MPE+ Frequently Asked Questions & Troubleshooting

MPE+ 4.7.0.36

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Mobile Forensics Background Knowledge

Q. What is the difference between Computer Forensics and Mobile Phone Forensics?

A. In computer forensics, the devices that we are imaging are static storage devices; this means that with we will obtain the same image every time. In mobile phone forensics, the devices that we are imaging are full dynamic systems; this means that, while we may support the phone, we might only extract the contacts, SMS, and call logs but not the calendar or any other combination of this information. This may come as a shock to many customers that have never dealt with any mobile forensic software or haven't had any type of mobile forensic training; but for those customers that understand mobile phone forensics, they should only see MPE+ as a tool that can help them fill the voids of other software they use and become their main tool.

Q. What is CDMA?

A. CDMA stands for Code Division Multiple Access and is a cellular technology used for communication. CDMA is usually only used in the USA. CDMA phones typically do not use SIM cars, unless they are world phones (which rely on GSM technology outside of the USA). More information about CDMA can be obtained here.

O. What is GSM?

System Requirements

Q. What Operating Systems are supported by MPE+?

Windows XP Professional (32-bit only)

Windows 7 Home Premium (32- and 64-bit)

Windows 7 Professional (32- and 64-bit)

Windows 7 Enterprise (32- and 64-bit)

Windows 7 Ultimate (32- and 64-bit)

Q. What prerequisites must I install manually before installing MPE+?

On Windows XP Professional, you will need to manually install MSMQ (Microsoft Message Queuing) as per the following instructions:

- 1. In Control Panel, double-click Add/Remove Programs.
- 2. On the left tab of the Add/Remove Programs window, click Add/Remove Windows Components.
- 3. Once the Windows Components Wizard opens, click to select the Message Queuing Services item.
 - Click Next.
- 4. This will start the MSMQ 2.0 setup process. Your Windows XP installation CD-ROM, network share, or install point must be available.
- 5. MSMQ will display an installation dialog box. You will be prompted to install either an MSMQ server or a dependent client.
- 6. You can install MSMQ 2.0 in Workgroup mode by selecting "Message Queuing Will Not Access a Directory Service".

If you have Windows 7 N, you will need to manually install Windows Media Player via Microsoft's Media Feature Pack <u>here</u>.

O. Can I use the Home Edition of Windows XP with MPE+?

A. No. MPE+ utilizes MSMQ (Microsoft Message Queuing) which is no available in XP Home Edition.

Licensing

Q. Why does MPE+ ask for an activation code?

A. In earlier releases of MPE+, two licenses were involved in running MPE+. One was the license that's stored on the CodeMeter dongle (or Virtual CodeMeter dongle), and one was a GSM license. Recent releases of MPE+ no longer require a GSM license, and the infrastructure used for the GSM lisenses is no longer supported. If MPE+ is asking for an activation code, you must upgrade to a newer version of MPE+ that does not use GSM licenses.

Q. How do I move my MPE+ installation to a different computer?

A. If your MPE+ license is stored on a physical CodeMeter dongle, you can simply install MPE+ and the CodeMeter software on another PC and connect the dongle to that PC when you wish to run MPE+. If your MPE+ license is stored in a Virtual CodeMeter (usually the case with the MPE+ tablet) you will first need to move your MPE+ license to a physical CodeMeter dongle through the following steps:

- 1. Make sure the machine with the Virtual CodeMeter is connected to the internet.
- 2. Open AccessData License Manager.
- 3. Under the Licenses tab, select the checkbox next to the entry for "FTK Mobile Phone Examiner".
- 4. Click "Remove License" and click "Yes" when prompted.
- 5. On another PC, make sure you are connected to the internet and insert a physical CodeMeter dongle.
- 6. Open AccessData License Manger.
- 7. Under the Licenses tab, click "Add Existing License".
- 8. On the web page that opens up, select the checkbox next to the unbound "Mobile" license.
- 9. Click "Bind", then switch back to License Manager and click "Yes" when prompted.

Installing & Running MPE+

Q. How do I install MPE+?

Online:

- 1. Uninstall any previous versions of MPE+
- 2. Ensure your CodeMeter dongle is connected and has a current MPE+ license
- 3. In a browser, go to http://accessdata.com/MPE-clickonce
- 4. Select either "Install MPE+" or "Install Tablet MPE+"
- 5. Let the installer run all the way through, installing any necessary prerequisites and all drivers

Offline:

