

Software Release Notes

CN50 Series OS v2.10.32.0002

Windows Embedded Handheld 6.5

Overview

This is a maintenance release of the Windows Embedded Handheld 6.5 Operating System for the CN50 series handheld computers.

Supported Hardware

- All 256 MB RAM CN50 configurations.

Version numbers

| | CN50 2.10.32.0002 Release | CN50 2.10.00.0656 Release | CN50 1.70.21.0038 Release | CN50 1.61.15.0063 Release | CN50 1.61.15.0054 Release |
|-------------------|--|--|--|--|--|
| Microsoft WM | 6.5.3.12.43 | 6.5.3.12.5 | 6.5.3.12 | 6.1.4.8 | 6.1.4.8 |
| IBI | 6.01.00.0046 | 6.01.00.0046 | 6.00.40.3803 | 6.00.40.3803 | 6.00.40.3803 |
| IDL | 4.02.00.1858 | 4.02.00.1858 | 4.02.00.1637 | 4.02.00.1637 | 4.02.00.1637 |
| IVADCEDrivers | 1.07.00.0375 | 1.07.00.0375 | N.A. | N.A. | N.A. |
| Printer_Configlet | 2.20.00.0021 | 2.20.00.0021 | N.A. | N.A. | N.A. |
| IVAEventlog | 5.70.00.0017 | 5.70.00.0017 | N.A. | N.A. | N.A. |
| Intermec_Settings | 5.70.00.0080 | 5.70.00.0080 | N.A. | N.A. | N.A. |
| STCDecodes | 2.01.08.0005 | 2.01.08.0005 | N.A. | N.A. | N.A. |
| IVAPAL | 6.02.00.0336 | 6.02.00.0336 | N.A. | N.A. | N.A. |
| IVADeviceSettings | 6.02.00.0243 | 6.02.00.0243 | N.A. | N.A. | N.A. |
| IVAVirtualWedge | 6.02.00.0321 | 6.02.00.0321 | N.A. | N.A. | N.A. |
| IVADCE | 6.03.00.0451 | 6.03.00.0451 | N.A. | N.A. | N.A. |
| SS_Client | 4.03.11.0591 | 4.03.11.0591 | 3.48.07.0669 | 3.48.07.0669 | 3.48.07.0669 |
| INET | 1.02.00.0003 | 1.02.00.0003 | 1.02.00.0002 | 1.02.00.0002 | 1.02.00.0002 |
| ITCFunkSupplicant | 2.01.08.0392 | 2.01.08.0392 | 2.01.06.0333 | 2.01.06.0333 | 2.01.06.0333 |
| ITC80211Api | 2.01.06.0333 | 2.01.06.0333 | N.A. | N.A. | N.A. |
| TUSB | 2.01.112.0000 | 2.01.112.0000 | 2.01.112.0000 | 2.01.112.0000 | 2.01.112.0000 |
| IDL_LS | 1.15.00.0153 | 1.15.00.0153 | N.A. | N.A. | N.A. |
| TCO_GUI | 1.03.01.0282 | 1.03.01.0282 | N.A. | N.A. | N.A. |
| IVA | N.A. | N.A. | 5.06.72.3295 | 5.06.72.3295 | 5.06.72.3295 |

New Functionality

2.10.32.0002 Release

- Updated AKU to the latest version (43), which includes support for SHA-2.

2.10.00.0656 Release

- Improved file system performance by having OneNand run in Sync mode
- Ability to upgrade OS via SD card flashing
- Ability to adjust microphone gain
- Route phone audio to SD50 dock for CN50
- Support for 5MP camera
- Power save mode for Wifi
- Battery voltage returned in GetSystemPowerStatusEx2 API
- In GPS Extra mode, GPS will now establish a connection and download assistance data if a connection is not established.
- Support for new Ethernet Multidock
- Added Simplified Chinese language in LP builds
- Ability to use SmartSystems to upgrade from WM6.1 to WM6.5
- Intermec supplicant is now the default
- Pressing scan button wakes the device from suspend.
- Ability to switch audio output device
- TCO dashboard
- Location services IDL
- CCX v4 certification
- Office Mobile removed from WWE builds.
- Added support for Rev. C USB transceiver.

1.70.21.0038

- Support for CN50B configuration and new camera module

1.70.21.0035

- Initial WEHH 6.5 release.

1.61.15.0063 Release

- Added support for Rev. C USB transceiver.
- Added support for new CN50 ethernet multidock.

1.61.15.0054 Release

- Support for the new "CN50B" configuration and new camera module.

