Windows Embedded operating system add-ons and security updates

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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Contents

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Overview

Dell Wyse thin clients running Windows Embedded Standard operating system provide access to applications, files, and network resources.

Locally installed software permits remote administration of the thin clients and provides local maintenance functions. More add-ons are available that support a wide range of specialty peripherals and features for environments that require a secure user interface.

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Support matrix

Table 1. Support matrix

Add-on name	Supported operating system	Release date	Release notes
Dell Overlay Optimizer Application Add-on to fix SymLink Vulnerability	Windows 10 IoT Enterprise	November 2019	Dell Overlay Optimizer Application Add-on to fix SymLink Vulnerability
Wyse Easy Setup Application Add-on to fix SymLink Vulnerability	Windows 10 IoT Enterprise	November 2019	Wyse Easy Setup Application Add-on to fix SymLink Vulnerability
Windows Embedded Standard Applications Add-on to fix SymLink Vulnerability on Windows 10 IoT-based Thin Clients	Windows 10 IoT Enterprise	November 2019	Windows Embedded Standard Applications Add-on to fix SymLink Vulnerability on Windows 10 IoT-based Thin Clients
CAD MAP VDI Enhancement (WIN+L support) version 3.0.3.0 and WinLock workstation version 3.0.3.0 Add-on	Windows 10 IoT Enterprise	August 2019	CAD MAP VDI Enhancement (WIN+L support) version 3.0.3.0 and WinLock workstation version 3.0.3.0 Add-on
BIOS Add-on with AMD Microcode to fix Side Channel Vulnerability for Wyse 5020 and 7020 Thin Clients running Windows Embedded Operating System	• Windows 10 IoT Enterprise • Windows Embedded Standard 7P • Windows Embedded Standard 7	July 2019	BIOS Add-on with AMD Microcode to fix Side Channel Vulnerability for Wyse 5020 and 7020 Thin Clients running Windows Embedded Operating System
BIOS Add-on with AMD microcode to fix Side Channel Vulnerability for Windows Embedded Operating System	• Windows 10 IoT Enterprise • Windows Embedded Standard 7P	May 2019	BIOS Add-on with AMD microcode to fix Side Channel Vulnerability for Windows Embedded Operating System
Intel Bluetooth Pairing Vulnerability Fixes Add-on	• Windows 10 IoT Enterprise • Windows Embedded Standard 7P	December 2018	Intel Bluetooth Pairing Vulnerability Fixes Add-on
OSComponentCleanup Add-on for Windows 10 IoT Enterprise Redstone 1	Windows 10 IoT Enterprise RedStone 1	November 2018	OSComponentCleanup Add-on for Windows 10 IoT Enterprise Redstone 1
Language Control Add-on Version 2.1 for Windows Embedded Standard with Multi-lingual User Interface	• Windows 10 IoT Enterprise • Windows Embedded Standard 7P • Windows Embedded Standard 7	October 2018	Language Control Add-on Version 2.1 for Windows Embedded Standard with Multi-lingual User Interface
CADMAP updates for Dell Wyse 5060 thin client and Wyse 5070 thin client with Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	September 2018	CADMAP updates for Dell Wyse 5060 thin client and Wyse 5070 thin client with Windows 10 IoT Enterprise
Language Control Application version 1.0.0 Add-on	• Windows 10 IoT Enterprise • Windows Embedded Standard 7P • Windows Embedded Standard 7	August 2018	Language Control Application version 1.0.0 Add-on

Add-on name	Supported operating system	Release date	Release notes
Write Filter update for Windows Embedded Standard 7 Operating System	• Windows Embedded Standard 7P • Windows Embedded Standard 7	March 2018	Write Filter update for Windows Embedded Standard 7 Operating System
Unified Write Filter RAMDisk Size add-on for Microsoft Windows 10 IoT Enterprise	• Windows 10 IoT Enterprise RedStone 1 • Windows 10 IoT Enterprise Threshold	March 2018	Unified Write Filter RAMDisk Size add-on for Microsoft Windows 10 IoT Enterprise
Custom Field Thin Client Application add-on for Microsoft Windows 10 IoT Enterprise	• Windows 10 IoT Enterprise RedStone 1 • Windows 10 IoT Enterprise Threshold	March 2018	Custom Field Thin Client Application add-on for Microsoft Windows 10 IoT Enterprise
Write Filter update for Windows 10 IoT Enterprise Threshold and Redstone Operating System	• Windows 10 IoT Enterprise RedStone 1 • Windows 10 IoT Enterprise Threshold	February 2018	Write Filter update for Windows 10 IoT Enterprise Threshold and Redstone Operating System
Windows Embedded Standard Security Update to Mitigate Meltdown and Spectre Vulnerability	• Windows 10 IoT Enterprise • Windows Embedded Standard 8 • Windows Embedded Standard 7P • Windows Embedded Standard 7	January 2018	Windows Embedded Standard Security Update to Mitigate Meltdown and Spectre Vulnerability
WPA2 Security Vulnerability Add-on	• Windows 10 IoT Enterprise RedStone 1 • Windows 10 IoT Enterprise Threshold • Windows Embedded Standard 7P • Windows Embedded Standard 7	December 2017	WPA2 Security Vulnerability Add-on
Windows security updates	• Windows 10 IoT Enterprise RedStone 1 • Windows 10 IoT Enterprise Threshold • Windows Embedded Standard 7P • Windows Embedded Standard 7	September 2017	Windows security updates for Microsoft Bluetooth driver spoofing vulnerability
Dell Wyse 5060 Thin Client with WES7P for Tier 3 Language support	Windows Embedded Standard 7	January 2017	Dell Wyse 5060 Thin Client with WES7P for Tier 3 Language support

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Dell Overlay Optimizer Application Add-on to fix SymLink Vulnerability

Release summary

This release note contains information about the add-on for Dell Overlay Optimizer application to address the SymLink vulnerability issue. You can deploy the add-on to thin clients running Windows 10 IoT Enterprise operating system. The add-on replaces the log path of the affected Windows Embedded Standard applications such as DewMgr, Dewsvc, and Dewdrv.cer with C:\Wyse\WAPPS\DEW. The new log path is also added to the Unified Write Filter exclusion list.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Compatibility

Test environment

Table 2. Windows 10 IoT Enterprise Redstone 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIN10_5070_March2019.exe
Wyse 5470 All-in-One Thin Client	32 GB eMMC	4 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 All-in-One Thin Client	128 GB SSD	8 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 Thin Client	32 GB SSD	4 GB	WIE10_5470_July2019.exe
Wyse 5470 Thin Client	32 GB SSD	8 GB	WIE10_5470_July2019.exe

Table 3. Windows 10 IoT Enterprise Redstone 5

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIE10_RS5_5070_September2019.exe

Table 4. Windows 10 IoT Enterprise Threshold 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 7040 Thin Client	128 GB SSD/256 GB SED/500 GB HDD	4 GB/8 GB/16 GB	7040_0A79_32GB_Standard.exe

Table 5. Tested management servers

Management server	Version	
Wyse Management Suite	1.4	
System Center Configuration Manager (SCCM)	2016 Version 1606 Console Version: 5.0.8412.1313 Site version: 5.0.8412.1000	2019 Version 1902 Console Version: 5.1902.1085.1700 Site version: 5.0.8790.1000
Wyse Device Manager	5.7.3	

NOTE: You can use Wyse Device Manager 5.7.3 to manage Wyse 7040 Thin Clients only.

Add-on information

- Name—DellOverlayOptimizer_1.0.0.4020.exe
- Version—1.0.0.4020
- Size—40.3 MB (42,269,016 bytes)
- Silent parameter for remote installation—/s

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Wyse Easy Setup Application Add-on to fix SymLink Vulnerability

Release summary

This release note contains information about the add-on for Wyse Easy Setup to address the SymLink vulnerability issue. You can deploy the add-on to thin clients running Windows 10 IoT Enterprise operating system. The add-on replaces the log path to `%UserProfile%\Documents\Wyse\WyseWin\WyseEasySetup`.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Compatibility

Test environment

Table 6. Windows 10 IoT Enterprise Redstone 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIN10_5070_March2019.exe
Wyse 5470 All-in-One Thin Client	32 GB eMMC	4 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 All-in-One Thin Client	128 GB SSD	8 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 Thin Client	32 GB SSD	4 GB	WIE10_5470_July2019.exe
Wyse 5470 Thin Client	32 GB SSD	8 GB	WIE10_5470_July2019.exe

Table 7. Windows 10 IoT Enterprise Redstone 5

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIE10_RS5_5070_September2019.exe

Table 8. Windows 10 IoT Enterprise Threshold 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 7040 Thin Client	128 GB SSD/256 GB SED/500 GB HDD	4 GB/8 GB/16 GB	7040_0A79_32GB_Standard.exe

Table 9. Tested management servers

Management server	Version	
Wyse Management Suite	1.4	
System Center Configuration Manager (SCCM)	2016 Version 1606 Console Version: 5.0.8412.1313 Site version: 5.0.8412.1000	2019 Version 1902 Console Version: 5.1902.1085.1700 Site version: 5.0.8790.1000
Wyse Device Manager	5.7.3	

NOTE: You can use Wyse Device Manager 5.7.3 to manage Wyse 7040 Thin Clients only.

Add-on information

- Name—WyseEasySetup_2.0.0.147
- Version—2.0.0.147
- Size—28.76 MB (28,764,128 bytes)
- Silent parameter for remote installation—/s

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Windows Embedded Standard Applications Add-on to fix SymLink Vulnerability on Windows 10 IoT-based Thin Clients

Release summary

This release note contains information about the add-on for Windows Embedded Standard applications to address the SymLink vulnerability issue. You can deploy the add-on to thin clients running Windows 10 IoT Enterprise operating system. The add-on replaces the log path of the affected Windows Embedded Standard applications with `C:\Wyse\WAPPS`. The new log path is also added to the Unified Write Filter exclusion list.

Installing the add-on resolves the vulnerability issue that is observed on the following applications:

Table 10. Windows Embedded Standard applications

Application Name	Version
Master.exe	1.0.0.17
MasterLib.dll	1.0.0.15
BuildContent.exe	1.0.0.8
LanguageConfig.exe	1.0.0.10
Dell Thin Client Application	1.0.0.27
Debuglog.xml for Application Launch Manager (ALM) and xData Cleanup Manager (xDCM)	NA
Logging.psm1 for Custom and ConfigMgr Sysprep	NA

Version

WESAPPS Symlink Vulnerability Fix v1.0.0.0

Release date

November 2019

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Compatibility

Test environment

Table 11. Windows 10 IoT Enterprise Redstone 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIN10_5070_March2019.exe
Wyse 5470 All-in-One Thin Client	32 GB eMMC	4 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 All-in-One Thin Client	128 GB SSD	8 GB	WIE10_5470_All_in_One_June2019.exe
Wyse 5470 Thin Client	32 GB SSD	4 GB	WIE10_5470_July2019.exe
Wyse 5470 Thin Client	32 GB SSD	8 GB	WIE10_5470_July2019.exe

Table 12. Windows 10 IoT Enterprise Redstone 5

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 5070 Thin Client with Celeron processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Extended Thin Client with Pentium processor	64 GB SSD	8 GB	WIE10_RS5_5070_September2019.exe
Wyse 5070 Thin Client with Celeron processor	32 GB eMMC	4 GB	WIE10_RS5_5070_September2019.exe

Table 13. Windows 10 IoT Enterprise Threshold 1

Platforms	Flash/SSD/SED/HDD/eMMC size	RAM Size	Build Package Name
Wyse 7040 Thin Client	128 GB SSD/256 GB SED/500 GB HDD	4 GB/8 GB/16 GB	7040_0A79_32GB_Standard.exe

Table 14. Tested management servers

Management server	Version	
Wyse Management Suite	1.4	
System Center Configuration Manager (SCCM)	2016 Version 1606 Console Version: 5.0.8412.1313	2019 Version 1902 Console Version: 5.1902.1085.1700

Management server	Version	
	Site version: 5.0.8412.1000	Site version: 5.0.8790.1000
Wyse Device Manager	5.7.3	

NOTE: You can use Wyse Device Manager 5.7.3 to manage Wyse 7040 Thin Clients only.

Add-on information

- Name—`WESAPPS_WIE10_SymlinkVulnerability_Fix.msi`
- Version—1.0.0.0
- Size—3.99 MB (4,191,744 bytes)
- Silent parameter for remote installation—`/qn`

Installation Procedure

Download the add-on package

This section describes the steps to download the add-on from Dell support site.

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** field, type the Service Tag or the model number of your device, and press Enter or click the search icon.
3. On the product support page, click **Drivers & downloads**.
4. Select the appropriate operating system.
5. From the list, locate the add-on entry and click the download icon.

Install the add-on using Wyse Management Suite

This section describes the steps to install the add-on using Wyse Management Suite.

1. Register the device to the Wyse Management Suite server, and add the device to the respective groups.
2. Copy the `.msi` file to the Wyse Management Suite server repository.
3. Log in to Wyse Management Suite.
4. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
5. Select the **Local Repository** check box.
6. Click **Sync Files**.
   Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
7. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
8. Verify the copied package in the applications list.
9. To create a group in the Wyse Management Suite server, click **Groups & Configs**.
   The **Groups & Configs** page is displayed.
10. Click the **Plus sign (+)** button and enter the required details to register your client in the same group.
11. Click **Apps and Data**.
    The **Apps and Data** page is displayed.
12. Click **Thin Clients** under **App Policies**.
13. Click **Add Policy** to add the policy to the required group.
14. Update the required fields and click **Save**.

    NOTE: For the `.msi` file installation, the silent installation parameter is `/qn`.
15. Click **Yes** to schedule the job immediately.

16. Go to the **App Policy** job, and enter the description.
17. From the **Run** drop-down menu, select **Immediately**.
18. Click **Preview** and then click **Schedule**.
    The package deployment takes a few minutes to complete.

    NOTE:

    - **The lock screen is displayed during the package installation process on all the thin clients.**
    - **System reboots two times during the package deployment.**

Install the add-on using Wyse Device Manager

This section describes the steps to install the add-on using Wyse Device Manager.

