MC65 OPERATING SYSTEM BSP 4.47.0002 - LOCALIZED RELEASE NOTES

INTRODUCTION

This package contains the v04.47.0002 OS image for the MC659B terminals which are running with WEHH 6.5.3 operating system. This image supersedes the previous BSP 03.44.0004 image and older images.

DESCRIPTION

The 659Bw65XxxUL044702.zip / 659Bw65XxxAB044702.apf (xx stands for Locale i.e. 'it' for Italian) contain an Update Loader package / Airbeam package to load the 04.47.0002 OS image onto the terminal.

CONTENTS

659Bw65XxxUL044702.zip / 659Bw65XxxAB044702.apf (xx stands for Locale i.e. 'it' for Italian)

- partition.mbn - Partition Table

- Pkgs.lst - Images list installed through update loader

- StartUpdLdr.exe - Launch update loader

- modem.smb - Modem Firrmware

- FLASH.bin - Windows Mobile 6.5 Image.

DEVICE COMPATIBILITY

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

Device	Operating System

MC659B	WEHH 6.5.3 Professional

INSTALLATION REQUIREMENTS

This software package has been approved for use with the following:

- Microsoft Windows 2000 or Windows XP Operating System

- ActiveSync 4.5 or higher.

- If developing applications for Windows Mobile 6.5

- MC659B currently running English Rev A BSP21.0, BSP20.11, MR1 BSP21.103, Rev A1 BSP31.2, BSP 40.211,BSP 41.400,BSP 44.0000, BSP 03.44.0004 and CPLD 1.8.

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.

CHANGES AND FIXES

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".

- Fusion Software H_3.40.0.1.060R.

- 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.

- Added Document Capture Feature v2.0.

- Added support for ORTUS Display.

- 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 23.

- The OEM version and Modem Version outputs in the RTLog file.

General Stability/Exceptions/Crashes/Lockups
- SPR24853/SPR24799/SPR24982 - 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/SPR24280/SPR25298 - 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.

- SPR23790/SPR24227 - Resolved an issue where MC65 may not Wake from a Suspend when it is on CRD5501-4000ER four slot Ethernet Cradles.

- SPR24101 - Resolved an issue where the device would lockup while scanning.

- 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.

- SPR21300 - Resolved an issue where WM6 VZW devices are randomly prompted a network credential for data connection. The issue can be fixed by installing the CAB files present in \Windows\WANResetTool_Cabs.zip

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.

· SPR25492 - Resolved an issue wherein MC65 intermittently fail to communicate via Ethernet in the CRD5501 four slot cradles..

· SPR25203 - Resolved an issue where MC65 devices won't connect to Ethernet in the CRD5501 four slot cradles..

· SPR25460 - Resolved an issue where Key-mapping to Camera function do not work on 03.44.0000 & 03.44.0004.

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

· SPR23736 - Resolved an issue where MSR application will stop reading Magnetic Stripe Cards if placed and removed from a cradle.

· SPR23747/SPR24156 - Resolved an issue where Intermittent Ethernet Connectivity issue is observed while sitting in a CRD5001-4000, CRD500-4000ER or Single slot cradle.

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

· SPR24766 - Resolved an issue where MC65 Numeric keyboard is not allowing to remap keys to an another program.

· SPR24497 - Resolved an issue where MC65 NLED Error on some slots of 4 slot cradle.

Note:

- "Non-Datalight Images" (Microsoft File System) - 2.40.211 Or Older.

- "Datalight Images" (Datalight FlashFX File System) - 2.41.400/3.44.0000 or Above.

Image Upgrade
- When Updating from "Non-Datalight Images" (2.40.211 Or Older) to "Datalight Images" (2.41.400/3.44.0000 Or Later) Available flash memory is reduced by approximately 170MB due to the implementation of the Datalight FlashFX file system when compared to older OS versions (Microsoft File System).

- When updating from ANY earlier image to 3.44.0004 or Later image, the "Application Partition will be persisted" unless the update package contains the "CleanAppl.bin" command.

Image Downgrade
- While downgrading from 3.44.0004 or Later image to ANY Older images (BSP44.0000 Or Older) the "Application Partition will NOT be persisted".

  - Note : When downgrading from "Datalight Image" to "Datalight Image" if from the later image "CleanAppl.bin" is removed from the "pkg.lst file" then the "Application Partition will be persisted".

- 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.

- As part of SPR 25492 (MC65 intermittently fail to communicate via Ethernet in the CRD5501 four slot cradles), the following registry key was introduced.
  "[HKEY_LOCAL_MACHINE\Comm\SMSC95001\Parms\TcpIp]
  "MTU"=dword:000005DC ; 1500" Reg included
  This key can be configured by customer if required.
- Use the below registry key to force the device to 2G or 3G.
  HKEY_LOCAL_MACHINE\Drivers\BuiltIn\NETWORKSELECT]
  ;"Sysid"=dword:4 //force to 2G only
  "Sysid"=dword:3 //force to 3G only

For these registry keys to take effect, the user must keep the Phone Network Settings Applet open and integrate the registry keys.

- "Clean Boot" and "CleanBoot and Clean Application" packages have been updated ("ES400-MC65-CleanBoot&CleanBoot-Blank_v2.zip") for OS versions containing the Datalight FlashFX flash file system (BSP 2.41.4400 / 3.44.0000 or later). The new packages are compatible with older OS versions as well.

- Users with applications that utilize Microsoft SQL Server compact 3.5 are advised to update to Service Pack2 which can be [downloaded from Microsoft](). Some users have reported that this has resolved a sqlcese30.sys.dll crash in their application.

- The following older software patch that utilized the update loader method to load the patch is not supported on this OS due to incompatibility with the Datalight FlashFX flash file system. This patch should NOT be loaded onto any OS version from 02.41.xxxx or later, or it will result in the device failing to boot and will require the OS to be reloaded using the USB loader recovery method.

    - SPR21311 patch - Removed ability to enter engineering menu from the boot screen by holding down the "w" key while booting and removed ability to Clean Boot the device from the boot screen by holding down the "c" key while booting.[note this fix has been integrated into all OS versions since BSP 02.40.xxxx].

Other General Best Practices

- To avoid prompting of network credential for data connection on Verizon network activated devices, install the CAB files present in \Windows\WANResetTool_Cabs.zip.

- 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\Motorola\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_HighAvailabilty 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_HighAvailabilty.cab", from the \Windows folder.

PART NUMBER AND RELEASE DATE

659Bw65XcsUL044702.zip

659Bw65XcsAB044702.apf

659Bw65XctUL044702.zip

659Bw65XctAB044702.apf

659Bw65XdeUL044702.zip

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October 10, 2014