- 1. Uninstall any previous versions of MPE+
- 2. On a PC with an internet connection, go to http://accessdata.com/MPE-clickonce
- 3. Expand the option for "Offline Downloads"
- 4. Download the appropriate offline installer and firmware package
- 5. If you want to be able to extract physical images from Apple devices, you will also need to contact Support at 800-658-5199 to obtain the Apple physical support files
- 6. Extract the offline installer and put its contents, along with the firmware package(s) (put each firmware package in its own folder) and the Apple physical support files installer, on media to transport to your forensic machine
- 7. Ensure your CodeMeter dongle is connected and has a current MPE+ license
- 8. Run the "setup.exe" from the unzipped installer package
- 9. Let the installer run all the way through, installing any necessary prerequisites and all drivers
- 10. When the installation completes, install the firmware package(s) one at a time by going to Tools>Mobile Device Drivers>Import From Folder in MPE+ and browsing to the folder containing the firmware package,
- 11. After closing MPE+, run the Apple physical support files installer

Notes

- Full installation can take quite a while as there is about 1.5 GB of data for it to download and install, including prerequisites, driver files, firmware, Apple physical support files, and MPE+ itself
- If you are prompted to reboot your PC during the installation, please choose to restart later and then restart your PC after MPE+ has run for the first time.
- Please pay attention to warnings and popups and make sure to allow any and all drivers to install.
- Some driver prompts may be covered by the MPE+ progress window, so you should click and drag the progress window to move it out of the way.
- If you choose to reboot your PC or disallow any drivers to be installed, you may need to manually restart/resume the installation process.

Q. What is the importance of the MPE+ TEMP folder and where should I put it?

A. During extraction and/or analysis, all extracted data is stored in the MPE+ TEMP folder. Due to how this data is stored, the TEMP folder may contain several times the amount of data as the device itself or the AD1 image. You should put the TEMP folder should be placed on the drive with the most free space, preferably with 100GB free space or more. MPE+ will not work properly if the TEMP folder runs out of space during extraction.

Q. How do I change the location of my MPE+ TEMP folder? MPE+:

- 1. Click the "Tasks" menu
- 2. Click "Settings"
- 3. Open the "Temp Data" tab
- 4. Click the button next to the "Data Provider Temporary Data Path" field to select a new location
- 5. Click "OK"

Tablet MPE+:

- 1. Click the lower-right button in Tablet MPE+
- 2. Click "Settings"
- 3. Click the button next to the "Temporary Data Path" field to select a new location
- 4. Click "OK"

Q. What does MPE+ do during the initialization process every time it starts?

A. The first time MPE+ starts, it will install any available firmware updates (containing additional drivers), as well as download and install the files needed to perform physical extraction of Apple devices. Every subsequent time that MPE+ is launched, it will check for any available program updates and for the presence of the several key drivers and files. If this process fails, you will be prompted to re-download and reinstall any necessary files.

Q. Do I really need the Apple physical support files?

A. These files are necessary only if you want to be able to extract physical images of Apple devices.

Q. The MPE+ Driver installers left several shortcuts on my desktop and Start menu. Do I need these?

A. No. These shortcuts are safe to delete. Some of the shortcuts won't even work as unnecessary files have been removed from their accompanying programs.

Q. Where is the shortcut to run MPE+?

A. The installation method has been changed drastically, and currently only creates a Start menu shortcut to run MPE+. However, if you'd like a shortcut to MPE+ on your desktop, you can still manually create one.

MPE+ Tablet

Q. What is the MPE+ Tablet?

A. With the release of MPE+ 4.6, we are introducing a new, slimmer tablet preloaded with a touch-friendly version of MPE+. The new MPE+ Tablet interface is also available here if you'd like to install it on the old MPE+ Tablet.

Q. How do I install the MPE+ Tablet interface?

A. The procedure for installing either MPE+ or MPE+ Tablet is outlined in this post.

Q. What are the specifications for the new MPE+ Tablet?

Operating System: Windows 7 Embedded Standard x64

Display: 10.1" Capacitive Screen

CPU: Dual-Core 1.66 GHz Intel Atom N570

RAM: 2 GB DDR2 Drive: 16 GB SSD

Expandable Storage: microSDHC Slot

Ports: USB 2.0 x 2, Multi-Use Port for Ethernet & VGA adapter, A/C Port

Q. The Tablet's internal drive does not have much space. Where should I store my data?

A. The new MPE+ Tablet is meant to be a pass-through device. Images should not be stored on the Tablet's internal drive, but on external media. Your MPE+ TEMP folder should also be stored on external media to ensure you do not run out of space.

Q. How do I change the location of my MPE+ TEMP folder?

A. The procedure for changing the TEMP folder location in either version of MPE+ is outlined in this post.

Q. How can I expand my available storage space?

A. You can add storage space by connecting a USB thumb drive or inserting a microSDHC card. External USB HDDs can also be used if desired.

Q. Does the new MPE+ Tablet have WiFi connectivity?

A. No. Although the Tablet hardware includes a WiFi card, we have left it disabled intentionally to protect the device. Internet connectivity can be achieved via Ethernet with the included adapter.