1. Copy the respective `.msi` file to the WDM server.
2. Log in to Wyse Device Manager.
3. Go to **Applications**, and select **Other Packages**.
4. Click **Create Package Plus (+)**.
   The application prompts to download the Package Register utility.
5. Click **Allow**.
   The **Create Package** window is displayed.
6. Download the `.msi` file on your local repository.
7. Go to the folder, and run the **Package Register** utility file.
   The **WDM Package Registration Utility** window is displayed.
8. Enter WDM server address and user credentials in the respective fields.
9. Select the .msi file, and select the add-on path.
10. Click **Open**.
    The list of selected packages is displayed.
11. Select the appropriate operating system package, and provide the command-line parameter as `/qn` for installation.
12. Click **Upload**.
    The status is displayed as **Success**, and the package is displayed under **Other Packages**.
13. Go to **Devices**, and select the target client.
14. Click **Update**.
15. Go to **Select Package** > **Other Package**, and select the add-on package.
16. Click **Save**.
    A message is displayed on the target device.
17. Click **Update Now** on the target device.
    `C:\Temp` folder is created. You must edit the `.rsp` script manually to delete the temp folder using the command `DT C:\Temp`.

    NOTE:

    - **The lock screen is not displayed during the package installation process on all the thin clients.**
    - **System reboots two times during the package deployment.**

Install the add-on using System Center Configuration Manager 2016/2019—SCCM

Prerequisites:

1. Disable the write filter.
2. Add the thin client to the SCCM server domain and restart.
3. Log in to the thin client with valid SCCM domain credentials.
4. Change the time zone and time (HH:MM:SS) according to the SCCM server.
5. Go to **Control Panel** > **Configuration Manager** > **Site** > **Configuration Settings**.
6. In the **Configuration Manager service location** section, enter the site code.
7. In the **Actions** tab, select each action, and click **Run Now**.

   A system tray message is displayed, and the new software is available for installation.

Add a device to the new device collection

This section describes the steps to add a thin client to the new device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to New Device collection**.
3. In the **Device Collections** window, enter the new device collection details, such as name and limiting collection, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Add a device to the existing device collection

This section describes the steps to add a thin client to the existing device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to Existing Device collection**.
3. In the **Device Collections** window, select the device collection group to which you need to add the device, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Package deployment

After the thin client is added to the device collection list, use any of the following methods to deploy the add-on:

- Create and distribute a package.
- Create and deploy a task sequence.

Create and distribute a package

This section describes the steps to create and distribute a package.

1. Copy the `.exe or .msi` file to a shared folder.
2. Expand **Software Library** > **Overview** > **Application management** > **Packages**.
3. Right-click **Packages**, and click **Create Package**.
4. Enter the package name, description, manufacturer name, language, and version.
5. Click **Next**.
6. Browse to the source folder where you have copied the add-on files.
7. Click **Next**.
   The newly created packages are listed in the **Application Management** under **Package**.
8. Select the **Standard Program** option as the program type.
   The Standard Program page is displayed.
9. Enter the required details, and click **Browse** to go to the file location.
10. Select the `.exe` or `.msi` file, and enter `--silent` or `/qn` for silent installation, `--silent --repair` for repair, and`--silent --uninstall` for uninstallation.
11. Click **Next**.
12. Click **Next** until the window with the **Close** button is displayed.
13. Click **Close**.
14. Select the package, right-click, and click Distribute Content .
15. From the **Add** drop-down list, select **Distribution Point**.
16. Select an option to schedule job at a specified time, and click **Next**.
17. Verify the information that you have provided on the summary page, and click **Next**.
18. Click **Close**.
19. Right-click on the created package, and click **Deploy**.
20. Click **Collection**, and browse to the device collection list.
21. Select the device, and click **Next**.
22. From the **Add** drop-down list, select **Distribution Point**.
23. Select the available distribution points, and click **OK**.
24. Click **Next** to complete the deployment process.
25. Click **Close**.

The content status is displayed in green. It may take a few minutes to complete the distribution process.

Create and deploy a task sequence

This section describes the steps to create and deploy a task sequence.

1. Copy the `.exe` file to a shared folder.
2. Expand **Software Library** > **Overview** > **Operating System**.
3. Right-click **Task Sequence**, and click **Create Task Sequence**.
4. In the New Task Sequence wizard, select **Create Custom Task Sequence**, and click **Next**.
5. Click **Close**.
6. Right-click the created task sequence, and click **Edit**.
7. From the **Add** drop-down list, go to **Software** > **Install Package**.
8. Select the created package, and click **Apply**.
9. Click **OK**.
10. Go to **Start** > **All Programs** > **Microsoft System Center** > **Configuration Manager Console**.
    The System Center Configuration Manger window is displayed.
11. Click **Software Library**.
12. Right-click the created the task sequence and deploy it to the required device collection.

NOTE: After you deploy the add-on using the package deployment method or through task sequence, enable the write filter.

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CAD MAP VDI Enhancement (WIN+L support) version 3.0.3.0 and WinLock workstation version 3.0.3.0 Add-on

Release summary

This release note contains information about the CAD MAP VDI and Winlockworkstation add-on for Wyse 5070 thin client with Windows 10 IoT Enterprise Red stone images. This feature is to use WIN+L key in remote sessions and user can enable or disable the WIN+L key in local sessions using WinLock Workstation application.

Version

CAD_MAP_VDI v3.0.3.0

Winlockworkstation v3.0.3.0

Release date

August, 2019

Priority and recommendations

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

Compatibility

Test environment

Table 15. Windows 10 IoT Enterprise RedStone 1

Platforms	Flash\SSD\SED\HDD\eMMC size	RAM Size	Build Package Name
Wyse 5070 thin client with Celeron processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 thin client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 Extended thin client with Pentium processor	64 GB SSD	8 GB	WIN10_5070_March2019.exe
Wyse 5070 thin client with Celeron processor	32 GB eMMC	4 GB	WIN10_5070_March2019.exe

Table 16. Supported management servers

Management Server	Version
Wyse Management Suite	1.3
SCCM	2016 Version 1606 Console Version: 5.0.8412.1307 Site version: 5.0.8412.1000

Previous version

CAD_MAP_VDI v.3.0.0.2

Add-on information

Table 17. Add-on information for Winlockworkstation.exe

Component	Details
Add-on Name	Winlockworkstation.exe
File Version	3.0.3.0
Size	4.15 MB (4,360,984 bytes)
Type of file	.exe

Table 18. Add-on information for CAD_MAP_VDI_WIE10_64bit.msi

Component	Details
Add-on Name	CAD_MAP_VDI_WIE10_64bit.msi
File Version	3.0.3.0
Size	4.88 MB(5,125,632 bytes)
Type of file	.msi

Important notes

This add-on is to support WIN+L key in Remote Connections (Citrix, VMware, and Remote Desktop) and you can disable or enable the local Winlock workstation by Winlockworkstation.exe by passing the parameter. After installing Winlockworkstaion.exe, you must reboot the thin client.

Installation Procedure

Prerequisites

- You must install WinLock workstation v3.0.3.0 after installing or upgrading CAD MAP VDI to v3.0.3.0.
- Minimum version of Dell Thin Client Application should be 10.0.0.15 before deploying `CAD_MAP_VDI_WIE10_64bit.msi`.

Installing CAD_MAP_VDI_WIE10_64bit.msi add-on manually in client

Follow these steps to install the add-on manually:

1. Log in as an administrator and disable UWF.
2. Copy the downloaded `CAD_MAP_VDI_WIE10_64bit.msi` file to `C:\Temp` folder.
3. Double-click the `CAD_MAP_VDI_WIE10_64bit.msi` file and follow the on-screen instructions.
4. Click **Finish** and enable UWF.

Installing Winlockworkstation.exe add-on manually in client

The following are the steps to install Winlockworkstation.exe add-on manually in client:

1. Login to Admin account and Disable UWF.
2. Copy the Winlockworkstation.exe to C:\Temp folder (folder to be created).
3. Open command prompt with administrator privilege and go to the Winlockworkstation.exe location.
4. Run the command Winlockworkstation.exe /WD for disabling the local Winlock workstation and Winlockworkstation.exe /WE for enabling the local Winlock workstation.
5. After the installation is complete, reboot the device.
6. Login to Admin account and Enable the UWF.

Installing CAD_MAP_VDI_WIE10_64bit.msi add -on using Wyse Management Suite(WMS)

The following are the steps to install CAD_MAP_VDI_WIE10_64bit.msi add -on using Wyse Management Suite(WMS):

1. Register the Device to WMS server and add to respective add-on group.
2. Copy .msi file to the WMS server Repository.
3. Launch the browser and login to WMS Server with valid credentials.
4. Navigate to **Portal Administration** > **File Repository**.
5. Check the File Repository and select Sync Files
6. Go to **Apps & Data** > **App Inventory** > **Thin Client** ensure files listing in the Thin Client.
7. Go to **Apps & Data** > **App Policies** > **Thin Client** > **Add Policy**.
8. Fill all the mandatory fields (Policy Name, Group, Task, OS Type, Application, OS subtype Filter).
9. And click **Save** and **Yes** to schedule a Job Immediately.
10. In **App Policy Job**, update Description.
11. **Run** > **Immediately and Click Preview and Click Schedule**
12. Go to **Jobs** to ensure the Job status.
13. Lock screen is there when pushed from WMS.

Installing Winlockworkstation.exe add-on using Wyse Management Suite (WMS)

The following are the steps to install Winlockworkstation.exe add-on using Wyse Management Suite (WMS):

1. Register the Device to WMS server and add to respective add-on group.
2. Copy .exe file to the WMS server Repository.
3. Launch the browser and login to WMS Server with valid credentials.
4. Go to **Portal Administration** > **File Repository**.
5. Check the File Repository and select **Sync Files**.
6. Go to **Apps & Data** > **App Inventory** > **Thin Client**, ensure files listing in the Thin Client.
7. Go to **Apps & Data** > **App Policies** > **Thin Client** > **Add Policy**.
8. Fill all the mandatory fields (Policy Name, Group, Task, OS Type, Application, OS subtype Filter).
9. Provide silent installation parameters.

10. To disable local Winlock workstation provide /WD , for enabling local Winlock workstation, provide /WE.
11. And click **Save** and Yes to schedule a Job Immediately.
12. In App Policy Job, update Description
13. **Run** > **Immediately** and click Preview and click Schedule.
14. Go to Jobs for ensure the Job status.
15. Lock screen will be there when pushed from WMS.

Install the add-on using System Center Configuration Manager 2016/2019—SCCM

Prerequisites:

1. Disable the write filter.
2. Add the thin client to the SCCM server domain and restart.
3. Log in to the thin client with valid SCCM domain credentials.
4. Change the time zone and time (HH:MM:SS) according to the SCCM server.
5. Go to **Control Panel** > **Configuration Manager** > **Site** > **Configuration Settings**.
6. In the **Configuration Manager service location** section, enter the site code.
7. In the **Actions** tab, select each action, and click **Run Now**.

   A system tray message is displayed, and the new software is available for installation.

Add a device to the new device collection

This section describes the steps to add a thin client to the new device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to New Device collection**.
3. In the **Device Collections** window, enter the new device collection details, such as name and limiting collection, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Add a device to the existing device collection

This section describes the steps to add a thin client to the existing device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to Existing Device collection**.
3. In the **Device Collections** window, select the device collection group to which you need to add the device, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Create Application for CAD_MAP_VDI_WIE10_64bit.msi

1. Add the thin client to the Device Collection List.
2. Copy the file to local share.
3. Go to **Software Library** > **Overview** > **Application management** > **Applications**.
4. Right-click **Applications** and then select **Create Applications**.
5. Enter the local share location where the .msi file copied and select the .msi file and then click **Next**.
6. On the **Import Information** page, click **Next**.
7. Edit the installation program and add the parameter `/q /forcerestart`.
8. On the **General Information** page, select the Install behavior as **Install for system** and click **Next**.
9. Go to **Software Library** > **Overview** > **Application management** > **Applications**.
10. Right-click **Applications** and then select **Distribute Applications**.
11. Select the distribution point.
12. Refresh the application screen and ensure that the content status is Success before proceeding (It may take few minutes to complete the distribution process).
13. Verify the details on the Summary page and then click **Next**.

14. Click **Close**.

Deploy CAD_MAP_VDI_WIE10_64bit.msi application

1. Select **Software Library** > **Overview** > **Application Management** and then select **Applications**.
2. Right-click on CAD_MAP_VDI application in right pane and click **Deploy**.
3. Browse and select the **Device Collection** and click on OK in **General** page.
4. Click on **Next** and select the **Distribution point** in C**ontent Destination** page and click on **Next**.
5. Select **Required** under **Purpose in Deployment Settings** page and click **Next**.
6. Click **Next** on **Scheduling Page** and uncheck the option **Commit changes** at deadline or during a maintenance page (requires restart) in **User Experience** page.
7. Click **Next** until the wizard finishes and then click **Close**.

Create package for Winlockworkstation.exe

1. Add the thin client to the Device Collection List.
2. Copy the file to local share.
3. Go to **Software Library** > **Overview** > **Application management** > **Applications**.
4. Right-click **Applications** and then select **Create Package**.
5. Enter the package name, and the description of the manufacturer.
6. Check the **This package contains source files** check box and click **Browse**.
7. Select **Network path** radio button and enter the local share location where the .exe files are copied and click **Next**.
8. Select the **Standard Program** radio button as the Program Type.
9. In the **Standard Program** page, enter the details and click **Browse** to go to EXE file location.
10. Enter installation parameters /WD to disable Winlock workstation or enter /WE to enable Winlock workstation.
11. Click **Next**.
12. Right-click **Package** and then select **Distribute Content**.
13. Select the distribution point.
14. Refresh the package screen and ensure that the content status is Success before proceeding (It may take few minutes to complete the distribution process).
15. Verify the details on the Summary page and then click **Next**.
16. Click **Close**.

Creating a task sequence for deploying Winlockworkstation.exe package

1. Select**Software Library** > **Overview** > **Operating Systems**.
2. Right-click **Task Sequence**, and then select Create **Task Sequence**
3. In the **New Task Sequence** wizard, select **Custom Task Sequence** and then click **Next** and provide valid Task sequence name.
4. Click **Next** till **Create Task Sequence** wizard completes.
5. Right-click and edit the created Task sequence.
6. Click **Add** > **Software** > **Install package**option and specify the created package and click **Apply**.
7. Click **Add** > **General** > **Restart** and click **Apply** and **OK**.
8. Now deploy the modified task sequence to the required device collection.

7

BIOS Add-on with AMD Microcode to fix Side Channel Vulnerability for Wyse 5020 and 7020 Thin Clients running Windows Embedded Operating System

Release summary

The scope of this release is to update BIOS with AMD Microcode to address the Side Channel security vulnerability for Wyse 5020 Thin Client and Wyse 7020 Thin Client running the Windows Embedded operating system.

