Release Notes - *MC659B OS Release 05.48.0002*

1 Introduction

This package contains the v05.48.0002 OS image for the MC659B terminals which are running with WEHH 6.5.3 operating system. This image supersedes the previous BSP 04.47.0002 image and older images.

2 Description

1. The 659Bw65XenUL054802.zip / 659Bw65XenAB054802.apf contain an Update Loader package / Airbeam package to load the 05.48.0002 OS image onto the terminal.

3 Contents

1. 659Bw65XenUL054802.zip / 659Bw65XenAB054802.apf
   - o partition.mbn - Partition Table
   - o Pkgs.lst - Images list installed through update loader
   - o StartUpdLdr.exe - Launch update loader
   - o modem.smb - Modem Firrmware
   - o FLASH.bin - Windows Mobile 6.5 Image.

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.

Bugs Fixed/Changes in this Release BSP 5.48.02 (from OS Image 04.47.0002)

General Enhancements/Features

- Microsoft - Windows Embedded Handheld - AKU 6.5.3.12.37 Build 29315.

- Fusion Rebranded Software H_3.40.0.1.064R is included.
- Rebranded EmScript(eMscriptcore version v1.3.5) and CaptureDump(v3.1.9) Debugging tools have been included.
- Data Wedge has been updated to v3.7.04.
- Virtual Platform - version 27019.
- Modem SVN has been updated to 27.
- " ES" option in Start->Settings->Home->Appearance has been renamed to "Mobile ES".
- " Home" options in Start->Settings->Home->Items has been changed to "Mobile Home".
- Ring Tone name " Ring" in Sounds & Notification applet has been renamed to "Mobile Ring".
- "Model Number" in Device Information application has been rebranded to show only MC65.
- Rebranded RTLogManager is included.
- Splash screen on Eboot and OS have been rebranded.
- Rebranded Enterprise Dialer is included

General Stability/Exceptions/Crashes/Lockups

- SPR25802/25895/25836/25954- Resolved an issue whereby the MC65 was not able to establish IP address once the units are docked in a CRD550x-4000ER cradle.
- SPR26360/26453- Resolved an issue wherein the device will pop up an error message "Maximum Host Mode Current Exceeded" when USB client device drains over 300mA from MC65 device.
- SPR26392 – SHA2 Support is added for WEHH6.5 devices. Resolved an issue whereby devices running WEHH6.5. SHA2 certificate is not recognized properly and installing any root SHA2 certificate gets installed in intermediate section rather than root section.Also there was an issue syncing emails from Microsoft exchange server.

WLAN

- Updated WLAN driver version: Fusion H_3.40.0.1.064R.This version of Fusion is ETSI compliant.

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.
    http://www.microsoft.com/en-us/download/details.aspx?id=8831
- 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 with assistance from Support.
    - 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):
  - o [HKEY_LOCAL_MACHINE\Software\ \dailyReboot]
    "Disable"=dword:00000000
    "dailyRebootTime"="02:30"
  - o 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.

4 **Device Compatibility**

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

Device	Operating System
MC659B	WEHH 6.5.3 Professional

5 **Installation Requirements**

- 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,BSP 04.47.02 and CPLD 1.8.

6 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.

7 Part Number and Release Date

659Bw65XenUL054802.zip
659Bw65XenAB054802.apf

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