / ports 80 and 443
- IP range 52.177.91.16/28 (52.177.91.16 52.177.91.31) / ports 80 and 443

If your firewall performs DNS or IP egress filtering, contact Pearson for a list pertinent to your site.



Internet bandwidth

The minimum connection speed (Base Network) requirement of 5.0 Mbps down/ 3.0 Mbps up is required for all test centers. Some exam deliveries will require an internet connection. For Internet Based Tests (IBT), internet requirements depend on the number of delivery workstations. See the table below for details.

Base network bandwidth + 256 Kbps for each exam delivery workstation

- 1 15 delivery workstations
 - **5.0 Mbps down/ 3.0 Mbps up** base and **512 Kbps** for each workstation.
- 16 50 delivery workstations
 - **10.0 Mbps down / 5.0 Mbps up** base and **512 Kbps** for each workstation.

51 – 100 delivery workstations

• **20.0 Mbps down / 10.0 Mbps up** base and **512 Kbps** for each workstation.

All workstations

• For IBT exam deliveries, latency should not exceed **150 ms**.

24-inch monitors – exam delivery

All test centers are required to use 24-inch monitors.

Monitor

- Must allow for the following display resolution settings and be set to the highest resolution:
 - 1920 x 1080 (set to this resolution)
 - o **1280 x 1024**
 - o 1024 x 768
- Monitor must be connected to the computer using DVI, DisplayPort, or HDMI

Desktop graphics adapter

- Exam delivery workstations must have a graphics adapter that supports **GPU Scaling** (ability to Maintain Aspect Ratio).
- Exam delivery workstations must have the GPU Scaling feature enabled in the graphics adapter software.
- The latest version of graphics drivers must be installed.

Pearson VUE specific hardware

Some exams require test center admissions equipment and/or audio/visual equipment. Please consult with your Pearson VUE representative to determine if these components are required for your test center.

Exam monitoring

Internet connection:

Administration workstation:

• See <u>Administration and proctor workstations</u> section below.

DVR workstation:

• Broadband (DSL, cable, or LAN/WAN)

Admissions

Web camera:

Administration workstation:

- Logitech HD Webcam C615 or
- Logitech Pro C920 Pro HD Webcam or
- Logitech C920e Business Webcam

Signature device:

Administration workstation:

- ePadLink: ePad Signature Pad Model VP9801 or
- ePadLink: ePad II Signature Pad Model VP9851

Palm vein device:

Administration workstation:

• Fujitsu Palm Vein Device

Exam delivery

<u>Video camera</u>:

Exam delivery workstation:

• Mini dome camera

Microphone:

Exam delivery room:

• Microphone

Audio/visual collection:

DVR workstation:

• EZWatch Pro

Server: file storage

The file storage server must be accessible to the Administration workstation, Proctor workstation, and all exam delivery workstations. These requirements apply to Administration workstations with 1 – 15 exam delivery workstations, and to Servers with 16 – 30 exam delivery workstations.

Operating System

<u>Required for 1 – 15 exam delivery seats:</u>

***Windows 10** Professional or Enterprise (64-bit mandatory)

***Windows 11** Professional or Enterprise 10th generation or higher (**64-bit mandatory**)

Windows Server 2022 (64-bit)

Windows Server 2019 (64-bit)

Windows Server 2016 (64-bit)

<u>Required for 16 – 30 exam delivery seats:</u>

Windows Server 2022 (64-bit)

Windows Server 2019 (64-bit)

Windows Server 2016 (64-bit)

(Windows Server Core is not currently supported.)

*You must have the latest version of Windows 10 or 11 with all current patches installed. You should run monthly updates for any OS updates.

****Windows 10 support ends October 2025.**



Note:

If you are an educational facility, i.e., University, **Windows 10** education is currently supported.

Processor

Required for 1 – 15 exam delivery seats:

- Intel: **i5** Generation 4 or higher **i3** Generation 8 or higher
- AMD: Ryzen 3 Generation 5 or higher

<u>Required for 16 – 30 exam delivery seats:</u>

- Intel: **i7** Generation 2 or higher
- AMD: Ryzen 5 or higher

*Please refer to the Microsoft website to ensure the i3/i5/i7 or Ryzen 3/5 processor is compatible with Windows 11.

RAM

Required for 1 – 15 exam delivery seats:

8 GB of RAM

Required for 16 – 30 exam delivery seats:

16 GB of RAM or more

Hard drive

SATA II Interface Standard or faster Interface Standard.