Version

2.0G

Release date

July 2019

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Compatibility

Supported platforms

Table 19. Supported platforms

Platform name	Operating system	Build number	Memory configuration	
			Flash size	RAM size
• Dell Wyse 5020 Thin Client • Dell Wyse 7020 Thin Client	Windows Embedded Standard 7	BOB0_7092_16GB.exe	16 GB	4 GB
• Dell Wyse 5020 Thin Client • Dell Wyse 7020 Thin Client • Dell Wyse 7020 Accelerated Graphics Thin Client	Windows Embedded Standard 7P	BOB0_7091_16GB.exe	16 GB	4 GB
	Windows 10 IoT Enterprise	GOG0_0A79_32GB.exe	32 GB	4 GB/8 GB

Previous version

2.0F

Add-on details

- File name—`WES_5020_7020_BIOS_20G.zip`
- File size—7 MB

The zip file contains the following three add-ons:

- `WES7P_5020_7020_BIOS_20G.exe`
- `WIE10_5020_7020_BIOS_20G.exe`
- `WES7_5020_7020_BIOS_20G.exe`

NOTE: The file size of the add-ons is 2.4 MB.

Tested management servers and USB Imaging Tool version

Table 20. Management Servers and USB Imaging Tool Version

Management Server	Version
Wyse Management Suite	1.4
Wyse Device Manager	5.7.3
USB Imaging Tool	3.1.0

- Wyse Device Agent must be upgraded to the latest version before deploying the BIOS add-on.
- Extract the add-on from the zipped folder and copy the .exe file to the Wyse Management Suite repository.
- Extract the add-on from the zipped folder and register the .exe file to the RSP file when you deploy the package using WDM.
- The client automatically reboots after you push the add-on.
- The BIOS file is displayed under OS image repository in Wyse Management Suite and under Images in Wyse Device Manager.

Known issues

Table 21. Known issues

Issue ID	Description	Workaround
WIN-1148	Unable to register BIOS version 2.0G pulled from the Wyse 5020 Thin Client and Wyse 7020 Thin Client running Windows 10 IoT Enterprise operating system using USB Imaging Tool version 3.1.0.	1. Configure the USB Imaging tool for the image pull operation. 2. Extract the BIOS add-on `WES_5020_7020_BIOS_20G.exe` from the zipped folder. 3. Extract the `WIE10_5020_7020_BIOS_20G.exe` from the WIE10 folder. 4. Copy the file to the USB drive that is prepared for the image pull operation.
WIN-1152	The operating system type is displayed as WES instead of WES7P in the RSP file when you pull the BIOS using the USB Imaging Tool.	There is no workaround in this release.
WIN-1157	Occasionally, there is no display on Wyse 7020 Accelerated Graphics Thin Client when you boot to BIOS.	There is no workaround in this release.

Installing the add-on

Install the add-on using Wyse Management Suite

This section describes the steps to install the add-on using Wyse Management Suite.

1. Register the device to the Wyse Management Suite server, and add the device to the respective groups.
2. Copy the `.exe` file to the Wyse Management Suite server repository, `C:\WMS\LocalRepo\repository\osImages\zipped`.
3. Log in to Wyse Management Suite.
4. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
5. Select the **Local Repository** check box.
6. Click **Sync Files**.
   Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
7. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
8. Go to **OS Image Repository** > **WES/ThinLinux** and verify the copied package in the applications list.
9. To create a group in the Wyse Management Suite server, click **Groups & Configs**.
   The **Groups & Configs** page is displayed.
10. Click the **Plus sign (+)** button and enter the required details to register your client in the same group.
11. Click **Apps and Data**.
    The **Apps and Data** page is displayed.
12. Click **WES/ThinLinux** under **OS Image Policies**.
13. Click **Add Policy** to add the policy to the required group.
14. Update the required fields and click **Save**.
15. Click **Yes** to schedule the job immediately.
16. Go to the **Image Policy** job, and enter the description.
17. From the **Run** drop-down menu, select **Immediately**.
18. Click **Preview** and then click **Schedule**.
    The package deployment takes a few minutes to complete.

    NOTE: System reboots once during the package deployment.

Install the add-on using Wyse Device Manager

This section describes the steps to install the add-on using Wyse Device Manager.

1. Extract the BIOS add-on from the `WES_5020_7020_BIOS_20G.zip` file to the WDM server `WES_5020_7020_BIOS_20G` folder with WES7, WES7P, and WIE10 sub folders are created
2. Extract `WES7P_5020_7020_BIOS_20G.exe` from WES7P, `WES7_5020_7020_BIOS_20G from WES7` and `WIE10_5020_7020_BIOS_20G.exe` from WIE10 folder.
   `WES7_5020_7020_BIOS_20G.rsp`, `WES7P_5020_7020_BIOS_20G.rsp`, and `WIE10_5020_7020_BIOS_20G.rsp` are created.
3. Log in to the WDM server.
4. Click **Applications** in the Dell Wyse Device Manager dashboard page.
   The options **Images**, **Other Packages**, **Agent Update**, **Device Configuration**, and **PCoIP Device Configuration** are displayed.
5. Select **Images**.
6. Click **Create Package Plus (+)**.
   The application prompts to download the Package Register utility.
7. Click **Allow**.
   The **Create Package** window is displayed.
8. Download the `.exe` file on your local repository.
9. Navigate to the folder, and run the **Package Register** utility file.
   The **WDM Package Registration Utility** window is displayed.
10. Enter WDM server address and user credentials in the respective fields.

11. Select the respective RSP file , and click **Browse**.
12. Select the add-on path.
    The list of selected packages is displayed.
13. Select the appropriate operating system.
14. Click **Upload**.
    The status is displayed as **Success**, and the package is displayed under **Images**.
15. Go to **Devices** and select the target client.
16. Click **Update**.
17. Go to **Select Package** > **Images**, and select the add-on package.
18. Click **Save**.
    A pop-up is displayed on the target device.
19. Click **Update Now** on the target device.
    System reboots and the BIOS is updated.

After the BIOS is updated, the thin client boots to the operating system.

Install the BIOS add-on using the USB Imaging tool

1. Download the Dell Wyse USB Imaging tool from downloads.dell.com/wyse.
2. Install the tool on the supported operating system.
3. Launch the USB Imaging tool.

   The tool displays the **Image Pull** screen by default.
4. Click **Image Push** to display the **Image Push** screen.
5. Plug in the USB drive to the system running the USB Imaging Tool.
6. Click the **Refresh** button to populate the USB drives.
7. Select the USB drive from the **Available drives** drop-down list.

   If your USB drive contains images, these images are displayed on the screen.
8. Select the operating system architecture that you want to push to the target device. Select one of the following:
   - **32 bit**—Select this option to push the 32-bit architecture-based operating system to the target device.
   - **64 bit**—Select this option to push the 64-bit architecture-based operating system to the target device.
9. To add a new local image on the USB drive, click the **Local** tab, and add the BIOS file.
   Ensure that only the BIOS check box is selected.
10. Click **Configure USB Drive**.
11. Click **Update** (Recommended).
    The status is displayed in the progress bar.
12. Remove the USB drive.
13. Ensure that the target thin client is configured to boot from the USB drive.
14. Connect the USB drive to the thin client, and enable **Boot from USB** in the BIOS menu.

    NOTE: Select the boot mode settings as UEFI for Windows 10 IoT Enterprise, and Legacy for Windows Embedded Standard 7 and Windows Embedded Standard 7P.
15. During boot, press and hold the key `P` on your keyboard until the **Boot menu** is displayed.
16. Select your USB drive and press `Enter`.
    The device reboots from the USB drive, and the BIOS that needs to be pushed to the device is displayed.
17. In the **Choose image to push to this device** section, select the local BIOS from the list, and click **OK**.
    The BIOS push operation starts, and the overall status is displayed in the progress bar.
18. After the BIOS push operation is complete, remove the USB drive from the target device.
    The thin client restarts automatically after BIOS push operation is complete.

8

BIOS add-on with AMD microcode to fix Side Channel vulnerability for Windows Embedded operating system

Release summary

The scope of this release is to update BIOS with AMD Microcode to address the Side Channel security vulnerability on Dell Wyse 5060 thin clients running the Windows Embedded Standard 7P and Windows 10 IoT Enterprise operating system.

Version

1.0K

Release date

May 2019

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Compatibility

Supported platforms

Table 22. Supported platforms

Platform name	Operating system	Memory configuration	
		Flash size	RAM size
Dell Wyse 5060 thin client	Windows Embedded Standard 7P	32 GB	4 GB/8 GB
	Windows 10 IoT Enterprise	32 GB	4 GB/8 GB

Previous version

- 1.0J—Windows Embedded Standard 7P
- 1.0H—Windows 10 IoT Enterprise

Add-on details

- File name—`WES_5060_BIOS_10K.zip`
- File size—6.23 MB (6,542,594 bytes)

The zip file contains the following two add-ons:

- `WES7P_5060_BIOS_10K.exe`—file size 33,54,218 bytes
- `WIE10_5060_BIOS_10K.exe`—file size 33,59,674 bytes

Tested management servers and USB Imaging Tool version

Table 23. Management Servers and USB Imaging Tool Version

Management Server	Version
Wyse Device Manager	5.7.3
Wyse Management Suite	1.4
USB Imaging Tool	3.1.0

- Wyse Device Agent must be upgraded to the latest version before deploying the BIOS add-on.
- Extract the add-on from the zipped folder and copy the .exe file to the Wyse Management Suite repository.
- Extract the add-on from the zipped folder and register the .exe file to the RSP file.
- To deploy the add-on using USB Imaging Tool to the thin clients running Windows 10 IoT Enterprise, you must change the Boot mode settings to **Both**.
- The client automatically reboots after you push the add-on.
- The BIOS file is displayed under OS image repository in Wyse Management Suite and under Images in Wyse Device Manager.

Known issue

Table 24. Known issue

Issue ID	Issue description	Workaround
WC-1058	You cannot register the BIOS file that is unzipped for Windows Embedded Standard 7P to the USB Imaging tool.	There is no workaround for this issue.

Installing the add-on

Install the add-on using Wyse Management Suite

This section describes the steps to install the add-on using Wyse Management Suite.

1. Register the device to the Wyse Management Suite server, and add the device to the respective groups.
2. Copy the `.exe` file to the Wyse Management Suite server repository, `C:\WMS\LocalRepo\repository\osImages\zipped`.
3. Log in to Wyse Management Suite.
4. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
5. Select the **Local Repository** check box.
6. Click **Sync Files**.
   Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
7. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
8. Go to **OS Image Repository** > **WES/ThinLinux** and verify the copied package in the applications list.
9. To create a group in the Wyse Management Suite server, click **Groups & Configs**.
   The **Groups & Configs** page is displayed.
10. Click the **Plus sign (+)** button and enter the required details to register your client in the same group.
11. Click **Apps and Data**.
    The **Apps and Data** page is displayed.
12. Click **WES/ThinLinux** under **OS Image Policies**.
13. Click **Add Policy** to add the policy to the required group.

14. Update the required fields and click **Save**.
15. Click **Yes** to schedule the job immediately.
16. Go to the **Image Policy** job, and enter the description.
17. From the **Run** drop-down menu, select **Immediately**.
18. Click **Preview** and then click **Schedule**.
    The package deployment takes a few minutes to complete.

    NOTE: System reboots once during the package deployment.

Install the add-on using Wyse Device Manager

This section describes the steps to install the add-on using Wyse Device Manager.

1. Copy the respective `.exe` file to the WDM server.
2. Launch Wyse Device Manager and login using valid credentials.
3. Click **Applications** in the Dell Wyse Device Manager dashboard page.
   The options **Images**, **Other Packages**, **Agent Update**, **Device Configuration**, and **PCoIP Device Configuration** are displayed.
4. Select **Images**.
5. Click **Create Package Plus (+)**.
   The application prompts to download the Package Register utility.
6. Click **Allow**.
   The **Create Package** window is displayed.
7. Download the `.exe` file on your local repository.
8. Navigate to the folder, and run the **Package Register** utility file.
   The **WDM Package Registration Utility** window is displayed.
9. Enter WDM server address and user credentials in the respective fields.
10. Select **EXE** to register, and click **Browse**.
    The **WDM Package Uploader** window is displayed with the progress status bar.
11. Click **Open**.
    The list of selected packages is displayed.
12. Select the appropriate operating system package.
13. Click **Upload**.
    The status is displayed as **Success**, and the package is displayed under **Images**.
14. Go to **Devices** and select the target client.
15. Click **Update**.
16. Go to **Select Package** > **Images**, and select the add-on package.
17. Click **Save**.
    A pop-up is displayed on the target device.
18. Click **Update Now** on the target device.
    `C:\Temp` folder is created. You must edit the `.rsp` script manually to delete the temp folder using the command `DT C:\Temp`.

    NOTE: System reboots once during the package deployment.

Install the BIOS add-on using the USB firmware tool

1. Download the Dell Wyse USB Imaging tool from downloads.dell.com/wyse.
2. Install the tool on the supported operating system.
3. Launch the USB firmware tool.

   The tool displays the **Image Pull** screen by default.
4. Click **Image Push** to display the **Image Push** screen.
5. Plug in the USB drive to the system running the USB Imaging Tool.
6. Click the **Refresh** button to populate the USB drives.

   NOTE: You can have multiple USB drives that are plugged in to your system.
7. Select the USB drive from the **Available drives** drop-down list.

If your USB drive contains images, these images are displayed on the screen.

8. Select the operating system architecture that you want to push to the target device. Select one of the following:
   - **32 bit**—Select this option to push the 32-bit architecture-based operating system to the target device.
   - **64 bit**—Select this option to push the 64-bit architecture-based operating system to the target device.
9. To add a new local image on the USB drive, click the **Local** tab, and add the BIOS file.
   Ensure that only the BIOS check box is selected.
10. Click **Configure USB Drive**.
11. Click **Update** (Recommended).
    The status is displayed in the progress bar.
12. Remove the USB drive.
13. Ensure that the target thin client is configured to boot from the USB drive.

    NOTE: For thin clients running Windows 10 IoT Enterprise operating system, you must set the Boot mode to BOTH to boot from USB.
14. Connect the USB drive to the thin client.
15. During boot, press and hold the key `P` on your keyboard until the **Boot menu** is displayed.
16. Select your USB drive and press `Enter`.
    The device reboots from the USB drive, and the BIOS that needs to be pushed to the device is displayed.
17. In the **Choose image to push to this device** section, select the local BIOS from the list, and click **OK**.
    The BIOS push operation starts, and the overall status is displayed in the progress bar.
18. After the BIOS push operation is complete, remove the USB drive from the target device.
    The Wyse 5060 thin client restarts automatically after BIOS push operation is complete.

