Windows 10 IoT Enterprise LTSB 2016 for Dell Wyse 5470 Thin Client

Release Notes
Notes, cautions, and warnings

**NOTE:** A NOTE indicates important information that helps you make better use of your product.

**CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

**WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.
# Contents

1 Release summary

Priority and recommendations ....................................................................................................................... 5

2 Compatibility

Build details ................................................................................................................................................... 6
Connection brokers ...................................................................................................................................... 6
Supported languages ..................................................................................................................................... 6

3 New and enhanced features

Wyse Easy Setup ........................................................................................................................................ 7
Quick Start ................................................................................................................................................... 7
MUI build behavior ..................................................................................................................................... 7
Overlay Optimizer ....................................................................................................................................... 7
Application Launch Manager ........................................................................................................................ 8
xData Cleanup Manager ............................................................................................................................... 8
BIOS details .................................................................................................................................................. 8
C-A-D tool .................................................................................................................................................... 8
Dell Thin Client Application .......................................................................................................................... 8
Dell wallpapers ............................................................................................................................................ 8
ENERGY STAR specification .......................................................................................................................... 8
Ericom Connect Client .................................................................................................................................. 9
Ericom PowerTerm InterConnect .................................................................................................................. 9
Event Viewer log preservation ....................................................................................................................... 9
PlatV.sys ........................................................................................................................................................ 9
Internet Explorer 11 ..................................................................................................................................... 9
Keyboard filters .............................................................................................................................................. 9
Log files for customization ............................................................................................................................. 9
Out-of-Box driver install ................................................................................................................................. 9
System Center Configuration Manager 2016 server information ................................................................ 10
User accounts .............................................................................................................................................. 10
Unified Write Filter .................................................................................................................................... 10
Windows Defender Advanced Threat Protection .......................................................................................... 11
XML driven PowerShell scripts .................................................................................................................... 11
USB redirection ............................................................................................................................................. 11
Sysprep using User Interface ........................................................................................................................ 11
Prerequisites ............................................................................................................................................... 11
Running Custom Sysprep tool ...................................................................................................................... 12
Running the Config Sysprep tool .................................................................................................................. 13

4 Important notes

Hardware support information ......................................................................................................................... 16
Used and free space details ............................................................................................................................ 16
Supported peripherals ..................................................................................................................................... 16
Operating system components ...................................................................................................................... 17
Contents

5 Known issues.......................................................... 20

6 Resources and support.................................................. 21

7 Contacting Dell.......................................................... 22
Release summary

This release note contains information about the Windows 10 IoT Enterprise unified build 10.03.08.06.19.00 that runs on Wyse 5470 Thin Client. The operating system is based on Windows 10 Enterprise 2016 LTSB, also known as Redstone1 (RS1).

Version

10.03.08.07.19.00

Release date

August 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).
Build details

Table 1. Build details

<table>
<thead>
<tr>
<th>Release detail</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform</td>
<td>Dell Wyse 5470 Thin Client</td>
</tr>
<tr>
<td>Product</td>
<td>Windows 10 IoT Enterprise</td>
</tr>
<tr>
<td>Build version/Kernel version</td>
<td>10.0</td>
</tr>
<tr>
<td>Build number</td>
<td>10.03.08.07.19.00</td>
</tr>
<tr>
<td>BIOS version</td>
<td>1.0.0</td>
</tr>
<tr>
<td>Build size</td>
<td>1,443,079,434 bytes</td>
</tr>
</tbody>
</table>

Connection brokers

- VMware Horizon client version 4.9.0.2862 is supported.
- Citrix Receiver version 14.12.0.18020 is supported.
- Ericom Web connect version 7.5.1 is supported.