Q. Can I use the Tablet's built-in SIM card slot?

A. No. Although the Tablet hardware includes a slot for a SIM card, we have left it disabled intentionally to protect the device. The SIM card reader in the MPE+ Cable Pack can still be used to analyze SIM cards.

Drivers

Q. What drivers are included on the MPE+ disc or on AccessData's site?

A. Two driver packages are installed with MPE+ and included on our site and on the disk. The "AccessDataMobilePhoneExaminerDrivers" package contains drivers for most of the supported phones. The "MPESmartphoneDriver" package contains the drivers for Apple devices.

Q. What do I do if I am unable to download the Apple Device Physical Files via MPE+?

A. Contact Support at 800-658-5199 to obtain the Apple Device Physical Files another way.

Q. Does AccessData provide drivers for every supported phone?

A. We try to provide as many drivers as we can. Any other drivers can be found on the internet, either from the phone manufacturers or their providers, or through a simple Google search.

Cables

Q. Why does MPE+ prompt me for different cables than the ones included in my cable pack?

A. We have gone through three revisions of the cable pack, with each differing slightly. However, MPE+ is still programmed to ask for the cables from our first revision of the cable pack as more customers have the that pack than the newer packs. Please see MPE Cable Numbers.zip for a table comparing the contents of the different cable packs.

Q. Can I use OEM cables with MPE+?

A. Yes. It is actually encouraged to obtain any cables, chargers, and accessories when seizing a phone.

Q. Does AccessData provide cables for every supported device?

A. We provide cables for many supported phones, but are unable to provide cables for all supported devices.

Phones

Q. What phone/devices are supported by MPE+?

A. You can view a list of supported devices in MPE+ by going to Help>Supported Devices or viewing the online Supported Devices List. If a devices is not listed in MPE+ it typically means that MPE+ cannot extract any data from that device, with the exception of CDMA "dumb" phones, which still might be able to have their File System extracted by selecting "Other" as the Manufacturer and "Other CDMA" as the Model in MPE+. On unsupported smart phones, you can try selecting a similar model, but there's no guarantee that it will work, and if it does, the reports will show the wrong phone model.

Q. Why aren't all phones supported by MPE+?/Why can't MPE+ collect all the data from every phone?

A. Phones are full dynamic systems rather than static storage devices. This means that every phone will store information differently, communicate differently with the computer, and require a different driver. Phone providers have even been known to change the file system structure between different firmware versions on the same model phone, further complicating the issue. We are constantly working to add more supported devices to our product and improve device support.

Q. What is the general process for acquiring data from a phone?

- 1. Ensure the proper drivers have been installed.
- 2. For GSM devices, make sure a SIM is inserted (use a forensic SIM, if possible, but do *not* use a foreign SIM).
- 3. Power on and unlock the device.
- 4. Connect the device to the PC using the appropriate cable.
- 5. Ensure the device is in the proper mode (almost always *not* "Mass Storage" mode).
- 6. Confirm that Windows can see the device properly (usually by looking under "Modems" or "Ports" in Device Manager).
- 7. Launch MPE+ and choose to acquire data from a phone.
- 8. Select the appropriate Manufacturer and Model from the dropdowns.
- 9. Select the proper Port (usually a Serial or Modem port for CDMA phones) or click "Refresh Port(s)" (for GSM phones).
- 10. Click "Connect" and proceed to acquire the data you want.

SIM Cards

Q. What are the two black cards I received in the MPE+ bundle?

A. The MPE+ bundle includes a blank SIM card that can be used as a forensic SIM (it says "MPE+ Forensic SIM" in the back), and a micro-SIM adapter (it looks like a SIM card but has no circuitry, and has a smaller section the size of a micro-SIM that can be popped out). The micro-SIM adapter has two purposes: you can pop a micro-SIM into it so that it can be read by the SIM card reader, or you can use it as a template to cut a normal SIM into a micro-SIM. Additional Forensic SIM cards and adapters can be obtained by contacting Sales at 800-574-5199 or sales@accessdata.com.

Q. What is a forensic SIM?

A. A forensic SIM is partial clone of a SIM card that contains enough data for the phone to recognize it and turn on, but will not enable the phone's radios and does not contain user data. A forensic SIM only has IMSI (International Mobile Subscriber Identity) and ICCID (Integrated Circuit Card Identifier) data.

