

# Windows 10 IoT Enterprise LTSB 2016 for Dell Wyse 5070 Thin Client Release Notes

Release Date: March 2019

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Software releases are created to correct defects, make enhancements, or add new features. These releases are tested on all current, actively shipping platforms and operating systems, as applicable. This release notes contain details on the supported platforms, any changes in the configuration settings and licensing details as well. The bug fixes along with the workarounds are documented in the release notes. Any changes in the feature functionality from an end-user perspective are listed with the description of each feature at a high level.

# Release type and definition

This release note contains information for Windows 10 Enterprise 2016 LTSB, also known as Redstone 1 (RS1) on Wyse 5070 Thin Client.

Table 1. Release detail and specification

Release detail	Specification		
Platform	Wyse 5070 thin client		
Operating system	Windows 10 Enterprise 2016 LTSB		
Previous product version	10.03.06.10.18.00		
Current product version	10.03.06.03.19.00		
Build version	10.03		
System type	64-bit operating system		
Supported languages	<ul> <li>English—en-US</li> <li>German—de-DE</li> <li>French France—fr-FR</li> <li>French Canada—fr-CA</li> <li>Italian—it-IT</li> <li>Spanish—es-ES</li> <li>Japanese—ja-JP</li> <li>Korean—ko-KR</li> <li>Chinese Simplified—zh-CN</li> <li>Chinese traditional—zh-TW</li> </ul>		

Release detail	Specification		
	· Brazilian Portuguese—pt-BR		
Supported USB Imaging tool version	3.1.0		
Wyse Management Suite package Name	WIN10_5070_March2019.exe		
Build size	10.4 GB (11,269,474,427 bytes)		
BIOS version	1.1.4		

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 reenabled 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.

# What's new

### New and enhanced features in build 10.03.06.03.19.00

- · Apacer Solid-State Drives registry settings are updated.
- · Application Launch Manager is updated to version 1.0.0.2.
- · QFEs are updated until October 2018.

# New and enhanced features in build 10.03.06.10.18.00

- · The component Computrace version 8.0.944 by Absolute Software Inc is removed.
- · CAD\_MAP\_VDI is updated to version 1.0.0.1.
- Wyse Device Agent is updated to version 14.2.0.51.
- · ThinPrint Viewture is updated to version 11.22.2.3.
- Microsoft Visual C++ 2008 Redistributable x64 9.0.30729.6161 is supported.
- · Citrix Receiver is updated to version 14.11.0.17061.
- · Citrix HDX RealTime Media Engine is updated to version 2.4.0.1233.
- · VMware Horizon Client is updated to version 4.8.0.1562.

# Supported features

The following features are supported in this release:

# **Threat Defense**

Dell Data Protection | Threat Defense Agent (powered by Cylance) detects and blocks malware before it can affect your computer. Cylance uses a mathematical approach for malware identification. It uses machine learning techniques instead of reactive signatures, trust-based systems, or sandboxes. Dell Data Protection | Threat Defense analyzes potential file executions for malware in the operating system.

## **Connection brokers**

- · VMware Horizon client is updated to version 4.8.0.1562.
- · Citrix Receiver is updated to version 14.11.0.17061.
- Ericom WebConnect is updated to version 7.5.1.

### Out-of-Box driver install

All the respective device drivers are pre-installed in the operating system.

# **Dell wallpapers**

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

# XML driven PowerShell scripts

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

# Log files for customization

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

### 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 2. Login credentials

Account detail	Password		
User	DellCCCvdi		
Admin	DellCCCvdi		
TightVNC—Administrator	DELL		
BIOS—Administrator	Fireport		

# Flash.sys

Hostname calculation allows you to enable and disable the Hostname calculation in flash.sys.

The following are the features of Hostname calculation:

- · You can disable or enable the Hostname calculation.
- · You must 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.

# **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) is on. This feature enables you to collect event logs if they are required for debugging or analysis purposes.

# **Dell Thin Client Application**

Dell Thin Client Application is a replaced for Client Information Application with a new User Interface (UI). You can view and configure thin client device, system shortcuts, custom fields, RAM disk, autologon, and CAD map.