Supported languages

- English (en-US)
- German (de-DE)
- French France (fr-FR)
- French Canada (fr-CA)
- Italian (it-IT)
- Spanish (es-ES)
- Japanese (ja-JP)
- Korean (ko-KR)
- Chinese Simplified (zh-CN)
- Chinese traditional (zh-TW)
- Brazilian Portuguese (pt-BR)
- Dutch Netherlands (nl-NL)
- Danish Denmark (da-DK)
- Swedish Sweden (sv-SE)
- Norwegian (nb-NO)
- Russian (ru-RU)
- Finnish -Finland (fi-FI)
New and enhanced features

Wyse Easy Setup

Wyse Easy Setup enables administrators to quickly and easily deploy configurations on thin clients.

Wyse Easy Setup enables you to:

- Create a dedicated browser-focused client by configuring the Internet Explorer settings.
- Configure multiple broker connections such as Citrix, VMware, and Remote Desktop Protocol (RDP).
- Configure a device to create a dedicated application for a particular line of business.

You can create a kiosk mode to lock down a Windows device to prevent users from accessing any features or functions on the device outside of the kiosk mode. You can also customize the kiosk interface to enable or disable user access to specific settings.

For more information, see Wyse Easy Setup Administrator's Guide and Release notes at downloads.dell.com/wyse.

Quick Start

The Quick Start application launches when you boot into a thin client for the first time. This tool displays the software and hardware features of the thin client. It also provides information about the VDI applications, management software, and supported peripherals.

You can also configure Wyse Easy Setup application using the Quick Start application.

After you exit the Quick Start application, the user desktop is displayed by default. You can also launch the tool later from the Start menu.

MUI build behavior

Windows 10 IoT Enterprise unified build 10.03.07.06.19.00 provides multi-language support. The default language is English—en-us.

To change the language of the build, do the following:

1. Go to C:\Windows\Setup\Tools.
2. Right-click LanguageConfig.exe and click Run as Administrator.
3. Select the language.
4. Push the image using Wyse Management Suite server or USB Imaging Tool.
5. Run Custom Sysprep to pull the image, and push it to the target thin client.

NOTE:

- To configure Bit locker with TPM, use the Configure TPM platform validation profile for native UEFI firmware configurations group policy.
- To view the event logs, run the Event Viewer Errors.docx file.
- To update Windows defender definition, you must increase the write filter threshold value.

Overlay Optimizer

Overlay Optimizer is a software component that works with Unified Write Filter (UWF). Overlay Optimizer provides write protection and extends the uptime of devices. Overlay optimizer works on Windows 10 IoT Enterprise operating system.

The UWF protects the disk by storing the changes in the RAM overlay. When an application tries to write data to the disk, write filter redirects the write operations to the RAM overlay. The overlay size is preconfigured and cannot increase dynamically. When the overlay runs out of space over a period, the device restarts.

The Overlay Optimizer monitors the UWFs' overlay space and the content. Overlay Optimizer identifies higher overlay space consumption in write filter and moves the unused content to the Overlay Optimizer's disk overlay. Clearing the UWF overlay extends the device uptime.

For more information, see Overlay Optimizer Release notes at downloads.dell.com/wyse.
Application Launch Manager

The Application Launch Manager (ALM) version 1.1.0.2 enables you to start an application that is based on predefined events such as service startup, user login/logoff, or system shutdown in system account. You can also configure multilevel logs which are essential for troubleshooting using the DebugLog.xml file.

You can add or remove application configuration nodes from the ALM configuration file using the command-line interface.

xData Cleanup Manager

xData Cleanup Manager (xDCM) version 1.1.0.2 prevents extraneous information from being stored on the local disk. xDCM can be used to automatically clean up directories that are used to temporarily cache the information. A clean-up is triggered on either service startup, user logoff, or system shutdown.

It also enables you to configure multilevel logs which are essential for troubleshooting. You can clean up files, folders, and enable or disable xDCM using Application Programming Interface (API). You can also add or remove configuration nodes from the xDCM configuration file using command-line interface.

