



DEVICE CONFIGURATION PACKAGE V1.8 FOR MC9090C50 WITH WINDOWS CE V5.0 (BSP35.0) RELEASE NOTES

INTRODUCTION

The REV H software package for MC9090c50 with Windows CE v5.0 contains the binary images and the OSUpdate package corresponding to DCP version 1.8. The DCP provides tools necessary for customizing the associated Platform and Application images.

DESCRIPTION

General Enhancements

- WLAN Fusion version 2.57.0.0.18R
- BTEplorer version 1.2.6 Build 24421.
- AirBEAM, Rapid Deployment Client & MSP Agent - version 5.65.
 - This software release has been tested on MSP 3.2 and passed MSP Compliance.
- Windows CE 5.0 OS build with QFE updates till June 2008.
- Updated SMB server (Samba file server) installation file in Application partition to June 2008 QFE baseline.
- The DCP installation is applicable for all localized configurations.
- Heximages and OSUpdate files have been removed from DCP and are available as separate download.

General Issues Resolved

- Added fix for Favorites menu in IE for Kiosk Mode.
- SPR 15113 Fix: Customer's application is writing data from application to SQL DB on SD card. When device suspend and resume, they see transaction errors from time to time.
- SPR 14734 fix: RegMerge driver truncates any number of back slashes in the registry data to a single back slash.



- Expanded the command line building to control to creating partition tables, splash screens, Platform and Application
- Fixed an issue where USB file download was not working in Windows Vista as expected
- Increased the COM port count to 99 from 4 so COM port index up to 99 could be supported.
- Added capability to enumerate INI files in both \Programs Files\Motorola\TCM2 and \Program Files\Symbol\TCM2 folders. This solution coupled with changes to install shield scripts of DCP's to copy the new TCM.exe to both above folders would address potential problems arising out of invoking TCM script files from respective installed DCP locations, where it was observed in certain instances TCM was recommending to convert the scripts as it could not locate the corresponding INI file associated with the script file being invoked

Scanner Issues Resolved

- SPR 14976 Fix: updated with new PixDLL to improve the scanning performance.
- SPR 14729 Fix: Not able to decode Inverse Data Matrix barcodes.
- SPR 14991 Fix: Added support for QR_INVERSE Decoder Params.
- Bookland EAN issue fixed.
- ISBT128 Concatenation feature
- Fix for Illumination Allowed.
- RSS no decode issue fixed.
- Codabar decode issue due to invalid decode status result fixed.
- Fixed the enumeration for ISBT128 Concat mode. (Will not work in Auto mode)
- Supports ISBT128 concatenation feature as well as check ISBT table for common pairs.
- Over Night Scanning Fails: Issue Fixed.

Enhancements in WLAN - Fusion 2.57.0.0.18R

Cumulative notes since BSP30 CE release with Fusion 2.55.1.0.10R



Features:

- Support added for CCX v3 including CCKM for all Photon based devices.
- EAP FAST enhanced to allow manual, file based, PAC provisioning.
- WPA2 enhanced to allow a mixed mode of AES and TKIP encryption options
- Fusion API updated to support all new features including file based PAC provisioning

Issues Resolved:

- SPR 15921 – Added country code support for Tunisia
- SPR 15555 – Security breach in PAC Store
- SPR 15389 – Device occasionally failed to re-auth after suspend resume
- SPR 15366 – Registry handle leak found in Fusion 2.55.1
- SPR 15277 – Allow importing PFX file that is not password protected
- SPR 15188 – Fixed Fusion API to return correct version information
- SPR 15204 – Allow viewing MAC address on IPv4 page after a boot-up without first associating to an AP
- SPR 14824 – Device.exe Exception in certain situations where WPA2-Enterprise is used in conjunction with more than 16 APs
- SPR 16004 – When changing the WinCE color profile, UI becomes unusable for few colors.

Enhancements in Bluetooth - BTE Explorer 1.2.6 Build 24421

Cumulative notes since BSP30 CE release with BTE Explorer 1.2.4 Build 14702

Features:

- SYNC persistent change log.
- BTSnoop format HCI log readable by FTE Capture File Viewer.
- The BTE Explorer Provisioning API has been extended with several new features. These new functions are documented in the BTE Explorer Provisioning API document. The following is a breakdown of the new features.



