Microsoft Windows 10 IoT Enterprise for Dell Wyse Thin Clients Maintenance Release 3

Release Notes

Current Version: 0A62
Release Date: 11-02-2017
Previous Version: Wyse 7020 thin client\Wyse 7020 accelerated graphics thin client\Wyse 5020 thin client– Build 0A38

Contents

Release type and definition

This release note contains the following information for Microsoft Windows 10 IoT Enterprise maintenance release:

Table 1.   Release detail and specification

Release detail	Specification
Operating system	Windows 10 IoT Enterprise
Product version	11.03
Build	0A62
System type	64-bit operating system
Platforms	• Wyse 7020 thin client with Win10 IoT • Wyse 7020 accelerated graphics thin client with Win10 IoT • Wyse 5020 thin client with Win10 IoT

Current version

Build 0A62

Previous version

Wyse 7020 thin client/Wyse 7020 accelerated graphics thin client/Wyse 5020 thin client–Build 0A38

Enhanced features

The following are the enhanced features that are modified with additional enhancements:

- You can enable or disable the SFC scan during Custom and Config Sysprep.
- Sysprep user interface version 1.0.0.10 for Custom and Config Sysprep is supported. Also, you can a join a domain using the Sysprep tool.
- You can change the user and administrator password during Custom Sysprep.
- Wyse Device Agent is updated to version 13.0.2.21.
- Flash.sys is updated to version 1.0.7.7.
- Boot Agent is updated to version 3.5.4.
- VMware Horizon Client is updated to version 4.5.
- Citrix Receiver is updated to version 4.8.
- Latest Bluetooth vulnerability KBs are supported.
- BIOS version is updated to version 2.0F.
- Overlay issue is fixed.
- Auto update of Windows Defender is disabled.
- Digital signature is added for the Dell Wyse flash driver.
- Citrix HDX RTME is updated to version 2.2.100.949.
- Microsoft Silverlight is updated to version 5.1.50907.0.

General features

Write Filter

Write Filters intercept writes to protected volumes, and redirect the writes to an overlay that records changes to protected volumes. By redirecting attempted writes to an overlay, Write Filters can make a

write-protected volume appear to function as a writeable volume. Write Filters can also reduce the wear on solid state drives by eliminating or reducing the number of writes that are written to the disk.

CAUTION: **Dell recommends using thin clients running Windows 10 IoT enterprise in Write Filter enable state unless there is need for support or maintenance activity.**

Windows 10 IoT Enterprise contains only Unified Write Filter (UWF). UWF cache size is 1024 MB.

For more information, see Microsoft Windows 10 IoT Enterprise for Dell Wyse Thin Clients at support.dell.com

Auto login experience

When you turn on or restart the thin client, you will automatically be logged in as a user. After you log off, the login screen is displayed, where the list of available users is displayed.

Dell Thin Client application

You can view general information about the thin client device, system shortcuts, custom fields, RAM disk, Auto logon, C-A-D map tool, and support information.

NOTE: By default, the RAM disk size is set to 512 MB.

Configuration details

This section provides configuration details of Windows 10 IoT Enterprise on the thin client.

Product name

The Windows 64-bit 10240 displays the product name as Windows 10 Enterprise 2015 LTSB.

BIOS information

When you push the GOG0_0A62_32GB image to Wyse 7020 thin client, Wyse 7020 accelerated graphics thin client, and Wyse 5020 thin client, the BIOS gets updated to version 2.0F.

WDA

Wyse Device Agent installer replaces WCM and HAgent.

Windows Defender

To update the latest defender definitions, you must manually update the defender using the Windows Defender console.

Flash.sys

You can enable or disable hostname calculation in flash.sys file. The flash.sys file is located at <drive C>/Windows/system32/DriverStore/FileRepository or at <drive C>/Windows/System32/drivers.

- Ensure that when you alter the MAC ID for a client, host name calculation is not performed.
- If you change the MAC ID (NIC card change), you must perform a hostname calculation by changing your device name to MINWITHNET.

Event Viewer log details

Event Viewer log stores data and allows you to enable or disable the Event log saving when the Unified Write Filter is on. This feature also allows you to collect event logs for debugging or analysis purpose.

Internet Explorer cache size on the disk

By default, the Internet Explorer cache size is set to 100 MB. Temporary Internet files, cache, history locations are set to drive C instead of drive Z.

Citrix Receiver

Citrix receiver is used to connect a virtual machine and is an interface between the thin client and virtual machine.