<table>
<thead>
<tr>
<th>NOTE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Existing <code>NetXclean.ini</code> configurations are ported to new <code>xDataCleanupConfig.xml</code>.</td>
</tr>
<tr>
<td>• Contents in the xData Cleanup Manager are cleaned by default.</td>
</tr>
</tbody>
</table>

BIOS details

Wyse 5470 thin client supports Dell BIOS and Wyse BIOS entries. The BIOS image is included in the latest Wyse Management Suite release.

C-A-D tool

The C-A-D tool allows administrators to map the Ctrl+Alt+Del key combination of VDI applications to display the Ctrl+Alt+Del screen of the VDI application. If the C-A-D tool is enabled, you can use Ctrl+Alt+Del key combination for all VDI applications.

| NOTE: | By default, the C-A-D tool is enabled. |

Dell Thin Client Application

You can view and configure thin client device, system shortcuts, custom fields, RAM disk, autologon, and CAD map using the Dell Thin Client application.

| NOTE: | By default, RAM disk size is 512 MB for thin clients with 8 GB RAM, and 100 MB when the write filter is enabled for thin clients with 4 GB RAM. |

Dell wallpapers

Older wallpapers and themes are replaced with the new Dell wallpapers and themes.

ENERGY STAR specification

Windows 10 IoT Enterprise on Wyse 5470 thin client is ENERGY STAR version 7.0 compliant.

The following are the details in the Control Panel applet for power options:

- Supports Wake on LAN (WoL) during power off.
- Supports Idle state wake up from the sleep mode.
- Screen off timer is 10 minutes.
- Sleep timer is 15 minutes.
Ericom Connect Client

Ericom Connect Client maximizes the value of Terminal Servers (RDS), virtual desktops (VDI), Web applications, Cloud services, and legacy host systems. For IT departments of all sizes, PowerTerm Web Connect streamlines the management and utilization of IT resources, and also protects earlier IT investments and improves the end user-experience.

Ericom PowerTerm InterConnect

PowerTerm InterConnect consists of several robust terminal emulation applications supporting the host access of large and small organizations. PowerTerm InterConnect product provides fast and reliable access to data residing on the broadest range of hosts. It enables enterprises to standardize on a single host access solution.

Event Viewer log preservation

Event Viewer log preservation feature allows you to enable or disable Event Viewer log saving when the File Based Write Filter (FBWF) or Unified Write Filter (UWF) is enabled. This feature enables you to collect event logs if they are required for debugging or analysis purposes.

PlatV.sys

Hostname calculation enables you to enable and disable the Hostname calculation in PlatV.sys.

The following are the features of Hostname calculation:
• You can disable or enable the Hostname calculation.
• Ensure that altering the MAC ID for a client does not perform a Hostname calculation.
• If you require a Hostname calculation to perform after a change in MAC ID (NIC card change), then you must use the MINWITHNET option.

Internet Explorer 11

• Performance enhancements—Microsoft has included support for web standards like CSS animations, HTML5 spell checking, and improved JavaScript performance.
• Security enhancements—The main security addition to Internet Explorer 11 is Enhanced Protected Mode, which locks down parts of the Windows operating system, preventing the browser from accessing the operating system.

The following Internet Explorer 11 features are customized by default:
• First run customizations are disabled.
• Internet Explorer 11 enhanced protection mode is enabled.
• Internet Explorer cookies and cache are redirected to Z: RAM Disk.
• Cache content is limited to 100 MB.
• Browsing history is cleared when you exit Internet Explorer.

Keyboard filters

You can use keyboard filters to disable key presses or combinations. For example, you can disable common Windows key combinations such as Ctrl+Alt+Delete and Alt+Tab. You can disable any key or key combination.

Log files for customization

A log file is created for the customization scripts where you can view the overall script execution.

Out-of-Box driver install

All the respective device drivers are preinstalled in the operating system.
System Center Configuration Manager 2016 server information

System Center Configuration Manager (SCCM) is supported for standard deployment of images.

User accounts

You can log in as an administrator or as a standard user.

