
Release Notes - MC5590 03.38.04 WM 6.5 Classic

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Introduction

The released software v03.38.04 contains the images required to update MC5590 devices to WM6.5 REV D.

The MC5590 is an Enterprise Digital Assistant (EDA). Its hardware includes WiFi A/B/G radio, Bluetooth radio, color QVGA display and various scanning options including laser, color camera and monochrome imager.

Description

General Enhancements:

- Microsoft WM6.5 COM3 (AKU 6.5.3 build 23096)
- WLAN Fusion version 3.0.0.0.51R
- BTExplorer 2.1.1 Build 27053
- MSP Agent 7.03.07, Airbeam 7.03.07, RD Client 7.03.07

This software release has been tested on MSP 3.3 and passed MSP Compliance.

- Seamless upgrade/downgrade between WM6.1 and WM6.5
 - In order to support WM 6.5 COM3 OS the OS partition size has been increased by 16MB and correspondingly the Persistent store has been reduced by 16MB.
 - On MSP AirBEAM upgrade Network connectivity settings are persisted across upgrade/downgrade so as to allow the device to connect back to the network post upgrade/downgrade. Please refer to WM6_MSPUpgrade doc.

· If you flash a WM6.1 image on WM6.5 device using standard update loader method, the device will retain the WM6.5 partition layout. If you need to regain the 16MB space for the persistent store, you must “downgrade” the WM6.5 device to WM6.1 using the “Downgrade package”.

· Notes:

- Make sure the Main battery of the device is sufficiently charged and is placed in A/C powered cradle before starting upgrade/downgrade
 - Make sure to use the recommended SD cards referred in Commodity-Peripheral- PRD for Upgrade/Downgrade using SD card. On unapproved SD cards the Upgrade/Downgrade might take more time as Read/Write speed is less.

- Application partition can be backed up by at least 10MB. Please refer 'WM6.1 - WM6.5 Upgrade_Downgrade Instructions.doc'.
- Adobe Reader Lite Edition v2.5 for viewing .pdf files.
- Adobe Flash Lite plug-in for Internet Explorer
- New Icons compatible with WM6.5 COM3.
- Maximum RAM Disk support is now 57MB for MC55.
- Improved Touch screen sensitivity.
- Added the functionality to map Volume Keys to control IE zoom
 - User can press and hold the volume up/down keys for continuous Zoom operation.
 - The IE Zoom-In/Out behavior customization will take effect only when the IE mobile browser is on the foreground, without any audio being played on the device.
- Whenever audio is played the control reverts back to default Volume +/- functionality.
 - The registry keys to change the default IE Zoom VKEY mapping are available at:
 [HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Main]
 "Zoom In Shortcut"=dword:000000E3 ;Map Zoom-In to E3 (OEM specific unused VK code)
 "Zoom Out Shortcut"=dword:000000E4 ;Map Zoom-Out to E4 (OEM specific unused VK code)
 - The user can remap the Zoom-In/Out keys which takes effect on new browser instance (Exit/EndTask IE and reopen)
 - Note: Deleting "Zoom In Shortcut" or "Zoom Out Shortcut" registry keys will completely disable this feature.
- Added UI setting control panel applet:
 - Enable/Disable the mapping of IE ZOOM control to Volume keys.
 - Customization of start screen grid view [1 to 4 columns]
- Default ring tone changed to legacy WM6.1 ring tone

Features/Fixes in Audio

- VQM now reflects version number as 2.6, on icon's tap-and-release and reflects the file version as 2.6.0.7 seen after right click of VQM executable.
- VQM now supports default modality of handset for system audio. With this fix, VQM will correctly maintain the handset modality on its launch and correctly switch back to handset mode once VoIP calls are disconnected (if handset is the default mode set)
- Added fix for Notification and audio files are playing in the ear speaker instead of the back speaker.
- Fixed bug AUDIOPROCESS_Close Func typo error to AUDIOPROCESS_Close.