9

Intel Bluetooth Pairing Vulnerability Fixes Add-on

Release type and definition

This release notes contains information about the Intel bluetooth add-on for Wyse 5060 thin client, Latitude E7270 mobile thin client, Latitude 3460 mobile thin client, and Latitude 5280 mobile thin client.

This add-on addresses the security vulnerability issue **Bluetooth Pairing (INTEL-SA-00128)**.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Support matrix

Table 25. Support matrix

Platform	Operating system	Flash/SSD Size	RAM Size	Build number
Wyse 5060 thin client	Windows 10 IoT Enterprise	32 GB /64 GB	4 GB /8 GB	5060_0A71_32GB
Latitude 5280 mobile thin client	Windows 10 IoT Enterprise	128 GB SSD	8 GB	5280_0A73_32GB
Wyse 5060 thin client	Windows Embedded Standard 7P	32 GB /64 GB	4 GB /8 GB	5060_7067_32GB
Latitude 3460 mobile thin client	Windows Embedded Standard 7P	128 GB SSD	8 GB	3460_7065_128GB
Latitude E7270 mobile thin client	Windows Embedded Standard 7P	128 GB SSD	8 GB	E7270_7065_128GB

Table 26. Management Server details

Management Server	Version
Wyse Device Manager	5.7.3
Wyse Management Suite	1.3
Microsoft System Center Configuration Manager	Microsoft System Center Configuration Manager 2016 Version 1606 Console Version—5.0.8412.1313 Site version—5.0.8412.1000

Version information and components name

Table 27. Version information

Locations	Old driver version				New driver version	
	Windows 10 IoT Enterprise		Windows Embedded Standard 7P		Windows 10 IoT Enterprise	Windows Embedded Standard 7P
	5060	5280	E7270/3460	5060	5060/5280	E7270/3460/5060
Dell Thin Client - Installed Products	20.40.0	19.60.0	19.0.1603.0650	19.0.1601.0594	20.70.2	20.60.0
Device Manager	20.40.0.3	19.60.0.3	19.0.1603.630	9.0.1601.582	20.70.0.4	20.60.0.4
Control Panel - Programs and Features	20.40.0	19.60.0	19.0.1603.0650	19.0.1601.0594	20.70.2	20.60.0

Table 28. Component name under various locations

Locations	Windows 10 IoT Enterprise and Windows Embedded Standard 7P
Dell Thin Client - Installed Products	Intel Wireless Bluetooth
Dell Thin Client - WDM Packages	IntelBluetoothDriver
Device Manager	Intel Wireless Bluetooth
Control Panel - Programs and Features	Intel Wireless Bluetooth

ENERGY STAR specifications

The product meets the ENERGY STAR requirement.

On thin client running Windows 10 IoT Enterprise operating system, the following values are set by default in control panel applet of Power options:

- Supports WOL power off states.
- Supports idle state wake.
- Screen off timer set to 10 minutes in Balanced mode, five minutes in Power saver mode, and 15 minutes in High Performance mode.
- Sleep timer set to 15 minutes in Balanced mode, 15 minutes in Power saver mode, and **Never** in High Performance mode.

On thin client running Windows Embedded Standard 7 operating system, the following values are set by default in control panel applet of Power options:

- Supports WOL power off states.
- Supports idle state wake.
- Screen off timer set to 10 minutes in Balanced mode, five minutes in Power saver mode, and 15 minutes in High Performance mode.
- Sleep timer set to 15 minutes in Balanced mode, **Never** in Power saver mode, and **Never** in High Performance mode.

Known issues

Table 29. Known issues

Issue ID	Issue description	Workaround
WS-2263	When you are installing or uninstalling the add-on **Interactive services detection crash message** window is displayed occasionally.	There is no impact to functionality.

Issue ID	Issue description	Workaround
WS-2246	A yellow exclamation mark is observed on Bluetooth peripheral devices in **Device Manager** after you connect a mobile Bluetooth device to the client.	1. Go to **Control Panel** > **Devices & Printers** > **Devices** and select the device. 2. Go to **Properties** > **Services** and clear the respective Bluetooth services.
WS-2244	Occasionally, uninstallation of Bluetooth add-on does not clean up, even after successful job completion from management servers.	There is no impact to functionality.
WS-2376	When you pair two Bluetooth devices, **Windows explorer has stopped working** error message is displayed. This issue is also observed when you transfer the files using Bluetooth.	There is no impact to functionality.

10

OSComponentCleanup Add-on for Windows 10 IoT Enterprise Redstone 1

Release type and definition

This release contains information about the **OSComponentCleanup** add-on for Windows 10 IoT Enterprise Redstone 1. This add-on increases free space by optimizing the disk space on thin clients that run Windows 10 IoT Enterprise. This OSComponentCleanup add-on is supported on the thin clients with 32 GB or a higher disk configuration.

The **OSComponentCleanup** add-on clears all the overridden operating system components that are accumulated during the installation of Microsoft security updates.

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).

Support matrix

Table 30. Supported platforms

Platform	Memory configuration	Build number
Wyse 5060 thin client	500 GB/128 GB/256 GB, 8 GB/4 GB RAM	0A60/0A71
Wyse 5070 thin client	128 GB/64 GB SSD/32GB eMMC, 8 GB/4 GB RAM	10.03.06.05.18.01
Wyse 5280 mobile thin client	128-GB M2 SSD, 8-GB RAM	0A73
Wyse 3480 mobile thin client	128-GB M2 SSD, 8-GB RAM	0A72

Table 31. Add-on details

OSComponentCleanup add-on	
File name	`OSComponentCleanup.msi`
File size	679,424 bytes

Installing add-on manually

Follow these steps to install the add-on manually:

1. Go to support.dell.com.
2. Click **Product Support**, enter the `Service Tag` of your thin client, and then click **Submit**.

   NOTE: If you do not have Service Tag, manually browse for your thin client model.
3. Click **Drivers and Downloads**.
4. From the **Operating system** drop-down menu, select the appropriate operating system.
5. Scroll down the page and download the `OSComponentCleanup.msi` file.
6. Log in as an administrator and disable UWF.
7. Copy the downloaded `OSComponentCleanup.msi` file to `C:\Temp` folder.

8. Double-click the `OSComponentCleanup.msi` file and follow the on-screen instructions.
9. Click **Finish** and enable UWF.

Known issues

Table 32. Known issues

Issue number	Issue description	Workaround
WS-852	Installation progress bar displays **Completed** before running the DISM command.	There is no workaround in this release.

Important notes

- When you install the OSComponentCleanup add-on for the first time, it may take 1-3 hours to finish the component clean-up. However, it may take 30-60 minutes to complete the component clean-up process when you again install the OSComponentCleanup add-on.
- The OSComponentCleanup add-on can be used by the Wyse Management Suite administrator with Pro license to trigger the clean-up process after every monthly cumulative update as part of the **Post install** option in **Advanced App Policy**.
- Recurring schedule for clean-up process can be created in Wyse Management Suite to avoid manual intervention by the Wyse Management Suite administrator.

11

Language Control Add-on Version 2.1 for Windows Embedded Standard with Multi-lingual User Interface

Release type and definition

This release note contains information for deploying the unified multilingual user interface image on top of non–unified image with language meta data in the merlin partition. Imaging the client brings up the unit in the same multilingual user interface language present in merlin.

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).

Supported platforms

Table 33. Supported platforms

Operating system	Platform
Windows 10 IoT Enterprise	Latitude 3460 mobile thin client
	Wyse 5020 thin client
	Wyse 5060 thin client
	Latitude 5280 mobile thin client
	Wyse 7020 thin client
	Wyse 7020 accelerated graphics thin client
	Wyse 7040 thin client
Windows Embedded Standard 7 Professional	Latitude 3460 mobile thin client
	Wyse 5020 thin client
	Wyse 5060 thin client
	Wyse 7020 thin client
	Wyse 7020 thin client with accelerated graphics
	Wyse 7040 thin client
	Latitude E7270 mobile thin client
Windows Embedded Standard 7	Wyse 3030 thin client
	Wyse 5010 thin client
	Wyse 5020 thin client
	Wyse 7010 extended chassis thin client

Operating system	Platform
	Wyse 7010 thin client
	Wyse 7020 thin client

New feature

The new feature in this release is:

LanguageControl_2.1.exe—It writes language meta data to the merlin partition. Following are the language meta data for different languages:

- En-US (English-United States)
- De-DE (German-Germany)
- Fr-CA (French-Canada)
- Ja-JP (Japanese-Japan)
- Es-ES (Spanish-Spain)
- Fr-FR (French-France)
- It-IT (Italian-Italy)
- Ko-KR (Korean-Korea)
- Zh-CN (Chinese-Simplified)
- Zh-TW (Chinese-Traditional)
- Pt-BR (Portuguese-Brazil)

You should uncomment by removing the semicolon at the beginning of an EX command in the WDM rsp script. For example, write de-DE (German-Germany) to merlin partition, uncomment de-DE and comment the other EX commands in rsp script.

EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language de-DE" "+

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language en-US" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language es-ES" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language fr-CA" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language fr-FR" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language it-IT" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language ja-JP" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language ko-KR" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language zh-CN" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language zh-TW" "+"

; EX "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"

"C:\Windows\Setup\Tools\MUI\LanguageConfig.ps1 -Language pt-BR" "+"

NOTE: You must uncomment only one EX command before deploying the package

Add-on details

Table 34. Add-on details

Add-on name	Size in bytes
LanguageControl_2.1.exe	122,880

Add-on package details

- This package writes the language meta data to the merlin partition.
- This package deploys Windows Embedded Standard builds.
- The system restarts twice while deploying the package.
- Minimum free space required to install the package is 5 MB.

Energy Star test

Thin client meets the ENERGY STAR version 6.0 requirements.

Following are the values that are displayed in control panel applet of power options:

- Supports WOL power off states.
- Supports idle state wake.
- Screen off timer is set to 10 minutes.
- Sleep timer is set to 15 minutes.

12

CADMAP updates for Dell Wyse 5060 thin client and Wyse 5070 thin client with Windows 10 IoT Enterprise

Release type and definition

This release note contains information about the CADMAP tool update for Wyse 5060 thin client and Wyse 5070 thin client with Windows 10 IoT Enterprise Redstone 1 image. These add-ons enable Win+L and Ctrl+Alt+Delete key to function in the remote session such as Remote Desktop, Citrix, and VMware sessions.

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).

Support matrix

Table 35. Support matrix

Platform name	Operating system	Add-on file name	Add-on file size	RAM size	Flash size	Build number
Wyse 5060 thin client	Windows 10 IoT Enterprise	CAD_MAP_VDI_WIE10_64bit.msi	5,127,680 bytes	4 GB/8 GB	32 GB/64 GB	0A60/0A71
Wyse 5070 thin client				4 GB/8 GB	128 GB/64 GB SSD/32 GB eMMC	10.03.06.05.18.01

Table 36. Management server details

Management Server	Version
Wyse Device Manager	5.7.3
Wyse Management Suite	1.2
Microsoft System Center Configuration Manager	Microsoft System Center Configuration Manager 2016 Version 1606 Console Version-5.0.8412.1313 Site version-5.0.8412.1000

Known issues

Table 37. Known issues

Issue number	Known issues	Workaround
WC-739	Win+L key is not working inside the VMware session when connected with RDP protocol in Window mode.	There is no workaround for the issue.

Issue number	Known issues	Workaround
WC-816	Temp folder is not deleted after you push the CAD_MAP_VDI_WIE10_64bit.msi add-on using WDM.	There is no workaround for the issue.

13

Language Control Application version 1.0.0 Add-on

Release type and definition

Intel Bluetooth 8265 and Intel Wireless 8265 add-on package for thin clients that run Windows 10 IoT Enterprise Windows Embedded Standard 7P, and Windows 10 IoT Enterprise operating system. You can install this package by using Wyse Device Manager, Wyse Management Suite, and System Center Configuration Manager.

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).

Supported platforms

Table 38. Windows 10 IoT Enterprise

Platforms	Flash size	RAM size	Build number
Dell Wyse 5020 thin client	32 GB	4 GB	GOG0_0A79_32GB.exe
Dell Wyse 7020 thin client	32 GB	4 GB	GOG0_0A79_32GB.exe
Dell Wyse 7020 accelerated graphics thin client	32 GB	4 GB	GOG0_0A79_32GB.exe

Table 39. Windows Embedded Standard 7P

Platforms	Flash size	RAM size	Build number
Dell Wyse 5020 thin client	16 GB	4 GB	BOB0_7066_16GB.exe BOB0_7065_16GB.exe
Dell Wyse 7020 thin client	16 GB	4 GB	BOB0_7066_16GB.exe BOB0_7065_16GB.exe
Dell Wyse 7020 accelerated graphics thin client	16 GB	4 GB	BOB0_7066_16GB.exe BOB0_7065_16GB.exe
Dell Wyse 7010 thin client	16 GB	4 GB	BZB0_0896_16GB.exe

Table 40. Windows Embedded Standard 7

Platforms	Flash size	RAM size	Build number
Dell Wyse 3030 thin client	16 GB	4 GB	BEB0_7077_16GB.exe
Dell Wyse 5010 thin client	16 GB	4 GB	BDB0_7064_16GB.exe
Dell Wyse 5020 thin client	16 GB	4 GB	BOB0_7064_16GB.exe

Platforms	Flash size	RAM size	Build number
Dell Wyse 7010 thin client	16 GB	4 GB	BZB0_7064_16GB.exe
Wyse 7010 Extended thin client	16 GB	4 GB	BZB0_7064_16GB.exe
Dell Wyse 7020 thin client	16 GB	4 GB	BOB0_7064_16GB.exe

Supported management software

Table 41. Supported management software

Management software	Version
Wyse Device Manager	5.7.3
Wyse Management Suite	1.3
System Center Configuration Manager	2016 Microsoft System Center Configuration Manager Version 1606 Console Version—5.0.8412.1313 Site version—5.0.8412.1000

Add-on package details

- Package name: `Intel_Bluetooth_8265.exe`
  - This package installs `Intel_Bluetooth_8265` on Windows 10 IoT Enterprise, Windows Embedded Standard 7P, and Windows Embedded Standard 7 builds.
  - The system restarts twice during the installation.
  - Minimum free disk space required to install this package is 2 GB.
- Package name: `Intel_Wireless_8265.exe`
  - This package installs `Intel_Wireless_8265` on Windows 10 IoT Enterprise, Windows Embedded Standard 7P, and Windows Embedded Standard 7 builds.
  - The system restarts twice during the installation.
  - Minimum free disk space required to install this package is 2 GB.