The following are the login credentials for user and administrator accounts:

<table>
<thead>
<tr>
<th>Account detail</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>DellCCCvdi</td>
</tr>
<tr>
<td>Admin</td>
<td>DellCCCvdi</td>
</tr>
<tr>
<td>TightVNC—Administrator</td>
<td>DEll</td>
</tr>
<tr>
<td>BIOS—Administrator</td>
<td>Fireport</td>
</tr>
</tbody>
</table>

Unified Write Filter

Unified Write Filter (UWF) is a sector-based write filter that protects your storage media. UWF redirects the write attempts to a virtual overlay, and intercepts the write attempts to the protected volume. This improves the stability, reliability of the device thereby reducing the wear on write media, such as solid-state drives. In UWF, overlay is a virtual storage space that saves changes made on the protected volume. If the file system attempts to modify a protected sector, UWF will copy the sector from the protected volume to the overlay, and the overlay is updated. If an application tries to read from that sector, UWF returns the data from the overlay, so that the system appears to have written to the volume, while the volume remains unchanged.

For more information, see the Unified Write Filter documentation at www.microsoft.com.

CAUTION: Failure to keep the Write Filter turned on (except for regular maintenance or Application/Driver installs or upgrades) will prematurely wear out your Flash/SSD storage and invalidate your warranty.

The following are the default file folders excluded from being filtered by UWF:
- `C:\Users\Admin\AppData\LocalLow`
- `C:\Users\User\AppData\LocalLow`
- `C:\Program Files\Windows Defender`
- `C:\Program Files (x86)\Windows Defender`
- `C:\Windows\WindowsUpdate.log`
- `C:\Windows\Temp\MpCmdRun.log`
- `C:\ProgramData\Microsoft\Windows Defender`
- `C:\program files\Wyse\WDA\Config`
- `C:\Users\Public\Documents\Wyse`
- `C:\Wyse\WCM\ConfigMgmt`
- `C:\Wyse\WCM`
- `C:\Wyse\WDA`

The following are the default registries excluded from being filtered by UWF:
- `HKLM\Software\Wyse\ConfigMgmt`
- `HKLM\SYSTEM\CurrentControlSet\Control\WONT\UWFSvc`
- `HKLM\SOFTWARE\Microsoft\Windows Defender`
- `HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\HomeGroup`
- `HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\NetworkList`
- `HKLM\SYSTEM\WPA`
- `HKLM\SYSTEM\CurrentControlSet\Control\WONT\DWCADTool`
CAUTION: Please follow proper write filter and Windows Page File usage instructions at all times. Such instructions include making sure that the write filter is enabled during regular use and is disabled only temporarily by an administrator when required for image upgrades, applying security patches, registry changes and application installation. The write filter should be re-enabled as soon as such tasks are completed. Such instructions further include never enabling the Windows Page File feature during regular use of the thin client. Any operation of a Dell Wyse Windows Embedded Thin Client with the write filter turned off during regular use and/or with the Windows Page file enabled will prematurely wear out your Flash/SSD storage, decrease performance and decrease the lifespan of the product. Dell is not responsible for, and will not, warrant, support, repair or replace any thin client device or component that fails to operate properly due to a failure to follow these instructions.

Windows Defender Advanced Threat Protection

Windows Defender Advanced Threat Protection feature helps enterprises to detect, investigate, and respond to advanced attacks on their networks.

XML driven PowerShell scripts

Customization scripts are ported to the PowerShell scripts, and are based on the XML file input.

USB redirection

USB redirection is applicable for all users of the client machine with all the published XenDesktop irrespective of the setting Simplify device connections for me in the XenDesktop connection preferences user interface.

Sysprep using User Interface

The System Preparation tool (Sysprep) can now be configured using the inbuilt user interface. Using this tool the data gets cleared from the system and the system can be customized as per the requirement. The operating system will be like a new installation.

The Sysprep tool is used with other deployment tools to install the Microsoft Windows operating systems with minimal intervention by an administrator.

