**Technical Document**

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| **Category** | WISE-PaaS/OTA | **Date** | 2018/01/03 |
| **Topic** | How to remotely update BIOS with WISE-PaaS/OTA? | | |
| **Keyword** | WISE-PaaS/OTA 3.0.9, BIOS update/flash, AfuWin64, Windows | | |

* **Suggestion:**

Instructions in this FAQ are intended to walk you through on how to remotely update BIOS under Windows utilizing Advantech’s WISE-PaaS/OTA software

**Prerequisite:**

1. OTA server/agent v3.0.9 & OTAPackager 1.0.9
2. FTP storage connected with OTA server (either on OTA server locally or other FTP site)
3. A folder containing the following files

(If not, please contact Advantech for those files to proceed)

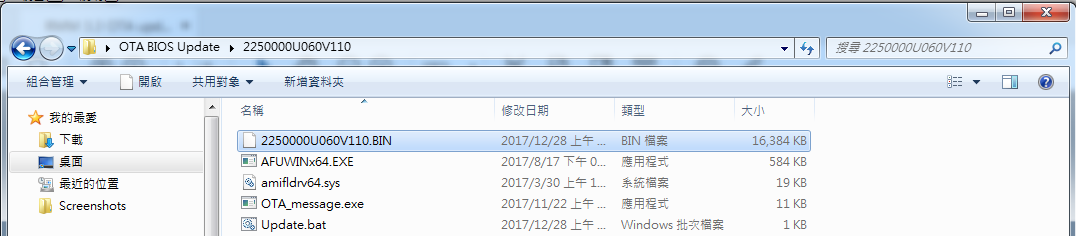
* AFUWINx64.EXE (version of AFUWINx64 may depend on the platform of agent devices)
* amifldrv64.sys
* OTA\_message.exe
* Update.bat



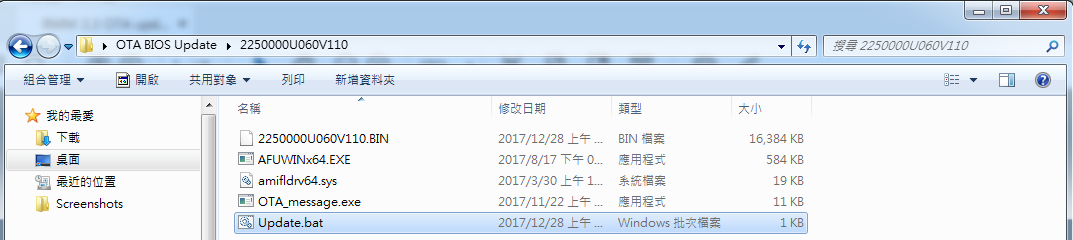
**Step 1: Generate BIOS update package**

Step 1-1: Open the folder and put BIOS to be updated in the same folder

(*2250000U060V110.BIN* here for example)

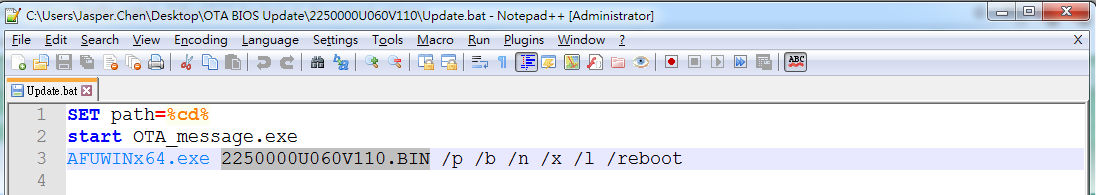
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Step 1-2: Right-click “Update.bat” to edit the batch/script file



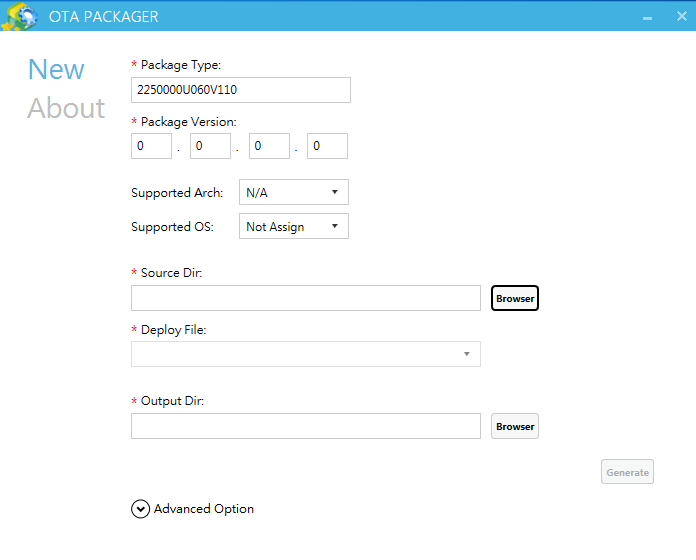
Step 1-3: Modify the highlighted area below to be the BIOS name you put in [Step 1-1](#Step11)