1.61.15.0043 Release

- ① Added IFTP application
- ① Added support for the Single Dock (RNDIS Ethernet Adapter)
- ① Added support for the MSR snap-on
- ① Added Intermec Supplicant (disabled by default in this release)
- ① Added Intermec DHCP
- ① Added Intermec Settings applet
- ① Added printer configuration support
- ① Added Bluetooth Wireless Scanner Wizard and Enabler
- ① Added support for full keyboard remapping
- ① Added "press and hold" support for the orange key plane
- ① Added Korean language option in the LP build
- ① Added support for disabling camera and scanner imaging
- ① Changed to TFAT formatting of the Flash File Store

1.51 Release

- ① Added support for EA11 scanner
- ① Added GPS Xtra support
- ① Added Remote Desktop Mobile to the image

1.45 Release

- ① Added support for 256MB memory configurations

Defects Fixed In This Build

2.10.32.0002 Release

- None

2.10.00.0656 Release

| ID | Description Summary | Subsystem |
|-------------|--|------------------|
| ICM00005176 | The Bluetooth headset connection is dropped when a voicemail message is received | Bluetooth |
| ICM00007141 | Missed call notification LED does not remain lighted when device enters suspend. | Power Management |
| ICM00009568 | Synchronization issue between speaker button and actual speaker phone mode when mute button is pressed. | Audio |
| ICM00010115 | Transferring large files over a Bluetooth ActiveSync connection will sometimes fail and may freeze the device. | Bluetooth |
| ICM00010430 | Picture taken date shows incorrect date. | Camera |
| ICM00015567 | Virtual Wedge location moved - SSAPI calls to previous location fail | IVADCE |

1.70.21.0038 Release

- Fix clean boot failure issue

1.70.21.0035 Release

None

1.61.15.0063 Release

None

1.61.15.0054 Release

- Fix clean boot failure issue
- CPR 110419-000124 – time/date EXIF information in pictures not correct
- Lock APPS partition
- Fixed "Battery Bounce" issue
- CPR 100831-000089 – Goodwrite failures on SD card

1.61.15.0043 Release

| ID | Description Summary | Subsystem |
|-------------|---|-----------|
| ICM00004651 | (CDMA-Sprint) The camera application would accept special characters in the filename, resulting in an error message when attempting to save the file. | Camera |
| ICM00008419 | The camera resolution menu options did not display correctly in the Chinese Traditional language. | Camera |
| ICM00006510 | After closing the camera application using the 'END' key, when you re-open the camera application it would display a blank screen. | Camera |
| ICM00006697 | The camera would display a blank screen when opening the application again after closing it using the "END" key. | Camera |

| ID | Description Summary | Subsystem |
|----------------------------|--|-------------------|
| ICM00005157 | Using the orange "<" and ">" keys to enable and disable torch mode caused the camera application to display the wrong torch state. | Camera |
| ICM00003278 | Certain scanner settings for Trigger Mode and Aimer Activation may not backup correctly through SmartSystems. | Device Management |
| ICM00008331 | A SmartSystems Client Exception would occur after enrolling into a Microsoft System Center Mobile Device Manager server. | Device Management |
| ICM00008716 | Querying the 802.11 Microsoft Security attributes while 802.11 is disabled by policy would crash the SmartSystems Client. | Device Management |
| ICM00008026 | A Scan-To-Load file download would result in an error for large files. | Device Management |
| ICM00005515 | The screen would not rotate when the backlight was off. | Display |
| ICM00009929 | If the backlight turned off automatically while on external power, it would turn on when external power was removed and then stay on and not turn off automatically again while on battery. | Display |
| ICM00007490 | On UMTS configurations, there was a black box in the middle of the screen after rotating the CN50 while playing video. | Display |
| ICM00007030 | The CN50 was unable to reconnect to Ethernet after resuming from suspend mode in an Ethernet dock. | Ethernet |
| ICM00005211 | The CN50 would sometimes fail to reconnect to Ethernet when the device is docked and undocked. | Ethernet |
| ICM00006289 ICM00006979 | On CDMA configurations, reloading a GPS xtra.bin file would occasionally fail. | GPS |
| ICM00007140 | In GPS settings, the Download Time and Valid Time options were not visible in landscape mode. | GPS |
| ICM00001577 | COM port designations listed two IrDA ports. | IrDA |
| ICM00008130 | On CDMA configurations, some applications were not able to uniquely identify CN50 devices when calling KernelloControl with IOCTL_HAL_GET_DEVICEID. | Kernel |
| ICM00008039 | On UMTS configurations, using the DateTime.Now property in the .NET Compact Framework would occasionally return decreasing millisecond time values. | Kernel |
| ICM00007942 | The VK values were greater than 256 for the special keys like shift plane 1, shift plane 2, scan, backtab, etc. This arrangement prevented applications from generating these keys programmatically. The VK values were reassigned to be less than 256 for the special keys. These keys are also now reprogrammable with this release. In addition, the DeviceControl call with IOCTL_KPD_GET_INPUT_PLANE will now return the current keypad input plane: Normal, SP1 or SP2 (for numeric keypad). This IOCTL is necessary when using applications to operate the keypad programmatically. | Keyboard |
| ICM00007999 | On CDMA configurations, the Scan button would not turn on the backlight when this option was enabled in the Control Panel. | Keyboard |
| ICM00007136 | The 'Delay before first repeat' and 'Repeat rate' options for the Up/Down buttons were not working. | Keyboard |
| ICM00007028 | It was not possible to unlock the device using the Qwerty keypad. | Keyboard |
| ICM00005445 | After installing traditional Chinese from the LP builds, the options for traditional Chinese did not show up under the regional settings. In addition, it was not able to display pages using code page 950. | Language Support |
| ICM00010924 | The CN50 would sometimes fail to resume or become unstable after suspending due to a critically low battery. Now the device is shutdown gracefully when the battery reaches a critically low level. | Power Management |