NOTE: By default, RAM disk size is 512 MB for thin clients with 8 GB RAM.

# **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.

### **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.

# **ENERGY STAR specification**

Windows 10 IoT Enterprise on Wyse 5070 thin client is ENERGY STAR version 6.0 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.

### Microsoft SCCM 2016 server information

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

## **BIOS details**

Wyse 5070 thin client supports Dell BIOS and Wyse BIOS entries. The BIOS image is included in the latest Wyse Management Suite release.

# **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.

## Windows Defender Advanced Threat Protection

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

## 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.

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

# 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.

 $\bigwedge$  CAUTION: After you run the Sysprep tool, enable the Unified Write Filter to ensure device security.

### **Running Custom Sysprep tool**

#### **Prerequisites**

- · 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 32 GB.

#### About this task

To run the Custom Sysprep tool, do the following:

#### Steps

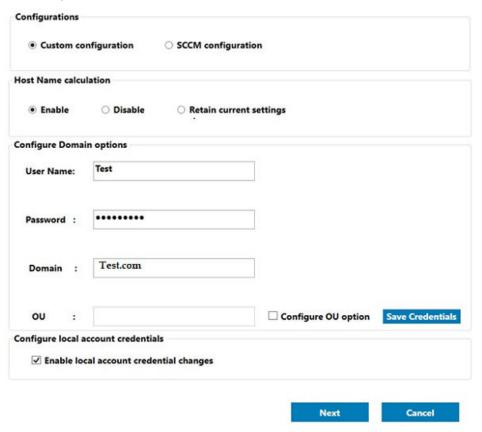
- 1. Go to <drive C>\Windows\Setup.
- 2. Right-click **Build\_Master.cmd**, and select **Run as administrator**. The **Config Master** window is displayed.



#### Figure 1. Config Master

#### 3. Click Next.

The Configuration screen is displayed.



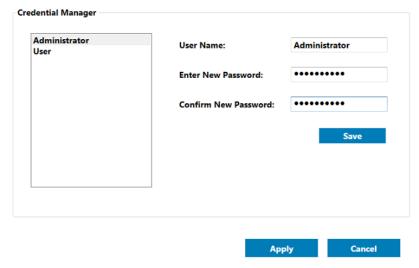
#### Figure 2. Configuration

- 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.
- 7. Click **OK** when prompted.
- 8. Select Enable local account credentials changes.

The changes that are made to the credentials are applied.

#### 9. Click Next.

The Credential Manager page is displayed.



#### Figure 3. Credential Manager

- 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

#### About this task

To run the Config Sysprep tool, do the following:

#### Steps

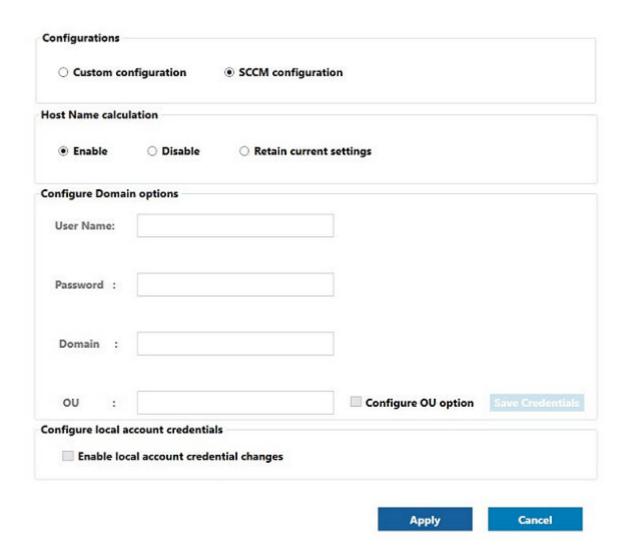
- 1. Go to <drive C>\Windows\Setup.
- 2. Right-click Build\_Master.cmd, and select Run as administrator. The Config Master window is displayed.



Figure 4. Config Master

#### 3. Click **Next**.

The  ${\bf Configuration}$  screen is displayed.