Q. What is the process for acquiring data from a SIM card?

- 1. Ensure the SIM card reader driver has been installed (often installs automatically).
- 2. Connect the SIM card reader to your computer (usually appears as a Smart Card Reader in Device Manager).
- 3. Launch MPE+.
- 4. Insert the SIM card into the reader according to the picture on the reader (you may see a Smart Card device in Device Manager that shows it is not working, but that is fine). If the phone uses a micro-SIM, you can pop the micro-SIM into the micro-SIM adapter so it fits in the SIM card reader.
- 5. Choose to acquire data from a SIM card and proceed to acquire the data you want.

Q. How do I create a forensic SIM?

Automatically

- 1. Ensure the SIM card reader driver has been installed (often installs automatically).
- 2. Connect the SIM card reader to your computer (usually appears as a Smart Card Reader in Device Manager).
- 3. Launch MPE+.
- 4. Insert the original SIM card into the reader according to the picture on the reader (you may see a Smart Card device in Device Manager that shows it is not working, but that is fine). If the phone uses a micro-SIM, you can pop the micro-SIM into the micro-SIM adapter so it fits in the SIM card reader.
- 5. Click on Tools>Create Forensic SIM>Read SIM.
- 6. Once it has read the IMSI and ICCID, click "Continue".
- 7. Insert a blank/forensic SIM into the reader and click "OK".
- 8. After the values have been written to the forensic SIM, MPE+ will allow you to view and save the results.
- 9. (Optional) If the phone uses a micro-SIM, you can use the micro-SIM adapter as a template to cut the forensic SIM down to micro-SIM size to fit in the phone.

Manually (if you already know the correct IMSI and ICCID values)

1. Ensure the SIM card reader driver has been installed (often installs automatically).

- 2. Connect the SIM card reader to your computer (usually appears as a Smart Card Reader in Device Manager).
- 3. Launch MPE+.
- 4. Insert a blank/forensic SIM card into the reader according to the picture on the reader (you may see a Smart Card device in Device Manager that shows it is not working, but that is fine).
- 5. Click on Tools> Create Forensic SIM>Enter Values.
- 6. Enter the IMSI and ICCID (either in octet form or in raw form), and click "Continue".
- 7. Insert a forensic SIM into the reader and click "OK".
- 8. After the values have been written to the forensic SIM, MPE+ will allow you to view and save the results.
- 9. (Optional) If the phone uses a micro-SIM, you can use the micro-SIM adapter as a template to cut the forensic SIM down to micro-SIM size to fit in the phone.

Android Devices

Q. How can I collect logical data from an Android device with MPE+?

Devices: Most Android devices **Type of Capture:** Logical

Procedure:

- 1. Install the ADB (Android Debug Bridge) driver for your phone. Some are included in the Driver Pack or on the MPE+ CD, but ADB drivers are specific to device model and carrier so we cannot provide them all. These should be obtained through the device carrier (not the device manufacturer).
- 2. Remove any memory cards that came with the device and insert an empty "forensic" SD card (this is where MPE+'s agent will be temporarily stored).
- 3. On the device itself, set the device to connect in Debugging/Development mode (this setting can be in different locations on different devices, so check with the device's user manual).
- 4. On the device itself, set the device to allow applications from Unknown Sources (this setting can be in different locations on different devices, so check with the device's user manual).
- 5. Connect the device with the proper cable.
- 6. Unlock the device.
- 7. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 8. Select the device's Manufacturer and Model in the drop-downs.
- 9. Click "Connect" and proceed to acquire the data you want.

Q. How can I collect Protected User Data (Forensic Files) from Android devices with MPE+?

Devices: Most Android devices **Type of Capture:** Logical

Procedure:

- 1. Install the ADB (Android Debug Bridge) driver for your phone. Some are included in the Driver Pack or on the MPE+ CD, but ADB drivers are specific to device model and carrier so we cannot provide them all. These should be obtained through the device carrier (not the device manufacturer).
- 2. Remove any memory cards that came with the device and insert an empty "forensic" SD card (this is where MPE+'s agent will be temporarily stored).
- 3. On the device itself, set the device to connect in Debugging/Development mode (this setting can be in different locations on different devices, so check with the device's user manual).
- 4. On the device itself, set the device to allow applications from Unknown Sources (this setting can be in different locations on different devices, so check with the device's user manual).
- 5. Connect the device with the proper cable.
- 6. Unlock the device.
- 7. Gain Shell Root (*not* full root) with a tool like SuperOneClick.
- 8. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 9. Select the device's Manufacturer and Model in the drop-downs.
- 10. Click "Connect" and proceed to acquire the "Forensic Files".

