

# **Windows 10 Enterprise 2019 LTSC for Dell Wyse Thin Clients**

## 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.

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# Release summary

This release note contains information about the Windows 10 IoT Enterprise unified build 10.04.06.09.19.00 that runs on Wyse 5070 Thin Client. The operating system is based on Windows 10 Enterprise 2019 LTSC, also known as Redstone 5 (RS5).

This build can be pushed on thin clients with 32 GB eMMC, 64 GB SSD, 128 GB SSD and 256 GB SSD and higher with 4 GB RAM and 8 GB RAM.

**NOTE:** Thin clients running Windows 10 IoT Enterprise Redstone 1 purchased before 10/3/2019 cannot be updated to Redstone 5 without purchasing additional license. This can be accomplished by reviewing your SA/CLA agreement with Microsoft or through distribution.

## Version

10.04.06.09.19.00

## Release date

October 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).

# Compatibility

## Build details

Table 1. Build details

| Release detail               | Specification                       |
|------------------------------|-------------------------------------|
| Platform                     | Dell Wyse 5070 Thin Client          |
| Product                      | Windows 10 IoT Enterprise 2019 LTSC |
| Build version/Kernal version | 10.0                                |
| Build number                 | 10.04.06.09.19.00                   |
| BIOS version                 | 1.2.4                               |

## Connection brokers

- VMware Horizon client version 5.0.0.5596 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)

## 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 2. Port preferences**

| Thin Client                                  | Port preferences   |
|--|--|
| Wyse 5070 Thin Client with Celeron processor | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>PCIe slot is available.</li> </ul> |

**Wyse 5070 thin client with Celeron processor**

**Table 3. 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 4. 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 5. 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-4K resolution—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 6. 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 7. 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> |
| <b>One display</b>                | Yes                          | Yes                             |
| <b>Two displays</b>               | Yes                          | Yes                             |
| <b>Three displays<sup>4</sup></b> | Yes                          | Yes                             |
| <b>Four displays<sup>5</sup></b>  | Yes                          | Yes                             |
| <b>Five displays</b>              | No <sup>3</sup>              | Yes                             |
| <b>Six displays</b>               | 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.

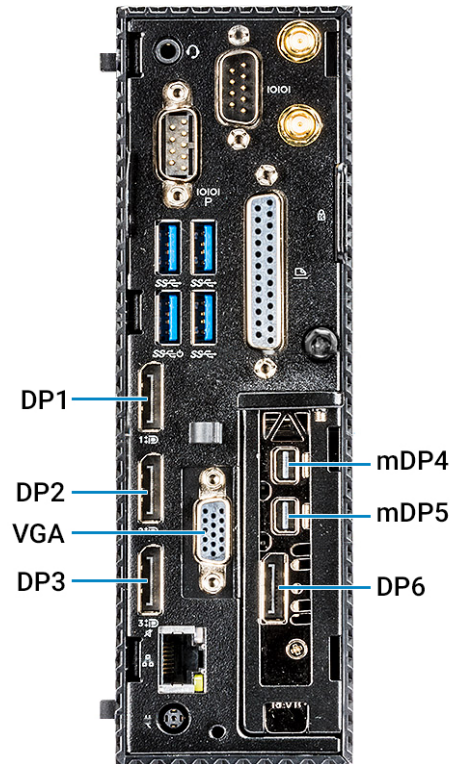


Figure 1. Ports of Wyse 5070 Extended thin client

Table 8. Ports

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

## 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](https://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 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](https://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.

## NOTE:

- Existing `NetXclean.ini` configurations are ported to new `xDataCleanupConfig.xml`.
- Contents in the xData Cleanup Manager are cleaned by default.

# 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.

# 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 5070 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.

## 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 9. Login credentials**

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

## 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](http://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\WNT\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\WNT\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 disabled.
- 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 drive 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.**