#### Figure 5. Configuration

- 4. In the Configurations section, select SCCM configuration.
- 5. In the **Host Name calculation** section, enable or disable hostname calculation.
  - i NOTE: The Configure Domain Option and Configure local account credentials field are grayed out.
- 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

- · Rich 4K display capability is provided.
- · Option for 802.11 a/b/g/n/ac wireless is provided.
- Intel Celeron® J4105 CPU at 1.50 GHz (Economy configuration), Intel Pentium® Silver J5005 at 1.50 GHz (Standard and Extended configuration) is supported.
- $\cdot$   $\:$  Video adapters—DP to DVI, DP to VGA—is supported.
- · Dynamic throttling for higher performance is supported.

# Hardware capability

# Display settings for Wyse 5070 thin client

By default, the Display Settings UI is available in both user mode and admin mode. Any changes to display preferences made through this UI is saved for the user.

#### Table 3. Port preferences

Wyse 5070 thin client with Celeron processor	<ul> <li>Optional port can be used as second RJ-45, SFP, VGA, or second serial port.</li> <li>If wireless is enabled, the optional port cannot be used as second RJ-45 or SFP.</li> <li>When monitor is connected on USB-C port, DisplayPort 2 becomes inactive.</li> </ul>
Wyse 5070 thin client with Pentium processor	<ul> <li>Optional port can be used as second RJ-45, SFP, VGA, or second serial port.</li> <li>If wireless is enabled, the optional port cannot be used as second RJ-45 or SFP.</li> <li>Back headset is disabled if front headphone is used.</li> <li>When monitor is connected on USB-C port, DisplayPort 2 becomes inactive.</li> <li>When the VGA monitor is present on VGA optional port, DisplayPort 3 becomes inactive.</li> </ul>
Wyse 5070 Extended thin client	<ul> <li>Optional port can be used as second RJ-45, SFP, or VGA.</li> <li>If wireless is enabled, the optional port cannot be used as second RJ-45 or SFP.</li> <li>Back headset is disabled if front headphone is used.</li> <li>When monitor is connected on USB-C port, DisplayPort 2 becomes inactive.</li> <li>When the VGA monitor is connected on VGA optional port, DisplayPort 3 becomes inactive.</li> <li>Power option is available on the first serial port.</li> <li>PCle slot is available.</li> </ul>

#### Wyse 5070 thin client with Celeron processor

#### Table 4. Wyse 5070 thin client with Celeron processor

Number of Displays	Supported display resolution				
	4K resolution <sup>1</sup> Non- 4K resolution <sup>2</sup>				
One display Yes		Yes			
Two displays Yes		Yes			
Three displays	No <sup>3</sup>	Yes <sup>3</sup>			

- 1. 4K resolution—3840 x 2160 @ 60 Hz
- 2. Non-4K resolution—Up to 2560 x 1600 @ 60 Hz
- **3.** VGA port does not support 4K display. However, it supports a display with 1080p screen resolution.

#### Table 5. Ports

Ports	DP1	DP2	VGA	USB Type-C
Monitor priority	1	2B <sup>2</sup>	3	2A <sup>2</sup>
4K display resolution	Yes	Yes	No <sup>1</sup>	Yes
Non-4K resolution	Yes	Yes	Yes <sup>1</sup>	Yes

- 1. VGA port does not support 4K display. However, it supports a display with 1080p screen resolution.
- 2. DP2 and USB Type-C port are mutually exclusive with USB Type-C port taking higher priority.

#### Wyse 5070 thin client with Pentium processor

#### Table 6. Wyse 5070 thin client with Pentium processor

Number of Displays	Supported display resolution			
	4K resolution <sup>1</sup> Non- 4K resolution <sup>2</sup>			
One display	Yes	Yes		
Two displays	Yes	Yes		
Three displays	No <sup>3</sup>	Yes		

- 1. 4K resolution—3840 x 2160 @ 60 Hz
- 2. Non-4Kresolution—Up to 2560 x 1600 @ 60 Hz
- 3. If you connect three displays, two monitors will have 4K resolution and one monitor will have 2560 x 1600 @ 60 Hz.