- a. Command to set the PIN for the local device. The Provisioning API will overwrite any PIN previously stored in BTE Explorer and will return to the calling application the overwritten PIN. The new PIN will be used for all incoming connections to local services requiring authentication. This command can be used to clear the PIN used for incoming connections by setting the PIN length to 0.
 - b. By default, if no PIN has been assigned for incoming connections either in BTE Explorer or through the Provisioning API, a pairing dialog will be presented to the user. When a PIN for incoming connections is has been assigned, no dialog will be displayed. A registry value has been added to [HKLM/Software/Stonestreet One/BTE Explorer/User Interface] called SuppressPINDialog to prevent the PIN dialog from being displayed. In the case where the PIN dialog is suppressed and no PIN has been assigned for incoming connections, the connection will fail.
 - c. Command to set the PIN for all outgoing connections to services on remote devices that require authentication. There is no corresponding PIN dialog in BTE Explorer. If an outgoing PIN has been assigned through the Provisioning API, the PIN dialog will not be displayed for outgoing connections. Instead, the outgoing PIN will be used for the connection. The developer may use the registry value [HKLM/Software/Stonestreet One/BTE Explorer/User Interface] HideSPPOpen to suppress error messages and progress dialogs on outgoing connections. This function can be used to clear the PIN for outgoing connections by setting the PIN length to 0.
 - d. A method to return information about the local device. This information includes the friendly name, the Bluetooth board address (BD ADDR), and the class of device.
- The BTE Explorer Provisioning API has been further expanded for the HID profile. The new functions and structures have been added to the BTE Explorer Provisioning API document. The following is a breakdown of the new functionality.
- a. A method to discover remote devices that support the HID profile. This is an extension to the current methods that discover devices supporting RFCOMM.
 - b. A method to search for services on a remote device supporting the HID profile.
 - c. A function to add a remote device that supports the HID profile as a Favorite in BTE Explorer.
 - d. A function to delete the HID device from the list of Favorites.



e. Commands to connect to and disconnect from the remote Favorite HID device.

Issues Resolved:

- SPR 13744 Fix: Application will freeze, if the main thread priority is set higher than normal, and SSO BT stack is initialized using BSC_INITIAZE.
- SPR 15507 Fix: StackBTC PIN authentication bug
- SPR 15565 Fix: BTEplorer provisioning API BTPDeleteConnection() does not entirely remove BT favorites.
- SPR 15508 Fix: device fails to print after change of Operation Mode from Wizard to Explorer or Vice Vera.
- SPR 15172 Fix: device will not enable bluetooth radio and establish connection to favorite when writing to com port.
- SPR 15410 Fix: when using HideSPPOpen set to true, an application attempting to open up a Bluetooth COM port will loose focus
- SPR 15464 Fix: long printout truncation with Zebra printer
- Addressed an issue where, with the interaction between BT Explorer's Favorites page and the Provisioning API call to BTPDeleteConnection. Although the connection and accompanying favorite was deleted from BT Explorer per the API call, there were instances where an errant, 'ghost', icon of the favorite remained in the Favorites window.
- A problem was identified in the SPP driver where the mapping of RTS/CTS and DTR/DSR were not correct.
- Removed logic that displays a cancel confirmation dialog when the user cancels the settings dialog. The previous logic only displayed the latter dialog if the user added or deleted a service. Now, the settings dialog silently cancels either of these operations when the user chooses to cancel the dialog. This behavior is consistent with other settings tabs.

Enhancements in MSP 3.0 Client - Version 5.65

Cumulative notes since BSP30 CE release with MSP 3.0 Client - Version 4.43

- Added MSP 3.2 control functionality.
- Added fix for AirBEAM client menu issue



- Updated Fusion plug-in that supports automatically powering on WLAN in RD.
- Added logic to close RD and MSP Agent applications when a ctrl-Q or VK_ESCAPE is sent to the application.
- Updated Fusion plug-in to support new Fusion protocols.
- Added fix for issue where task bar was cleared after RD and after reboot.
- Added fix for issue when AB client configuration UI used to enter maximum characters for Package1 through Package8.
- Added change to allow close button (X) to redisplay after RD client is closed.
- SPR 15363 Fix: Added fix to handle BATCH command file lines that are not terminated by CR/LF
- Added fix for staging log not being uploaded in staging profile forces two or more reboots.
- Added fix for -1012 error which is caused if bundle file not ready when job delivered. Logic was added to automatically retry when this situation occurs.
- Added fix for issue when more than two jobs are queued for a device. The client-side logic that got the list of jobs didn't handle more than two jobs correctly.
- Added fix for -858 error when client was downloading from some FTP servers. The -858 error was caused by issue with client's implementation of the FTP restart command.
- Added change to increase the size of the FTP receive buffer. This change helps eliminate -813 errors when downloading directly to slower FLASH from some FTP servers.
- Added fix for Kerberos support in legacy WLAN setting plug-in (NwProfile.dll).
- Added support for relay server setting Private IP Address where the IP address has a leading decimal. This IP address specifies a partial IP address. The device's actual IP address is used to fill in the remaining octets. This feature has historically been supported in AirBEAM, but until now was not supported in MSP RD or MSP agent.
- Added RDLeapUtil.exe to resolve issue where LEAP was not working.



MC9090 specific changes

- Wavelink TE v7.0.12.
- Microsoft components “KERBEROS” and “MSXML” have been added to the OS configuration.
- Fixed issue where white screen appears on suspend/resume after cold boot.
- The Power micro image has been provided in the HexImages folder in the “.hex” format.