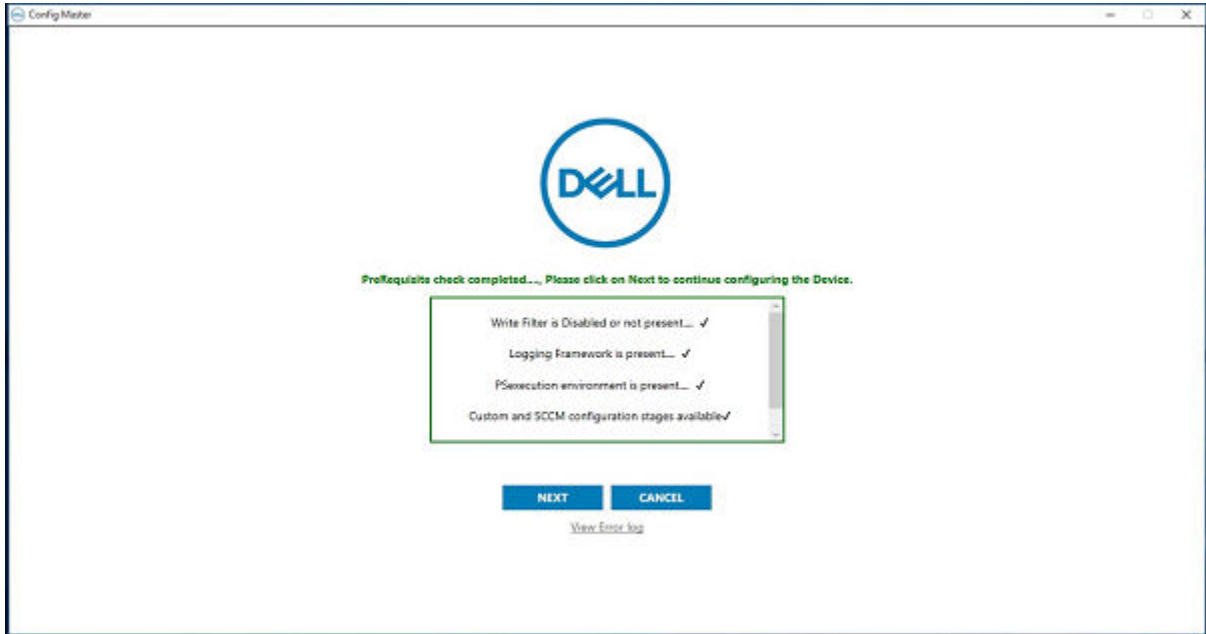
## Running Custom Sysprep tool

- 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 2. Config Master**

3. Click **Next**.  
The **Configuration** screen is displayed.

The screenshot displays the 'Configuration' screen with several sections:
 

- Configurations:** Radio buttons for 'Custom configuration' (selected) and 'SCCM configuration'.
- Host Name calculation:** Radio buttons for 'Enable' (selected), 'Disable', and 'Retain current settings'.
- Configure Domain options:** Text input fields for 'User Name' (Test), 'Password' (masked with dots), and 'Domain' (Test.com). An 'OU' field is empty. A checkbox for 'Configure OU option' is unchecked. A 'Save Credentials' button is present.
- Configure local account credentials:** A checked checkbox for 'Enable local account credential changes'.

 At the bottom right, there are 'Next' and 'Cancel' buttons.