#### Table 7. Ports

Ports	DP1	DP2	DP3	VGA	USB Type-C
Monitor priority	1	2B <sup>2</sup>	3B <sup>3</sup>	3A <sup>3</sup>	2A <sup>2</sup>
4K display resolution	Yes	Yes	Yes	No <sup>1</sup>	Yes
Non-4K resolution	Yes	Yes	Yes	Yes	Yes

- 1. VGA port does not support 4K display. However, it supports a display with 1080p screen resolution.
- 2. DP2 and USB Type-C port are mutually exclusive with USB Type-C port taking higher priority.
- **3.** DP3 and VGA port are mutually exclusive with VGA port taking higher priority.

#### Wyse 5070 Extended thin client with AMD GPU

#### Table 8. Wyse 5070 Extended thin client with AMD GPU

Number of Displays	Supported display resolution				
	4K resolution <sup>1</sup> Non- 4K resolution <sup>2</sup>				
One display	Yes	Yes			
Two displays	Yes	Yes			
Three displays <sup>4</sup>	Yes	Yes			

Number of Displays	Supported display resolution			
Four displays <sup>5</sup>	Yes	Yes		
Five displays	No <sup>3</sup>	Yes		
Six displays	No <sup>3</sup>	Yes		

- 1. 4K resolution—3840 x 2160 @ 60 Hz
- 2. Non-4K resolution—Up to 2560 x 1600 @ 60Hz Support only up to four monitors with 4K screen resolution @60 Hz.
- 3. If you connect five or six displays, four monitors will have 4K resolution and other monitors will have a maximum resolution of 2560 x 1600 @ 60 Hz.
- 4. For three displays, Dell recommends that you configure first two 4K displays on the main board (DP1~DP3), and the third 4K display on AMD GPU card.
- 5. For four displays, Dell recommends that you configure first two 4K displays on the main board (DP1~DP3), and the remaining two 4K displays on AMD GPU card.

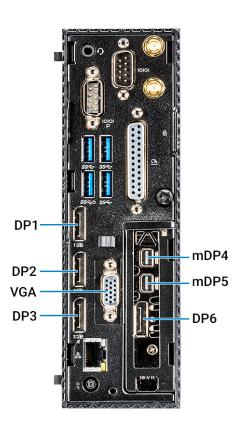


Figure 6. Ports of Wyse 5070 Extended thin client

#### Table 9. Ports

Ports	DP1	DP2	DP3	VGA	USB-C	mDP4 <sup>3</sup>	mDP5 <sup>4</sup>	DP6 <sup>5</sup>
Monitor priority	1	2B <sup>6</sup>	3B <sup>7</sup>	3A <sup>7</sup>	2A <sup>6</sup>	4	5	6
4K display resolution	Yes	Yes	Yes	No <sup>1</sup>	Yes	Yes	Yes	Yes

Ports	DP1	DP2	DP3	VGA	USB-C	mDP4 <sup>3</sup>	mDP5 <sup>4</sup>	DP6 <sup>5</sup>
Non-4K resolution	Yes	Yes	Yes	Yes <sup>2</sup>	Yes	Yes	Yes	Yes

- 1. VGA port does not support 4K display. However, it supports a display with 1080p screen resolution.
- 2. VGA port supports 1080p screen resolution.
- **3.** mDP4 port refers to the top mDP port of the AMD GPU slot.
- **4.** mDP5 port refers to the middle mDP port of the AMD GPU slot.
- **5.** DP6 refers to the bottom DP port of the AMD GPU slot.
- 6. DP2 and USB Type-C port are mutually exclusive with USB Type-C port taking higher priority.
- 7. DP3 and VGA port are mutually exclusive with VGA port taking higher priority.

Monitor priority—The following order defines the monitor priority set on Windows 10 IoT Enterprise for Wyse 5070 thin client:

- DP1 > DP2 > DP3 > mDP4 > mDP5 > DP6
- DP1 > USB-C > DP3 > mDP4 > mDP5 > DP6
- DP1 > DP2 > VGA > mDP4 > mDP5 > DP6
- DP1> USB-C > VGA > mDP4 > mDP5 > DP6

Audio capability—Audio is supported on all DP ports except DP3.

