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Horizon
by dvtel

Horizon 7.0 Client Workstation Specifications and Deployment

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1. Introduction

The Horizon System is comprised of server components and client applications that interact with the server side. In this document, we will provide a brief description about the Admin Center, Control Center and Quick Control Center (QCC) applications. This document will describe the process of deployment and the hardware requirements.

1.1 Control Center

The primary role of the Control Center client application is to provide the user interface for the system operator, which enables the monitoring of live and archived video and audio, as well as receiving and managing alarms.



NOTE: *The Horizon system may include multiple Control Center applications, which can connect either locally from the Local Area Network or remotely via a Wide Area Network.*

1.2 Horizon Admin Center

The primary role of the Horizon Admin Center client application is to provide the user interface for the system administrator, enabling the definition and configuration of various system aspects.

1.3 Quick Control Center

The Quick Control Center is self-contained version of Control Center application that does not require installation. This application serves also as a stand-alone player.

2. Hardware Requirements

Name	Minimum	Recommended	High Performance
Processor	Intel Dual Core 2.4 GHz	Intel E3-1245 v3 or better	Intel E5-1650 v3
RAM	4GB	8GB	8GB
Hard Drive	5400 RPM 60 GB for OS+SW	7200 RPM 80 GB for OS+SW	SSD 80 GB for OS+SW
Network Interface	100/1000 Mbps	1Gbps	1Gbps
Video Card	Intel HD 4000 Series	Intel HD 4000/6000 Series	2 x NVIDIA® Quadro® K620
Operating System	Any supported OS (Section 5)	Windows 7 64-bit Windows 8.1 64-bit	Windows 7 64-bit Windows 8.1 64-bit

3. Control Center Video Display Performance Guidelines

3.1 Video Display Adaptors

It is recommended to use an Intel HD Graphics 4000 card or a Dual Head 128MB PCI Express video card or higher.

4. Control Center Performance Guidelines

The example below provides only estimated performance. The numbers below are to be compared to the hardware specifications list in [Section 2: Hardware Requirements](#)

Resolution/FPS	Minimum	Recommended	High Performance
CIF @ 30 FPS	20 streams	70 streams	80 streams
4CIF @ 30 FPS	10 streams	32 streams	40 streams
1080P @ 15 FPS	8 streams	24 streams	32 streams
1080P @ 30 FPS	4 streams	12 streams	16 streams
4K @ 15 FPS	1 streams	6 streams	8 streams
4K @ 30 FPS	0 streams	3 streams	4 streams

- Calculations based on DVTEL Quasar cameras streaming H.264 with default DVTEL values.

5. Supported Operating Systems

The following operating systems are supported with Horizon client applications:

Windows 7 SP1 - 64 bit*

Windows 8 - 64 bit

Windows 8.1 - 64 bit

*Window 7 SP1 – 32 bit supported only for upgrades on client machines.

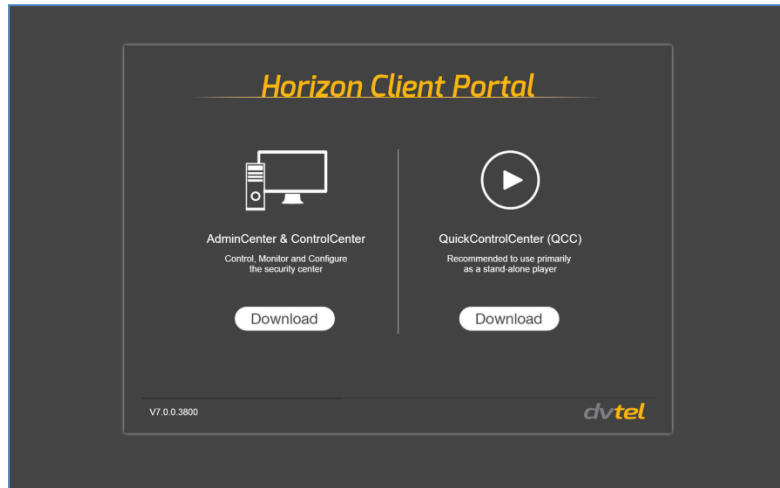


NOTE: DVTEL cannot verify or guaranty proper functionality over non-English Windows OS.