**Figure 3. 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**—optional.

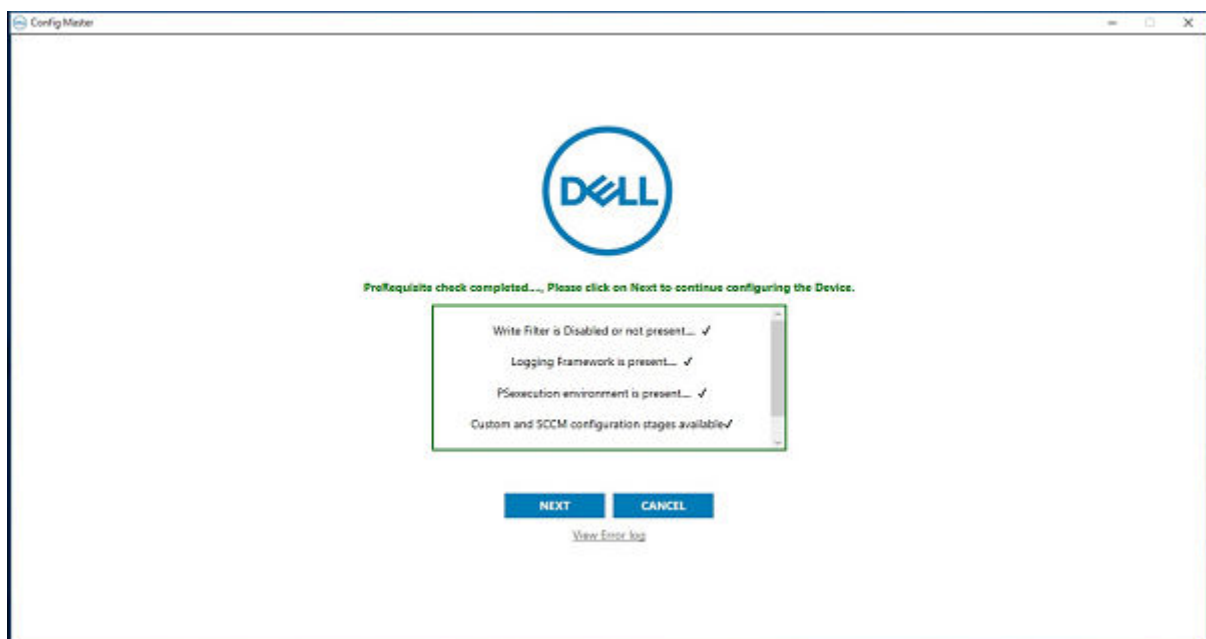


7. Click **OK** when prompted—optional.
  8. Select **Enable local account credentials changes**—optional.  
The changes that are made to the credentials are applied.
  9. Click **Next**.  
The **Credential Manager** page is displayed.
  10. Select the user account, and type the login credentials.
  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 4. Config Master**

3. Click **Next**.  
The **Configuration** screen is displayed.

**Configurations**

Custom configuration
  SCCM configuration

**Host Name calculation**

Enable
  Disable
  Retain current settings

**Configure Domain options**

User Name:

Password :

Domain :

OU :   Configure OU option

**Configure local account credentials**

Enable local account credential changes

**Figure 5. Configuration**

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.

## Important notes

### 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.
- Video adapters—DP to DVI, DP to VGA—is supported.
- Dynamic throttling for higher performance is supported.

### Test Environment

**Table 10. Test Environment**

| Thin client   | CPU Name   | Build Package Name               | Product Version   | RAM  | SSD Size           | BIOS Version |
|---|--|----------------------------------|-------------------|------|--------------------|--------------|
| Wyse 5070 Thin Client with Celeron processor          | Intel(R) Celeron(R) J4105 CPU at 1.50 GHz        | WIE10_RS5_5070_September2019.exe | 10.04.06.09.19.00 | 8 GB | 64 GB—Apacer       | 1.2.4        |
| Wyse 5070 Thin Client with Pentium processor          | Intel(R) Pentium(R) Silver J5005 CPU at 1.50 GHz | WIE10_RS5_5070_September2019.exe | 10.04.06.09.19.00 | 8 GB | 64 GB—Apacer       | 1.2.4        |
| Wyse 5070 Extended Thin Client with Pentium processor | Intel(R) Pentium(R) Silver J5005 CPU at 1.50 GHz | WIE10_RS5_5070_September2019.exe | 10.04.06.09.19.00 | 8 GB | 64 GB—Apacer       | 1.2.4        |
| Wyse 5070 thin client with Celeron processor          | Intel(R) Celeron(R) J4105 CPU at 1.50 GHz        | WIE10_RS5_5070_September2019.exe | 10.04.06.09.19.00 | 4 GB | 32 GB eMMC—Default | 1.2.4        |

**Table 11. Additional details**

| Component             | Version |
|-----------------------|---------|
| Wyse Management Suite | 1.4     |
| Boot Agent            | 4.0.5   |
| USB Imaging Tool      | 1.2.4   |

### Used and free space details

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

| Platform                                     | Flash size | Used space <drive C> | Free space |
|--|------------|----------------------|------------|
| Wyse 5070 Thin Client with Celeron processor | 64 GB      | 13.5 GB              | 40.7 GB    |

| Platform  | Flash size | Used space <drive C> | Free space |
|---|------------|----------------------|------------|
| Wyse 5070 Thin Client with Pentium processor          | 64 GB      | 13.5 GB              | 40.7 GB    |
| Wyse 5070 Extended Thin Client with Pentium processor | 128 GB SSD | 13.5 GB              | 100 GB     |
| Wyse 5070 Thin Client with Celeron processor          | 32 GB eMMC | 12.8 GB              | 12.9 GB    |