- Citrix Receiver icon is not available in the system tray. To set the server URL, you must start the Program Neighborhood Agent (PNA) using the Citrix Receiver icon available on the desktop or the **Start** menu.
- USB redirection is applicable for all users on all published XenDesktops, irrespective of the settings in the connection preferences UI.
- Citrix Flash redirection requires the Adobe Flash plugin. It can be downloaded from the Citrix website. This download requires you to click the displayed Optimize window.

ENERGY STAR specification for Wyse builds

Windows 10 IoT Enterprise meets the ENERGY STAR v6.0 thin client requirements.

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.

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

Adobe Flash player

ActiveX is part of the build that helps to download content from a network. Netscape Plugin Application Programming Interface (NPAPI) plugin has been added that allows plugins (more specifically, browser extensions) to be developed for web browsers.

Premium Codecs

Codecs support compression and faster transmission of data.

The following are the premium codecs from Microsoft that are part of the Windows 10 IoT Enterprise builds:

Table 3.   Premium codecs

Codec	Description
H.265	High Efficiency Video Coding (HEVC) or H.265 doubles the data compression ratio at the same level of video quality, or improves video quality at the same bit rate. It supports resolutions up to 8192 × 4320, including 8 K UHD. This codec is supported only if the required hardware is present.
H.263	H.263 codec is a new software implementation that can substantially improve encoding efficiency and provide other capabilities such as enhanced robustness against data loss in the transmission channel. This codec is primarily used in phones.
ALAC	Apple Lossless Audio Codec (ALAC), or Apple Lossless Encoder (ALE), is an audio coding format, and its reference audio codec implementation for lossless data compression of digital music.
FLAC	Free Lossless Audio Codec is an audio coding format in which the audio is compressed without any loss in quality.
AMR-NB	The Adaptive Multi-Rate (AMR or AMR-NB or GSM-AMR) audio codec is an audio compression format optimized for speech coding. AMR speech codec consists of a multirate narrowband speech codec that encodes narrowband (200–3400 Hz) signals at variable bit rates ranging from 4.75 to 12.2 kilobits per second with toll quality speech starting at 7.4 kilobits per second.

NOTE: Dolby-2 Channel (was already in included in Win10) is the only third party codec license that is covered by Microsoft.

License information

Wyse 7020 thin client, Wyse 5020 thin client, and Wyse 7020 accelerated graphics thin client

The license details for Wyse 7020 thin client, Wyse 5020 thin client, and Wyse 7020 accelerated graphics thin client are:

- License activation scripts are available as part of the build.
- License gets activated only if the OA3.0 product key, which is part of the build, is enabled.
- Network connection is necessary to activate the license.

Sysprep using User Interface (UI)

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.bat is the main program that calls other executable files that prepare the thin client for the Windows installation.

Buildmaster.bat 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.

Prerequisites

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

- Unified Write Filter (UWF) 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 sysperp 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 (UWF) to ensure device security.**

The Sysprep tool contains the following two options:
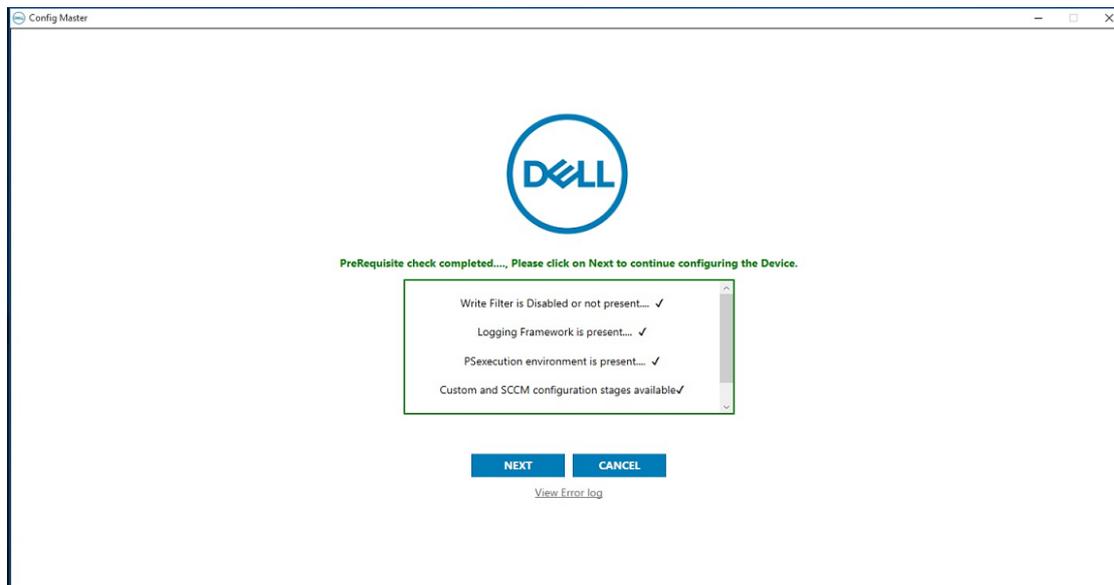
- Custom Sysprep
- Config Sysprep

Custom Sysprep

When you access the operating system using Custom Sysprep, the operating system is configured according to OEM specification or customer requirement. The information in the user interface is saved as configuration files (.xml) and is used for the Custom Sysprep process.