6. Client Application Deployment

6.1 Client Portal

Deploying the client application software on an additional workstation in Horizon is a simple task to perform, thanks to the Client Portal. Users can open a browser, type the Client Portal’s URL <http://<HorizonSeverIP>/ClientPortal> and use the links on the portal to download and install the Control Center and Admin Center client applications, or download a copy of Quick Control Center (QCC).



Once you conclude downloading the installation package, simply start the installation program, and proceed as guided by the installation wizard.



NOTE: Close all unnecessary applications before running the installation package.

6.2 Silent Installer

The Silent Mode installer allows the Horizon Client software to be installed locally or remotely without operator intervention. To install the software, copy the installation executable file to a client-accessible location on the network or on the remote client machine.

Note: In order to ensure the success of the silent installer, please be sure that the target client has System Administrator rights and that UAC settings are set to low/off.

To copy a non-automated, command-line installation

1. Click **Start ► Run** (or open CMD).
2. Enter the command in the following syntax: [*Horizon Installation File Path*] /silent. For example: “\\mysoftware-server\VideoManagementSWfolder\Horizon_ClientsOnly.exe” /silent
3. Press **ENTER**.

Automated script or IT tool installation

1. On the remote client machine, run the script with the shell command in proper syntax (*[Horizon Installation File Path\Horizon install file] /silent*).

7. Easy Future Upgrades to the Horizon System

Future upgrades to the Horizon system will be easy and will not require the system administrator to sequentially perform the installation process on each workstation. After upgrading to a newer version, the Control Center or Admin Center client application user will be notified that a newer version is available. He will be asked whether he wants to upgrade. When accepted, the new version will be downloaded over the network and installed automatically without requiring any further input.



8. Installation Process and Requirements

The following requirements must be fulfilled prior to installing the client applications.

8.1 Pre-requisites for User Account Control Feature

User Account Control (UAC) is a technology and security infrastructure introduced with Windows 7 that also exists in Windows 8. Make sure to run the installation as an administrator. Right-click *Run as Administrator*.

8.2 Required Microsoft Updates

Horizon 6.4 was certified with the latest Microsoft Updates available up until October 1, 2014.



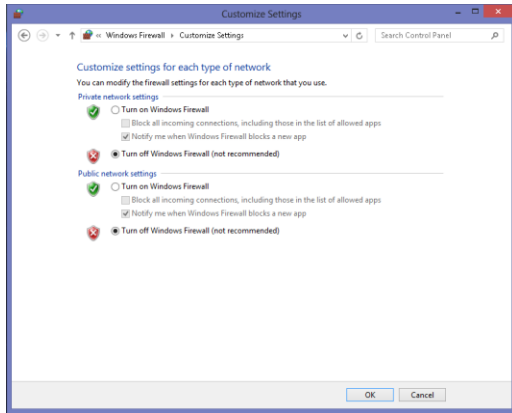
NOTE: To avoid improper or failed installation, assure that all Windows updates are run before, and not during, the installation process.

8.3 Disable the Windows Firewall

On every workstation running Horizon, it is important to disable the Windows Firewall in order to make sure it doesn't block communication. The procedure varies depending on the operating system. If you do not have access to turn off the firewall, contact your system administrator.

To turn the firewall off for Windows 8

1. Click the Desktop icon.
2. Move the mouse cursor to the bottom left-hand corner and right-click the Start icon.
3. Select *Control Panel* from the popup menu. The Control Panel appears.
4. In the Control Panel, click **System and Security**.
5. Click **Windows Firewall**. The **Windows Firewall** screen is displayed.
6. Note which network locations display the text "Connected" to the left of the network connection area: *Domain networks*, *Home or work (private) networks*, or *Public networks*.
7. On the left blue panel, click *Turn on Windows Firewall on* or *Turn off Windows Firewall*. The **Customize Settings** screen opens.



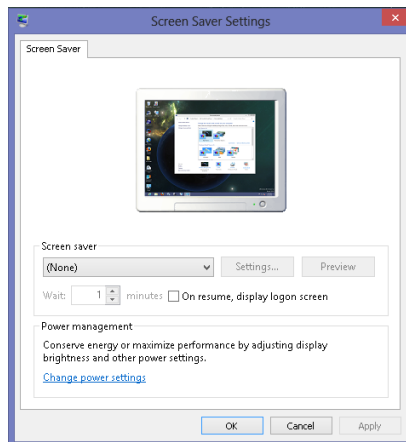
8. Select *Turn off Windows Firewall*.
9. Click **OK**.
10. Close the Control Panel.