Q. How can I collect physical images from Android devices with MPE+?

Devices: Most Android devices **Type of Capture:** Physical

Procedure:

- 1. Install the ADB (Android Debug Bridge) driver for your phone. Some are included in the Driver Pack or on the MPE+ CD, but ADB drivers are specific to device model and carrier so we cannot provide them all. These should be obtained through the device carrier (not the device manufacturer).
- 2. Remove any memory cards that came with the device and insert an empty "forensic" SD card (this is where MPE+'s agent will be temporarily stored).
- 3. On the device itself, set the device to connect in Debugging/Development mode (this setting can be in different locations on different devices, so check with the device's user manual).
- 4. On the device itself, set the device to allow applications from Unknown Sources (this setting can be in different locations on different devices, so check with the device's user manual).
- 5. Connect the device with the proper cable.
- 6. Unlock the device.
- 7. Gain Shell Root (*not* full root) with a tool like SuperOneClick.
- 8. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 9. In the Manufacturer drop-down, select "Android".
- 10. In the Model drop-down, select "Android (Physical).
- 11. Click "Connect" and proceed to acquire the data you want.

Notes

- When you have the proper ADB driver installed and the device is in Debugging mode, Device Manager will usually list an ADB Interface, Android Phone, or Android USB Device, and the device will not be seen as a mass storage device.
- If an Android device isn't explicitly listed as supported, you can usually still perform the extraction by selecting "Android" in the Manufacturer drop-down and "Generic Android" in the Model drop-down.
- Android physical images will be saved in DD format and cannot be viewed in MPE+. They must be processed in FTK.
- MPE+ will name an Android device's physical images in the format [partition_name].[sector_size].[file_system]. Changing these file names may result in FTK not being able to correctly read the images.

Q. Does AccessData provide ADB (Android Debug Bridge) drivers for supported Android phones?

A. Some ADB drivers are included in the Driver Packs or on the MPE+ disc, but ADB drivers are specific to device model and carrier so we cannot provide them all. These should be obtained through the device carrier (not the device manufacturer). As ADB drivers are commonly used in rooting Android devices, users may be able to find help setting up their ADB drivers on YouTube or on the XDA forums.

Q. How can I make sure my ADB driver is working?

A. Usually, your phone will be listed in Device Manager under something like "Android" or "ADB Devices" when the driver is installed properly. Another way to make sure that it's working is to use the ADB utility from the <u>Google Android SDK</u> by running the command "adb devices" from the directory containing adb.exe. This will list any devices that are communicating over ADB.

Q. I get the error "No flash card in device", but I know there is an SD card in it. A. The phone may be automatically mounting the SD card to the PC as a Mass Storage Device. You'll know if it's mounted to your PC because you'll be able to browse the phone's SD Card in Windows Explorer. If it is mounted, you should find the option to unmount it and set the phone to Charge

Only mode in the phone's Notifications (pull down the Notification Bar at the top of the screen).

Q. What is contained in the Protected User Data (Forensic Files)?

A. "Forensic Files" refers to the full contents of an Android device's "/data" folder. This folder contains a wealth of user data, including SQLITE databases full of "deleted" data (contacts, SMS, app cache, downloads, etc.) that is normally hidden from the user. To acquire this data, either select to extract "Forensic Files Only" to extract *only* the "/data" folder, or select "File System" to extract the *entire File System* including the "/data" folder.

Apple Devices

Q. How can I collect logical data from an iPhone/iPad/iPod with MPE+?

Devices: iPhone (all models), iPod Touch (all models), iPad (1 & 2)

iOS: Through iOS 5.1 **Type of Capture:** Logical

Procedure:

- 1. Uninstall any versions of iTunes that your PC has, and install the drivers from MPESmartphoneDriver.exe.
- 2. Connect the device with the normal Apple USB cable and allow Windows to install any needed drivers.
- 3. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 4. Unlock the device.
- 5. Select "Apple" in the Manufacturer drop-down.
- 6. Select the correct device in the Model drop-down.
- 7. Click "Connect" and proceed to acquire the data you want.

Q. How can I collect physical (or deep, unencrypted logical) images from an iPhone/iPad/iPod with MPE+?

MPE+ Version: MPE+ 4.2.0 and later

Devices: iPhone (all but iPhone 4S), iPod Touch (3 & 4), iPad 1

iOS: Through iOS 5.1Type of Capture: Physical

Procedure:

- 1. Uninstall any versions of iTunes that your PC has, and install the drivers from MPESmartphoneDriver.exe. Also, install the Apple Physical Device Support files if prompted by MPE+.
- 2. Connect the device with the normal Apple USB cable.
- 3. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 4. Select "Apple" in the Manufacturer drop-down.
- 5. Select the correct device with the "(Physical)" label in the Model drop-down.
- 6. Click "Connect" and follow the on-screen prompts to put the device in DFU mode. Note that holding the buttons down for longer than prompted will result in the device not going into DFU mode and you will need to restart the process.
- 7. If the device has a password, select the option to brute force the password, enter the password, or just extract the deep logical TAR files.
- 8. When prompted, select which partitions to acquire and proceed to acquire the data.