Running the Custom Sysprep tool

To run the Custom Sysprep tool, do the following:

1. Go to C:\Windows\Setup.
2. Right click Build_Master.cmd, and select **Run as administrator**.

   The **Config Master** window is displayed.

3. Click **NEXT**.

   The **Configuration** screen is displayed.

4. In the **Configurations** section, select **Custom configuration**.

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

6. In the **Configure Domain Options** section, enter the appropriate values, and click **Save Credentials**.

7. Click **OK** on confirmation dialog box.

8. Select **Enable Local Account Credentials changes option** if you want the changes made to the credentials to take effect.

9. Click **NEXT**.

   The **Credentials Manager** page is displayed.

10. On the **Credential Manager** page, select the user for which credentials have to be changed and provide the login credentials.

11. Click **Save**.

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

This process may take 5–10 minutes to complete. The device turns off after the Sysprep process is complete.

NOTE: If SFC scan is enabled, the process may take 45-60 minutes to complete.
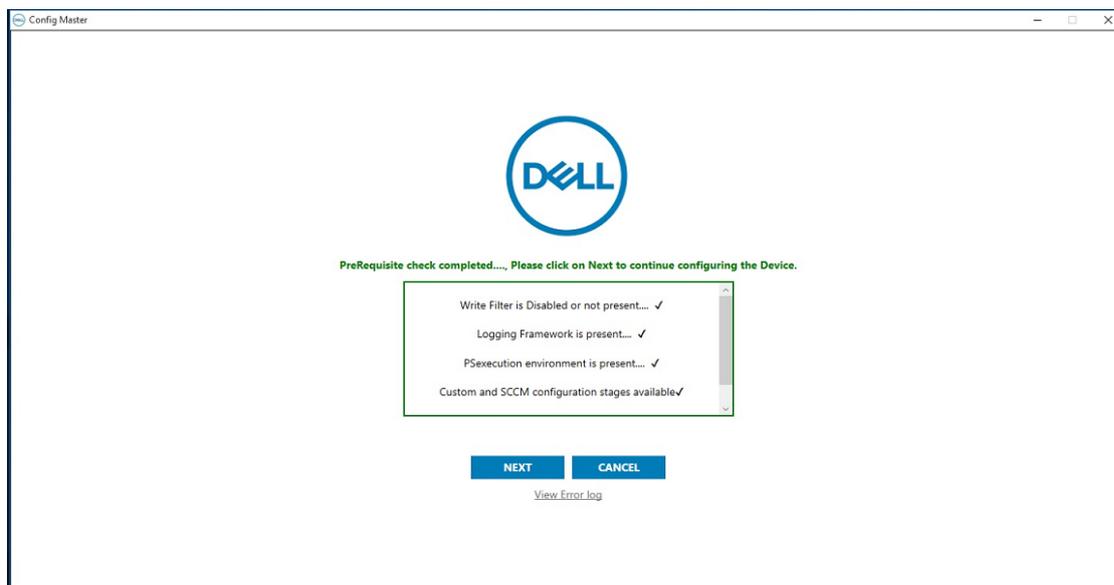
Config Sysprep

Running the Config Sysprep tool

To run the Config Sysprep tool, do the following:

1. Go to C:\Windows\Setup.

2. Right click Build_Master.cmd, and select **Run as administrator**.

   The **Config Master** window is displayed.

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.

Limitations

- Measured Boot, Fast Boot, Refresh PC, Antimalware, Custom Branding, Windows boot, bing sports, Xbox live, Skype, Zune videos, Zune music, people, Windows communication software, Microsoft office note, maps, Bing news, Windows Store application, Edge, and Cortana are not implemented or removed by Microsoft in this build.