(For example: *2250000U060V110.BIN)*

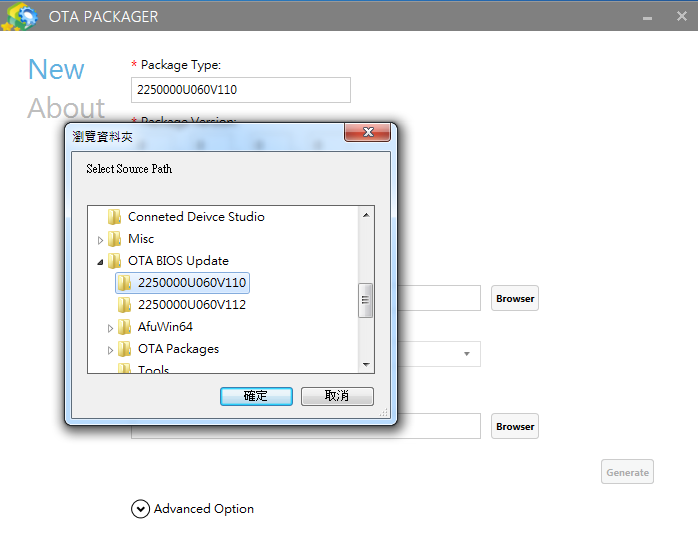


Step 1-4: Launch OTAPacker, fill in information required

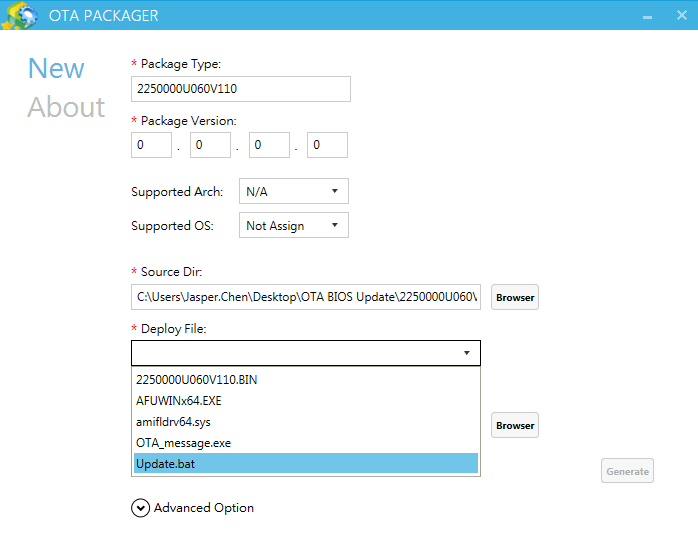
* Package Type
* Packager Version
* Support Arch
* Supported OS

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Step 1-5: Select source folder where you put all the files in [Step 1-1](#Step11)

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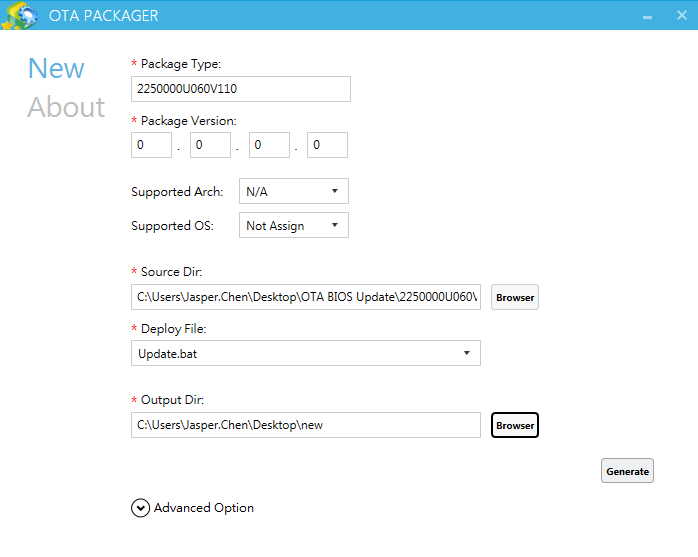
Step 1-6: Select “Update.bat” in drop-down list of “Deploy File” section

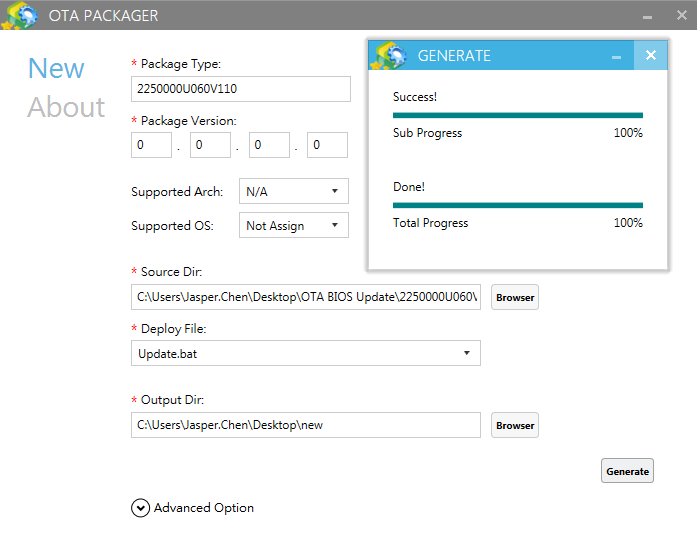


Step 1-7: Choose output directory then click “Generate”