14

Write Filter update for Windows Embedded Standard 7 Operating System

Release type and definition

This release note contains information about the Windows Writefilter_Update add-on for Windows Embedded Standard 7E and Windows Embedded Standard 7P images. This update addresses the following CIRs:

- CIR92178
- CIR92116

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.

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).

Supported platforms

Table 42. Supported Platforms

Platform	Build number	Language
Wyse 3030 thin client with WES7E	7077	en-US
Wyse 5010 thin client with WES7E	7064	en-US
Wyse 5020 thin client with WES7E	7064	en-US
Wyse 5020 thin client with WES7P	7066	en-US
Wyse 7010 thin client with WES7E	7064	en-US
Wyse 7010 thin client with WES7—Extended	7064	en-US
Wyse 7020 thin client with WES7E	7064	en-US
Wyse 7020 thin client with WES7P	7066	en-US
Wyse 7020 thin client with WES7P—Extended	7066	en-US
Wyse 7040 thin client with WES7P	7065	en-US
Wyse 5060 thin client with WES7P	7067	en-US

Installing the add-on manually

You can install the add-on manually.

1. Log into the thin client as administrator and disable the File-Based Write Filter option.
2. Copy the `WriteFilter_UpdateWES7E.msi` or `WriteFilter_UpdateWES7P.msi` add-on to `C:\Temp folder`.
3. Double-click the `WriteFilter_UpdateWES7E.msi` or `WriteFilter_UpdateWES7P.msi` file and follow the instructions displayed on the screen.
4. Click **Finish**.
   The add-on is installed on the thin client.

Known issues

Table 43. Known issues

Summary	Workaround
The UWF icon in the taskbar should be red in color when the caution message is displayed.	There is no workaround for the issue in this release.
When UWF is disabled using the shortcut icon on the desktop, the legal message is not displayed.	There is no workaround for the issue in this release.

Build information

Table 44. Windows Embedded Standard 7E

Build filename	Version	Build size
WriteFilter_UpdateWES7E.msi	1.0.2.4	2.75 MB

Table 45. Windows Embedded Standard 7P

Build filename	Version	Build size
WriteFilter_UpdateWES7P.msi	1.0.2.4	2.75 MB

NOTE: Note: WriteFilter_UpdateWES7E.msi can not be installed on Windows Embedded Standard 7P hardware.

Important notes

This add-on displays a warning message when you disable the write filter using the write filter system tray. It also provides reminder to users with a pop-up that the write filter is disabled.

15

Unified Write Filter RAMDisk Size add-on for Microsoft Windows 10 IoT Enterprise

Release type and definition

This release note contains information about the UWF RAMDisk Size add-on for Windows 10 IoT Enterprise Threshold and Red stone images.

NOTE: The UWF RAMDisk Size application sets the UWF cache size and RAMDisk size.

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.

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).

Support matrix

Table 46. Supported platforms

Platform	Ram size	Flash size	Build number
Wyse 3480 mobile thin client	8 GB	500 GB/ 128 GB/ 256 GB	0A63
Wyse 5280 mobile thin client	8 GB	500 GB/ 128 GB/ 256 GB	0A64
Wyse 5060 thin client	4 GB/ 8 GB	500 GB/ 128 GB/ 256 GB	0A60
Wyse 7040 thin client	4 GB/ 8 GB/ 16 GB	500 GB/ 128 GB/ 256 GB	0A62

Build information

Table 47. Build information

Build file name	Build Size
UWF_RAMDisk_Size.msi	3,406,336 bytes

Installing add-on manually

1. Log in as an administrator and disable the write filter.
2. Create a temp folder in <drive C>.
3. Copy the `UWF_RAMDisk_Size.msi` file to the temp folder.
4. Double-click the `UWF_RAMDisk_Size.msi` file, and follow the on-screen instructions.
5. Click **Finish** to exit the installer.
6. Reboot the thin client.

Important notes

When the write filter is enabled,

- UWF cache size for thin clients with 8 GB RAM is set to 2 GB, and RAMDisk size is set to 512 MB.
- UWF cache size for thin clients with 4 GB RAM is set to 1 GB, and RAMDisk size is set to 100 MB.

NOTE: When write filter is disabled, RAMDisk size is set to 512 MB for both 8 GB and 4 GB RAM thin clients.

16

Custom Field Thin Client Application add-on for Microsoft Windows 10 IoT Enterprise

Release type and definition

This release note contains information about the **Custom_Field_Thin_Client_Application** add-on for Windows 10 IoT Enterprise Threshold and Redstone 1 images.

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.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Support matrix

Table 48. Supported platforms

Platform	RAM size	Memory size	Build number
Wyse 3480 mobile thin client	8 GB	128 GB/256 GB—SSD	0A63
Wyse 5280 mobile thin client	8 GB	128 GB/256 GB—SSD	0A64
Wyse 5060 thin client	4 GB/8 GB	32 GB/64 GB—SSD	0A60
Wyse 7040 thin client	4 GB/8 GB/16 GB	128 GB—SSD 256 GB—SED 500 GB—HDD	0A62

Build information

Table 49. Build information

Component	Description
Build filename	`Custom_Field_Thin_Client_Application.msi`
Version	10.0.0.14

Component	Description
Build size	4,287,488 bytes

License information

This section contains the license information for **Newtonsoft.Json.dll 6.0.3.17227** component.

The MIT License (MIT) Copyright (c) 2007 James Newton-King Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

17

Write Filter update for Windows 10 IoT Enterprise Threshold and Redstone Operating System

Release type and definition

This release note contains information about the Windows Writefilter_Update add-on for Windows 10 IoT Enterprise Threshold and Red stone images. This update addresses the following CIRs:

- CIR92178
- CIR92116

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.

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).

Supported platforms

Table 50. Supported platforms

Platform name	Memory configuration (RAM/flash)	Build number
Latitude 3480 mobile thin client	500 GB/128 GB/256 GB/8 GB	0A63
Latitude 5280 mobile thin client	500 GB/128 GB/256 GB/8 GB	0A64
Wyse 7020 thin client with Win10 IoT—Z90Q10	32 GB/4 GB	0A62
Wyse 5020 thin client with Win10 IoT—D90Q10	32 GB/4 GB	0A62
Wyse 5060 thin client with Win10 IoT	500 GB/128 GB/256 GB/16 GB/8 GB/4 GB	0A60
Wyse 7040 thin client with Win10 IoT	500 GB/128 GB/256 GB/16 GB/8 GB/4 GB	0A62
Wyse 7020 thin client Win10 IoT—Z90QQ10	32 GB/4 GB	0A62

Build information

Table 51. WriteFilter_Update.msi

Build file name	Version	Build size
WriteFilter_Update.msi	1.0.4.11	3,180,544 bytes

Known issues

Table 52. Known issues

Known issues	Workaround
The UWF icon in the taskbar should be red in color when the caution message is displayed.	There is no workaround for the issue in this release.
When UWF is disabled using the shortcut icon on the desktop, the legal message is not displayed.	There is no workaround for the issue in this release.

Fixed issues

- After installing the add-on manually, the UWF icon is not displayed in the systray.
- Text in legal message window is cropped in monitor model-U2515H in all the screen resolutions.
- In the installer window, a message pertaining to current version of the add-on installed on thin client is not displayed.
- The add-on is digitally not signed.

18

Windows Embedded Standard Security Update to Mitigate Meltdown and Spectre Vulnerability

Release type and definition

This release note contains information about the Windows Embedded Standard security updates to mitigate meltdown and spectre vulnerabilities on the following operating systems:

- Windows Embedded Standard 7
- Windows Embedded Standard 7P
- Windows Embedded Standard 8
- Windows 10 IoT Enterprise

Speculative execution of meltdown and spectre vulnerabilities can be used to read the memory across a trusted boundary. There are multiple vectors by which an attacker can trigger the vulnerabilities depending upon your configuration.

This security update is to mitigate the meltdown and spectre vulnerability which prevent attackers from triggering a weakness in the CPU and access the content stored in memory.

For more information, see knowledge base article *Meltdown and Spectre Vulnerabilities* at www.dell.com

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

What is new in this release

- **KB4056897_WES7—** This file installs January 2018 security quality update for Windows Embedded Standard 7 on a 32-bit system. Your system reboots three times during the installation and requires 150 MB of free space. For more information, see KB article no 4056897 at support.dell.com
- **IE11_KB4056568_WES7**—This file installs January 2018 cumulative security update for Internet Explorer 11 for Windows Embedded Standard 7 on a 32-bit system. Your system reboots three times during the installation and requires 140 MB of free space. For more information, see KB article no 4056568 at support.microsoft.com
- **KB4056897_WES7P**—This file installs January 2018 security quality update for Windows Embedded Standard 7 on a 64-bit systems. Your system reboots three times during the installation and requires 335 MB of free space. For more information, see KB article no 4056897 at support.microsoft.com
- **IE11_KB4056568_WES7P**—This file installs January 2018 cumulative security update for Internet Explorer 11 for Windows Embedded Standard 7 on a 64-bit system. Your system reboots three times during the installation and requires 335 MB of free space. For more information, see KB article no 4056568 at support.microsoft.com
- **KB4056899_WE8S**—This file installs January 2018 security quality update for Windows Embedded 8 Standard on a 64-bit systems. Your system reboots three times during the installation and requires 100 MB of free space. For more information, see KB article no 4056899 at support.microsoft.com
- **KB4056893_WIE10**—This file installs January 2018 cumulative update for Windows 10 IoT Enterprise version 1507 on a 64-bit systems. Your system reboots three times during the installation and requires 4.5 GB of free space. For more information, see KB article no 4056893 at support.microsoft.com
- **KB4056890_WIE10_1607**—This file installs January 2018 cumulative update for Windows 10 IoT Enterprise version 1607 on a 64-bit systems. Your system reboots three times during the installation and requires 6 GB of free space. For more information, see KB article no 4056890 at support.microsoft.com

Test environment

Table 53. Supported Windows Embedded Standard 7 platforms

Platform name	Memory configuration	Build number
Wyse 3030 thin client	16 GB flash/4 GB RAM	9.09 build 7064
Wyse 5010 thin client	16 GB flash/4 GB RAM	9.09 build 7064
Wyse 5020 thin client	16 GB flash/4 GB RAM	9.09 build 7064
Wyse 7010 thin client	16 GB flash/4 GB RAM	9.09 build 7064
Wyse 7010 Extended thin client	16 GB flash/4 GB RAM	9.09 build 7064
Wyse 7020 thin client	16 GB flash/4 GB RAM	9.09 build 7064

Table 54. Supported Windows Embedded Standard 7P platforms

Platform name	Memory configuration	Build number
Wyse 5020 thin client	16 GB flash/4 GB RAM	9.09 build 7065/7066
Wyse 7020 thin client	16 GB flash/4 GB RAM	9.09 build 7065/7066
Wyse 7020 Extended thin client	16 GB flash/4 GB RAM	9.09 build 7065/7066

Table 55. Supported Windows Embedded Standard 7P platforms

Platform name	Memory configuration	Build number
Latitude 3460 mobile thin client	128 GB SSD flash/8 GB RAM	9.09 build 7065
Wyse 5060 thin client	64 GB SSD flash/8 GB RAM	9.09 build 7067
Wyse 7040 thin client	128 GB SSD flash/8 GB RAM	9.09 build 7065
Latitude E7270 mobile thin client	128 GB SSD flash/8 GB RAM	9.09 build 7065

Table 56. Supported Windows Embedded 8 Standard platforms

Platform name	Memory configuration	Build number
Wyse 5010 thin client	16 GB flash/4 GB RAM	10.03 build 924
Wyse 5020 thin client	16 GB flash/4 GB RAM	10.03 build 924
Wyse 7010 thin client	16 GB flash/4 GB RAM	10.03 build 924
Wyse 7020 thin client	16 GB flash/4 GB RAM	10.03 build 924

Table 57. Supported Windows 10 IoT Enterprise platforms (1607 Redstone)

Platform name	Memory configuration	Build number
Wyse 5060 thin client	64 GB flash/4 GB RAM	12.00 build 0A60
Latitude 3480 mobile thin client	128 GB flash/8 GB RAM	12.01 build 0A64
Latitude 5280 mobile thin client	128 GB flash/8 GB RAM	12.01 build 0A63

Table 58. Supported Windows 10 IoT Enterprise platforms (1507 Threshold)

Platform name	Memory configuration	Build number
Wyse 5020 thin client	32 GB flash/4 GB RAM	11.03 build 0A62
Wyse 7020 thin client	32 GB flash/4 GB RAM	11.03 build 0A62
Wyse 7020 Extended thin client	32 GB flash/4 GB RAM	11.03 build 0A62
Wyse 7040 thin client	256 GB SSD/4 GB RAM	11.03 build 0A62

Dependencies

Ensure that you update Wyse Device Agent or HAgent to the latest version on the client before you proceed with the security updates through Wyse Device Manager version 5.7.2 or Wyse Management Suite version 1.1.

Security update details

Table 59. Security update details

File name	File size in bytes
KB4056897_WES7.exe	38,043,648
IE11_KB4056568_WES7.exe	30,212,096
KB4056897_WES7P.exe	70,340,608
IE11_KB4056568_WES7P.exe	55,209,984
KB4056899_WE8S.exe	20,717,568
KB4056893_WIE10.exe	938,627,072
KB4056890_WIE10_1607.exe	1,261,240,320

Energy Star test

The following values are displayed by default in the control panel applet of Power Options:

- Supports WOL Power off states.
- Supports Idle State wake.
- Screen off timer is set to 15 minutes.
- Sleep timer is set to 20 minutes.