Notes

• If MPE+ reports that the device is not ready, try unlocking the device and opening Settings, then trying to connect again

- Apple Physical images will be saved in DD format and cannot be viewed in MPE+. They must be processed in FTK.
- Apple Deep Logical images will be saved in TAR format and can be viewed in MPE+ (via Tasks>Extract From>Apple TAR) or processed in FTK.
- MPE+ will name an Apple device's physical images in the format [partition_name].[sector_size].[segment_number]. Changing these file names may result in FTK not being able to correctly read the images
- The OS partition will usually require at least 1 GB of disk space on the destination PC. The other partitions require at least as much space as the Apple device is rated to hold. This means that selecting to acquire the OS Partition, User Partition, Decrypted User Partition, and Full Disk from a 32 GB Apple device will result in about 96 GB worth of image files.

Q. How do I know if an iPad 2 is Wifi-only, Wifi+GSM, or Wifi+CDMA?

A. You can check the model number under Settings>About>Model.

```
16 GB Wifi-only (Black): MC769LL/A
32 GB Wifi-only (Black): MC770LL/A
64 GB Wifi-only (Black): MC916LL/A
16 GB Wifi+GSM (Black): MC773LL/A
32 GB Wifi+GSM (Black): MC774LL/A
64 GB Wifi+GSM (Black): MC775LL/A
16 GB Wifi+CDMA (Black): MC755LL/A
32 GB Wifi+CDMA (Black): MC763LL/A
64 GB Wifi+CDMA (Black): MC764LL/A
16 GB Wifi-only (White): MC979LL/A
32 GB Wifi-only (White): MC980LL/A
64 GB Wifi-only (White): MC981LL/A
16 GB Wifi+GSM (White): MC982LL/A
32 GB Wifi+GSM (White): MC983LL/A
64 GB Wifi+GSM (White): MC984LL/A
16 GB Wifi+CDMA (White): MC985LL/A
32 GB Wifi+CDMA (White): MC986LL/A
64 GB Wifi+CDMA (White): MC987LL/A
```

Q. Apple Software Update asked me to upgrade iTunes. Should I allow this?

A. No. If you install the new version of iTunes after installing the MPE Smartphone Driver then MPE+ may cease to connect properly to Apple mobile devices. To prevent the prompt to upgrade, you can uninstall *only* the "Apple Software Update" program via the Control Panel. If you do accidentally allow it to upgrade iTunes, you will need to uninstall the MPE Smartphone Driver and iTunes, and then reinstall the MPE Smartphone Driver.

Q. How do I get my device out of DFU mode?

A. Your device should reboot itself to get out of DFU after doing a physical acquisition. If it does not or the device remains in DFU as the result of an error or cancelling the image process, hold down the Home button and Power button together for 10 seconds to get out of DFU mode.

Q. What does error 1013 mean when acquiring a physical image from an Apple device?

A. This means that you are using an unsupported device.

Q. What are the .IOS_KEYS files created during physical extractions?

A. These contain the key bundles that FTK will use to decrypt the physical image(s).

Q. Why can't FTK display some files in a physical image from an Apple device?

A. Since iOS 4, hardware-based encryption is used on all Apple devices and cannot be turned off. Because of this, you may not be able to view the contents of some files in FTK unless your images were created with MPE+ 4.7 or later (to obtain the decryption keys) and your are using a version of FTK that supports Apple physical image decryption. An alternative to getting these physical DD images would be to get the deep logical TAR images, which are not encrypted.

Blackberry Devices

Q. How can I collect logical data from a BlackBerry with MPE+?

Devices: Most BlackBerry Phones

Type of Capture: Logical

Procedure:

1. Install BlackBerry Desktop via the MPE+ Driver Pack.

- 2. Power on the phone.
- 3. Connect the device with the proper cable.
- 4. Click the "Select Device" button in MPE+ (or Tasks>Select Device).
- 5. Select "BlackBerry" in the Manufacturer drop-down.
- 6. Select the correct device in the Model drop-down.
- 7. Click "Connect".
- 8. When prompted in MPE+, enter the phone's password/PIN. If the device has no password/PIN, leave this field blank. If the device is also using encryption, enter the password/PIN on the device itself. (**Important:** A BlackBerry keyboard contains numbers and letters on the same keys. Often the device password/PIN is actually comprised of letters even though you might think you're entering numbers. For example, the password/PIN '1234' is actually 'wers'.)
- 9. Proceed to acquire the data you want.