Important Reminders: As mentioned in OTAPackager user manual:

1. Output directory and input directory *MUST BE DIFFERENT* folders
2. Output directory *CAN’T* be the sub-folder of input directory

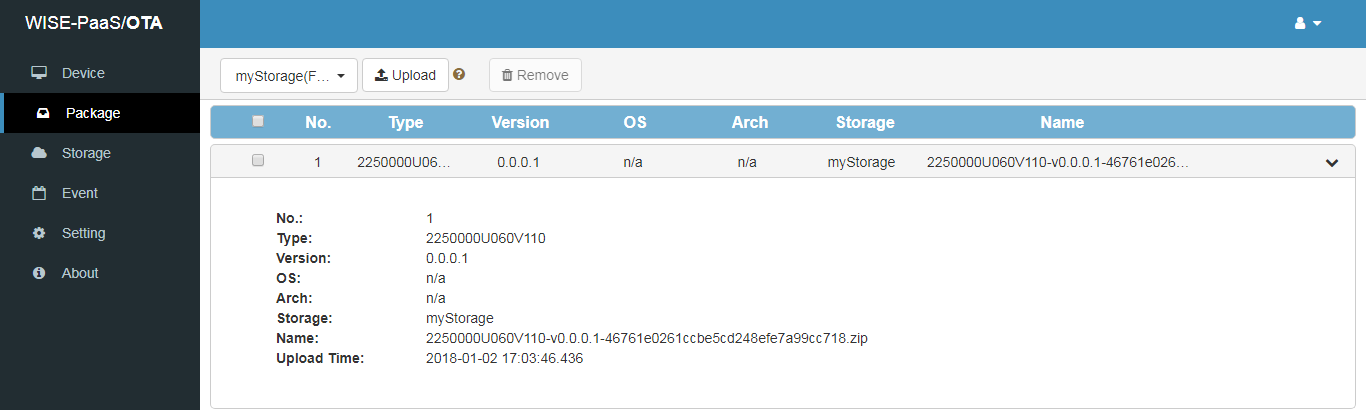




**Step 2: Upload generated BIOS update package on OTA Server**

Step 2-1: Login OTA server web console 

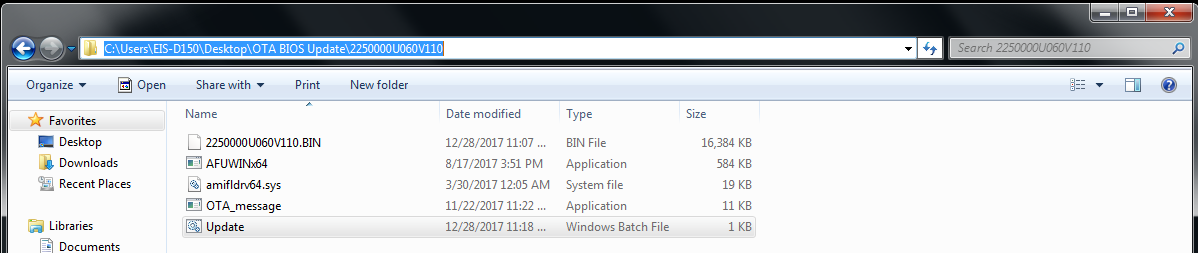
Step 2-2: Upload generated package from output directory selected in [Step 1-7](#Step17)



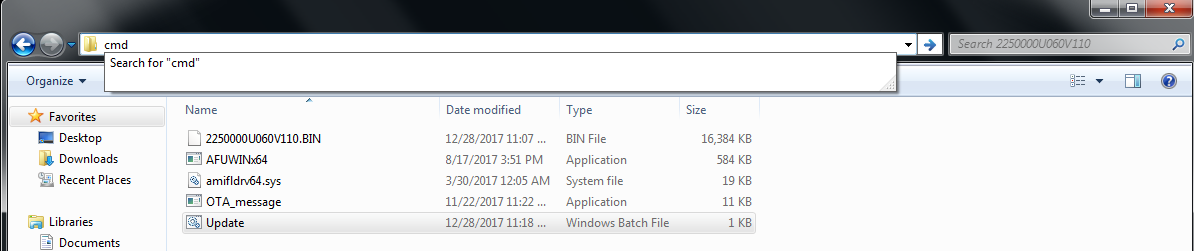
***IMPORTANT REMINDER:***

***IF MASS OR LARGE SCALE DEPLOYMENT IS INTENDED, WE HIGHLY RECOMMEND PAUSING THE PROCESS AND TRYOUT ONE OR TWO AGENTS AT LOCAL END MANUALLY BEFORE DEPLOYING VIA WISE-PAAS/OTA SERVER TO MAKE SURE AFUWIN AND ALL FILES IN FOLDER IN STEP 1-1 WORKS PROPERLY, HERE’S HOW IN 5 STEPS:***

