

MC45 OPERATING SYSTEM BSP 03.16.0002 RELEASE NOTES

INTRODUCTION

The MC45 is a size- and cost-optimized enterprise mobile computer that will help value-conscious enterprises affordably automate business processes in field mobility applications. It offers 3.5G WAN connectivity, high-performance 1D scanner, a color camera capable of picture taking and enterprise-class decoding of 2D barcodes, lightweight design, rugged construction and a core set of mobile computing features at affordable price points.

DESCRIPTION

1. OS Version: Windows Mobile 6.5.3 AKU 5.2.29256 (Build 29256.5.3.12.30)
2. Fusion Software v340.0.1.60R
3. Virtual Platform 5.2.5312.27017

CONTENTS

1. 459Xw65XenUL031602.zip : An UpdateLoader Package contained in a ZIP file.
2. 459Xw65XenAB031602.apf : A package for deployment using AirBEAM.

DEVICE COMPATIBILITY

This software release has been approved for use with the following Symbol devices.

Device	Operating System
MC4587	Windows Mobile 6.5.3
MC4597	Windows Mobile 6.5.3

INSTALLATION REQUIREMENTS

MC4587 or MC4597 device must contain a released version of Windows Mobile Software.

INSTALLATION INSTRUCTIONS

Copy contents of zip file to SD card or to \Temp folder. Execute StartUpdLdr.exe or cold boot terminal by pressing 1 + 9 + pwr and hold the left trigger key to start the update loader process.

BUGS FIXED/CHANGES FROM OS IMAGE 02.13.0000

The following features were either not included in the original release or were part of a point release. Additional high level changes are listed as well.

General Enhancements/Features

Microsoft - Windows Embedded Handheld - AKU 6.5.3.12.30 Build 29256.

Added support for customer-defined input Bluetooth HID queue size in Hidmdd.lib.

Microsoft has modified the daylight end time of "GMT+2 Jerusalem" time zone.

Microsoft has changed the display name of time zone "GMT+5 Tashkent" to "GMT+5 Ashgabat, Tashkent".

Included Updated Emscript logging and diagnostic tool which has a 5MB as default size for RTLOG.

Data Wedge has been updated to v3.6.16.

Virtual Platform – version 27017.

TLC and WEBCODE has been removed from the list of Default Enabled Symbologies.

Changed the DECODE LED time from earlier 3sec to 500ms to optimize power consumption

Integrated SOTI MobiControlStage client as part of OS

Changed the “DEMO” Icon link shortcut to open the registry configurable URL in IE.

Modem SVN has been updated to 07.

The OEM version and Modem Version outputs in the RTLog file

General Stability/Exceptions/Crashes/Lockups

SPR24853/24799/24982 – Resolved an issue where the device would freeze on one of the bootup splash screens and fail to complete bootup, and would require a reload of the OS to function.

SPR24395 – Resolved an issue where the device could get locked up if the scan buffer over ran during continuous scanning

SPR24802/24280 – Resolved a rare issue seen on the Verizon network which resulted in an ARM9 lockup and reboot

SPR24071/SPR24116 – Resolved an issue where the device would display “Incompatible OS” on the boot-up screen and fail to boot

SPR24424 – Resolved an issue where the device would reboot randomly due to GPS driver lockup.

SPR24227/SPR23790 – Resolved an issue where the device would not go to suspend state or lockup if USB driver gets an interrupt.

SPR24737 – Resolved an issue wherein Date/Time set to year 2016 without Time Sync after reboot

SPR24408 – Resolved an issue wherein Scanner laser beam gets disabled after Suspend/Resume.

SPR23990 – Resolved an issue where Slow scanning was experienced

WLAN

Updated WLAN driver version: Fusion H_3.40.0.1.060R.

SPR23785 – Resolved an issue where an exception was observed in the WLAN firmware.

WAN

SPR25469 – Resolved an issue where custom Private APN settings were lost if the SIM card was removed and the device rebooted.

SPR24591 – Resolved an issue when using an Etisalat SIM card where the SIM contacts that were created before insertion of the SIM card were not Visible.

SPR24525 – Resolved an issue when using an O2 SIM card where the programmatic retrieval of the ICCID was not available when PIN locked.

SPR24591 – Resolved an issue where SIM contacts cannot be seen which were created before the SIM card was inserted in device.