Buildmaster.cmd is the main program that calls other executable files that prepares the thin client for the Windows installation. Buildmaster.cmd is located in the <drive C>\Windows\Setup on all installations.

Sysprep must always be run from the <drive C>\Windows\Setup and must run on the version of Windows with which it was installed.

The Sysprep tool contains the following two options:

- Custom Sysprep, see Running the Custom Sysprep tool.
- Config Sysprep, see Running the Config Sysprep tool.

Prerequisites

The following are the pre-requisites to run the Custom Sysprep tool:

- Unified Write Filter must be in disable state.
- Logging framework must be available on your thin client.
- Power Shell script execution environment must be available.
- Custom Sysprep and Configuration Sysprep (SCCM) scripts must be available.
- Host Name calculation feature must be available.
- If the flash size or HDD size is more than 32 GB, reduce it to less than 32 GB for a better custom sysprep process.

NOTE: You cannot access the thin client if you terminate the Sysprep process. Make sure that the device is ready before you use the Sysprep tool.

CAUTION: After you run the Sysprep tool, enable the Unified Write Filter to ensure device security.
Running Custom Sysprep tool

- Disable File based Write Filter.
- Logging framework must be available on your thin client.
- PowerShell script execution environment, Custom Sysprep, Configuration Sysprep (SCCM) scripts, and Hostname calculation feature must be available.
- Reduce the flash drive or hard drive size to less than 16 GB.

**NOTE:** You must shrink the drive C manually to reduce the hard drive size to 16 GB or less.

To run the Custom Sysprep tool, do the following:

1. Go to `<drive C>\Windows\Setup`.
2. Right-click `Build_Master.cmd`, and select **Run as administrator**.
   The **Config Master** window is displayed.

   ![Figure 1. Config Master](image)

   **Figure 1. Config Master**

   3. Click **Next**.
      The **Configuration** screen is displayed.
4. Select Custom configuration in the Configurations section.
5. Enable or disable hostname calculation in the Host Name calculation section.
6. Enter the appropriate values in the Configure Domain options section, and click Save Credentials—optional.
7. Click OK when prompted—optional.
8. Select Enable local account credentials changes—optional.
   The changes that are made to the credentials are applied.
9. Click Next.
   The Credential Manager page is displayed.
10. Select the user account, and type the login credentials.
11. Click Save.
12. Click Apply to save the changes.
   This process takes 5–10 minutes to complete. The device turns off after the Sysprep process is complete.

NOTE: You cannot access the thin client if you terminate the Sysprep process. Make sure that the device is ready before you use the Sysprep tool.

Running the Config Sysprep tool

To run the Config Sysprep tool, do the following:

1. Go to <drive C>\Windows\Setup.
2. Right-click Build_Master.cmd, and select Run as administrator.
   The Config Master window is displayed.
Figure 3. Config Master

3. Click **Next**.

The **Configuration** screen is displayed.
4. In the **Configurations** section, select **SCCM configuration**.

5. In the **Host Name calculation** section, enable or disable hostname calculation.

   **NOTE:** The **Configure Domain Option** and **Configure local account credentials** field are grayed out.

6. Click **Apply** to save the changes.

   After the completion of SCCM Config Sysprep, the HAgent service ends. You can now perform the pull operation using SCCM.
**Hardware support information**

- Intel Celeron® J4100 CPU at 1.10 GHz with 4 GB RAM and 32 GB eMMC and Intel Celeron® J4100 CPU at 1.10 GHz with 8 GB RAM and 128 GB SATA are supported.
- Video adapters—C2G USB C to DisplayPort Adapter Converter, USB-C Mobile Adapter with DP/HDMI/VGA/Gigabit Ethernet/USB-C/USB-A (DA300), and Belkin Universal HDMI to VGA Adapter with Audio—are supported.