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WPA2 Security Vulnerability Add-on

Release type and definition

This release signifies WPA2 Security Vulnerability for the Windows-based thin clients. For information about the supported platforms, see Supported platforms

As with any technology, robust security research that pre-emptively identifies potential vulnerabilities is critical in providing strong protection. This issue can be resolved through simple software updates. In the Wi-Fi industry, you can expect all your Wi-Fi devices to continue to work together by deploying WPA2 add-on to all the Wi-Fi supported devices.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Supported platforms

Table 60. Windows Embedded Standard 7

Platform name	Build	Add-on name
Wyse 3030 thin client-3290	BEB0_7064_16GB.exe	IntelWiFiDriver.exe
Wyse 5010 thin client with WES7-D90D7	BDB0_7064_16GB.exe	IntelWiFiDriver.exe
Wyse 7010 thin client with WES7-Z90D7	BZB0_7064_16GB.exe	IntelWiFiDriver.exe
Wyse 5020 thin client with WES7-D90Q7	BOB0_7064_16GB.exe	IntelWiFiDriver.exe
Wyse 7020 thin client with WES7-Z90Q7	BOB0_7064_16GB.exe	IntelWiFiDriver.exe

Table 61. Windows Embedded Standard 7 Professional

Platform name	Build	Add-on name
Wyse 5020 thin Client with WES7P-D90Q7P	BOB0_7065_16GB.exe, European Build	IntelWiFiDriver.exe
Wyse 7020 thin Client with WES7P-Z90Q7P	BOB0_7065_16GB.exe, European Build	IntelWiFiDriver.exe
Wyse 7020 Accelerated Graphics thin client with WES7P-Z90QQ7P	BOB0_7065_16GB.exe, European Build	IntelWiFiDriver.exe
Wyse 5020 thin client with WES7P-D90Q7P	BOB0_7066_16GB.exe, Asian Build	IntelWiFiDriver.exe
Wyse 7020 thin client with WES7P-Z90Q7P	BOB0_7066_16GB.exe, Asian Build	IntelWiFiDriver.exe
Wyse 7020 Accelerated Graphics thin client with WES7P-Z90QQ7P	BOB0_7066_16GB.exe, Asian Build	IntelWiFiDriver.exe
D90D7P	BDB0_0896_16GB.exe	IntelWiFiDriver.exe
Z90D7P	BZB0_0896_16GB.exe	IntelWiFiDriver.exe
Wyse 5060 thin client with WES7P	5060_7067_32GB.exe	IntelWiFiDriver_5060.exe

Platform name	Build	Add-on name
Latitude E7270 mobile thin client with WES7P	E7270_7065_128GB.exe	IntelWiFiDriver_E7270_3460.exe
Latitude 3460 mobile thin client with WES7P	3460_7065_128GB.exe	IntelWiFiDriver_E7270_3460.exe

Table 62. Windows 10 IoT Enterprise Threshold

Platform name	Build	Add-on name
Wyse 7020 thin client with Win10 IoT-Z90Q10	GOG0_0A62_32GB.exe	IntelWiFiDriver.exe
Wyse 7020 Accelerated Graphics thin client with Win10 IoT-Z90QQ10	GOG0_0A62_32GB.exe	IntelWiFiDriver.exe
Wyse 5020 thin client with Win10 IoT-D90Q10	GOG0_0A62_32GB.exe	IntelWiFiDriver.exe

Table 63. Windows 10 IoT Enterprise RedStone

Platform name	Build	Add-on name
Wyse 5060 thin client with Win10 IoT	5060_0A60_32GB.exe	IntelWiFiDriver_5060.exe
Latitude 5280 mobile thin client with Win10 IoT	5280_0A64_32GB.exe	IntelWiFiDriver_5280.exe
Latitude 3480 mobile thin client with Win10 IoT	3480_0A63_32GB.exe	QualcommWiFiDriver_3480.exe

Table 64. Management server

Management server	Version	Operating System
Wyse Device Manager (WDM)	5.7.2	Windows Server 2012 R2
Wyse Management Suite (WMS)	1.1	Windows Server 2012 R2
System Center Configuration Manager (SCCM)	2016 Microsoft System Center Configuration Manager Version 1606 Console version: 5.0.8412.1313 Site version: 5.0.8412.1000	Windows Server 2016 version 1607-Operating systems build 14393.1715

Current version

Table 65. Current version

Sl.no	Add-ons	Driver version
1	IntelWiFiDriver.exe	18.33.9.3
2	IntelWiFiDriver_5060.exe	19.10.9.2
3	IntelWiFiDriver_E7270_3460.exe	19.10.10.2
4	IntelWiFiDriver_5280.exe	20.10.1.3
5	QualcommWiFiDriver_3480.exe	12.0.0.448

Known issues

Table 66. Known issues

Known issues	Workaround
Wireless connection is disconnected. SSID is removed from the saved wireless list in the thin client when you try to unregister the thin client from the WMS server.	NA
Wyse Device Manager: C:\Temp is not deleted, and the lock screen is not available when you push from Wyse Device Manager.	Edit the .rsp manually in the server side with DT command to delete C:\Temp and enable lock screen with LU and EL.
SCCM: C:\Temp is not deleted.	NA
Intel WiFi Driver add-on deployment from the SCCM server fails while deploying the add-on using task sequence.	Deploy the add-on without task sequence. **Note** : An error on the server side is present.

Network adapter details

Table 67. Network adapter

Add-on name	Network adapter	Driver version
IntelWiFiDriver.exe	Intel Dual Band Wireless-AC 7260 driver	18.33.9.3
IntelWiFiDriver_5060.exe	Intel Dual Band Wireless-AC 7265 driver	19.10.9.2
IntelWiFiDriver_E7270_3460.exe	Intel Dual Band Wireless-AC 3165 driver	19.10.10.2
IntelWiFiDriver_5280.exe	Intel Dual Band Wireless-AC 8265 driver	20.10.1.3
QualcommWiFiDriver_3480.exe	Qualcomm QCA61x4A 802.11ac wireless Adapter	12.0.0.448

Parameters to install WPA2 driver add-on

Table 68. Parameters

Platforms	.exe file	Command parameters
Latitude E7270 mobile thin client with WES7P Latitude 3460 mobile thin client with WES7P	IntelWiFiDriver_E7270_3460.EXE	/s
Latitude 5280 mobile thin client with Win10 IoT	IntelWiFiDriver_5280.EXE	/s
Wyse 5060 thin client	IntelWiFiDriver_5060.EXE	--silent
Latitude 3480 mobile thin client Win10 IoT	QualcommWiFiDriver_3480.exe	/s
Other platforms	IntelWiFiDriver.exe	--silent

Add-on information

Table 69. Add-on information

Components	Support information
Platforms	Wyse 3030 thin client—3290 Wyse 5010 thin client with WES7—D90D7 Wyse 5020 thin client with WES7—D90Q7

Components	Support information
	Wyse 7010 thin client with WES7—Z90D7 Wyse 7020 thin client with WES7—Z90Q7 Wyse 5020 thin client with WES7P—D90Q7P (European Build) Wyse 7020 thin client with WES7P—Z90Q7P (European Build) Wyse 7020 Accelerated Graphics thin client with WES7P—Z90QQ7P (European Build) Wyse 5020 thin client with WES7P—D90Q7P (Asian Build) Wyse 7020 thin client with WES7P—Z90Q7P (Asian Build) Wyse 7020 Accelerated Graphics thin client with WES7P—Z90QQ7P (Asian Build) D90D7P Z90D7P Wyse 5020 thin client with Win10 IoT—D90Q10 Wyse 7020 thin client with Win10 IoT—Z90Q10 Wyse 7020 thin client with Accelerated Graphics with Win10 IoT—Z90QQ10
Add-on name	IntelWiFiDriver.exe
Type of file	Application (.exe)
Size	216 MB-2273,30,296 bytes
Driver version	18.33.9.3
Language	English-United States

Table 70. Add-on information for Wyse 5060 thin client

Components	Support information
Platforms	Wyse 5060 thin client with WES7P Wyse 5060 thin client with Win10 IoT
Add-on name	IntelWiFiDriver_5060.exe
Type of file	Application (.exe)
Size	216 MB-2273,47,672 bytes
Driver version	19.10.9.2
Language	English-United States

Table 71. Add-on information for Latitude E7270 mobile thin client and Latitude 3460 mobile thin client

Components	Support information
Platforms	Latitude E7270 mobile thin client with WES7P Latitude 3460 mobile thin client with WES7P
Add-on Name	IntelWiFiDriver_E7270_3460.exe
Type of file	Application (.exe)
Size	149 MB-1572,77,576 bytes
Driver version	19.10.10.2
Language	English-United States

Table 72. Add-on information for Latitude 5280 mobile thin client

Components	Support information
Platforms	Latitude 5280 mobile thin client with Win10 IoT
Add-on Name	IntelWiFiDriver_5280.exe
Type of file	Application (.exe)
Size	149 MB-1572,74,016 bytes
Driver version	20.10.1.3
Language	English-United States

Important notes

Table 73. Additional information

Sl.no	Platform	Information
1	Wyse 3030 thin client-3290	Thin client restarts twice after you push the add-on with write filter that is enabled. Minimum space that is required is 1.3 GB.
2	Wyse 5010 thin client with WES7-D90D7	
3	Wyse 7010 thin client with WES7-Z90D7	
4	Wyse 5020 thin client with WES7-D90Q7	
5	Wyse 7020 thin client with WES7-Z90Q7	
6	Wyse 5020 thin client with WES7P-D90Q7P (European build)	
7	Wyse 7020 thin client with WES7P-Z90Q7P (European build)	
8	Wyse 7020 Accelerated Graphics thin client with WES7P-Z90QQ7P (European build)	
9	Wyse 5020 thin client with WES7P-D90Q7P (Asian build)	
10	Wyse 7020 thin client with WES7P-Z90Q7P (Asian build)	
11	Wyse 7020 Accelerated Graphics thin client with WES7P-Z90QQ7P (Asian build)	
12	D90D7P	
13	Z90D7P	
14	Wyse 7020 thin client with Win10 IoT-Z90Q10	
15	Wyse 7020 Accelerated Graphics thin client with Win10 IoT-Z90QQ10	
16	Wyse 5020 thin client with Win10 IoT-D90Q10	
17	Wyse 5060 thin client with WES7P	
18	Wyse 5060 thin client with Win10 IoT	

Sl.no	Platform	Information
19	Latitude E7270 mobile thin client with WES7P	
20	Latitude 3460 mobile thin client with WES7P	
21	Latitude 5280 mobile thin client with Win10 IoT	
22	Latitude 3480 mobile thin client with Win10 IoT	

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Windows Security Updates

Release type and definition

This release includes information about Windows Embedded security updates for Microsoft Bluetooth driver spoofing vulnerability for Dell Wyse thin client platforms.

This release includes information about Windows Embedded security updates for Microsoft Bluetooth driver spoofing vulnerability for Dell Wyse thin client platforms.

A spoofing vulnerability exists in the Bluetooth stack. An attacker can successfully exploit this vulnerability and perform a man-in-the-middle attack. This attack unknowingly routes traffic from your computer to an attacker-computer. The attacker can then monitor and read the traffic before sending it to the intended recipient. It is recommended to update the applicable Windows Embedded security updates as the severity of this threat is high.

Priority and recommendations

Urgent: Dell highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell system.

Supported platforms

Table 74. Supported platforms for Windows Embedded Standard 7

Platform name	Memory configuration (RAM/flash)	WES7SP1 builds
Wyse 5010 thin client	16 GB flash and 4 GB RAM	1. 09 build 7064
Wyse 3030 thin client	16 GB flash and 4 GB RAM	1. 09 build 7064
Wyse 7010 thin client	16 GB flash and 4 GB RAM	1. 09 build 7064
Wyse 7010 Extended Chassis thin client	16 GB flash and 4 GB RAM	1. 09 build 7064
Wyse 7020 thin client/ Wyse 5020 thin client	16 GB flash and 4 GB RAM	1. 09 build 7064

Table 75. Supported platforms for Windows Embedded Standard 7P

Platform name	Memory configuration (RAM/flash)	WES7PSP1 builds
Z90D7P	8 GB flash and 4 GB RAM	1. 04 build 896
Wyse 7010 Extended Chassis thin client	8 GB flash and 4 GB RAM	1. 04 build 896
D90D7P	16 GB flash and 4 GB RAM	1. 04 build 896
Wyse 5060 thin client	32 GB flash and 4 GB RAM	1. 07 build 7067
Latitude E7270 mobile thin client	128 GB SSD and 8 GB RAM	1. 08 build 7065
Latitude 3460mobile thin client	128 GB SSD and 8 GB RAM	1. 08 build 7065
Wyse 7020 thin client and Wyse 5020 thin client	16 GB flash and 4 GB RAM	1. 08 build 7066

Table 76. Supported platforms for Windows 10 IoT Enterprise TH

Platform name	Memory configuration (RAM/flash)	WIE10 TH builds
Wyse 5020 thin client	32 GB flash and 4 GB RAM	1. 02 build 0A38
Wyse 7020 thin client	32 GB flash and 4 GB RAM	1. 02 build 0A38
Wyse 7020 accelerated graphics thin client	32 GB flash and 4 GB RAM	1. 02 build 0A38

Table 77. Supported platforms for Windows 10 IoT Enterprise RS

Platform name	Memory configuration (RAM/flash)	WIE10 RS builds
Latitude 3480 mobile thin client	128 GB SSD and 8 GB RAM	12.01 build 0A40.128GB
Latitude 5280 mobile thin client	128 GB SSD and 8 GB RAM	12.0 build 0A59.128GB
Wyse 5060 thin client	32 GB flash and 4 GB RAM	12.0 build 0A60.32 GB

General features

The security update package details are as follows:

KB4038777_WES7

- This package installs 2017-09 security monthly quality rollup for Windows Embedded Standard 7 x86-based systems. For more information about KB4038777, see support.microsoft.com
- This package is pushed only on Windows Embedded Standard 7 builds.
- Minimum free space required to install this package is 365 MB.

KB4038779_WES7

- This package installs 2017-09 security only quality update for Windows Embedded Standard 7 x86-based systems. For more information about KB4038779, see support.microsoft.com
- This package is pushed only on WES7 builds.
- Minimum free space required to install this package is 76 MB.

KB4038777_WES7P

- This package installs 2017-09 security monthly quality rollup for Windows Embedded Standard 7 x64-based systems. For more information about KB4038777, see support.microsoft.com
- This package is pushed only on WES7P builds.
- Minimum free space required to install this package is 595 MB.

KB4038779_WES7P

- This package installs 2017-09 security only quality update for Windows Embedded Standard 7 x64-based systems. For more information about KB4038779, see support.microsoft.com
- This package is pushed only on WES7P builds.
- Minimum free space required to install this package is 126 MB.

KB4038781_WIE10

- This package installs 2017-09 cumulative update for Windows 10 version 1507 for x64-based systems. For more information about KB4038781, see support.microsoft.com
- This package is pushed only on WIE10 version 1507 builds.
- Minimum free space required to install this package is 2618 MB.

KB4038782_WIE10_1607

- This package installs 2017-09 cumulative update for Windows 10 version 1607 for x64-based systems. For more information about KB4038782, see support.microsoft.com
- This package is pushed only on WIE10 version 1607 builds.
- Minimum free space required to install this package is 3531 MB.