Notes:

- To make serial ActiveSync work the following Registry Settings on the PC has to be changed. ‘SerialBaudRate’ has to match the ActiveSync serial baud rate on the device (For example if the device has the baud rate set to 115200 then set as follows on the PC).[HKEY_CURRENT_USER\Software\Microsoft\Windows CE Services]
SerialBaudRate (DWORD) : 0x0001c200 (115200)
- MMC cards are not supported in IPL mode, only SD cards are supported.
- “VTHP number of rows” in wavelink emulator needs to be set to 25 to make the CLS command clear the entire screen.
- **IPL/monitor mode download** - If the terminal has monitor version v1.35 or before, the Image download via IPL/monitor mode fails for the latest OS and monitor images.
Workaround: Running OSUpdate will solve this or else the following two step approach will have to be followed:
 - i. If existing monitor version is 1.33 or 1.35(Monitor released prior to DCP v1.4) then flash the monitor 1.42 or 1.43 (Monitor released in DCP v1.4 or v1.5). Reset and go to IPL/monitor mode
 - ii. Flash Monitor latest version of the monitor (Example: Monitor v1.49 released in DCP v1.6). Reset & Flash rest of images.
- **OSUpdate Package Builder compatibility** - For BSP26 (DCP v1.6) and above, the compatible AirBEAM® OSUpdate Package Builder Utility is Version 1.45 or later.
It is not compatible with Version 1.39. If an AirBEAM package is created for previous releases (pre BSP 26) using AirBEAM package version v2.15 and OS package builder v1.39 and then deployed onto new display configuration, then the display will blank-out. AirBEAM packages should be built with OSUpdate package builder version 1.45 or later.



CONTENTS

1. 9090c50BenDC010803.exe - Device Configuration Package v1.8 for MC9090c50B with Windows CE v5.0.

The Device Configuration Package provides Terminal Configuration Manager (TCM) and the associated TCM scripts. With this package hex images that represent flash partitions can be created and downloaded to the mobile computer. Please refer MC9090 Product manuals for details of using TCM.

2. 909Xc50BenHX013500.zip - Hex images for MC9090c50B with Windows CE v5.0 English configuration.

Hex Files – Used to reload the default flash file partitions using TCM

Component	File Name	File Size
Partition Table	909Xc50BenPT015.hex	9.01 KB
Application	909Xc50BenAP036.hex	5.73 MB
Platform	909Xc50BenPL036.hex	5.70 MB
Splash Screen	909Xc50BenSC016.hex	78.6 KB
Splash Screen	909Xc50BenSM016.hex	38.9 KB
Power Micro	909Xc50BenPM112701.hex	16.3 KB
Monitor	909Xc50XenMO0153XX.hex	461 KB
Operating System	909Xc50BenOS013500.hex	27.2 MB



3. **909Xc50BenUP013500.zip** - OSUpdate Package for MC9090c50B with Windows CE v5.0 English configuration.

OSUpdate Files – Used to reload the entire image. These files are to be used with either the SD card or the \Temp directory.

Component	File Name	File Size
Script file used by the OSUpdate Utility on Color display terminal	909Xc50BenColor.txt	1 KB
Link file to execute to start Update process using an SD card on Color display terminal	909Xc50BenColor_SD.Ink	1 KB
Link file to execute to start Update process using the \Temp folder	909Xc50BenColor_TEMP.Ink	1 KB
Script file used by the OSUpdate Utility on Mono display terminal	909Xc50BenMono.txt	1 KB
Link file to execute to start Update process using an SD card on Color display terminal	909Xc50BenMono_SD.Ink	1 KB
Link file to execute to start Update process using the \Temp folder	909Xc50BenMono_TEMP.Ink	1 KB
Flash Utility used by OSUpdate	FlashUpdateUtility.dll	74.5 KB
OSUpdate Utility	osupdHblvd.exe	56.5 KB

Images - Used by the OSUpdate utility to update the device. Following are the contents of the images folder:

Component	File Name	File Size
Partition Table	909Xc50BenPT015.hex	9.01 KB
Application	909Xc50BenAP036.bgz	1.85 MB



Platform	909Xc50BenPL036.bgz	3.39 MB
Splash Screen	909Xc50BenSC016.hex	78.6 KB
Splash Screen	909Xc50BenSM016.hex	38.9 KB
Power Micro	909Xc50BenPM112701.bin	14.7 KB
Monitor	909Xc50XenMO0153XX.hex	461 KB
Operating System	909Xc50BenOS013500.bgz	11.0 MB

DEVICE COMPATIBILITY

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

Device	Operating System
MC9090	Windows CE 5.0 Professional

INSTALLATION REQUIREMENTS

Microsoft Windows 2000 or Windows XP Operating System

INSTALLATION INSTRUCTIONS

- DCP Installation - Download the 9090c50BenDC010803.exe installation file, execute it, and follow the install screen prompts.
- Terminal Update - Extract the 909Xc50BenUP013500.zip file and copy the 'OSUpdate' folder along with the sub-folders to the root of either the SD card or the \Temp directory and start the update process by executing the corresponding link file. It is important that the directory structure be maintained for proper operation.

PART NUMBER AND RELEASE DATE

9090c50BenDC010803

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