ES400 OPERATING SYSTEM BSP 04.47.0002-LOCALIZED RELEASE NOTES

INTRODUCTION

This package contains the v04.47.0002 OS image for the ES405B terminals which are running with WEHH 6.5.3 operating system. This image supersedes the previous BSP03.44.0004 image and older images.

DESCRIPTION

The 405Bw65XxxUL044702.zip / 405Bw65XxxAB044702.apf (xx stands for Locale i.e. 'it' for Italian) contains an Update Loader package and AirBeam package to load the 04.47.0002 OS image onto the terminal.

CONTENTS

1.   405Bw65XxxUL044702.zip / 405Bw65XxxAB044702.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

Bugs Fixed/Changes from OS image 03.44.0004
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.

· 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 26.

· 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.

· SPR23990- Resolved an issue where Slow scanning was experienced

· SPR23790/SPR24227- Resolved an issue where the device may not Wake from a Suspend.

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

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

Notes:
· "Non-Datalight Images" (Microsoft File System) - 2.31.02 Or Older.

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

Image Upgrade
- When Updating from "Non-Datalight Images" (2.31.02 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.

· 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 2.41.400

/ 3.44.0000 or later). The new packages are compatible with older OS versions as well.

![ZEBRA logo]

·   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.

http://www.microsoft.com/en-us/download/details.aspx?id=8831
·   The following older software patches that utilized the update loader method to load the patch are not supported on this OS due to incompatibility with the Datalight FlashFX flash file system. These patches 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.

- SPR21310 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 ES400 OS versions since -02.41.0400]
- SPR20095 patch - When using a wired headset, an incoming ring is only heard on the wired headset. [note this fix has been integrated into this OS release]
- SPR20773 patch - When using a device in a vehicle cradle and the device is completely powered off via the press and hold power button shutdown menu, the device will turn on and boot up when external power is removed from the vehicle cradle. [note this fix has been integrated into this OS release]

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\ \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.

DEVICE COMPATIBILITY

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

Device	Operating System
ES405B	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

· ES405B currently running English Rev A BSP19.1, BSP19.11, MR1 BSP19.103, BSP 31.2,BSP 41.400,BSP 44.0000,BSP 03.44.0004 and CPLD 13.1

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 camera key to start the update loader process.

PART NUMBER AND RELEASE DATE

405Bw65XcsUL044702.zip

405Bw65XcsAB044702.apf

405Bw65XctUL044702.zip

405Bw65XctAB044702.apf

405Bw65XfrUL044702.zip

405Bw65XfrAB044702.apf

405Bw65XdeUL044702.zip

405Bw65XdeAB044702.apf

405Bw65XitUL044702.zip

405Bw65XitAB044702.apf

405Bw65XjpUL044702.zip

405Bw65XjpAB044702.apf

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405Bw65XswUL044702.zip

405Bw65XswAB044702.apf

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