Build information

The platform-specific build details are as follows:

Table 78. KB4038777_WES7

Build file name	Build size (Bytes)
KB4038777_WES7.exe	127,393,792 bytes

Table 79. KB4038779_WES7

Build file name	Build size (bytes)
KB4038779_WES7.exe	263,98,720 bytes

Table 80. KB4038777_WES7P

Build file name	Build size (bytes)
KB4038777_WES7P.exe	208,035,840 bytes

Table 81. KB4038779_WES7P

Build file name	Build size (bytes)
KB4038779_WES7P.exe	43,921,408 bytes

Table 82. KB4038781_WIE10

Build file name	Build size (bytes)
KB4038781_WIE10.exe	914,878,464 bytes

Table 83. KB4038782_WIE10_1607

Build file name	Build size (bytes)
KB4038782_WIE10_1607.exe	1,233,981,440 bytes

Dependencies and recommendations

Update to the latest WDA or HAgent on the client side before updating the security updates through WDM v5.5, v5.7, v5.7.1, and v5.7.2.

Energy star test

- Supports WOL Power off states
- Supports Idle State wake
- Screen off timer is set to 15 minutes
- Sleep timer is set to 20 minutes only if the sleep timer is supported

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Dell Wyse 5060 Thin Client with WES7P for Tier 3 Language support

Release type and definition

This release supports Windows Embedded Standard 7P — WES7P 64–bit that supports Dell Wyse 5060 thin client for the Ransomware WannaCrypt susceptibility. WannaCrypt, also known as WannaCry, targets out-of-date Windows systems. This release build contains valid WES7P security updates—KB4012212 to protect your system from the ransomware WannaCrypt susceptibility.

This build can be pushed on 64 GB flash and above, in combination with a 4 GB or 8 GB RAM.

The WES7P v9.07 unified build 7067 supports English (en-US) and the following ten languages:

- 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)

Priority and recommendations

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

Build details

Table 84. General build details

Component	Build details
Platform	Dell Wyse 5060 thin client with WES7P
Product	WES7P
Build version	9.07
Build number	7067
Localization	English, French France, German, Italian, French Canada, Spanish, Japanese, Chinese Simplified, Chinese traditional, Korean, Portuguese Brazil
WSI	5.0.4
WDM	5.7.2
BA version	3.4.2
USB Imaging tool	2.1.3

Table 85. Platform specific build details—WDM package

Component	Build details
Version	9.07
Build number	7067
Build WSI Package Name	5060_7067_32GB.exe
Build size (Bytes)	17.0 GB (18,272,322,441 bytes)
Localization	English, French France, German, Italian, French Canada, Spanish, Japanese, Chinese Simplified, Chinese traditional, Korean, Portuguese Brazil

Table 86. BIOS details

Component	BIOS details
Platform	Dell Wyse 5060 thin client with WES7P
Version	1.0F

New features

The new features delivered in this release are:

Imaging procedure from WDM\USB environment

Imaging the units from WDM\USB have the following two scenarios on top of which the unified MUI build can be pushed:

- Four language unified WES7P build number 7025
- 11 language unified WES7P build number 7038

Unified build

This build supports English (en-US) and ten MUI languages (fr-FR, es-ES, de-DE, it-IT, fr-CA, ja-JP, ko-KR, zh-CN, zh-TW, pt-BR).

Unified MUI build

As the unified MUI build has the language metadata in the Merlin partition, imaging the unified MUI build brings up the unit in the same MUI language present in Merlin.

Threat defense

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

General features

This section contains general features of Wyse 5060 thin client running WES7P OS.

Hardware support information

- Rich 4K display capability
- Option for wireless AC 7265
- AMD GX-424CC SOC with Radeon (TM) RSE Graphics 2.40 GHz CPU
- Support for video adapters (DP to DVI, DP to VGA) in APOS manner

- Dynamic Throttling for higher performance

Menu driven Custom/ConfigMgr Sysprep

- Supports Menu driven Custom / ConfigMgr Sysprep where you can select the particular option.
- Shrinking of disk information available during Sysprep that reduces the image pull or push time in larger disks.

New versions of connection brokers

- VMware Horizon Client: 4.1.0.1487
- Citrix Receiver: 14.4.0.8014

Out of Box driver install

All the respective device drivers have been pre-installed in the OS as compared to the legacy approach wherein there are pre-staged drivers.

Newer Dell wallpapers

Wyse wallpapers and themes are replaced with the Dell wallpapers and themes.

XML driven PowerShell scripts

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

Logging support

Logging support added for customization scripts.

Flash.sys

Hostname Calculation and Preservation – This option allows you to enable and disable the Hostname Calculation in flash.sys.

- You can disable or enable the Hostname Calculation.
- You must ensure that altering the MAC ID for a client does not perform a Host name Calculation.
- Rest of the logic and flow remains the same as older flash.sys implementation.
- If you require a host name calculation to perform after a change in MAC ID (NIC card change), then you must use MINWITHNET.

Event Viewer log preservation

This feature allows you to enable or disable Event Viewer log saving while 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 Client Application is a replacement for Client Information Application with a new User Interface (UI).
- This application contains additional fields for accessing and configuring Custom Fields, RAM Disk, Auto Logon, C-A-D Map Tool, and System Shortcuts.
- By default, the RAM disk size is set to 512 MB.

WES7P 7067 build behavior

Internet Explorer 11

- **Performance enhancements:** IE 11 is the quickest version of the browser yet. Microsoft has included support for web standards like CSS animations, HTML5 spell checking, and improved JavaScript performance.
- **Security enhancements:** The main security addition to IE 11 is **Enhanced Protected Mode**, which locks down parts of the Windows operating system, preventing the browser from accessing the OS.

IE Customizations:

1. First run customizations are disabled.
2. IE 11 enhanced protection mode is enabled.
3. Start page and default page set to www.dell.com/wyse.
4. IE Cookies and Cache are redirected to `Z:`.
5. Cache content to 250 MB.
6. Clears browsing history on IE exit.

Citrix Receiver

USB redirection always works for all users of the client machine with all the published XenDesktops, irrespective of the setting **Simplify device connections for me** in the XenDesktop connection preferences UI.

Energy Star specification

This product meets the ENERGY STAR version 6.0 of the thin client requirement.

The following are the values by default, set in the Control Panel applet of the Power options:

- Power Option when plugged-in:
  - Supports WOL Power off states.
  - Supports Idle State wake.
  - Screen off timer is set to 10 minutes.
  - Sleep timer is set to 15 minutes.

Microsoft SCCM 2012 R2 information

- SCCM information is not present in Programs and features and client information because of the Microsoft design.
- Only Configuration Manager Control Panel Applet and SMS Agent Host Service are present.
- `SMSCFG.ini`, `clientstate.dat`, `wedmtrace.log`, `Ccmstore.sdf`, `InventoryStore.sdf`, `StateMessageStore.sdf` files, and the `ServiceData` folder are included in FBWF Exclusion list.
- For more details, see Dell SCCM Administrators Guide.

vWorkspace

After installation of vWorkspace, install .txt file is created in `C:\`.

CAD tool

By default the build contains CAD tool, but in a disabled state.

To enable the CAD tool, do the following:

1. Log in to the system using Admin account.
2. Disable the Write Filter.
3. Launch command prompt in elevated mode.
4. Run `cd c:\windows\system32`.
5. Run `DWKBFilterMon.exe –enable` and reboot.

Fixed issues

None

Known issues

The following table lists the known defects in this release:

Table 87. Known issues

Sl. no.	Issue description	Work around—if any
1	Multiple bluetooth device icons are displayed in the system tray—Periodic issue.	The functionality is not affected and restarting the client removes the icons.
2	While running `WES7P_CustomSysprep4man.bat`, Low Disk space message appears at system tray.	The functionality is not affected.
3	Dell Wyse 5060 thin client with WES7P—de-DE and fr-FR Run Time Commands are not localized in respective language.	The functionality is not affected.
4	Video BIOS information does not show in advanced graphics settings.	No work-around
5	Send and Receive option not present for Bluetooth while accessing from system tray.	From the Start button, select **All Programs**. Select bluetooth file transfer and a pop-up window opens which gives two options to send or receive files.
6	Citrix receiver icon is missing in system tray.	Launch the **Citrix Receiver** icon from the desktop for the **Citrix Receiver** icon to appear in the system tray.
7	Occasionally, WDM pull fails for Dell Wyse 5060 thin client devices.	Reschedule the pull.
8	The scheduled packages are still present in the WDM console after image deployment is successful—occasionally.	The functionality is not affected. Only Server console status is not updated.
9	Unable to play back the saved YouTube videos on the desktop.	This issue is specific to the YouTube videos. Videos from other websites, such as MSN work properly.
10	Junk MAC IDs are appearing in the Client application.	The functionality is not affected.
11	Internet Explorer crashes with multiple video playbacks for extended times.	Restart the Internet Explorer.
12	BitLocker protection is turned off instead of suspend when custom sysprep is executed.	The option to suspend is not available anymore. The BitLocker protection must be turned off.
13	Dell Open Printer driver is not working with Dell MFP e515dn printer.	Install the ODM driver.
14	You cannot run the Deletefreespace application, if the folder `Deletefreespace` is already present under `C:`	Delete the folder.
15	Server Connection Retry Attempts is exceeding 24 attempts during the discovery process.	The functionality is not affected.
16	Custom Sysprep script (Build Master) execution may terminate abruptly while checking for TPM status in TPM and BitLocker enabled systems.	Disable BitLocker and TPM before sysprep.
17	Some installed modules are not listed in the client info. The modules are as follows: RDP, FBWF, Windows Media Player, Internet Explorer, Ericom, Wyse client information, HAgent versions.	The functionality is not affected.
18	Occasionally bash command prompt displays can't access tty: Job control turned off, while pulling image through WDM Merlin non-pxe.	Try pulling image again.

Sl. no.	Issue description	Work around—if any
19	Citrix Receiver USB redirection always works for all users of the client machine with all published Xendesktops, irrespective of the setting **Simplify device connections for me** in the xen desktop connection preferences UI.	No work-around
20	Copyright Information for Flash.sys, Wyse RAM Disk is showing as Wyse/Wyse technology.	No work-around
21	KB2880890 is displayed twice in **View installed updates** section.	No work-around
22	Dell Wyse 5060 thin client (WES7P) – BSOD (Error Code – 0x000000B8) occurred when logged in to Admin Mode from User Mode	Restart the client
23	Phoenix Platform key avail in BIOS instead Dell PK.	No work-around
24	Occasionally check disk is running during system restart.	Restart the client
25	The System Tray is showing multiple Bluetooth Devices Icons (May be issue)	Restart the client
26	Client boots through PXE LAN if **F12** key is pressed in Dell BIOS Splash screen	No work-around
28	**Boot Menu** and **Bypass Splash screen** hotkey's not displayed during the BIOS boot up (New Feature Request)	No work-around
27	Citrix Receiver options are not localized for Italian	No work-around
28	Vmware Client options are not localized for Italian	No work-around
29	Disk cleanup shortcut need to be removed from start menu if support is not there.	No work-around
30	All installed modules are not listing in the client informnation.	No work-around
31	Service Control Manager Error has occurred in Event Viewer with event ID 7023.	No work-around
32	Dell logo is missing in User contact path c:\Users\User\Contacts.	No work-around
33	Occasionally after downloading the image from USB, client displays a message **Remove the USB and press enter to reboot** after removing the USB Pen drive (While pushing the pulled image).	No work-around

SCCM2012 R2 Information:

- SCCM Information is not present in Programs and features and client information because of Microsoft design.
- Only Configuration Manager Control Panel Applet and SMS Agent Host Service are present.
- SMSCFG.ini, clientstate.dat, wedmtrace.log, Ccmstore.sdf, InventoryStore.sdf, StateMessageStore.sdf files and Service Data folder will be included in FBWF Exclusion list.

Tested peripherals

Table 88. Tested peripherals

Product
Dell Pro Stereo Headset UC300
Dell USB Sound bar AC511
Dell 2.0 Speaker System AE215
Jabra Pro 935 MS Wireless headset (Mono)
Jabra Pro 930 MS Wireless headset

Product
Logitech B525HD webcam
Dell Tray Load CD/DVD player(DW316)
Dell USB Wired Keyboard - KB216
Dell USB Wired Optical Mouse - MS116
Dell USB Wired Keyboard with Smart Card reader - KB813
Dell Wireless Mouse - WM326
Dell 24 Monitor - E2417H
Dell 23 Monitor- E2316H
Dell 22 Monitor - E2216H
Dell 20 Monitor - E2016H
Dell 20 Monitor - E2016
Dell 19 Monitor - E1916H
Dell 19 Monitor - E1916HV
Dell 27 Monitor - P2717H
Dell 24 Monitor - P2417H with stand
Dell 24 Monitor - P2417H without stand
Dell 23 Monitor - P2317H
Dell 22 Monitor - P2217H with stand
Dell 22 Monitor - P2217H without stand
Dell 22 Monitor - P2217
Dell 22 Monitor - P2217 without stand
Dell 20 Monitor - P2016
Dell 19 Monitor - P1917S
Dell 24 Monitor - U2415
Dell 25 Monitor- U2515H
Dell 27 Monitor - U2717D
Dell 27 Monitor - U2717DA
Dell 43 Monitor - P4317Q
Dell 24 Monitor - MR2416
Dell 27 monitor - P2715Q 4K2K (UHD) monitor
Dell 24 Monitor - P2415Q 4K2K (UHD) monitor
Dell 30 Monitor – UP3017
Power adapter + 3 foot power cord
Dell Mono Unmanaged Printer - E515dn
Dell Color Unmanaged Printer - E525w
Dell Color Managed Printer - S5840cdn
DP to HDMI converter
DP to DVI converter

Product
DP to VGA converter

Used and free space details

Table 89. Used and free space details

Platform	Flash size	Used Space (C: Drive)	Free space
Wyse 5060 thin client	64 GB	14.2 GB	44.6 GB

OS Components

Table 90. Driver details

Component	Version
VGA	15.201.2401.0
Ethernet/ SFP Adapter	7.101.714.2016
Realtek HD Audio	6.0.1.7541
AMD Hi Def Audio Device	7.12.0.7723
USB xHCI driver	1.1.0.185
Wyse RAM Disk Driver	5.0.2183.4
flash.sys	1.0.7.0
Dell Open Print Drivers	1.91.7882.0
Bluetooth (as seen in add/remove programs)	19.0.1601.0594
WiFi	18.11.0.8

