Application Note

093

Updating the Video BIOS to the latest supported version using DOS update method

Overview

This application note describes how to update the Video BIOS on Amulet Hotkey DXM blade workstations to the latest supported version.

At April 2015, the latest supported Video BIOS is .227.

Update the existing Video BIOS to version .277

Using the DOS method for updating the Video BIOS, you must first create a bootable USB flash drive. Then you must reboot the DXM blade from the USB flash drive. These tasks are described below.

Create a bootable USB flash drive

Follow these steps:

1. Obtain VBIOS_update_utility_v1.0.zip from Amulet Hotkey technical support.

2. Unzip the contents of VBIOS_update_utility_v1.0.zip to a local folder on a convenient PC.

    The PC that you choose is your *build computer*. You will use the build computer to create the bootable USB flash drive.

    Note: Do *not* choose the blade workstation as your build computer.

3. Verify that the local folder now contains the following files:
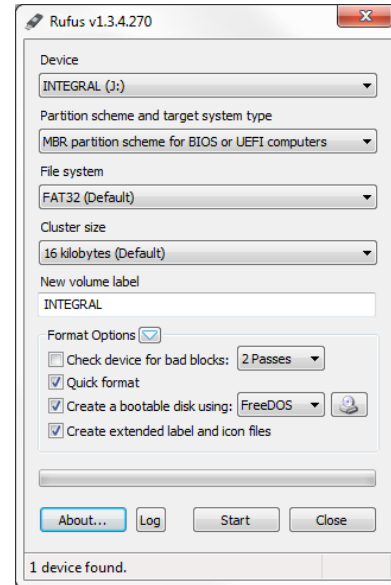
    - Atiflash.exe
    - Autoexec.bat   *This batch file runs when you reboot the blade from your USB flash drive.*
    - Choice.exe
    - EM93F4DP.227   *This file contains the new Video BIOS*.
    - Rufus_v1.3.4.exe   *Rufus is a freely redistributable USB formatting utility*.

    Note: On a Windows build computer, if Autoexec.bat is not listed in the local folder you will need to edit the folder options in Windows Explorer:

    a.   In Windows Explorer, choose Tools, Folder Options.

    b. In the Folder Options dialog, go to the View tab.

    c. Make sure the 'Hide protected operating systems file (Recommended)' check box is *not selected*.

4. Insert your USB flash drive into the build computer.

    Important! All existing data on the USB flash drive will be lost when you reformat the device!

5. Browse to the folder containing the unzipped contents of VBIOS_update_utility_v1.0.zip.

6. Run rufus_v1.3.4.exe.

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7. When Rufus starts, specify the parameters for the bootable USB flash drive. You *must* choose the following settings:

Device	Choose the USB flash drive that you inserted in step 4. **Important!** Take care to choose the correct device!
Partition scheme:	MBR partition scheme for BIOS or UEFI computers
File system:	FAT32
Cluster size:	16 kilobytes
Quick format:	Selected
Create a bootable disk using:	FreeDOS

Rufus utility

8. Click Start to format the USB flash drive.

   Rufus warns you that all existing data on the USB flash drive will be destroyed. Click OK to continue.

9. When the formatting is complete, close the Rufus utility.

10. Browse to the USB pen drive to confirm that the formatting was successful.

11. Browse to the folder containing the unzipped contents of VBIOS_update_utility_v1.0.zip. Then copy the following four files to the root folder of the USB flash drive:

   - Atiflash.exe
   - Choice.exe
   - Autoexec.bat
   - EM93F4DP.227

   Important! You must *replace* the existing Autoexec.bat on the USB flash drive with the new version unzipped and copied from VBIOS_update_utility_v1.0.zip.

Your bootable USB flash drive is now complete. You can now reboot the DXM blade from this USB flash drive. See the next section for details.

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Reboot the DXM blade from the USB flash drive

Important! You must plug the USB flash drive into the DXM blade when you reboot. Do not reboot the blade with USB flash drive plugged into a zero client.

Follow these steps:

1. Establish a PCoIP session between the DXM blade and a zero client.

1. Plug the bootable USB flash drive into the DXM blade.

2. Restart the blade workstation.

3. When the blade restarts, the Amulet Hotkey Boot Options screen briefly displays.

   Immediately press F11 to launch the BIOS Boot Manager.

   F11 prompt

4. When the DELL Boot Manager screen appears, use the keyboard to select **BIOS Boot Menu**.

   The blade now scans for attached devices.

5. Now select the USB flash drive. From the listed menu options:

   a. Choose Hard drive C.

   b. Choose USB DISK 2.0.

   Note: If you renamed your USB flash drive, this name is *not* included in the 'USB DISK 2.0' menu item.

6. Autoexec.bat on the bootable USB flash drive now runs and launches the Amulet Hotkey VBIOS Update Utility.

   a. First, the VBIOS Update Utility prompts you to specify how many PCoIP hosts are installed on the target blade:
   ```
   AMULET HOTKEY .227 VBIOS UPDATE UTILITY.
   1. SINGLE HOST CARD "QUAD HEAD",
   2. TWO HOST CARDS "OCTAL HEAD",
   3. EXIT
   [1,2,3]?
   ```
   b. If the blade has one PCoIP host card, enter 1. Then go to step 8.

   If the blade has two PCoIP cards, enter 2. Then go to step 9.

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7. If you specified one PCoIP host card:

    a. The VBIOS Update Utility confirms your selection and prompts you to continue:

        `SINGLE HOST CARD VBIOS .227 UPDATE`

        `Press any key to continue . . .`

    b. The VBIOS Update Utility unlocks the ROM and prompts you to continue:

        `ROM Unlocked`

        `Press any key to continue . . .`

    c. Go to step 10.

8. If you specified two PCoIP host cards:

    a. The VBIOS Update Utility confirms your selection and prompts you to continue:

        `TWO HOST CARDS OCTAL VBIOS .227 UPDATE`

        `Press any key to continue . . .`

    b. The VBIOS Update Utility unlocks the ROM on both hosts cards and prompts you *twice* to continue:

        `ROM Unlocked`

        `Press any key to continue . . .`

        `ROM Unlocked`

        `Press any key to continue . . .`

9. When the Video BIOS update is complete, the new product details are listed on screen. Confirm that the new product name is exactly as shown below:

    `New Product Name: F-PIV4 (.227) E6760 MXM`

10. The VBIOS Update Utility now prompts you to restart the DXM blade:

    `Restart System To Complete VBIOS Update.`

    `PLEASE RESET THE BLADE`

    Press Ctrl + Alt + Delete to restart the DXM blade.

The Video BIOS update is now complete.