1. Copy and paste the folder created in [Step 1-1](#Step11) on **OTA agent device** and click on the file path

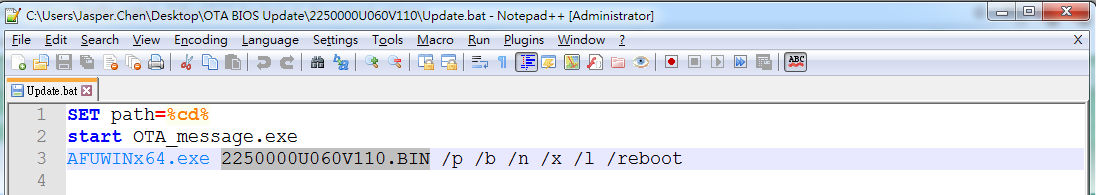
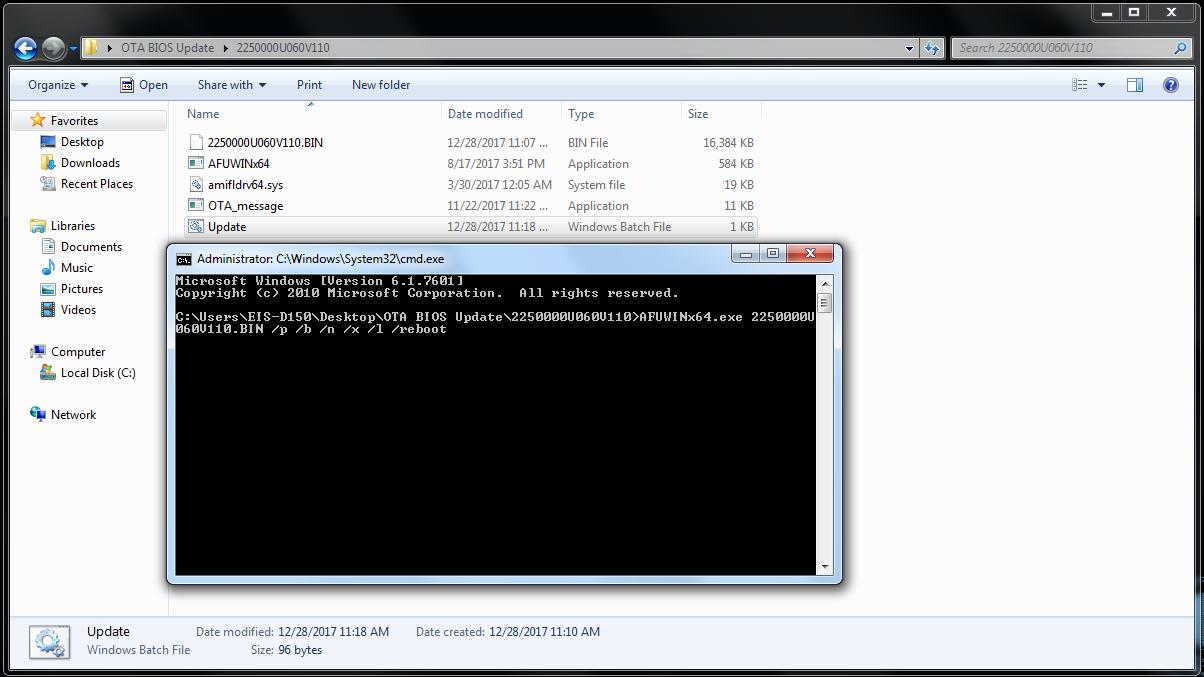