**Used and free space details**

*Table 3. Used and free space details*

<table>
<thead>
<tr>
<th>Platform</th>
<th>Flash drive size</th>
<th>Used space &lt;drive C&gt;</th>
<th>Free space &lt;drive C&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyse 5470 thin client</td>
<td>32 GB</td>
<td>21.4 GB</td>
<td>5.06 GB</td>
</tr>
<tr>
<td>Wyse 5470 thin client</td>
<td>128 GB</td>
<td>22.3 GB</td>
<td>91.5 GB</td>
</tr>
</tbody>
</table>

**Supported peripherals**

*Table 4. Supported peripherals*

<table>
<thead>
<tr>
<th>Product</th>
<th>Product description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>Dell Stereo Headset UC150</td>
</tr>
<tr>
<td></td>
<td>Dell Pro Stereo Headset UC350</td>
</tr>
<tr>
<td></td>
<td>Dell USB Sound Bar (AC511M)</td>
</tr>
<tr>
<td></td>
<td>Dell Professional Sound Bar (AE515M)</td>
</tr>
<tr>
<td></td>
<td>Dell 2.0 Speaker System - AE215</td>
</tr>
<tr>
<td></td>
<td>Dell Wireless 2.1 Speaker System - AE415</td>
</tr>
<tr>
<td></td>
<td>Jabra Evolve 65 MS Stereo - Headset</td>
</tr>
<tr>
<td></td>
<td>Jabra Engage 65 Stereo Headset</td>
</tr>
<tr>
<td></td>
<td>Plantronics Savi W440M-400 Series convertible wireless headset - DECT 6.0</td>
</tr>
<tr>
<td></td>
<td>Plantronics Voyager Focus UC B825-M headset for Microsoft Lync</td>
</tr>
<tr>
<td>Cables</td>
<td>C2G USB C to DisplayPort Adapter Converter - USB-C to DisplayPort Black external video adapter - black</td>
</tr>
<tr>
<td></td>
<td>USB-C Mobile Adapter with DP/HDMI/VGA/Gigabit Ethernet/USB-C/USB-A (DA300)</td>
</tr>
<tr>
<td></td>
<td>Belkin Universal HDMI to VGA Adapter with Audio - Video converter - HDMI - B2B</td>
</tr>
<tr>
<td></td>
<td>Dell USB to Ethernet adapter</td>
</tr>
<tr>
<td></td>
<td>Trendnet® USB to Serial Converter RS-232 - 2.25 ft</td>
</tr>
<tr>
<td></td>
<td>C2G - USB 2.0 A (Male) to DB9 (Serial) (Male) Adapter</td>
</tr>
<tr>
<td>Product</td>
<td>Product description</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td>StarTech.com 1-Port USB to RS232 DB9 Serial Adapter Cable - Serial adapter - USB 2.0 - RS-232</td>
</tr>
<tr>
<td>Input devices</td>
<td>Dell Laser Scroll USB 6-Buttons Silver and Black Mouse</td>
</tr>
<tr>
<td></td>
<td>Dell MS116 USB Wired Optical Mouse Black</td>
</tr>
<tr>
<td></td>
<td>Dell Wireless Mouse - WM326</td>
</tr>
<tr>
<td></td>
<td>Dell Premier Wireless Mouse - WM527</td>
</tr>
<tr>
<td></td>
<td>Dell Wireless Keyboard and Mouse Combo- KM636</td>
</tr>
<tr>
<td>Docking Station</td>
<td>Dell Dock - WD15 (130 W version)</td>
</tr>
<tr>
<td></td>
<td>Dell Dock - WD19-C</td>
</tr>
<tr>
<td>Storage</td>
<td>Dell Portable SSD, USB-C 250 GB</td>
</tr>
<tr>
<td></td>
<td>Dell External Tray Load ODD (Agate) (DVD Writer)</td>
</tr>
<tr>
<td>Display</td>
<td>Dell 20 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 20 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 22 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 22 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 22 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 23 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 24 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell UltraSharp 27 Monitor U2718Q - 4K</td>
</tr>
<tr>
<td></td>
<td>Dell 20 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 22 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 23 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 24 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 27 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 22 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 24 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell 27 Monitor</td>
</tr>
<tr>
<td></td>
<td>Dell UltraSharp 24 Monitor U2419H</td>
</tr>
<tr>
<td></td>
<td>Dell UltraSharp 24 Monitor U2419HC</td>
</tr>
<tr>
<td></td>
<td>Dell UltraSharp 27 Monitor U2719D</td>
</tr>
<tr>
<td></td>
<td>Dell UltraSharp 27 Monitor U2719DC</td>
</tr>
<tr>
<td></td>
<td>Dell 34 Curved Ultrawide Monitor - P3418HW</td>
</tr>
</tbody>
</table>