128 GB available disk space.

Network connection

1 Gbps Full Duplex WIRED connection to the network switch.

Strongly recommended:

The server should be dedicated to the VTS software to ensure the highest quality experience for candidates during exam delivery.

Pearson VUE strongly discourages that the server provides additional services such as: domain controller, DHCP, SQL Server, WINS, etc.



Warning:

Wireless Networks are strictly prohibited. 3G/4G/5G connections are prohibited.

Power

UPS is recommended.

Internet connection

See Internet bandwidth requirements above.

Internet browser

Latest version of Edge, Chrome, or Firefox.

Additional software

- Server must have **Anti-Virus software** installed with a current update.
- .NET 3.5 framework must be enabled.

Additional notes

- The Windows account used to **install** the VUE Testing System Platform must have **full local Administrative rights** to install properly.
- Candidates should never have free access to the Server machine at any time.

Administration and proctor workstations

Operating System

*Windows 10 Professional or Enterprise (64-bit mandatory)

****Windows 11** Professional or Enterprise 10th generation or higher (**64-bit mandatory**)

*You must have the latest version of Windows 10 or 11 with all current patches installed. You should run monthly updates for any OS updates.

****Windows 10 support ends October 2025.**

Note:

Ø

If you are an educational facility, i.e., University, **Windows 10** education is currently supported.

Processor

Minimum required:

- Intel: **i5** Generation 4 or higher **i3** Generation 8 or higher
- AMD: **Ryzen 3** Generation 5 or higher

Recommended specifications:

- Intel: **i7** Generation 2 or higher
- AMD: Ryzen 5 or higher



Note:

Processors must support SSE 2.0 or higher.

**Please refer to the Microsoft website to ensure the i3/i5 or Ryzen 3 processor is compatible with Windows 11.

RAM

<u>Minimum required:</u> <u>Recommended specification:</u>

8 GB of RAM

16 GB of RAM or more

Hard drive

128 GB available disk space.

Graphics adapter

- Video Adapter must support **DirectX 12** or higher and **OpenGL 2.0** or higher. Latest drivers installed.
- The **WDDM Driver** version must be **2.0** or higher.
- **128 MB** of dedicated Video RAM or the ability to increase the dedicated video memory to 128 MB via bios change.



OpenGL 2.0 or higher is required regardless of whether it is an "integrated chipset" or a machine with a dedicated video card.

 All computers and monitors must be connected via DVI, DisplayPort, or HDMI.

Display

24-inch monitor.

Mouse and keyboard

- English QWERTY Keyboard
- 2 Button Wheel Mouse

USB ports

7 available USB 2.0 ports for:

- English QWERTY Keyboard
- 2 Button Wheel Mouse
- Signature Pad admissions equipment
- Camera admissions equipment
- Palm Vein admissions equipment
- 2 spare ports

Network connection

1 Gbps Full Duplex WIRED connection to the network switch.

Strongly Recommended:

All machines with VTS software installed should remain in the same domain or workgroup, VLAN, and subnet.

Warning:

Wireless Networks are strictly prohibited. 3G/4G/5G connections are prohibited.

Internet connection

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See Internet bandwidth requirement above.

Internet browser

Latest version of **Edge**, **Chrome**, or **Firefox**.

Printer

600 DPI Laser Printer.

Additional software

- .NET 4.0 is installed with the VTS software.
- If installing on **Windows 10**, **.NET 3.5** must be enabled on the Administration/Proctor workstation to complete the VTS installation.
- All workstations must have **Anti-Virus software** installed with a current update.

Additional notes

- Windows 11 and 10 allows for up to 15 simultaneous exam deliveries.
- Candidates must not have free access to the Administration or Proctor workstations at any time.
- The Windows account used to **install** the VUE Testing System Platform must have **full local Administrative rights** to properly install and update the software.

Exam delivery workstation

Operating System

*Windows 10 Professional or Enterprise (64-bit mandatory)

****Windows 11** Professional or Enterprise 10th generation or higher (**64-bit mandatory**)

*You must have the latest version of Windows 10 or 11 with all current patches installed. You should run monthly updates for any OS updates.

**Windows 10 support ends October 2025.

Note:

If you are an educational facility, i.e., University, **Windows 10** education is currently supported.

Processor

Minimum required:

- Intel: **i5** Generation 4 or higher **i3** Generation 8 or higher
- AMD: **Ryzen 3** Generation 5 or higher

Recommended specifications:

- Intel: **i7** Generation 2 or higher
- AMD: Ryzen 5 or higher



Note:

Processors must support SSE 2.0 or higher.