Notes

- If a BlackBerry device isn't explicitly listed as supported, you can often still perform the extraction by selecting "BlackBerry" in the Manufacturer drop-down and "Other BlackBerry Phone" in the Model drop-down.
- Prior to MPE+ 4.5, extraction from a password/PIN locked BlackBerry is not supported and you must disable the password/PIN lock in the phone's settings.

iDEN Devices

Q. How can I collect logical data from an iDEN device with MPE+?

Devices: Supported iDEN devices

Type of Capture: Logical

Procedure:

- 1. Install the MPE+ Driver Pack, selecting to install the iDEN drivers (they should be installed to C:\Program Files (x86)\AccessData\Mobile Phone Drivers\iDENAD)
- 2. Power on the phone.
- 3. Set the phone to connect as a modem (typically Menu>Settings>Connections>USB>Data Modem).
- 4. Connect phone with the proper cable. Windows will likely try to automatically install the driver. Whether this installations fails or not, we need to change the driver.
- 5. Open the Device Manager and find the iDEN Device entry (may be under Modems).
- 6. Right-click the iDEN Device entry and select "Update Driver Software".
- 7. Tell Windows to browse your computer for driver software.
- 8. Tell Windows to let you pick from a list of drivers.
- 9. Click "Have Disk" and browse to iDEN_USB_Device.inf in the iDENAD\iDEN folder and click "OK" and "Next".
- 10. When prompted, allow the driver to install. When the installation completes, Device Manager should now list a device called "iDEN USB Device" under "libusb-win32 devices".
- 11. Open MPE+ and tell it to acquire data from a Mobile Device.
- 12. Select the proper manufacturer in the Manufacturer drop-down.
- 13. Select the proper device in the Model drop-down.
- 14. Click "Connect" and proceed to acquire the data you want.
- 15. Part way through acquiring data (usually after acquiring the phone book), progress will stop, the phone screen may turn white, and Windows will likely try to automatically install another driver. Whether this installations fails or not, we need to change the driver.
- 16. Open the Device Manager and find the iDEN Device entry.
- 17. Right-click the iDEN Device entry and select "Update Driver Software".
- 18. Tell Windows to browse your computer for driver software.
- 19. Tell Windows to let you pick from a list of drivers.
- 20. Click "Have Disk" and browse to Flash_P2K_Patriot.inf in the iDENAD\FlashPatriot folder and click "OK" and "Next".
- 21. When prompted, allow the driver to install. When the installation completes, Device Manager should list a device called "Flash P2K Patriot" under "libusb-win32 devices" and MPE+ should continue and finish the extraction.

Notes

 MPE+ only supports extraction of Contacts from most iDEN phones. Please see the <u>Supported Devices List</u> for details.

Windows Mobile Devices

Q. How can I collect logical data from a Windows Mobile device with MPE+?

Devices: Most Windows Mobile devices (Not Windows Phone 7)

Type of Capture: Logical

Procedure:

- 1. Install the Windows Mobile drivers from the MPE+ Driver Pack.
- 2. Power on the device.
- 3. In the "USB to PC" options on the phone, enable "ActiveSync" and "Enable faster data synchronization".
- 4. Connect the device with the proper cable. Windows Mobile Device Center should see the device, but do not tell it to connect.
- 5. Select the proper Manufacture and Model from the dropdowns in MPE+.
- 6. Click "Connect".
- 7. If prompted on the phone to install the OxygenEngine.dll, accept and allow the installation.
- 8. Proceed to acquire the data you want.

Notes

• If a Windows Mobile device isn't explicitly listed as supported, you can often still perform the extraction by selecting "Windows Mobile Phone" in the Manufacturer drop-down and "Generic Windows Mobile Phone" in the Model drop-down.

General Troubleshooting

Q. Why does MPE+ say my device is not ready or otherwise unable to connect?

A. There could be many causes for this:

- Ensure the device is on and unlocked.
- For GSM phones, make sure a SIM is inserted. Use a forensic SIM if possible but do *not* use a foreign SIM from another phone or provider.
- The drivers may not be installed or may be corrupt. Reinstall the drivers and ensure the device's ports show up in Device Manager.
- Ensure the phone is supported by MPE+ and you have selected the correct Manufacturer and Model.
- Try connecting over a different port.
- MPE+ sometimes requires that the device be connected before launching MPE+.
- You can contact AccessData Support at 800-658-5199 if you continue to have problems after following these points.

Q. Why did MPE+ fail to collect some data from my device?

A. This could be because this device doesn't have any of the specified types of data stored on it, which you can verify by looking through the device itself. It may also be due to a file system change in a specific firmware version that MPE+ cannot read/parse yet. This may also be due to the fact that the phones are full dynamic systems and can essentially choose not to allow a user to collect data. If this is the case, other methods not involving MPE+ can be used to report on the missing data. You can learn about these other methods in our Mobile Forensics training courses.