Operating system components

Table 5. Driver details

<table>
<thead>
<tr>
<th>Driver details</th>
<th>Version details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS version</td>
<td>1.0.0</td>
</tr>
<tr>
<td>Display Adapter</td>
<td>Intel UHD Graphics 600—26.20.100.6812</td>
</tr>
</tbody>
</table>
## Driver details

<table>
<thead>
<tr>
<th>Driver details</th>
<th>Version details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet Adapter</td>
<td>Realtek PCIe GBE Family Controller—10.32.1206.2018</td>
</tr>
</tbody>
</table>
| Audio | • Intel Display Audio—10.26.0.6  
• Realtek Audio—6.0.1.8627 |
| Wireless Adapter | Intel® Wireless AC 9560—20.90.0.7 |
| Bluetooth | Intel® Wireless Bluetooth®—20.90.0.3 |
| USB xHCI driver | AMD USB 3.0 eXtensible Host Controller 1.0 (Microsoft)—10.0.14393.1794 |
| Wyse RAM Disk driver | 5.0.2183.5  
By default, RAM disk size is 512 MB for thin clients with 8 GB RAM and 100 MB for thin clients with 4 GB RAM when the write filter is enabled. |
| PlatV.sys | 1.0.7.11 |

### Table 6. Common application, features, and files

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrix Receiver 4.12</td>
<td>14.12.0.18020</td>
</tr>
<tr>
<td>Intel Wireless Bluetooth</td>
<td>20.90.0</td>
</tr>
<tr>
<td>Realtek USB Audio</td>
<td>6.3.9600.202</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.4148</td>
<td>9.0.30729.4148</td>
</tr>
<tr>
<td>Realtek Audio COM Components</td>
<td>1.0.2</td>
</tr>
<tr>
<td>Citrix HDX RealTime Media Engine 2.5</td>
<td>2.5.0.1521</td>
</tr>
<tr>
<td>Intel PROSet/Wireless Software</td>
<td>20.90.0</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2012 Redistributable (x86) - 11.0.61030</td>
<td>11.0.61030.0</td>
</tr>
<tr>
<td>Ericom Connect WebConnect Client</td>
<td>7.5.1</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2017 Redistributable (x64) - 14.12.25810</td>
<td>14.12.25810.0</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.21005</td>
<td>12.0.21005.1</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2012 Redistributable (x64) - 11.0.61030</td>
<td>11.0.61030.0</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.21005</td>
<td>12.0.21005.1</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2017 Redistributable (x64) - 14.12.25810</td>
<td>14.12.25810.0</td>
</tr>
<tr>
<td>VMware Horizon Client</td>
<td>4.9.0.2862</td>
</tr>
<tr>
<td>Ericom PowerTerm InterConnect for Thin Clients</td>
<td>12.0</td>
</tr>
<tr>
<td>Intel Processor Graphics</td>
<td>26.20.100.6812</td>
</tr>
<tr>
<td>Realtek High Definition Audio Driver</td>
<td>6.0.1.8627</td>
</tr>
<tr>
<td>Microsoft Lync Vdi 2013</td>
<td>15.0.4420.1017</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2008 Redistributable - x64 9.0.30729.4148</td>
<td>9.0.30729.4148</td>
</tr>
<tr>
<td>Dell ControlVault Host Components Installer 64 bit</td>
<td>4.8.9.38</td>
</tr>
<tr>
<td>CAD_MAP_VDI</td>
<td>3.0.0.2</td>
</tr>
<tr>
<td>xData CleanUp Manager</td>
<td>1.0.0.2</td>
</tr>
<tr>
<td>Microsoft Silverlight</td>
<td>5.1.50918.0</td>
</tr>
<tr>
<td>Dell Command</td>
<td>Monitor</td>
</tr>
<tr>
<td>Microsoft Visual C++ 2005 Redistributable (x64)</td>
<td>8.0.61000</td>
</tr>
</tbody>
</table>