# Fixed issue

- FIWIOT-461—Computrace files that were in e-support image are removed in build 10.03.06.10.18.00.
- · WS-2482—Apacer Solid-State Drives registry files are updated to resolve the blue screen error or BSOD in build 10.03.06.03.19.00.

## **Known issues**

#### Table 10. Known issues

Issue number Description		Workaround
WC-684	Citrix Receiver opens in the minimized mode in the Wyse Easy Setup shell.	No workaround
WC-652	After performing HotPlug function on the DP1 port, display does not identify the first monitor when two monitors are connected.	No workaround
WC-633	The window title for both About Dell Wyse Easy Setup Shell and About Dell Wyse Easy Setup Admin is displayed as About Dell Wyse Easy Setup.	No workaround
WC-630	RDP connection window launched without enabling Full Screen option cannot be maximized.	No workaround
WC-603	When you add or set the newly created user account in auto logon, the <b>This user does not exist</b> error message is displayed.	Logging into the account manually once will allow for subsequent logins to auto-login until the device is rebooted.
WC-594	Shrinkable OS volume alert window is displayed when you run the ConfigMgr Sysprep in the SCCM configuration.	If the volume shrinks, there is no impact to the device or the experience.
WC-751	Low memory issue observed when you play 4K videos using a local browser on multiple displays.	No workaround

Issue number	Description	Workaround
BITS368006	Intel virtual monitor option is displayed in Display Settings when the Intel display port— DP1, DP2, or DP3 is hot plugged to AMD display port mDP4, mDP5, or DP6.	No workaround
WC-590	<b>Speed and Duplex</b> option is not displayed in the Ethernet Status properties.	No workaround
WS-2252	On Wyse 5070 thin client with 4 GB RAM, Unified Write Filter(UWF) cache size is updated to 2048 MB after upgrading the service image build.	<ol> <li>To reset the cache size, do the following:</li> <li>Log in as an administrator.</li> <li>Disable the write filter.</li> <li>Go to Systray and double-click the UWF icon.         The UWF panel is displayed.     </li> <li>Go to UWF Cache settings and click Default.</li> <li>The cache size is reset to 1024 MB.</li> </ol>

# Supported peripherals

Table 11. Supported peripherals

Professional Sound Bar - Skype for Business - AE515  Dell USB Sound Bar - AC511  Jabra Pro 935 MS Wireless headset (Mono) - Office Centric  Cables  DP to HDMI adapter  DP to VGA adapter  USB - C to DP adapter  USB - C to HDMI adapter  USB - C to VGA adapter  USB to Serial adapter - Trendnet  USB to Serial adapter - Cables-2-Go  Input devices  Dell USB Wired Keyboard - KB216  Dell USB Wired Keyboard with Smart Card reader - KB813  Dell Wireless Keyboard and Mouse - KM636  Dell USB Wired Laser mouse - Naruto  Japanese Keyboard - KB216				
Dell USB Sound Bar - AC511  Jabra Pro 935 MS Wireless headset (Mono) - Office Centric  Cables  DP to HDMI adapter  DP to VGA adapter  USB - C to DP adapter  USB - C to HDMI adapter  USB-C to VGA adapter  USB to Serial adapter - Trendnet  USB to Serial adapter - Cables-2-Go  Input devices  Dell USB Wired Keyboard - KB216  Dell USB Wired Optical Mouse - MS116  Dell USB Wired Keyboard and Mouse - KM636  Dell USB Wired Laser mouse - Naruto  Japanese Keyboard - KB216	Audio	Dell Pro Stereo Headset - Skype for Business - UC350		
Jabra Pro 935 MS Wireless headset (Mono) - Office Centric  DP to HDMI adapter  DP to VGA adapter  USB - C to DP adapter  USB - C to HDMI adapter  USB-C to VGA adapter  USB-C to VGA adapter  USB to Serial adapter - Trendnet  USB to Serial adapter - Cables-2-Go  Input devices  Dell USB Wired Keyboard - KB216  Dell USB Wired Keyboard with Smart Card reader - KB813  Dell Wireless Keyboard and Mouse - MS116  Dell USB Wired Laser mouse - Naruto  Japanese Keyboard - KB216		Professional Sound Bar - Skype for Business - AE515		
DP to HDMI adapter  DP to VGA adapter  USB - C to DP adapter  USB - C to HDMI adapter  USB-C to VGA adapter  USB to Serial adapter - Trendnet  USB to Serial adapter - Cables-2-Go  Input devices  Dell USB Wired Keyboard - KB216  Dell USB Wired Optical Mouse - MS116  Dell USB Wired Keyboard and Mouse - KM636  Dell Wireless Keyboard and Mouse - KM636  Dell USB Wired Laser mouse - Naruto  Japanese Keyboard - KB216		Dell USB Sound Bar - AC511		
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Japanese Keyboard – KB216		Dell Wireless Keyboard and Mouse - KM636		
		Dell USB Wired Laser mouse – Naruto		
Monitors Dell 24 Monitor - E2417H		Japanese Keyboard – KB216		
	Monitors	Dell 24 Monitor - E2417H		