1. Enter “cmd” and press “enter” to launch command prompt under this path

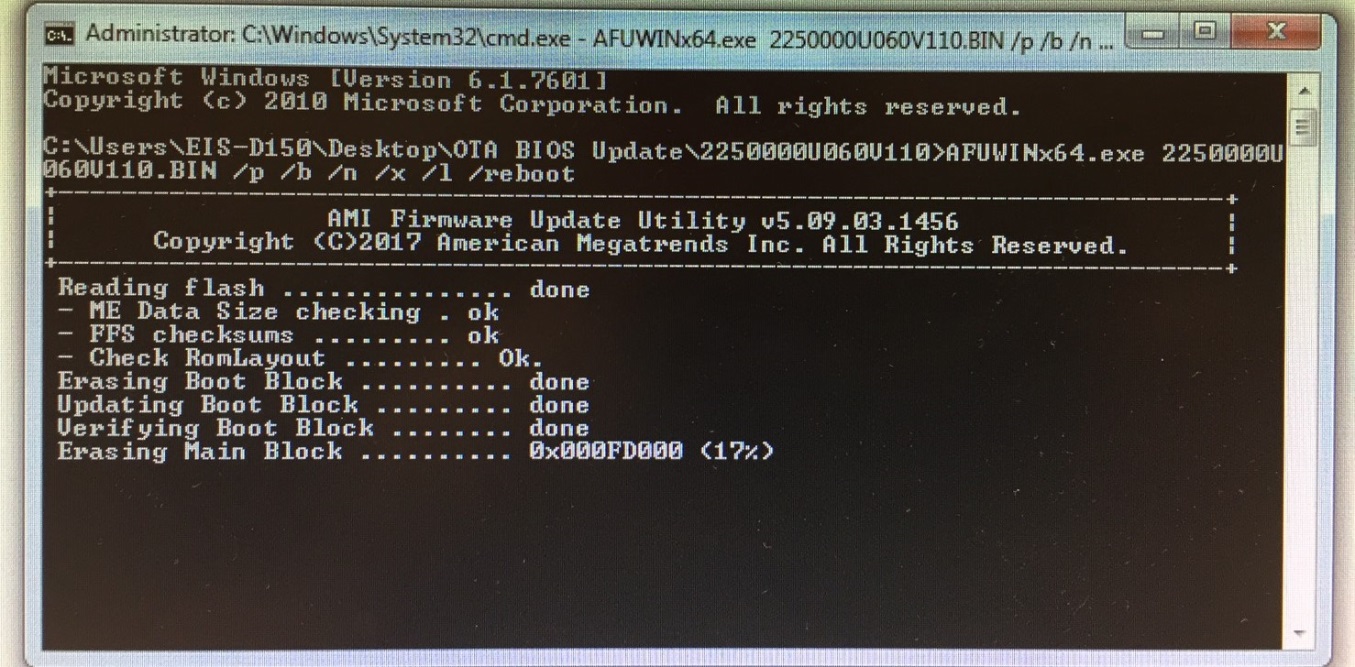


1. Manually enter the last line of command in “Update.bat” file

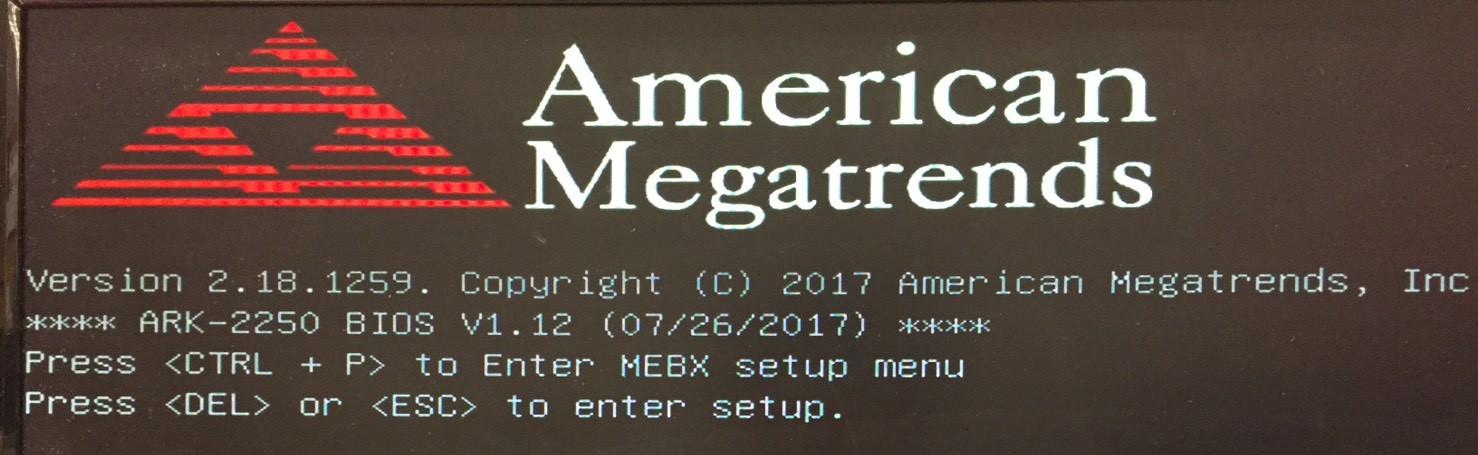
(For example: AFUWINx64.exe 2250000U060V110.BIN /p /b /n /x /l /reboot)