Common application/Features/Files

Table 91. Common application/Features/Files

Applications/Features/Files	Version—If applicable
RDC	6.3.9600 (RDP 8.1 supported)
Citrix Receiver (Standard)	4.4.0.8014 (In Citrix About)
Citrix Online Plug-in	14.4.0.8014 (In Client Information, Programs and Features)
Citrix HDX Real Time Media Engine	2.0.0.417
Windows Media Player	12.0.7601.18741
Internet Explorer	11.0.9600.18376
Power Term InterConnect	10.2.0.0.20140813.1
Ericom PowerTerm WebConnect	5.8.0.0
VMware Horizon View Client	4.1.0.1487
vWorkspace Connector for windows	8.6.309.4062
Configuration Manager Client	5.00.7958.1000
Adobe Flash player - ActiveX Adobe Flash player – Plug-in	20.0.0.270 20.0.0.267

Applications/Features/Files	Version—If applicable
Tight VNC	2.6.4.0
Microsoft Lync VDI 2013	15.0.4420.1017
.NET Framework	4.6.01055
WSUS	Supported
Microsoft Management Console	Management Console 3.0 Version 6.1 (Build 7601: SP1)
Microsoft Silverlight	5.1.30514.0
Bit locker with TPM	Supported
Windows Multi-touch	Supported
Background Intelligent Transfer Service (BITS)	Supported
Windows Defender Definition	1.227.441.0 dated 8/23/2016
MSXML	Supported
XML Paper Specification (XPS)	Supported
Network Access Protection	Supported
Credential Roaming	Supported
WPA2	Supported
CredSSP	Supported
ConfigMgr 2012 SP1 Client	Supported
Wyse Wallpaper on All Users	Supported
Registry Filter	Supported
Windows Time Service	Supported
DirectX	11
File-Based Write Filter Manager – fbwfmgr.exe	1.0.299.0
Ntoskrnl.exe	6.1.7601.18741
ArchiveInfo.exe	1.0.0.4
ClientInformation.exe	10.0.0.9
Disk_Size.exe	3.0.0.5
C-A-D Map Tool DWKbFilter.sys DWKbFilterMon.exe DWKbFilterWatchdog.exe	2.2.0.0 2.2.0.4 2.2.0.4
FBWF Service – FBWFSvc.exe	1.0.2.2
FBWF System Tray UI - FBWFTray.exe	1.0.2.2
HAgent.exe	12.1.1.25
HAgent_UI.exe	12.1.1.25
Wyse Device Agent (WDA)	2.1.1
NetXClean.exe	3.0.0.7
NumLock_Toggle.exe	1.0.0.4

Applications/Features/Files	Version—If applicable
NumLockTrigger.exe	1.0.0.5
TimeZonePreservation.exe	1.0.0.4
Wfacss.exe	1.0.1.3
WindowsEmbeddedTest.exe (equivalent to WES7Test.exe)	Not applicable
Winlog.exe	Part of Client Info
WinPing.exe	Not applicable
Winterm.dll	2.0.0.9
Xwfile.exe	1.0.0.5
Sysprep4man scripts	Build_Master.cmd

QFEs added in the release

Table 92. QFEs added in the release

QFEs added in the release		
KB2841134	KB2840631	KB3092601
KB2841134	KB2843630	KB3092627
KB2841134	KB2847927	KB3093513
KB2841134	KB2852386	KB3097989
KB2841134	KB2853952	KB3101722
KB2841134	KB2857650	KB3102429
KB2841134	KB2859502	KB3102810
KB2841134	KB2861698	KB3107998
KB2841134	KB2862152	KB3108371
KB2841134	KB2862335	KB3108381
KB2670838	KB2862973	KB3108664
KB2830477	KB2864202	KB3108670
KB2592687	KB2868038	KB3109094
KB2819745	KB2868116	KB3109103
KB2479943	KB2871997	KB3109560
KB2487305	KB2872035	KB3110329
KB2492386	KB2882822	KB3112343
KB2496898	KB2884256	KB3118401
KB2502664	KB2891804	KB3121255

QFEs added in the release		
KB2506212	KB2892074	KB3121461
KB2509553	KB2893294	KB3122648
KB2511455	KB2893519	KB3123479
KB2515325	KB2894844	KB3124275
KB2526967	KB2898785	KB3124280
KB2534366	KB2900986	KB3126587
KB2544893	KB2908783	KB3127220
KB2545698	KB2911501	KB3133977
KB2547666	KB2913431	KB3134814
KB2552343	KB2913751	KB3135445
KB2556532	KB2918077	KB3135983
KB2560656	KB2919469	KB3137061
KB2563227	KB2929733	KB3138378
KB2564958	KB2931356	KB3138612
KB2570814	KB2937610	KB3138901
KB2574819	KB2943357	KB3138910
KB2579686	KB2957189	KB3138962
KB2585542	KB2965788	KB3139914
KB2598845	KB2968294	KB3139923
KB2604115	KB2970228	KB3139929
KB2620704	KB2972100	KB3139940
KB2621440	KB2972211	KB3141092
KB2631813	KB2973112	KB3142024
KB2639308	KB2973201	KB3142042
KB2640148	KB2973351	KB3145739
KB2644615	KB2977292	KB3146706
KB2647753	KB2978120	KB3146963
KB2654428	KB2978742	KB3147071
KB2660075	KB2980245	KB3148198
KB2661254	KB2984972	KB3148851

QFEs added in the release		
KB2667402	KB2985461	KB3149090
KB2676562	KB2992611	KB3150220
KB2679255	KB2999226	KB3153171
KB2685747	KB3000483	KB3153199
KB2685811	KB3003743	KB3153731
KB2685813	KB3004361	KB3154070
KB2690533	KB3006121	KB3155178
KB2698365	KB3006137	KB3156013
KB2705219	KB3010788	KB3156016
KB2706045	KB3011780	KB3156017
KB2709715	KB3021674	KB3156019
KB2716513	KB3021917	KB3156417
KB2718704	KB3022777	KB3159398
KB2719033	KB3023215	KB3160005
KB2719857	KB3030377	KB3161561
KB2724197	KB3033889	KB3161664
KB2726535	KB3033929	KB3161949
KB2727528	KB3035126	KB3161958
KB2729094	KB3037574	KB3162835
KB2732487	KB3040272	KB3163245
KB2736422	KB3042553	KB3164033
KB2742599	KB3045685	KB3164035
KB2750841	KB3046017	KB3168965
KB2761217	KB3046269	KB3170106
KB2763523	KB3054476	KB3170455
KB2770660	KB3055642	KB3170735
KB2786081	KB3059317	KB4012204
KB2791765	KB3067903	KB4012212
KB2799494	KB3072305	KB4012864
KB2799926	KB3074543	KB4014661

QFEs added in the release		
KB2800095	KB3075851	KB4015193
KB2807986	KB3076949	KB4015546
KB2808679	KB3078601	KB4016446
KB2813170	KB3078667	KB947821
KB2813347	KB3083324	KB976902
KB2813430	KB3083710	KB976932
KB2818604	KB3084135	KB4015549
KB2834140	KB3086255	KB3139398

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Installing the add-on

Download the add-on package

This section describes the steps to download the add-on from Dell support site.

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** field, type the Service Tag or the model number of your device, and press Enter or click the search icon.
3. On the product support page, click **Drivers & downloads**.
4. Select the appropriate operating system.
5. From the list, locate the add-on entry and click the download icon.

Install the add-on using Wyse Management Suite

This section describes the steps to install the add-on using Wyse Management Suite.

1. Register the device to the Wyse Management Suite server, and add the device to the respective groups.
2. Copy the `.exe` file to the Wyse Management Suite server repository.
3. Log in to Wyse Management Suite.
4. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
5. Select the **Local Repository** check box.
6. Click **Sync Files**.
   Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
7. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
8. Verify the copied package in the applications list.
9. To create a group in the Wyse Management Suite server, click **Groups & Configs**.
   The **Groups & Configs** page is displayed.
10. Click the **Plus sign (+)** button and enter the required details to register your client in the same group.
11. Click **Apps and Data**.
    The **Apps and Data** page is displayed.
12. Click **Thin Clients** under **App Policies**.
13. Click **Add Policy** to add the policy to the required group.
14. Update the required fields and click **Save**.

    NOTE: For the `.exe` file installation, the silent installation parameter is `--silent`. For repair, the silent parameter is `--silent --repair`, and for uninstallation, the silent parameter is `--silent --uninstall`
15. Click **Yes** to schedule the job immediately.
16. Go to the **App Policy** job, and enter the description.
17. From the **Run** drop-down menu, select **Immediately**.
18. Click **Preview** and then click **Schedule**.
    The package deployment takes a few minutes to complete.

    NOTE:

    - **The lock screen is displayed during the package installation process on all the thin clients.**
    - **System reboots two times during the package deployment.**

Install the add-on using Wyse Device Manager

This section describes the steps to install the add-on using Wyse Device Manager.

1. Copy the respective `.exe` file to the WDM server.
2. Launch Wyse Device Manager and login using valid credentials.
3. Click **Applications** in the Dell Wyse Device Manager dashboard page.
   The options **Images**, **Other Packages**, **Agent Update**, **Device Configuration**, and **PCoIP Device Configuration** are displayed.
4. Select **Other Packages**.
5. Click **Create Package Plus (+)**.
   The application prompts to download the Package Register utility.
6. Click **Allow**.
   The **Create Package** window is displayed.
7. Download the `.exe` file on your local repository.
8. Navigate to the folder, and run the **Package Register** utility file.
   The **WDM Package Registration Utility** window is displayed.
9. Enter WDM server address and user credentials in the respective fields.
10. Select **EXE** to register, and click **Browse**.
    The **WDM Package Uploader** window is displayed with the progress status bar.
11. Click **Open**.
    The list of selected packages is displayed.
12. Select the appropriate operating system package and provide the command line parameter as `--silent` for installation. For repair, provide the command line parameter as `--silent --repair`, and for uninstallation provide the command line parameter as `--silent --uninstall`.
13. Click **Upload**.
    The status is displayed as **Success**, and the package is displayed under **Other Packages**.
14. Go to **Devices** and select the target client.
15. Click **Update**.
16. Go to **Select Package** > **Other Package**, and select the add-on package.
17. Click **Save**.
    A pop-up is displayed on the target device.
18. Click **Update Now** on the target device.
    `C:\Temp` folder is created. You must edit the `.rsp` script manually to delete the temp folder using the command `DT C:\Temp`.

    NOTE:

    - **The lock screen is not displayed during the package installation process on all the thin clients.**
    - **System reboots two times during the package deployment.**

Install the add-on using System Center Configuration Manager 2016/2019—SCCM

Prerequisites:

1. Disable the write filter.
2. Add the thin client to the SCCM server domain and restart.
3. Log in to the thin client with valid SCCM domain credentials.
4. Change the time zone and time (HH:MM:SS) according to the SCCM server.
5. Go to **Control Panel** > **Configuration Manager** > **Site** > **Configuration Settings**.
6. In the **Configuration Manager service location** section, enter the site code.
7. In the **Actions** tab, select each action, and click **Run Now**.

   A system tray message is displayed, and the new software is available for installation.

Add a device to the new device collection

This section describes the steps to add a thin client to the new device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to New Device collection**.
3. In the **Device Collections** window, enter the new device collection details, such as name and limiting collection, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Add a device to the existing device collection

This section describes the steps to add a thin client to the existing device collection list.

1. Go to **Assets and Compliance** > **Device Collections**.
2. In the **Devices** list, right-click a device, and go to **Add Selected Items** > **Add Selected Items to Existing Device collection**.
3. In the **Device Collections** window, select the device collection group to which you need to add the device, and click **OK**.
4. In the **Assets and Compliance** section, click **Device Collections**, and verify whether the device is added.

Package deployment

After the thin client is added to the device collection list, use any of the following methods to deploy the add-on:

- Create and distribute a package.
- Create and deploy a task sequence.

Create and distribute a package

This section describes the steps to create and distribute a package.

1. Copy the `.exe or .msi` file to a shared folder.
2. Expand **Software Library** > **Overview** > **Application management** > **Packages**.
3. Right-click **Packages**, and click **Create Package**.
4. Enter the package name, description, manufacturer name, language, and version.
5. Click **Next**.
6. Browse to the source folder where you have copied the add-on files.
7. Click **Next**.
   The newly created packages are listed in the **Application Management** under **Package**.
8. Select the **Standard Program** option as the program type.
   The Standard Program page is displayed.
9. Enter the required details, and click **Browse** to go to the file location.
10. Select the `.exe` or `.msi` file, and enter `--silent` or `/qn` for silent installation, `--silent --repair` for repair, and`--silent --uninstall` for uninstallation.
11. Click **Next**.
12. Click **Next** until the window with the **Close** button is displayed.
13. Click **Close**.
14. Select the package, right-click, and click Distribute Content .
15. From the **Add** drop-down list, select **Distribution Point**.
16. Select an option to schedule job at a specified time, and click **Next**.
17. Verify the information that you have provided on the summary page, and click **Next**.
18. Click **Close**.
19. Right-click on the created package, and click **Deploy**.
20. Click **Collection**, and browse to the device collection list.
21. Select the device, and click **Next**.
22. From the **Add** drop-down list, select **Distribution Point**.
23. Select the available distribution points, and click **OK**.

24. Click **Next** to complete the deployment process.
25. Click **Close**.
    The content status is displayed in green. It may take a few minutes to complete the distribution process.

Create and deploy a task sequence

This section describes the steps to create and deploy a task sequence.

1. Copy the `.exe` file to a shared folder.
2. Expand **Software Library** > **Overview** > **Operating System**.
3. Right-click **Task Sequence**, and click **Create Task Sequence**.
4. In the New Task Sequence wizard, select **Create Custom Task Sequence**, and click **Next**.
5. Click **Close**.
6. Right-click the created task sequence, and click **Edit**.
7. From the **Add** drop-down list, go to **Software** > **Install Package**.
8. Select the created package, and click **Apply**.
9. Click **OK**.
10. Go to **Start** > **All Programs** > **Microsoft System Center** > **Configuration Manager Console**.
    The System Center Configuration Manger window is displayed.
11. Click **Software Library**.
12. Right-click the created the task sequence and deploy it to the required device collection.

NOTE: After you deploy the add-on using the package deployment method or through task sequence, enable the write filter.

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Resources and support

Accessing documents using the product search

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** search box, type the product name. For example, `Wyse 3040 thin client` or `Wyse ThinOS`.

   A list of matching products is displayed.
3. Select your product and click the search icon or press Enter.
4. Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

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

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Contacting Dell

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

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