Dell 23 Monitor - E2318H  Dell 22 Monitor - E2218HN  Dell 20 Monitor - E2016H  Dell 19 Monitor - E1916H  Dell 24 Monitor - P2418HT (touch)  Dell 24 Monitor - P2417H  Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217H  Dell 22 Monitor - P2217  Dell 20 Monitor - P2217  Dell 20 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - P2016  Dell 24 Monitor - P2415  Dell 24 Monitor - WAR2416  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 10 Mbps SFP transceiver AT-SPFX/2-90  Allied Telesis 100 Mbps SFP fiber transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 10 BSFP - FTLF8519P3BNL  Dell Finisar 10 Mbps SFP - FTLF8519P3BNL				
Dell 20 Monitor - E2016H  Dell 19 Monitor - E1916H  Dell 24 Monitor - P2418HT (touch)  Dell 24 Monitor - P2417H  Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217H  Dell 22 Monitor - P2217  Dell 20 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - U2415  Dell 43 Monitor - U2415  Dell 44 Monitor - WR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver AT-SPFX/2-90  Allied Telesis 100 Mbps SFP fiber transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 23 Monitor- E2318H		
Dell 19 Monitor - E1916H  Dell 24 Monitor - P2418HT (touch)  Dell 24 Monitor - P2417H  Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217  Dell 20 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - P2016  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P3415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 10 Mbps SFP fiber transceiver AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 22 Monitor - E2218HN		
Dell 24 Monitor - P2418HT (touch)  Dell 24 Monitor - P2417H  Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217  Dell 22 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - P2016  Dell 24 Monitor - U2415  Dell 35 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P2415G 4K2K (UHD) monitor  Dell UltraSharp 37 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 20 Monitor - E2016H		
Dell 24 Monitor - P2417H  Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217  Dell 22 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - P2016  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPEX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 19 Monitor - E1916H		
Dell 23 Monitor - P2317H  Dell 22 Monitor - P2217  Dell 22 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - U2415  Dell 43 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 24 Monitor - P2418HT (touch)		
Dell 22 Monitor - P2217H  Dell 22 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - U2415  Dell 43 Monitor - P4317Q  Dell 24 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 24 Monitor - P2417H		
Dell 22 Monitor - P2217  Dell 20 Monitor - P2016  Dell 24 Monitor - U2415  Dell 43 Monitor - P4317Q  Dell 24 Monitor - P4316  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 23 Monitor - P2317H		
Dell 20 Monitor - P2016  Dell 24 Monitor - U2415  Dell 43 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 22 Monitor - P2217H		
Dell 24 Monitor - U2415  Dell 43 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 100/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 22 Monitor - P2217		
Dell 43 Monitor - P4317Q  Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 20 Monitor - P2016		
Dell 24 Monitor - MR2416  Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Networking  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 24 Monitor - U2415		
Dell 24 Monitor - P2415Q 4K2K (UHD) monitor  Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 43 Monitor - P4317Q		
Dell UltraSharp 34 Monitor - P3418HW  Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 24 Monitor - MR2416		
Dell UltraSharp 27 Monitor - U2518D  Dell UltraSharp 27 Monitor - U2718Q (4K)  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell 24 Monitor - P2415Q 4K2K (UHD) monitor		
Dell UltraSharp 27 Monitor - U2718Q (4K)  Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell UltraSharp 34 Monitor - P3418HW		
Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO  Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell UltraSharp 27 Monitor - U2518D		
Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90  Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Dell UltraSharp 27 Monitor - U2718Q (4K)		
Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90  Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL	Networking	Add On 1000 Base-T SFP transceiver (RJ-45) - 310-7225-AO		
Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX  Dell Finisar 1 GB SFP - FTLF8519P3BNL		Allied Telesis 1 Gbps SFP transceiver - fiber connector - AT-SPSX-90		
Dell Finisar 1 GB SFP - FTLF8519P3BNL		Allied Telesis 100 Mbps SFP fiber transceiver AT-SPFX/2-90		
		Allied Telesis 10/100/1000 RJ-45 SFP transceiver - copper (NOT TAA) - AT-SPTX		
Dell Finisar 100 Mbps SFP - FTLF1217P2BTL-FC		Dell Finisar 1 GB SFP - FTLF8519P3BNL		
		Dell Finisar 100 Mbps SFP - FTLF1217P2BTL-FC		