Features/Fixes in Scanning

- Continuous Read feature is added
- Added new configuration parameters SameSymbolTimeout and DifferentSymbolTimeout (across all our scanners)
- Issue fixed where sameSymbolTimeOut and differentSymbolTimeOut are not updating correctly in Continuous read mode.
- Ability to read PDF417 bar code
- Added support for new decoder type US4STATE_FICS
- Fixed issues in ScanMDD
 - Buffer overrun when scan buffer is too small
 - Buffer too small error reported even though the buffer has enough space for the barcode
- **RS507 & Scanning Service**

- bDisplayBTAddressBarcode – A new interface param which when set displays the pairing barcode for user to scan and connect has been added (RS507 specific feature)
 - Feedback on RS507 is disabled to fix issue where previous scanned barcode data is still displayed even after a new barcode is scanned in repeating mode. The user can enable feedback on the RS507 using and RSM command.
- **Camera & Blockbuster**
 - Camera Frame rate configurable via registry.
 - Fixed performance issue of video recording [The device took 58 seconds to save a 27 seconds video]
 - Bug fixes for camera driver.
 - New capabilities for the Imaging API added (Blockbuster)
 - Added a feature that allows all the interface params to be changed without having to enable the scanner first
 - Fixed the exceptions seen in PixDLL (v5.10.103.2) when Pico imager is turned on followed by the Camera.

SPRs included

- SPR 17727/17953 - USB config applet causes problem with Ethernet Cradle.
- SPR 17487 - Camera performance improvements.
- SPR 17733 - Making sure Force Speaker does not turn ON when in handset mode for VoIP and WAN.
- SPR 17710/SPR17653 - Fix in SPI driver for the QVGA (MC55) display issue which affects the picture taken.
- SPR 17737 - After the changes to the Avaya client for SPR 17736 and VQM's enhancements from SPR 17731, VQM will sometimes switch to the wrong audio mode (i.e. Speaker phone mode instead of Handset mode)
- SPR 17407 - Discovering BT devices dialog will never finish with Microsoft stack if the current BT connection is dropped.
- SPR 17629 - MC55 - Trying to make a DUN connection through a Bluetooth modem. MC55 can connect to modem and dial out but never completes session and terminates. Microsoft BT Stack works fine.
- SPR 17376 – MC55 OEM 27 AKU 1.4.1 file placed in windows with CAPITALS will be readonly after a warmboot. seems to be MS issue
- SPR17834 - Smart Battery MFG_DATE_STRUCT structure has the values for month and day reversed.

MC5590 Specific Changes

- Added DEX support

For DEX application to work, apply the following registry and warm boot:

MC5590 WM6.5:

```
[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\Serial6]
"Index"=dword:00000002
```
- MSR driver included in the OS.
- Disabled A5/2 ciphering mode for PTCRB test Regulatory requirement
- Clean Application bin file added to UL package to be in sync with other MPA products. For retaining application partition data, the user should remove this entry(55xxw65LenCA000001.bin) from Pkgs.lst [note this only applies to the Update loader package and not the Upgrade Package]

Bluetooth - BTExplorer Release Notes 2.1.1 Build 27053

- “ServerCOMPorts” registry value has been removed to prevent COM1 from appearing as an available port even if the port is physically unused.
- Fixed an issue where PIN code was being displayed in Settings->Security tab even after deleting the PIN
- Fixed an issue where the Changes made in Connection Highlighting Settings (Settings->Miscellaneous tab) was not persisting across warmboots.
- Fixed an issue where sometimes the Wizard Mode was performing SDP on the incorrect device in certain scenarios, such as selecting “Next” without altering the default selection.
- Fixed an issue where duplicate registry keys were being created when BT profiles are disabled via the Network Policy AllowedProfiles key.
- Fixed an issue where the device does not use static incoming PIN code if the pairing is initiated by the remote device.
- SPR17746 - Fixed an issue where BTExplorer was not saving new favorites that were created programmatically until BTExplorer was disabled.
- **Other Notes**
 - Modified the BTExplorer.reg file shipped with all platforms to exclude all “ExtModems” keys except COM21 (Bluetooth Dial-up Modem). This will cause the OS user interface to only display a single entry (COM21) for DUN connections over Bluetooth.
 - The Fixed PIN UI option now only affects incoming *legacy* pairing connections and no longer alters Secure Simple Pairing behavior. The provisioning API still causes the device to use JustWorks pairing so that no user interaction is required, unless this option is disabled via the registry.