- You must manually enable the **Boot from USB** option in BIOS.
- Native PXE imaging is not supported as the default boot mode is set to UEFI in this build.
- The Lockdown Manager is not embedded in this build and the following are the lockdown features:
    - USB filter
    - Keyboard filter
    - Gesture filter

Supported platforms

Table 4.   Supported platforms

Operating system	Platforms	Build number	BIOS Version	RAM	Flash Size	Supported Language
Windows 10 IoT Enterprise	Wyse 7020 thin client with Win10 IoT	GOG0_0A62_32GB .exe	2.0F	4 GB	32 GB	English (en-US) Japanese (ja-JP) French (fr-FR)
	Wyse 7020 Accelerated Graphics Thin Client with Win10 IoT, Wyse 5020 thin client with Win10 IoT					

Fixed issues

Table 5.   Fixed issues

SI.No.	Issue Description
1	The System Preparation tool (Sysprep) can now be configured using the inbuilt user interface. The Sysprep tool can be used with other deployment tools to install the Microsoft Windows operating systems with minimal intervention by an administrator.
2	During JSON deployment, Write Filter report now contains the correct status on WDM, and the custom WDM 5.7 packages enables the Write Filer after the package installation.

Known issues

Table 6.   Known issues

SI.No.	Defect Description
1	To set the disk volume to the default value, you must disable the **Operating system as paging** option.
2	Low Memory issue is observed when you set the Write Filter threshold to 512 MB on thin clients, and the application crosses the threshold limit on Wyse 7020 thin client, Wyse 7020 accelerated graphics thin client, and Wyse 5020 thin client. For example, running 1080p video on multiple tabs simultaneously (more than three tabs).

Sl.No.	Defect Description
3	You can share the file with another user even when Bluetooth is disabled in thin client.
4	When you use SCCM client to pull the image, the system fails to boot. This is a known issue on Windows 10.
5	When you move an application to other location in the start screen, the application gets disabled.
6	The second monitor display powers off when you toggle from extended display to duplicate display.
7	Unknown IP as subnet is observed during PAD imaging.
8	After running Custom Sysprep, time zone does not change after you change the language from one MUI language to another.
9	Auto power-on option does not work during BIOS setup.
10	Black screen is displayed on all six connected monitors when you use keyboard or mouse to wake up the thin client.
11	Error in device manager is observed on AMD driver when you play YouTube videos. This issue is observed along with the low memory issue, when the Write Filter threshold limit is crossed for the Youtube video.
12	The error message **Your computer is low on memory** is displayed in addition to Citrix HDX engine error message. This issue is observed due to the limitation of the Write Filter threshold being set to 512 MB in thin clients. Also, when the application crosses the threshold limit, the low memory issue pops up as the Write Filter cannot handle that scenario. For example, playing 1080p video in Citrix session on multiple tabs simultaneously (more than three tabs)
13	Bluetooth mouse does not work during some cases.
14	Microsoft Windows Media player displays the following error **Video Card problem** when you toggle the screen from extended display to duplicate display.
15	The revert functionality does not work in the display settings.

Build information

Table 7.   General build details

Platform(s)	Wyse 7020 thin client with Win10 IoT, Wyse 7020 Accelerated Graphics Thin Client with Win10 IoT, Wyse 5020 thin client with Win10 IoT
Product Name	Windows 10 Enterprise 2015 LTSB
Product Version	11.03 (Build 0A62.30GB)
Build Number	0A62

WSI/Wizard Compatibility	WSI 5.0.4
WDM Compatibility	WDM 5.7.2
BA version	3.5.4
USB Imaging Tool	2.1.4

Table 8.   Platform-specific build details

Wyse 7020 thin client, Wyse 7020 accelerated graphics thin client, and Wyse 5020 thin client	
Product Version	11.03
Build Number	0A62
Build WSI Package Name	GOG0_0A62_32GB.exe
Build Size (Bytes)	16,721,086,546 bytes
Localization	En-US, ja-JP, fr-FR
BIOS details	
Version	2.0F
Build File Name	20F.fd
Size(Bytes)	8,388,608 bytes

Driver details

Table 9.   Driver details for Wyse 7020 thin client, Wyse 7020 accelerated graphics thin client, and Wyse 5020 thin client

Drivers/Files	Version
BIOS	2.0F
Display Adapter	Wyse 7020 thin client-AMD Radeon (TM) HD 8400E
	Version 15.201.2401.0
	Wyse 5020 thin client-AMD Radeon (TM) HD 8330E
	Version 15.201.2401.0
	Wyse 7020 accelerated graphics thin client-AMD Radeon (TM) HD 8330E
	Version 15.201.2401.0
	AMD Radeon E6460 Application-AMD Catalyst Install Manager
	Version 8.0.916.0
Ethernet Adapter	Realtek PCIe GBE Family Controller
	Version 10.10.630.2016
Audio	AMD High Definition Audio Device
	Version 10.0.0.1
	Realtek High Definition Audio
	Version 6.0.1.7898