8.4 Disable the Screen Saver and Power Saving Options

In order to avoid interruptions while using the application and/or monitoring video, it is necessary to disable the screen saver and prevent the screen from automatically turning off before using the Control Center on a client workstation.

To disable the Screen Saver for Windows 8

1. On the Desktop, right-click and select **Personalize** from the menu that is displayed.
2. In the *Personalize* screen, click **Screen Saver**. The **Screen Saver** dialog appears.



3. From the *Screen Saver* drop-down menu, select *None*.

To create a Horizon power plan for Windows 8

1. On the Desktop, right-click and select **Personalize** from the menu that is displayed.

2. In the **Personalize** screen, click **Screen Saver**. The **Screen Saver** dialog appears.
3. In the **Screen Saver** dialog, click **Change Power Settings**. The **Control Panel Power Options** screen appears.
4. Click **Create a Power Plan**. In the **Power Plan** screen, select *High Performance* and enter “DVTel Horizon” in the *Plan Name* field.
5. Click **Next**.
6. From the *Turn off the Display* menu and the *Put the computer to sleep* menu, select *Never*.
7. Click **Create**. The **DVTel Horizon Power Plan** is displayed.



NOTE: By default, the *Hibernate* setting is disabled for timed sleep modes.

8. On the Control Panel, click **Close**.

8.5 Preventing Anti-Virus from Interfering with the Horizon System

This section is intended for users who plan to install anti-virus software on a computer running the Horizon system. This section assumes that the Horizon software is installed in the default location.

8.5.1 Anti-virus for Installation

When installing Horizon client software, it is possible that anti-virus software may interfere with one of the several components during the installation process. Prior to beginning the installation, or if the installer fails at any point, it is recommended to turn off anti-virus software until Horizon client software is completely installed.

8.5.2 Configuring Anti-Virus Software to Work with Horizon

1. Disable the firewall included in the anti-virus software.
2. Configure rules for *Real-time scans* and *Scheduled scans*.
3. Exclude the following locations for the client and server:
 - The Horizon system folder (e.g. C:\Program Files\DVTel\)
 - The Horizon system folder (e.g. C:\Program Files (x86)\DVTel\)
 - The Windows Paging file (C:\pagefile.sys)

Important

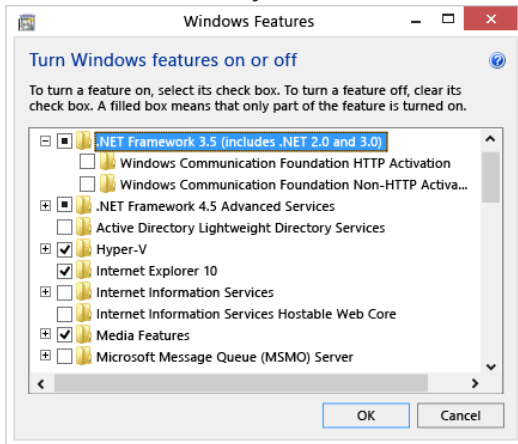
- A common mistake is to configure exclusions for Auto-Protect, but not exclude scheduled and manual scans. All types of scans that run on the server must be excluded, or there is a risk of data loss on the server.
- Another common mistake is to omit the paths to the folders that you need to exclude. For example: you may exclude “C:\Program Files\DVTel\” when the actual installation path is “E:\Program Files\DVTel\”. Because the Horizon folder locations can be configured differently, the paths here are given with the default installation path.

8.6 Installing Client Applications over Windows 8

When installing Horizon over Windows 8 OS, you must manually install .NET 3.5.

To enable .NET 3.5 for Windows 8 when an Internet connection is available

1. Click the Desktop Icon.
2. Move the mouse cursor to the bottom left-hand corner and right-click the “Start” icon.
3. Select *Control Panel* from the popup menu. The Control Panel appears.
4. Choose *Programs and Features*.
5. Select *Turn Windows features on or Turn Windows features off*.



6. Select the *.NET Framework 3.5 (includes .NET 2.0 and 3.0)* checkbox.
7. Click **OK**.

In case an Internet connection is not available, please contact DVTEL support.

9. Additional Resources

For more information about the Horizon system, read the *Horizon Admin Center Manual*, *Control Center User Guide*, and other relevant documentation at <http://www.dvtel.com>.

10. Disclaimer

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