United VMS 8.0
Client Workstation Specifications
# Table of Contents

1. **Introduction**.................................................................................................................. 4  
   1.1 Control Center ............................................................................................................... 4  
   1.2 Admin Center ............................................................................................................. 4  
   1.3 Quick Control Center ................................................................................................. 4  

2. **Client Workstation Hardware Requirements** ............................................................... 5  

3. **Control Center Performance Guidelines** .................................................................... 6  
   3.1 Video Throughput Performance Requirements ......................................................... 6  

4. **Supported Operating Systems** .................................................................................... 6  

5. **Client Application Deployment** .................................................................................... 7  
   5.1 Client Portal ................................................................................................................ 7  
   5.2 Silent Installer ............................................................................................................. 7  

6. **Easy Future Upgrades to Client Workstations** .............................................................. 8  

7. **Installation Process and Requirements** ........................................................................ 8  
   7.1 Pre-requisites for User Account Control Feature ..................................................... 8  
   7.2 Required Microsoft Updates ..................................................................................... 8  
   7.3 Disable the Windows Firewall .................................................................................. 9  
   7.4 Disable the Screen Saver and Power Saving Options ............................................. 9  
   7.5 Preventing Anti-Virus from Interfering with the United VMS Client Applications 10  
   7.5.1 Anti-virus for Installation ...................................................................................... 10  
   7.5.2 Configuring Anti-Virus Software to Work with a United VMS system ............. 11  
   7.6 Installing Client Applications over Windows 8/10 ............................................... 11  

8. **Additional Information and Resources** ........................................................................ 12  

9. **Disclaimer** ...................................................................................................................... 12
1. Introduction

Any United VMS System is comprised of server components and client applications that interact with the server side.

The client applications are the Control Center, Admin Center and Quick Control Center (QCC). This document describes the hardware requirements for workstations capable of running the client applications, and the process of their deployment.

1.1 Control Center

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

NOTE: Any model of United VMS Systems 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 Admin Center

The primary role of the Admin Center client application is to provide the user interface for the System Administrator, enabling the definition and configuration of the system components.

1.3 Quick Control Center

The Quick Control Center is self-contained version of Control Center application that does not require installation. This application may also serve as a stand-alone player.
### 2. Client Workstation Hardware Requirements

<table>
<thead>
<tr>
<th>Name</th>
<th>Minimum</th>
<th>Recommended</th>
<th>High Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>Intel Quad Core 2.4 GHz</td>
<td>Intel E3-1245 v6</td>
<td>Intel E5-1650 v4</td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>4GB</td>
<td>8GB</td>
<td>16GB</td>
</tr>
<tr>
<td><strong>Hard Drive</strong></td>
<td>5400 RPM</td>
<td>SSD / Hybrid</td>
<td>SSD / Hybrid</td>
</tr>
<tr>
<td></td>
<td>60 GB for OS+SW</td>
<td>80 GB for OS+SW</td>
<td>80 GB for OS+SW</td>
</tr>
<tr>
<td><strong>Network Interface</strong></td>
<td>1Gbps</td>
<td>1Gbps</td>
<td>1Gbps</td>
</tr>
<tr>
<td><strong>Video Card</strong></td>
<td>Intel HD 4000 Series</td>
<td>2 Monitors</td>
<td>2 Monitors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intel HD P630</td>
<td>NVIDIA K620</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Monitors</td>
<td>or NVS 315</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intel HD P630 +</td>
<td>4 Monitors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NVIDIA NVS 315</td>
<td>2 X NVIDIA K620</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or 2 X NVS 315</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>Any supported OS</td>
<td>Windows 10 64-bit</td>
<td>Windows 10 64-bit</td>
</tr>
<tr>
<td></td>
<td>(Section 4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Control Center Performance Guidelines

3.1 Video Throughput Performance Requirements

The example below provides only estimated performance. The numbers below are to be compared to the hardware specifications list above.