Other SPR Fixes

SPR24937 – Resolved an issue whereby it was not possible to format the SDCard when it was mounted to PC as a USB Mass Storage Device.

SPR24082/SPR23456/SPR24977– Resolved an issue where certain speed class SDHC Cards were getting un-mounted.

SPR24184 – Resolved an issue where the scanned barcode data using Datawedge was sent to the Phone Application instead of the DataWedge Demo while in the Home screen.

SPR24047/SPR22847 – Resolved an issue where the Mass Storage Mode reverts back to RNDIS mode after reboot.

SPR23927 – Resolved an issue when pressing the Power key continuously did not bring up the Shut-Down UI when a headset was connected.

SPR23754 – Resolved an issue where-in the Shutdown Application GUI was not behaving consistently upon Long Power Key Press.

SPR22570 – Resolved an issue where RS507 we observe misdecodes when using MS BT stack.

SPR24279 – Resolved an issue wherein Phone Network Setup icon becomes unresponsive.

SPR23882 – Resolved an issue wherein Scroll up/down with arrows buttons on Office Mobile 2010 does not work as expected.

Note:

In WZC mode (Zero Config), TKIP option will not be available in the dropdown for WPA2 authentication from this release. Rules have been changed by Wi-Fi standards to remove TKIP for WPA2/WPA2-PSK & Microsoft has removed the TKIP encryption for WPA2/WPA2-PSK Authentication to meet this requirement.

Use the below registry key to force the device to 2G or 3G. For these registry keys to take effect, the user must keep the Phone Network Settings Applet open and integrate the registry keys.

```
HKEY_LOCAL_MACHINE\Drivers\BuiltIn\NETWORKSELECT]
;"Sysid"=dword:4 //force to 2G only
"Sysid"=dword:3 //force to 3G only
```

The device laser uses following reg key to maintain defaults of Reader and Interface parameters
[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\BarCodeReader\Settings]

Adaptive Scanning is enabled by default. In order to make the Adaptive Scanning configurable, need to set the reg keys as following: [HKEY_LOCAL_MACHINE\Drivers\BuiltIn\BarCodeReader\Settings]
"Capabilities"=dword:00000103

Users with applications that utilize Microsoft SQL Server Compact 3.5 are advised to update to Service Pack 2 which can be [downloaded from Microsoft](#). Some users have reported that this has resolved a sqlcese30.sys.dll crash in their application.

Set the following registry key if the user doesn't want to remount SD card after Suspend & Resume.[HKEY_LOCAL_MACHINE\Software\IAC] "SDHighAvailability"=dword:00000000 ; disabled SD High Availability by default.

Other General Best Practices

Use Application\Startup folder to load applications not Windows\Startup folder as items in Windows\Startup run very early in the boot process and it is possible for items to start prior to full system resources being available.

Programmatic Suspend API: PowerPolicyNotify - this is the only suspend API supported. VK_Off method is not supported.

```
PowerPolicyNotify(PPN_SUSPENDKEYPRESSED, 0);
PowerPolicyNotify(PPN_SUSPENDKEYRELEASED, 0);
```

Programmatic Warm Boot API: ExitWindowsEx(EWX_REBOOT,0); - this is the only warm boot API supported.

Many use cases benefit from a daily scheduled system reboot, especially use cases requiring a large amount of virtual memory. A scheduled daily system reboot is disabled by default. It can be enabled with the following registry settings (2:30AM local system time as an example below):

```
[HKEY_LOCAL_MACHINE\Software\ \dailyReboot] "Disable"=dword:00000000
"dailyRebootTime"="02:30"
```

"dailyRebootTime" should be set as a string value in "HH:mm" format. If the time is set greater than 23 hours or greater than 59 minutes a popup warning will be shown on the device. If enabled, the scheduled reboot will occur even if the device is suspended.

Following can help with specific customer setups:

Applications such as GPS Mapping where map files are stored on an SD card will require “SD-Card_HighAvailability mode”. This mode retains file handles during suspend and resume of the device so that the SD card is available immediately following a suspend/resume. To enable this mode launch the CAB installer, “RemoveSealedSlot_SD-Card_HighAvailability.cab”, from the Windows folder.

PART NUMBER AND RELEASE DATE

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