BIOS Add-on with AMD microcode to fix Side Channel Vulnerability for Windows Embedded Operating System

Release Notes

Notes, cautions, and warnings

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

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

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

Contents

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.

Topics:

- Version
- Release date
- Priority and recommendations

Version

1.0K

Release date

May 2019

To download and install the add-on, see Downloading the add-on package.

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 1. 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 2. 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 3. 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

Download the add-on package

About this task

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

Steps

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

About this task

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

Steps

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

About this task

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

Steps

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.

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 `Windows 10 IoT Enterprise`.
     A list of matching products is displayed.
3   Select your product and click the search icon or press Enter.
4   Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

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

Contacting Dell

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

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