18 Important notes
Quick Fix Engineering (QFE)

The following QFEs are added as part of this release:

- KB4132216
- KB4465659
- KB4480979
- KB4480977

For more information, see support.microsoft.com.
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC-995</td>
<td>You cannot print more than 10 pages in VMware Blast and PCoIP session.</td>
<td>There is no workaround in this release.</td>
</tr>
<tr>
<td>WC-997</td>
<td>USB to serial port mapping does not work in RDP session.</td>
<td>There is no workaround in this release.</td>
</tr>
<tr>
<td>WC-871</td>
<td>RDP display configuration is not set to Full Screen in RDP Connection and Application Configuration in Wyse Easy Setup.</td>
<td>There is no workaround in this release.</td>
</tr>
<tr>
<td>WC-873</td>
<td><a href="http://www.wyse.com">http://www.wyse.com</a> is displayed as default the Server URL and Broker History in VMWare Connection.</td>
<td>There is no workaround in this release.</td>
</tr>
<tr>
<td>WC-880</td>
<td>Occasionally, after you deploy an image from SCCM, the desktop wallpaper is not displayed—black screen—for administrator account.</td>
<td>There is no workaround in this release.</td>
</tr>
<tr>
<td>WC-976</td>
<td><strong>Exit confirmation</strong> dialog box displays a localized path which is not available in <strong>Start</strong> menu.</td>
<td>There is no workaround in this release.</td>
</tr>
</tbody>
</table>
| WC-930   | Media keys—F9 to F12 and volume increase, decrease, and mute—do not work in a Citrix session. | 1. Add the following registry key: 
HKEY_LOCAL_MACHINE\SOFTWARE\wow6432node\Citrix\ICA Client
   Name: AddScanCodes
   Type: REG_DWORD
   Data: 1
2. Reboot the thin client. |
| WC-925   | You cannot push the image that is pulled on a raw flash using USB tool. | There is no workaround in this release. |
| WC-1034  | Launch Help Center goes to Wyse 5060 Thin Client support sites. | There is no workaround in this release. |
| WIN-1072 | Wyse 5470 Thin Client warranty link under related documents in the Quick Start redirects to the Knowledge Base article. | There is no workaround in this release. |
| WIN-1073 | **Not found** error is displayed for Wyse 5470 Thin Client article when you click Dell TechCentre under the **Recommended Add-ons** tab in the Quick Start tool. | There is no workaround in this release. |
| WIN-1102 | If the Ethernet is not connected to the docking station, Asset Tag information is listed as Docking station connected to Wyse 5470 thin client. | There is no workaround in this release. |
Accessing documents using the product search

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** search box, type the product name. For example, *Wyse 3040 thin client* or *Wyse ThinOS*.
   
   A list of matching products is displayed.
3. Select your product and click the search icon or press Enter.
4. Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

1. Go to www.dell.com/support.
2. Click **Browse all products**.
3. Click **Thin Clients**.
4. Click the desired category, either **Wyse Hardware** or **Wyse Software**.
5. Click the desired product.
6. Click **Manuals & documents**.
Contacting Dell

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for technical support or customer service issues, see www.dell.com/contactdell.

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.