# Used and free space details

#### Table 12. Used and free space details

Platform	Flash size	Used space <drive c=""></drive>	Free space
Wyse 5070 thin client	32 GB	15.1 GB	13.3 GB
Wyse 5070 extended thin client	64 GB	15.2 GB	43 GB

# **Operating system components**

#### Table 13. Driver details

Driver details	Version details for build 10.03.06.10.18.00	Version details for build number 10.03.06.03.19.00
BIOS version	1.1.3	1.1.4
Display Adapter	AMD Radeon Graphics—23.20.768.0	AMD Radeon Graphics—23.20.768.0
	Intel UHD Graphics—23.20.16.4933	Intel UHD Graphics—23.20.16.4933
Ethernet Adapter	Realtek PCle GBE Family Controller— 10.21.811.2017	Realtek PCIe GBE Family Controller—10.3.815.2018
Audio	Intel Display Audio—10.24.0.3     Realtek Audio—6.0.1.8378	<ul><li>Intel Display Audio—10.24.0.3</li><li>Realtek Audio10.0.149393.0</li></ul>
Wireless Adapter	Intel® Wireless AC 9560—20.30.4.1	Intel® Wireless AC 9560—20.30.4.1
Bluetooth	Intel® Wireless Bluetooth®—20.50.1.2	Intel® Wireless Bluetooth®—20.50.1.2
USB xHCl driver	AMD USB 3.0 eXtensible Host Controller 1.0 (Microsoft)— 10.0.14393.1794	Intel® USB 3.0 extensible Host Controller 1.0 (Microsoft)— 10.0.14393.1794
Wyse RAM Disk driver	5.0.2183.5	5.0.2183.5
	By default, RAM disk size is 512 MB for thin clients with 8 GB RAM.	By default, RAM disk size is 512 MB for thin clients with 8 GB RAM.
Flash.sys	1.0.7.11	1.0.7.11
Dell Command Monitor	9.3.1.320	9.3.1.320
CAD-MAP-VDI	1.0.0.1	1.0.0.1

#### Table 14. Common application, features, and files

Application/features/files	Version details for build 10.03.06.10.18.00	Version details for build number 10.03.06.03.19.00
RDC	10.0.14393—RDP 10.2 is supported	10.0.14393—RDP 10.2 is supported
Citrix Receiver—Standard	14.11.0.17061	14.11.0.17061
	Citrix Online Plugin 14.11.0.17061	Citrix Online Plugin 14.11.0.17061
Citrix HDX Real Time Media Engine	2.4.0.1233	2.4.0.1233
VMware Horizon Client	4.8.0.1562—In <b>Dell Thin Client Application</b> and <b>Programs and Features</b> 4.8.0—In VMware Horizon Client	4.8.0.1562—In <b>Dell Thin Client Application</b> and <b>Programs</b> and <b>Features</b> 4.8.0—In VMware Horizon Client
Ericom PowerTerm Interconnect for Thin Clients	12.0	12.0
SCCM 2016 client	5.00.8412.1307	5.00.8412.1307
Windows Media Player	12.0.14393	12.0.14393
Internet Explorer	11.00.14393	11.00.14393