Drivers/Files	Version
Wireless Adapter	Intel® Dual Band Wireless-AC 7260 Version 18.33.6.2
Bluetooth	Intel® Wireless Bluetooth® Version 19.40.1.1 Intel® Wireless Bluetooth® Version 19.50.1 (Program and features)
TPM	Supported
Wyseramdisk.sys (Wyse RAM Disk driver)	5.0.2183.5
USB 3.0	AMD USB 3. 0 eXtensible Host Controller 1.0 (Microsoft) Version 10.0.10240.16461
Flash.sys	1.0.7.7
Dell CAPS Lock indicator application Driver	2.1.10.0604
Dell Open printer driver	1.91.7882.0
Keyboard Device Driver	10.0.10240.16384

Common Applications/Features/Files

Table 10.   Common Applications/Features/Files

Applications/Features/Files	Version
RDC	10.0.10240 10.0.10240.16384
Citrix Receiver 4.8	14.8.0.1010
Citrix HDX Real Time Media Engine 2.2	2.2.100.949
Lync vdi 2013	15.0.4569.1506
VMware Horizon Client	4.5.0.8090
vWorkspace client	8.6.309.4062
Ericom PowerTerm InterConnect for thin clients	12.0
SCCM client	5.00.8412.1307
Windows Media Player	12.0.10240.16384
Internet Explorer	11.0.10240.17609 11.0.10240.17609 11.00.10240.16384
Adobe Flash player 23 NPAPI	23.0.0.205
Tight VNC	2.6.4.0
Ericom Connect Client	7.6

Applications/Features/Files	Version
.NET Framework	4.6
WDA	13.0.2.21
Bit locker with TPM	Supported
Windows Multi touch	Supported
Windows Defender with latest definition	Virus & Spyware definition updates 1.249.278.0
Microsoft Management Console	Management Console 3.0 Version 10.0 (Build 10240)
Microsoft Silverlight	5.1.50907.0
Background Intelligent Transfer Service	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	Supported
DellThinClientApplication.exe (New Client Application)	10.0.0.11
Unified Write Filter manager - Uwfmgr.exe (File Version)	10.0.10240.17488
UWF system tray UI – UWFTray.exe	1.0.4.6
UWF Service – UWFSvc.exe	1.0.4.6
Master.exe	1.0.0.10
NetXClean.exe	3.0.0.8
Disk_Size.exe	3.0.0.5
LicMgrTool.exe	1.0.0.7 for Potomac
DeleteFreeSpace.exe	1.2.1.0
Sysprep4man scripts	TPM and Sysprep (part of the build)
Windows Time Service	Supported

QFEs

Table 11.   QFEs added in this release

KB Number	Description
KB3081424	Update for Microsoft Windows 10 IoT Enterprise
KB3081431	Security update for Microsoft Windows 10 IoT Enterprise
KB3081436	Security update for Microsoft Windows 10 IoT Enterprise

KB Number	Description
KB3081438	Update for Microsoft Windows 10 IoT Enterprise
KB3081441	Update for Microsoft Windows 10 IoT Enterprise
KB3081444	Security update for Microsoft Windows 10 IoT Enterprise
KB3081448	Update for Microsoft Windows 10 IoT Enterprise
KB3081452	Update for Microsoft Windows 10 IoT Enterprise
KB3081455	Security update for Microsoft Windows 10 IoT Enterprise
KB3093266	Update for Microsoft Windows 10 IoT Enterprise
KB3095020	Update for Microsoft Windows 10 IoT Enterprise
KB3097617	Security update for Microsoft Windows 10 IoT Enterprise
KB3105210	Security update for Microsoft Windows 10 IoT Enterprise
KB3105213	Security update for Microsoft Windows 10 IoT Enterprise
KB3105514	Update for Microsoft Windows 10 IoT Enterprise
KB3106932	Update for Microsoft Windows 10 IoT Enterprise
KB3116097	Update for Microsoft Windows 10 IoT Enterprise
KB3116869	Security update for Microsoft Windows 10 IoT Enterprise
KB3135174	Security update for Microsoft Windows 10 IoT Enterprise
KB3140745	Security update for Microsoft Windows 10 IoT Enterprise
KB3141032	Update for Microsoft Windows 10 IoT Enterprise
KB3173427	Update for Microsoft Windows 10 IoT Enterprise
KB4038806	Security update for Microsoft Windows 10 IoT Enterprise
KB4038781	Security update for Microsoft Windows 10 IoT Enterprise

For more information, see support.microsoft.com.