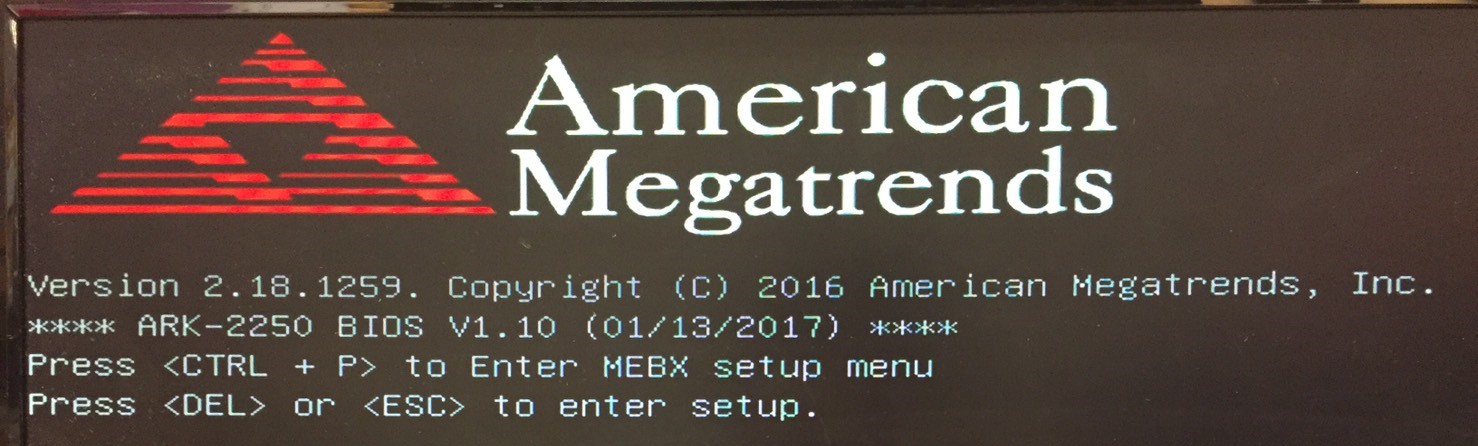


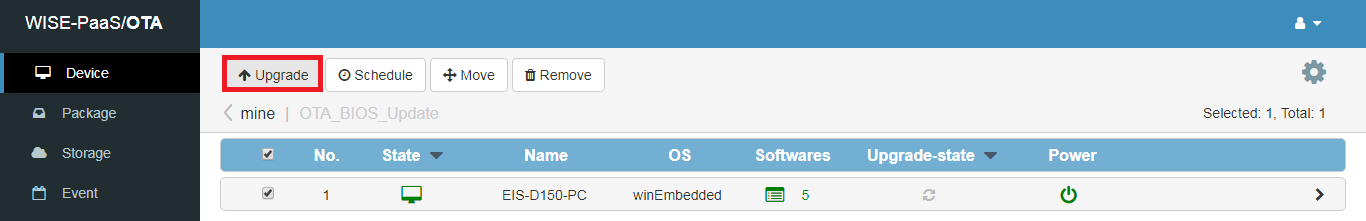
1. Then you’ll see flashing process starts with mouse cursor locked, system will reboot after flash



1. Once we confirmed the files work normally locally with BIOS successfully updated (for example here we updated BIOS from V1.12 back to V1.10), and then we can go back and resume the process with OTA server for deployment with larger scale