WLAN - Fusion Release Notes 3.0.0.0.51R

- Copyright date updated to 2010 and company name to Motorola.
- (Primary) key edit on profile editor masked key entry page now clears on first input after keys are loaded from a saved profile. Also accounts for keys loaded when WEP key index selection is changed.
- Profile editor now properly resizes to avoid closed SIP panel.
- Fixed "AUTO TIME CONFIG" being 1 hour off after connecting to AP
- Added Japan-Only, RoWv3 SKUs to dynamic regulatory table
- Reorganized Fusion html help files for WM65 OS
- Fix to remove flickering from Logos and Certifications when alpha/function/shift key is pressed
- TX Throughput performance improvement.
- Fixed full screen version of WcLaunch to disable scrolling by gestures if scrolling is disabled.
- Authentication modes in profile are now reset when in ad-hoc mode.
- Adjusted offset for password pop up hint.

Fixed Issues in MSP Agent 7.03.07

- Fixed issue with scanning barcodes with wedge scanner causing scan dialog to exit.
- Fixed issue with settings jobs being handled by proxy plug-in with bundle handler.
- Added agent.supportsProxyPlugins attribute for proxy-enabled MSP agent.
- Fixed issue with format of name and contents of nv.gz upload file for device-based MSP proxy agent.
- Fixed issue with path for default built-in setting handlers for proxy device classes on device-based MSP proxy agent.

- Fixed issue with erroneous values returned for identity.proxyServerDNSName and identity.proxyServerDNSDomain. If the DNS values are undefined for a PC running the MSP proxy agent then the value of identity.deviceOS was reported for the DNS attributes.
 - Changes to support WM 6.5 COM3 UI, including issue with Start icon.
 - Fixed issue with invalid error messages for autostage connectivity issues.
 - Fixed issue with DISABLEOPTIONS30 registry name in airbeam.reg file.
 - Fixed issue where PC proxy agent was not reporting DNS name.
 - Fixed issue where OnDemand client could not process RD profiles longer than 1K bytes. Limit has been increased to 32K bytes.
 - Fixed issue where abup30 packages were not including abboot.exe delay on devices that did not have the MSP certificate installed.
 - Changed logic to escape values greater than 0x7f in attribute values.
 - Added fix to return error if multiple autostage profiles exist on relay server.
 - Added fix for issue where detached jobs reported as completed successfully on MSP server even when the install fails.
 - SPR 17560 - Added change to allow values greater than 0x7f in attribute values.
- Change was made to support extended ASCII characters for European language characters.
- Fixed issue where time conditions where time window crosses midnight always failed.
 - Added fix for issue where abup30 update does not work on devices with AB version 1.x.
 - Added descriptions to newer abup30 packages.
 - Fixed issue where autostaging fails with "Invalid RD Profile" error message.
 - Added logic to clean out package cache after detached jobs processed.
 - Added logic to clean package cache.
 - Fixed issue where abup30 package was removed after clean boot even though install was persistent.
 - Added support for device-based certificate for Fusion profiles in FusionPublic setting DLL.
 - Added fix for exception error in MSP agent when using auto-wake feature to wake devices for check-in.
 - Added support for ForceTime in Certificate setting.
 - Fixed logic to remove WLAN profiles if RD fails in Legacy WLAN setting plug-in.
 - Fixed logic to remove WLAN profiles if RD fails in WZC WLAN setting plug-in.
 - Decoupled "Persist Across Cold Boot" option from Fusion "profile roaming" option in FusionPublic setting plug-in.
 - Added support for ForceTime in Certificate setting.
 - Added support for MSP 3.3
 - Support for detached jobs.
 - Support for dynamic content.
 - Support for auto-staging.

Known issues in the Windows Mobile Products:

- By default Input panel applet is not displayed in Start->Settings->Personal page due to a known issue from Microsoft wherein the user will not be able to close the Input panel applet.

As a workaround if enabled, the applet can be closed using the "OK" button on the hard keyboard.

Remove the below registry entry and reboot, to display the "Input" applet under Settings\Personal page.

"Redirect"=""

which is present in the following section:

[HKEY_LOCAL_MACHINE\ControlPanel\Input]

- IE Mobile 6 - Keypad "Enter" key will not take effect on web page button controls if the user is browsing with zoom level changed., Tab key is used select the button control and Enter Key from Keypad is used for button press event. Issue noticed when the zoom level is increased. Observed with physical keypad and not with SIP keys.