Q. Why did MPE+ pull all the data off my device when I only selected to acquire the File System?

A. If MPE+ has any difficulty in acquiring the File System of a device, it will automatically try another method of acquiring the File System. The second method will automatically collect all the data from the device.

Q. I told MPE+ to acquire all data from my supported CDMA phone, but the extraction failed?

A. If this happens, completely close and restart MPE+, and reboot the phone. Try extracting data again, but rather than selecting all data, select only the File System. After the File System extracts you can click the "Extract Device Data" button (or go to Tasks>Extract Data) to extract the remaining data.

Known Issues (MPE+ 4.7.0.36)

MPE+ cannot be installed or run from multiple user accounts on the same PC. (63843)

Resolution: Choose one user account (with Administrator privileges) under which to install and run MPE+

During the installation, you may be prompted to reboot the PC, stopping the installation prematurely. (63629)

Resolution: If possible, select to reboot the PC later, and wait until MPE+ runs for the first time and finishes driver installation before rebooting. If you are forced to reboot the PC, you may need to manually resume/restart your installation so everything installs completely.

During the installation and first run of MPE+, the "Initializing" window may cover up some of the settings and driver prompts.

Resolution: Click and drag the "Initializing" window to move it out of the way.

During the installation and first run of MPE+, you may be warned that a driver is unsigned of a publisher is unknown. (63163)

Resolution: Make sure to allow all of these drivers to install. Sometimes, it may be possible to check "Always trust software from..." to reduce the number of warnings/prompts.

During the installation and first run of MPE+, minimizing the MPE+ window may cause MPE+ to freeze. (63163)

Resolution: End MPE.exe is Task Manager and restart MPE+.

During the installation and first run of MPE+, MPE+ may fail to download the Apple physical support files if your PC is behind a proxy or firewall.

Resolution: Please contact AccessData Support at 800-658-5199 and we will find another way to get the needed files to you.

The iDEN drivers are missing from the latest driver installer. (63623)

Resolution: Please contact AccessData Support at 800-658-5199 to get these drivers.

On Windows XP, the AccessData phone drivers for older Sanyo, LG, Motorola, and Samsung phones may not install automatically. (63830, 63832)

Resolution: Please contact AccessData Support at 800-658-5199 to get these drivers, which you can then manually install as needed.

You will only be prompted to update MPE+ once on start up. If you decide not to update, you will not be prompted again. (63369)

Resolution: Update manually via the offline installer on the MPE+ installation web page.

MPE+ will only recognize the SIM Card reader if it is plugged in before starting MPE+. (63266)

Resolution: Make sure to connect the SIM Card reader before starting MPE+.

On some CDMA phones, MPE+ appears not extract media files. (63252)

Resolution: Some CDMA phones do not save their media files with proper extensions. You should still be able to find the media files if the extract the File System and carve for media files.

Some HTC phones aren't detected properly even though the HTC drivers were installed via the Mobile Phone Examiner Drivers installer. (63605, 63630)

Resolution: Sometimes the driver pack installer doesn't install all the parts of HTC drivers. If this occurs, you can download and install HTC Sync separately directly from HTC's website.

When using Quick Print to create a PDF report, if the amount of information selected for the PDF is large, PDF generation will take some time to complete. If you have a lot of data, PDF reports may result in an out-of-memory error. (60097)

Resolution: To workaround reports that are very slow or fail, try creating several smaller reports rather

than one large report. If you install the free <u>CutePDF Writer</u>, which acts as a printer, you can tell MPE+ to print its report through CutePDF to generate a PDF copy of the report. You can also select to instead generate and RTF or CSV report.

Multiple subsequent extractions using some devices (Windows Mobile, Apple and Android) may fail. (60354, 60204)

Resolution: Restart MPE+ and try extracting data again.

If the user inputs the incorrect model number when extracting, that incorrect number will appear in the Quick Print Report. (60413)

Resolution: Select the correct device from the MPE+ menus when extracting data.

After data carving in MPE+, the "Export to AD1" button in the toolbar may be grayed out.

Resolution: Use the "Export to AD1" option in the Tasks menu instead.

On a rooted Android phone, if you select the "Forensic Files Only" option, all other extraction options are ignored and only the forensic files are pulled. (60307)

Resolution: Perform the extraction for Forensic Files, then perform a new extraction to get the remaining data.

On some CDMA phones, the File System fails to extract during a "Select All" extraction.

Resolution: Perform one extraction selecting only the File System, then another extraction (Tasks>Extract from>Device) selecting everything else.

Although they are listed in MPE+, Palm phones running Windows Mobile OS are not currently supported.

Resolution: Wait for a future release of MPE+ to support the following phones:

Palm Treo 500 Palm Treo 700w Palm Treo 700wx Palm Treo 750 Palm Treo 750v Palm Treo 800w

Palm Treo Pro