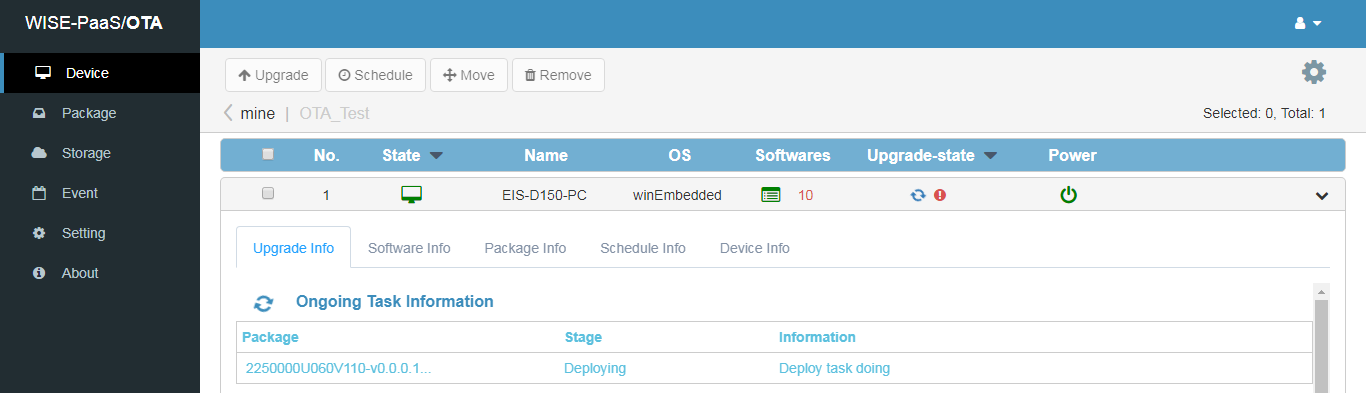
Now we get back to Step 2

Step 2-3: Choose agent device(s) and click “Upgrade” button

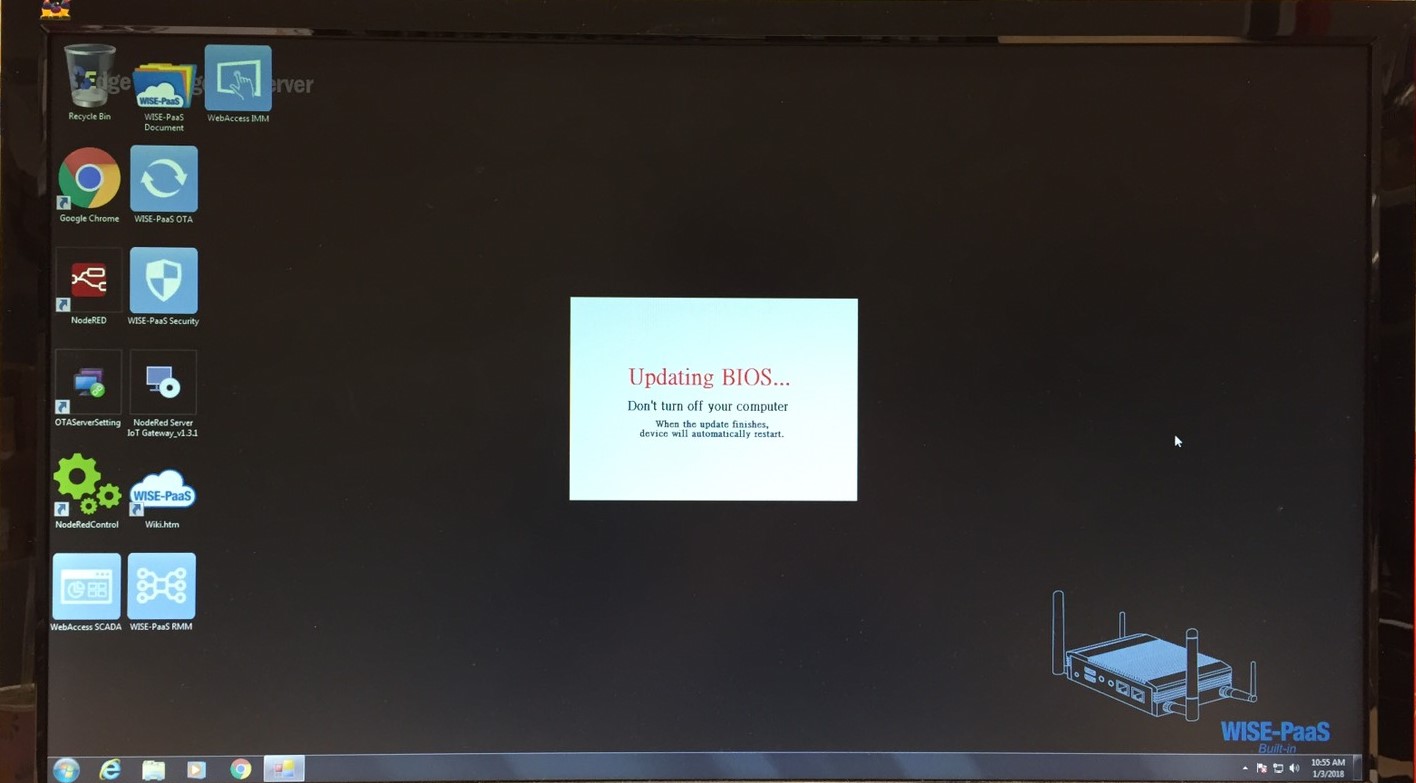
Step 2-6: Select the BIOS you’d like to update/flash on agent devices

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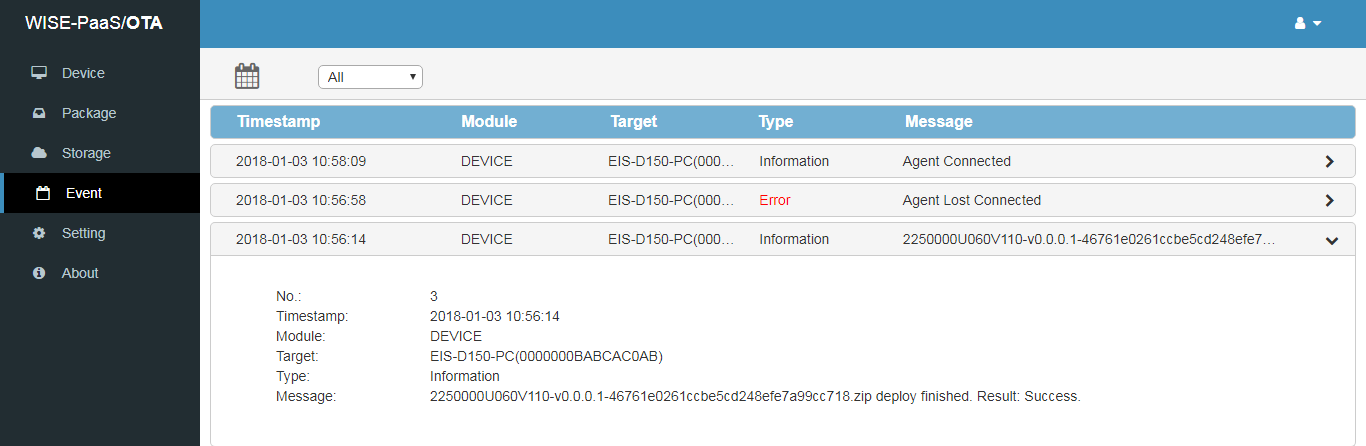
Step 2-7: In “Upgrade Info” tab under “Device” section, we can see update status and information