**Please refer to the Microsoft website to ensure the i3/i5 or Ryzen 3 processor is compatible with Windows 11.

RAM

<u>Minimum required:</u> <u>Recommended specification:</u>

8 GB of RAM

16 GB of RAM or more

Hard drive

128 GB available disk space.

Graphics adapter

- Video Adapter must support **DirectX 12** or higher and **OpenGL 2.0** or higher. Latest drivers installed.
- The **WDDM Driver** version must be **2.0** or higher.
- **128 MB** of dedicated Video RAM or the ability to increase the dedicated video memory to 128 MB via bios change.



Note:

OpenGL 2.0 or higher is required regardless of whether it is an "integrated chipset" or a machine with a dedicated video card.

- All exam delivery workstations must have a **Graphics Adapter** that supports **GPU Scaling** (sometimes called Maintaining Aspect Ratio).
- All exam delivery workstations must have the **GPU Scaling feature** enabled.
- All computers and monitors must be connected via DVI, DisplayPort, or HDMI.

Display

See <u>24-inch monitor</u> requirements above.

Audio

Windows compatible audio playback capability.

Mouse and keyboard

- English QWERTY Keyboard
- 2 Button Wheel Mouse

USB ports

4 available USB 2.0 ports for:

- English QWERTY Keyboard
- 2 Button Wheel Mouse
- 2 spare ports

Network connection

1 Gbps Full Duplex WIRED connection to the network switch.

Strongly Recommended:

All machines with VTS software installed should remain in the same domain or workgroup, VLAN, and subnet.

U Warning:

Wireless Networks are strictly prohibited. 3G/4G/5G connections are prohibited.

Internet connection

See Internet bandwidth requirements above.

Internet browser

Latest version of **Edge**, **Chrome**, or **Firefox**.

Printer

600 DPI Laser Printer.

Additional software

- .NET 4.0 is installed with the VTS software.
- If installing on **Windows 10**, **.NET 3.5** must be enabled on the Administration/Proctor workstation to complete the VTS installation.
- All workstations must have **Anti-Virus software** installed with a current update.

Additional notes

- The Windows account used to **install** the VUE Testing System Platform must have **full local Administrative rights** to install properly.
- The Windows account profile logged into the **exam delivery workstation** must have **full local Administrative rights** to launch the Delivery Manager software.
- If there is an approved accommodation for Assistive Technology (such as JAWS software) the exam delivery workstation requires more advanced technical requirements, such as 16 GBs of RAM.
 A Pearson representative will confirm with test center staff prior to scheduling this type of Assistive Technology.

Prohibited on all workstations and servers

Portable computing devices

Smartphones are strictly prohibited.

Tablet devices are strictly prohibited (e.g., iOS, Android, and Windows 8).

Netbooks and Chromebooks are strictly prohibited.

U Warning:

Laptops are strictly prohibited as exam delivery workstations or as Servers.

Processor

Devices running Ultra Mobile Processors are strictly prohibited. This includes but is not limited to **Intel Atom**, **AMD NEO CPU** lines, and **ARM** CPUs.

RAM

Less than **8 GB** on any workstation.

Hard drive

FAT32 File System.

Operating System

- **Evaluation versions** of operating systems are not allowed.
- Windows 8.1, 8, 7, XP and Vista are strictly prohibited.
- Windows Server 2012 and 2008 (all versions).
- Windows Server Operating System strictly prohibited on the exam delivery workstations and not supported on Administration workstations.
- Virtual environments are strictly prohibited (e.g., VMWare, Virtual PC, Citrix, Parallels, VirtualBox, etc.)
- **Mac OSX** is strictly prohibited.
- Mac hardware running any Operating System is strictly prohibited.
- All Linux/Unix based Operating Systems are strictly prohibited.

Graphics adapter

Any Graphics Adapter that does not support **DirectX 12** or later with **WDDM 2.0 driver** or higher.

Monitor display

- **Monitors smaller than 24 inches** are strictly prohibited on exam delivery workstations.
- **Dual monitors** are strictly prohibited on exam delivery workstations.
- **KVM switches** are strictly prohibited on exam delivery workstations.
- Touch Screen monitors must be disabled on all workstations.

USB

Portable computing devices such as, but not limited to, smartphones and tablets are strictly prohibited from being connected to the exam delivery workstation during exam deliveries.

USB Hubs are strictly prohibited on exam delivery workstations.

Network

Wireless Networks of any kind are strictly prohibited.

IPv6 is not currently supported.