## Supported peripherals

Table 13. Supported peripherals

| Wyse 5070 Thin Client Eco System Peripherals Information |   |
|--|---|
| Product  | Product description   |
| Audio  | UC150 - Dell Stereo Headset - Skype for Business  |
|  | UC 350 - Dell Pro Stereo Headset - Skype for Business   |
|  | AE215 - 2.0 Speaker System  |
|  | Microsoft Corporation LifeChat LX-6000 Headset  |
|  | Jabra Evolve 65 MS Stereo - Headset   |
|  | Jabra Engage 65 Stereo Headset  |
|  | Plantronics Savi W440M-400 Series convertible wireless headset - DECT 6.0                     |
|  | Plantronics Voyager Focus UC B825-M headset for Microsoft Lync                                |
| Cables   | Dell Adapter - DisplayPort to HDMI 2.0 (4K)   |
|  | DisplayPort to VGA Active Adapter (M/F)   |
|  | Trendnet® USB to Serial Converter RS-232 - 2.25 ft  |
|  | C2G - USB 2.0 A (Male) to DB9 (Serial) (Male) Adapter   |
|  | Dell Adapter- USB - C to HDMI   |
|  | Dell Adapter-USB-C to VGA   |
|  | StarTech.com 1 Port USB to RS232 DB9 Serial Adapter Cable - Serial adapter - USB 2.0 - RS-232 |
| Input devices  | Dell USB Wired Keyboard - KB216   |
|  | Dell USB Wired Optical Mouse - MS116  |
|  | Dell Wireless Keyboard and Mouse - KM636  |
|  | Dell USB Wired Laser mouse  |
|  | Dell USB Wired Keyboard - KB216   |
| Monitors   | Dell 24 Monitor - E2417H  |
|  | Dell 23 Monitor- E2318H   |
|  | Dell 22 Monitor - E2218HN   |
|  | Dell 22 Monitor - E2216H  |
|  | Dell 24 Monitor - P2418HT (touch)   |
|  | Dell 24 Monitor - P2419H  |

| <b>Wyse 5070 Thin Client Eco System Peripherals Information</b>               |   |
|---|---|
| <b>Product</b>  | <b>Product description</b>                    |
|   | Dell 27 Monitor - P2719H                      |
|   | Dell 24 Monitor - U2415                       |
|   | Dell 43 Monitor - P4317Q                      |
|   | Dell 24 Monitor - P2415Q 4K2K (UHD) monitor   |
|   | Dell Ultra Sharp 34 Monitor - P3418HW         |
|   | Dell Ultra Sharp 27 Monitor - U2518D          |
|   | Dell Ultra Sharp 27 Monitor - U2718Q (4K)     |
|   | Dell Ultra Sharp 24 Monitor - U2419H          |
|   | Dell Ultra Sharp 24 Monitor - U2719D          |
|   | Dell 27 Monitor - P2719HC                     |
|   | Dell 24 Monitor - P2419HC                     |
|   | Dell 24 Monitor - P2319H                      |
|   | Networking                                    |
| 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 Finisar 100 Mbps SFP - FTLF1217P2BTL-FC                                  |   |
| Dell USB Wired Keyboard with Smart Card reader - KB813                        |   |
| Others  | Dell S5840cdn printer                         |
|   | Logitech Webcam B525                          |
|   | SanDisk Cruzer blade 8GB USB drive            |
|   | SanDisk Cruzer blade 64GB USB drive           |
|   | SanDisk Ultra Dual drive 32 USB-C type drive  |
|   | SanDisk Ultra Dual drive 128 USB-C type drive |
|   | Transcend 64GB USB drive                      |
|   | Transcend 128GB USB drive                     |
|   | Kingston Data Traveller 8GB USB drive         |
|   | Kingston Data Traveller 32GB USB drive        |
|   | Kingston Data Traveller 64GB USB drive        |
|   | Kingston Data Traveller 128GB USB drive       |

## QFEs

The following QFEs are added as part of this release:

- KB4490481
- KB4493510
- KB4486553

For more information, see [support.microsoft.com](https://support.microsoft.com).

# Operating system components

**Table 14. Driver details**

| Driver details       | Version details   |
|----------------------|---|
| BIOS version         | 1.2.4   |
| Display Adapter      | Intel UHD Graphics 600— 25.20.100.6582  |
| Ethernet Adapter     | Realtek PCIe GBE Family Controller—10.32.1206.2018  |
| Audio                | <ul style="list-style-type: none"> <li>Intel Display Audio—10.27.0.1</li> <li>Realtek Audio— 6.0.1.8666</li> </ul>  |
| Wireless Adapter     | Intel® Wireless AC 9560— 20.0.0.5   |
| Bluetooth            | Intel® Wireless Bluetooth®— 21.0.0.4(Device Manager)<br>Microsoft Bluetooth Enumerator - 10.0.17763.348<br>Microsoft Bluetooth LE Enumerator - 10.0.17763.1 |
| USB Controller       | Intel(R) USB 3.0 eXtensible Host Controller - 10.0.17763.1<br>USB Root Hub (xHCI) - 10.0.17763.1  |
| Wyse RAM Disk driver | Dell Wyse RAM Disk driver-5.0.2183.5  |
| Flash.sys            | 1.0.7.11  |
| CAD-MAP-VDI          | 3.0.3.0   |