Step 2-8: During BIOS updating process, screen of **agent devices** will show an alert reminding the process is undergoing while keyboard/mouse cursor are locked. System will automatically reboot when finished

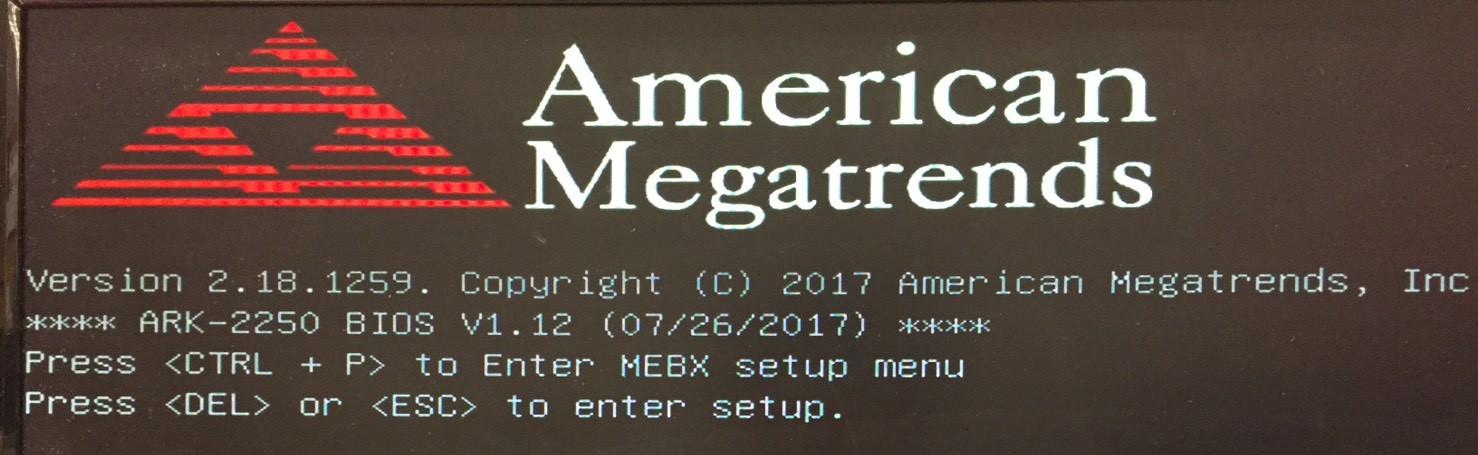


Step 2-9: Once completes, logs could be seen by user in “Event” session indicating deployment has successfully conducted

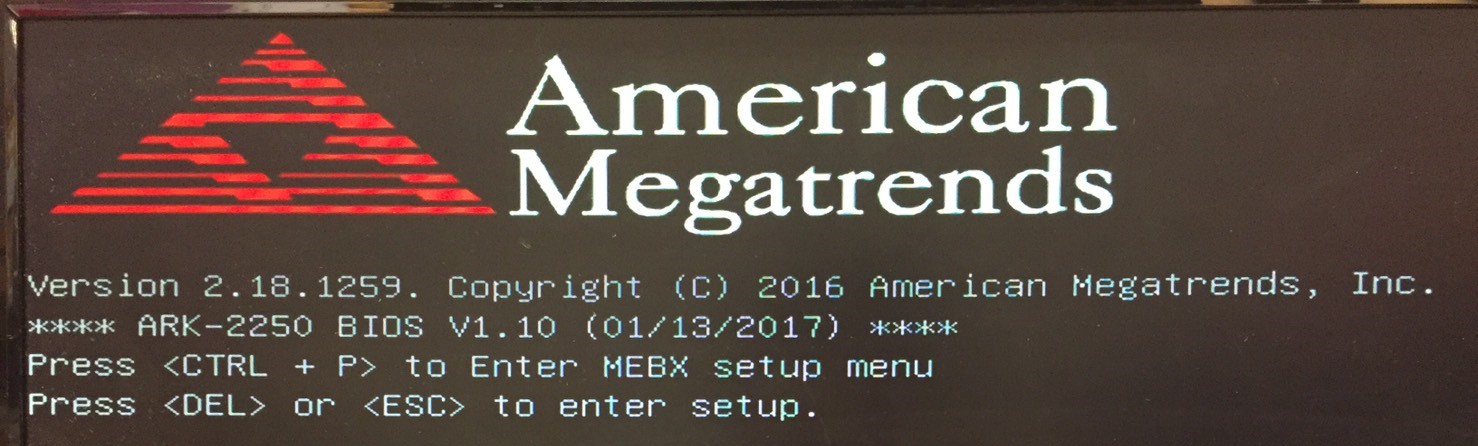


**Step 3: Confirm BIOS version**

Before BIOS update (for example: V1.12)

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After BIOS update (for example: V1.10)

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