Novell Netware is not supported.

Network Hubs are strictly prohibited.

Internet connection

SSL VPNs are strictly prohibited. (e.g., Hotspot Shield).

Additional software

Software that can be used to remotely access the delivery workstations during exam delivery is strictly prohibited.

Additional notes

It is strictly prohibited to install the VUE Testing System Platform on any computer that does not have Anti-Virus software installed on it.

PVTC Selects are prohibited from installing in a Workgroup scenario configuration.

About PVTC Select test centers

To meet the needs of high stakes testing and professional licensure clients, Pearson VUE has implemented a testing network model called the Pearson VUE Authorized Testing Center Select channel (PVTC Select). This channel delivers exams in over 90 countries globally. This network provides professional licensure exams and requires special equipment and higher security than IT certification exam sponsors.

Pearson VUE has identified 'premiere' authorized test centers in locations where candidate demand warrants a need:

• To meet the added security requirements of exam sponsors, state-ofthe-art candidate admissions equipment for verifying candidate identity is required, (e.g., digitized photograph, palm vein, and signature) as well as audio/video monitoring and recording equipment for enhanced exam delivery room security.

Symbols used

The symbols used throughout this document are described below.

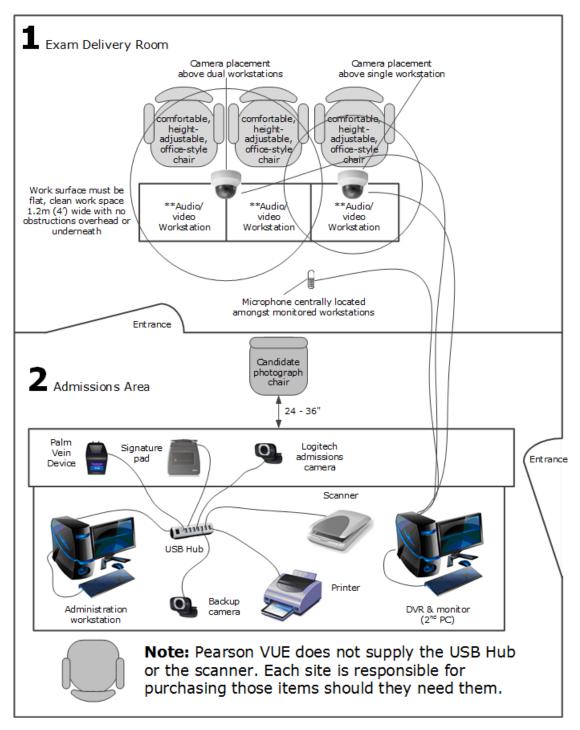


Padlock—Used when security measures are discussed in the guide.

Heart—Used to indicate best practices. Best practices are procedures that Pearson VUE does not necessarily require but encourages you to follow. These procedures are intended to help you provide the best possible services at your test center and to help you run your center efficiently.

PVTC Select test center layout

The diagram below identifies where the test center equipment should be placed in your facility. More detailed information can be found in the <u>About</u> <u>admissions and audio/visual equipment</u> and <u>Test center layout overview &</u> <u>recommendations</u> sections of this document.



About admissions and audio/visual equipment

Biometrics refers to technologies for measuring and analyzing human characteristics such as voice patterns, facial patterns, and hand measurements, typically for authentication purposes.

- Palm vein and other biometric devices consist of a reader or scanning device and software that convert the scanned information into digital form. The biometric data is then stored in a database along with other data about a person.
- When the person's identity must be verified, the newly captured biometric data can be compared to the stored biometric data. The software uses sophisticated algorithms to compare the two sets of data and determines if it matches.

Some exam sponsors require Pearson VUE to collect admissions information from candidates when they are admitted for exams and to video record them while they take their exams. To facilitate this requirement, Pearson VUE provides test centers with a system of hardware and software that allows administrators to capture the necessary data.

- Sponsors choose which admissions information they would like the test center administrator to collect (digital palm vein, signature and/or photo). Most sponsors choose all three.
- To collect this data, test center administrators admit a candidate using Admissions Manager, which is the normal procedure for all Pearson VUE exams. If a sponsor requires admissions data, Admissions Manager automatically incorporates the necessary steps into the admission process.
- The devices used to capture the data are controlled from within the Admissions Manager software. It is not necessary to manipulate the hardware or launch any other software applications.
- The admissions data is automatically sent to Pearson VUE with the candidate's exam results.

Test center layout overview & recommendations

Refer to the diagram on page 24 for desired test center setup.