**Table 15. Common application, features, and files**

| Application/features/files                     | Version details  |
|--|--|
| Citrix Receiver—Standard                       | 4.12.0.18020   |
|  | Citrix Online Plugin 4.12.0.18020  |
| Citrix HDX Real Time Media Engine              | 2.5.0.1521   |
| VMware Horizon Client                          | 5.0.0.5596—In <b>Dell Thin Client Application</b> and <b>Programs and Features</b> |
| Ericom PowerTerm Interconnect for Thin Clients | 12.0   |
| Windows Media Player                           | 12.0. 17763.1  |
| Internet Explorer                              | 11.00.17763.1 (Dell thin client Application)<br>11.379.17763.0 (IE About)          |
| Tight VNC                                      | 2.6.4.0  |
| Ericom connect web connect                     | 7.5.1  |
| Wyse Device Agent                              | 14.4.1.5   |
| Wyse Easy Setup                                | 1.1.1.60   |
| Quick Start                                    | NA   |
| Overlay Optimizer                              | 1.0.0.4018   |
| Bit locker with TPM                            | Supported by default.  |

| Application/features/files                                 | Version details  |
|--|--|
|  |  <b>NOTE: TPM 2.0 firmware is supported as a factory configuration.</b> |
| Windows Multi touch  | Supported  |
| Windows Defender with antivirus definition<br>Media Player | 12.0.17763.1   |
| Microsoft Management Console                               | Management Console 3.0<br>Version 1607—OS Build 14393.1884   |
| Microsoft Silverlight                                      | 5.1.50918.0  |
| Background Intelligent Transfer Service<br>(BITS)          | Supported  |
| MSXML  | Supported  |
| XML Paper Specification (XPS)                              | Supported  |
| Network Access Protection                                  | Not Supported  |
| Credential Roaming   | Supported  |
| WPA2   | Supported  |
| CredSSP  | Supported  |
| Dell Wyse Wallpaper on All Users                           | Supported  |
| DirectX  | 12   |
| DellThinClientApplication.exe<br>—NewClient Application    | 10.0.0.26  |
| Unified Write Filter manager -<br>Uwfmggr.exe—File Version | 10.0.17763.1   |
| UWF system tray UI -<br>UWFTray.exe                        | 1.0.4.13   |
| UWF Service - UWFSvc.exe                                   | 1.0.4.12   |
| Disk_Size.exe  | 3.0.0.5  |
| DeleteFreeSpace.exe  | 1.2.1.0  |
| Custom Sysprep support in scripts                          | Supported  |
| Windows Time Service                                       | Supported  |
| FI Core changes  | Scripts changes are part of the build.   |
| CAD MAP Application<br>DWKbFilter.sys                      | 3.0.0.0  |
| DWKbFilterMon.exe  | 3.0.2.1  |
| DWKbFilterWatchdog.exe                                     | 3.0.2.0  |
| Microsoft Lync Vdi 2013                                    | 15.0.4420.1017   |

| Application/features/files |                            | Version details  |
|----------------------------|----------------------------|--|
| ALM.exe                    | Application Launch Manager | In <b>Control Panel &gt; Programs and Features</b>                                     |
|                            | Application Launch Manager | In <b>Dell Thin Client Application &gt; Client Information &gt; Installed Products</b> |
|                            | Application Launch Manager | In C:\Program Files\ALM  |
| XDCM.exe                   | xData CleanUp Manager      | In <b>Control Panel &gt; Programs and Features</b>                                     |
|                            | xData CleanUp Manager      | In <b>Dell Thin Client Application &gt; Client Information &gt; Installed Products</b> |
|                            | XDataCleanupManager        | In C:\Program Files\xDCM   |



## Known issues

Table 16. Known issues

| Issue ID | Description   | Workaround                              |
|----------|---|---|
| WIN-1072 | The warranty link under related documents in Quick Start redirects to the knowledge base page.  | There is no workaround in this release. |
| WIN-1175 | <b>New user local account</b> created on the MUI build is displayed in English instead of the existing MUI language.  | There is no workaround in this release. |
| WIN-1180 | When you push (ja-JP) language build to a new (en-US) language build, the <b>Notifications</b> and <b>LockScreen</b> keyboard language is displayed in Japanese instead of English. | There is no workaround in this release. |

## Resources and support

### Accessing documents using the product search

1. Go to [www.dell.com/support](http://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](http://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](http://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.