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.
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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

<table>
<thead>
<tr>
<th>Platform name</th>
<th>Operating system</th>
<th>Memory configuration</th>
<th>Flash size</th>
<th>RAM size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Wyse 5060 thin client</td>
<td>Windows Embedded Standard 7P</td>
<td>32 GB</td>
<td>4 GB/8 GB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Windows 10 IoT Enterprise</td>
<td>32 GB</td>
<td>4 GB/8 GB</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Management Server</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyse Device Manager</td>
<td>5.7.3</td>
</tr>
<tr>
<td>Wyse Management Suite</td>
<td>1.4</td>
</tr>
<tr>
<td>USB Imaging Tool</td>
<td>3.1.0</td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Issue description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC-1058</td>
<td>You cannot register the BIOS file that is unzipped for Windows Embedded Standard 7P to the USB Imaging tool.</td>
<td>There is no workaround for this issue.</td>
</tr>
</tbody>
</table>
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.
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 PColP 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.
   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.