- Exam delivery room
 - All exam delivery workstations must be configured with a video camera for candidate monitoring.
 - The video camera must be installed on or near the ceiling to view workstations for exams that require audio and visual monitoring such as GMAT[®] or Pearson Test of English Academic (PTE-A).
 - Audio and visual monitored workstations should be installed as far away from the entrance to the exam delivery room as possible to provide a less disruptive environment for candidates.
 - The video camera is connected to the video server (DVR) and monitor where the Test Administrators monitor candidates.
 - GMAT[®] and other professional exam candidates are required to scan their palm each time they ENTER and EXIT the exam delivery room.
 - The exam delivery room should be arranged to prevent a line of sight to the exam delivery workstation monitor screens from outside the room. In some cases, this might require partitions on the ends of rows (if, for instance, the end of the row is near a door or window). See the Partitions – exam delivery room section below for additional guidelines on partition setup.
 - We recommend you **attach labels** to the side of the monitor on workstations that are equipped with a Video Camera.
 - Each exam delivery workstation must be placed on a flat, clean workspace 1.2 m (4') wide with no obstructions overhead or underneath. Each workstation should have a comfortable, height-adjustable, office-style chair.

B

• Partitions – exam delivery room

 Partitions should separate lateral candidates (seated side-byside or corner-to-corner). These solid privacy partitions or walls must be at least 1.5 m (5') in height and extend outward from the wall at least 1.2 m (4').

All Partitions must be 1.5 m (5') in height and extend outward from the wall at least 1.2 m (4'). Partitions that do not meet these requirements will not be approved.

- **Desktop partitions** are acceptable if height measured from the floor is at least 1.5 m (5') and measures outward from the wall 1.2 m (4').
- Exam delivery room setup should also take into consideration that ceiling mounted cameras should have sufficient viewing area into the cubicles.
- Candidates seated at the end of a row do not need a partition at the end of the table/row unless

a candidate is seated nearby or
the end of the row is near a door or window.

 Sites with only one exam delivery workstation are not required to have partitions, if the exam delivery room is enclosed and any viewing windows would not allow others to pass by and view exam items on the screen.

• Partitions – classroom

In addition to the exam delivery room partition items listed **above**, the following guidelines should be considered when installing partitions in a classroom setup:

- **Temporary partitions** may be used in a classroom if installing permanent partitions would conflict with classroom activities.
- Front row candidates do not need partitions in front of them (behind their computer monitor) since no candidates are in view in front of them.
- Candidates in rows seated <u>behind</u> other candidates should have a partition in front of them (behind their computer monitor) to prevent viewing of candidates seated in front.
- Candidates seated at the end of a row do not need a partition at the end of the table/row since no candidate is seated next to them unless the end of the row is near a door or window.

Admissions area

- Having the admissions area and/or exam delivery room on different floors or in different buildings is NOT desirable. They should be **on the same floor**, in the same building, and in the same general area. This ensures higher testing security.
- The admissions equipment should be located as close to the exam delivery room as possible, since candidates MUST have their palm vein captured each time they ENTER and EXIT the exam delivery room, including scheduled and unscheduled breaks.
 - All admissions devices including the signature pad, palm vein device, admissions camera, and scanner should be connected to the Administration workstation, or a USB hub connected to the Administration workstation.
 - The USB hub should connect to the workstation or computer in which the Test Administrator will use Admissions Manager to admit candidates.

- The video server (DVR) and video monitor must be installed where the Test Administrator will be seated for CONSTANT candidate monitoring. DO NOT install the DVR and monitor in an area where the Test Administrator does not spend the majority of his or her time.
- Do NOT turn off the Video Server at any time. It must always remain powered ON. We recommend you attach a label to the DVR box instructing others to <u>always</u> leave it on.
- Do not turn off the Monitor for the Video Server at any time. It must <u>always</u> remain powered ON. We recommend you attach a label to the Video Monitor near the power switch instructing others to <u>always</u> leave it on.
- Lockers
 - PVTC Select sites are required to have one locker per exam delivery Workstation for storage of candidates' personal belongings. It is not acceptable to use a shared locker or drawer, where multiple candidates use the same locker/drawer.
 - Each locker must have **its own key and locker number**, which will be provided to the candidate.
 - Lockers do not need to be in the check-in area but must be outside of the exam delivery Room.
 - If your site has only one exam delivery workstation, then one cabinet/drawer is acceptable, if the key is provided to the candidate (the Administrator cannot keep the key while the candidate is using the locker).