### 2 Client Workstation Hardware Requirements

<table>
<thead>
<tr>
<th>Resolution/FPS</th>
<th>Minimum</th>
<th>Recommended</th>
<th>High Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIF @ 30 FPS</td>
<td>20 streams</td>
<td>70 streams</td>
<td>80 streams</td>
</tr>
<tr>
<td>4CIF @ 30 FPS</td>
<td>10 streams</td>
<td>32 streams</td>
<td>40 streams</td>
</tr>
<tr>
<td>1080P @ 15 FPS</td>
<td>8 streams</td>
<td>24 streams</td>
<td>32 streams</td>
</tr>
<tr>
<td>1080P @ 30 FPS</td>
<td>4 streams</td>
<td>12 streams</td>
<td>16 streams</td>
</tr>
<tr>
<td>4K @ 15 FPS</td>
<td>1 streams</td>
<td>6 streams</td>
<td>8 streams</td>
</tr>
<tr>
<td>4K @ 30 FPS</td>
<td>0 streams</td>
<td>3 streams</td>
<td>4 streams</td>
</tr>
</tbody>
</table>

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

4. Supported Operating Systems

The following operating systems are supported with client applications:

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows®</td>
<td></td>
</tr>
<tr>
<td>Windows 7 SP1 - 64 bit</td>
<td>upgrade only</td>
</tr>
</tbody>
</table>
5. Client Application Deployment

5.1 Client Portal

Deploying the client application software on an additional workstation is a simple task to perform, thanks to the Client Portal. Users can open a browser, type the Client Portal’s URL (http://[server-name]/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).

![Horizon Client Portal](image)

Figure 1 - Example - Horizon Client Portal Page

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.

5.2 Silent Installer

The Silent Mode installer allows the United VMS 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: `[System Installation File Path] /silent`. For example:
   ```cmd
   "\\mysoftware-server\VideoManagementSWfolder\Latitude_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
   \(\text{([<System Installation File Path><System> install file] /silent)}\).

6. Easy Future Upgrades to Client Workstations

Future upgrades for workstations running the United VMS client applications will be easy and will not require the system administrator to perform the installation process sequentially 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. The user 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.

![Figure 2 - Automatic Upgrade Message](image)

7. Installation Process and Requirements

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

7.1 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.

7.2 Required Microsoft Updates

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

United VMS 8.0 was certified with the latest Microsoft Updates available up until April 1st, 2017.
7.3 Disable the Windows Firewall

On every United VMS client workstation, 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.
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.

7.4 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.
Installation Process and Requirements

3. The **Screen Saver** dialog appears.

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

   **To create a Workstation 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 “FLIR Horizon” or similar 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 new power plan is displayed.

   ![](image)

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

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

7.5 Preventing Anti-Virus from Interfering with the United VMS Client Applications

This section is intended for users who plan to install anti-virus software on a computer running the United VMS Client Applications. **This section assumes that the Client software is installed in the default location.**

**7.5.1 Anti-virus for Installation**

When installing United VMS 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 the client software is completely installed.
7.5.2 Configuring Anti-Virus Software to Work with a United VMS system

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 United VMS system folders
     (e.g. C:\Program Files\FLIR\ and/or C:\Program Files (x86)\FLIR\)
   - 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 client must be excluded, or there is a risk of disruption of the client application’s monitoring of the system.
- Another common mistake is to omit the paths to the folders that you need to exclude. For example: you may exclude “C:\Program Files\FLIR\” when the actual installation path is “E:\Program Files\FLIR\”. Because the United VMS folder locations can be configured differently, the paths here are given with the default installation path.

7.6 Installing Client Applications over Windows 8/10

When installing United VMS client applications over Windows 8 OS, you must manually install .NET 3.5.

To enable .NET 3.5 for Windows 8/10 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.
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 FLIR support.
8. Additional Information and Resources

For more information about the VMS system, visit http://www.flir.com/security, or contact a FLIR Sales Engineer in your region.

9. Disclaimer

© 2017 FLIR, Inc. All rights reserved.

By providing this document, FLIR, Inc. is not making any representations regarding the correctness or completeness of its contents and reserves the right to alter this document at any time without notice.

FLIR Systems, Inc.
6769 Hollister Ave
Goleta, CA 93117
USA
PH: +1 805.966.9797
PH: +1 877.773.3547 (Sales)
PH: +1 888.398.3577 (Support)
FX: +1 805.685.2711
http://www.flir.com/security

Corporate Headquarters
FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
PH: +1 503.498.3547
FX: +1 503.498.3153

Document:
Latitude 8.0 Specification
Version: 2
Date: July 26, 2017
Language: en-US