Application/features/files	Version details for build 10.03.06.10.18.00	Version details for build number 10.03.06.03.19.00
Tight VNC	2.6.4.0	2.6.4.0
Ericom connect web connect	7.5.1	7.5.1
.NET Framework	4.6.2	4.6
Wyse Device Agent	14.2.0.51	14.2.0.51
Wyse Easy Setup	NA	1.0.1.3289
Quick Start	NA	1.0
Bit locker with TPM	Supported by default.  i NOTE: TPM 2.0 firmware is supported as a factory configuration.	Supported by default.  i NOTE: TPM 2.0 firmware is supported as a factory configuration.
Windows Multi touch	Supported	Supported
Windows Defender with antivirus definition	1.271.1182.0	1.271.1182.0
Microsoft Management Console	Management Console 3.0 Version 1607—OS Build 14393.1884	Management Console 3.0 Version 1607—OS Build 14393.1884
Microsoft Silverlight	5.1.50907.0	5.1.50907.0
Background Intelligent Transfer Service (BITS)	Supported	Supported
MSXML	Supported	Supported
XML Paper Specification (XPS)	Supported	Supported
Network Access Protection	Not Supported	Not Supported
Credential Roaming	Supported	Supported
WPA2	Supported	Supported
CredSSP	Supported	Supported
Dell Wyse Wallpaper on All Users	Supported	Supported
DirectX	12	12
DellThinClientApplic ation.exe—NewClient Application	10.0.0.15	10.0.0.21
Unified Write Filter manager -Uwfmgr.exe—File Version	10.0.14393.1770	10.0.14393.2312
UWF system tray UI - UWFTray.exe	1.0.4.6	1.0.4.12

Applicatio	n/features/files	Version details for build 10.03.06.10.18.00	Version details for build number 10.03.06.03.19.00
UWF Ser		1.0.4.6	1.0.4.12
Disk_Si	ze.exe	3.0.0.5	3.0.0.5
DeleteF	reeSpace.exe	1.2.1.0	1.2.1.0
Custom Sysprep support in scripts		Supported	Supported
Windows <sup>-</sup>	Гime Service	Supported	Supported
FI Core ch	anges	Scripts changes are part of the build.	Scripts changes are part of the build.
DWKbFil	Application ter.sys terMon.exe terWatchdog.e	2.3.0.1 2.2.0.4 2.2.0.4	2.3.0.1 2.2.0.4 2.2.0.4
Microsoft	Lync Vdi 2013	15.0.4420.1017	15.0.4420.1017
ALM.exe	Application Launch Manager	NA	In Control Panel > Programs and Features
	Application Launch Manager	NA	In Dell Thin Client Application > Client Information > Installed Products
	Application Launch Manager	NA	In C:\Program Files\ALM
XDCM.e xe	xData CleanUp Manager	NA	In Control Panel > Programs and Features
	xData CleanUp Manager	NA	In Dell Thin Client Application > Client Information > Installed Products
	XDataCleanupMa nager	NA	In C:\Program Files\xDCM

# **QFEs**

The following QFEs are added as part of this release:

- · KB4048953—build number 10.03.06.10.18.00
- · KB4132216—build number 10.03.06.10.18.00
- · KB4338832—build number 10.03.06.10.18.00
- KB4345418—build number 10.03.06.10.18.00
- · KB4132216—build number 10.03.06.03.19.00
- · KB4462930—build number 10.03.06.03.19.00
- · KB4462917——build number 10.03.06.03.19.00

For more information, see support.microsoft.com.