IE Mobile 6 Zoom Feature:

- With IE in foreground and audio played in BT stereo headset with A2DP profile, the volume controls work as IE Zoom In/Out functions instead of expected volume +/- functionality.

Known issues in MC5590:

- By design USB ActiveSync will not work when a MSR attached to a terminal
- MSR will not work if the USBConfig settings of device is in Client mode. It has to be in Host mode or in OTG mode so that when the MSR is attached it switches to Host mode On-The-Go. Out of the box or on Cleanboot, the device will be in OTG mode and stay in OTG mode unless the user changes the configuration using USBConfig applet. In USBConfig applet, the default option selected is Client Mode. So if a user opens the applet and presses ok, it switches to Client mode. In this case user has to explicitly change it to OTG/HOST mode.
- Unable to enter Static IP address on QVGA (MC55) devices.
Work around is to use the following registry key
Following workaround can be applied for configuring Static IP Address in MC55:
IP Address, Subnet Mask & Default Gateway can be configured using the following registry entries

```
[HKEY_LOCAL_MACHINE\Comm\<COMM_ID>\Parms\TcpIp]  
"EnableDHCP"=dword:00000000  
"IpAddress"=hex(7): <value>  
"Subnetmask"=hex(7): <value>  
"DefaultGateway"=hex(7): <value>
```

Where <COMM_ID> =

```
AsyncMac1      ;"AsyncMac NDISWAN Miniport"  
JEDI10_1      ;"Motorola JEDI WiFi Driver"  
L2TP1         ;"L2TP NDISWAN Miniport"  
LANNDS1       ;"USB/Ethernet Series Adapter"  
NE20001       ;"NE2000 Compatible Ethernet Driver"  
PPTP1         ;"PPTP NDISWAN Miniport"  
RNDISFN1      ;"Remote-NDIS Host"  
SS1VNDIS1     ;"Bluetooth Network Driver"  
VEM          ;"Virtual Ethernet Intermediate Miniport"  
...
```

For example to configure Motorola JEDI WiFi Driver with:

Default Gateway : 157.235.208.246

IP Address : 157.235.208.86

Subnet Mask : 255.255.255.0

set the following registries:

```
[HKEY_LOCAL_MACHINE\Comm\JEDI10_1\Parms\TcpIp]
"DefaultGateway"=hex(7):\n    31,35,37,2e,32,33,35,2e,32,30,38,2e,32,34,36,00,00,00,00,00
"Subnetmask"=hex(7):\n    32,35,35,2e,32,35,35,2e,32,35,35,2e,30,00,00,00,00
"IpAddress"=hex(7):\n    31,35,37,2e,32,33,35,2e,32,30,38,2e,38,36,00,00,00,00
"EnableDHCP"=dword:00000000
```

Contents

1. 55x0w65LenUG033804.zip – Upgrade Package [WM6.1 to WM6.5 Upgrade]
2. 55x0w65LenUG033804.APF – AirBEAM Upgrade Package [WM6.1 to WM6.5 AirBEAM Upgrade]
3. 55x0w65LenUL033804.zip – Update Loader Package [WM6.5 to WM6.5 Update]
4. 55x0w65LenAB033804.APF – AirBEAM Update Package [WM6.5 to WM6.5 AirBEAM Update]
5. 55x0w61LenDG023501.zip – Downgrade Package [WM6.5 to WM6.1 BSP35 Downgrade]
6. WM6.1 - WM6.5 Upgrade_Downgrade Instructions.doc
7. WM6.1 - WM6.5 MSPUpgrade Instructions.doc

Device Compatibility

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

Device	Operating System
MC5590	Windows Mobile 6.5

Installation Requirements

- MC5590

Installation Instructions

Refer "WM6.1 - WM6.5 Upgrade_Downgrade Instructions.doc" for detailed instructions to upgrade MC5590 **WM 6.1** device to **WM 6.5** OS.
and "WM6.1 - WM6.5 MSPUpgrade Instructions.doc" for detailed instructions to upgrade using MSP.

Part Number and Release Date

55x0w65LenUL033804

55x0w65LenUG033804

55x0w65LenAB033804

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