| ID | Description Summary | Subsystem |
|----------------------------|---|------------------|
| ICM00005630 | While suspended, the CN50 would occasionally become frozen and require a reboot to recover. | Power Management |
| ICM00006814 | The CN50 would sometimes fail to resume from suspend while in a multi-dock. | Power Management |
| ICM00006394 | Some aimer modes were not supported for EA11 scanner. | Scanner |
| ICM00005214 | Calling the ScannerTrigger(true) function again after scanning a barcode would not enable the imager unless ScannerTrigger(false) was called first. | Scanner |
| ICM00006300 ICM00007036 | The trigger mode options for the EA11 scanner were updated to correctly match the capabilities of the device. The Continuous trigger mode option for the EA11 scanner was removed because this feature is not supported. | Scanner |
| ICM00010662 | SD cards would sometimes fail to load or result in errors after resuming the device from suspend. | SD Card |
| ICM00006893 | Calling the TAPI function lineSetEquipmentState with LINEEQUIPSTATE_RXONLY or LINEEQUIPSTATE_TXONLY parameters would fail and/or cause the CN50 to reboot. | TAPI |
| ICM00006719 | The TAPI function phoneGetGain with the PHONEHOOKSWITCHDEV_HANDSET parameter would return invalid data when the gain was set to the maximum. | TAPI |
| ICM00006152 | USB devices such as card readers and flash drives would not reattach after resuming the CN50. | USB |
| ICM00008008 | On CDMA configurations, the speakerphone would not work after ending a call with speakerphone enabled. | WAN |
| ICM00007089 | On UMTS configurations, when a SIM with an SPN was inserted into a CN50, the network operator name was displayed instead of the service provider name. | WAN |
| ICM00008443 | On CDMA configurations, devices would occasionally reboot when roaming with data connections in low coverage. | WAN |
| ICM00009132 | For UMTS configurations, network status notifications were not received after suspending the device while out of coverage and then changing towers before resuming again. This resulted in the display showing out of coverage, although the UMTS connection was working. | WAN |
| ICM00006267 | For UMTS configurations, the phone application would not show connected when in a conference call. | WAN |
| ICM00008672 | For UMTS configurations, when you attempt to make a call with the phone turned off the screen would show "dialing" after prompting to turn on the phone, but the phone was not actually dialing. | WAN |
| ICM00004694 ICM00005025 | The Wi-Fi radio would sometimes become disabled after many suspend/resume cycles. | Wi-Fi |
| ICM00005400 ICM00005473 | For UMTS configurations, if the CN50 was suspended or shut down while in a powered Ethernet dock with a valid Wi-Fi connection, it would not re-attach to Wi-Fi when removed from the dock. | Wi-Fi |
| ICM00004787 ICM00007154 | When using Microsoft Zero Config, wireless profiles would sometimes be lost when the device was away from coverage for an extended period of time. Enable the Intermec Supplicant on the device to resolve this issue. | Wi-Fi |

1.51 Release

| ID | Description Summary | Subsystem |
|---|--|------------------|
| ICM00004632 | Occasionally the Bluetooth radio would turn off after a suspend/resume cycle. | Bluetooth |
| ICM00004651 | (UMTS, CDMA-Verizon) The camera application would accept special characters in the filename, resulting in an error message when attempting to save the file. | Camera |
| ICM00006044 | Several Microsoft DirectShow APIs were not working as expected for applications using still pictures. | Camera |
| ICM00005632 ICM00006049 | Files and folders would occasionally be lost or corrupted when writing data to the internal FLASH or storage card. | File System |
| ICM00005215 | When in a call, if you swap to another call while muted the device would unmute. | Phone |
| ICM00005542 | In rare circumstances devices on power would overheat and fail. | Power Management |
| ICM00005143 ICM00005633 ICM00005372 | Several TAPI function calls would fail to return after terminating a data connection.or resuming the system. | TAPI |
| ICM00003663 ICM00004320 | USB thumb drives sometimes would not attach correctly. | USB |

1.46 Release

| ID | Description Summary | Subsystem |
|-------------|---|-----------|
| ICM00005542 | Added protection logic to prevent 1900MHz PA failures | WAN |

1.45 Release

None

1.40 Release

| ID | Description Summary | Subsystem |
|----------------------------|---|-------------------|
| ICM00003836 | Occasionally the Data Collection components will not initialize on reboot. Another reboot is needed. | Data Collection |
| ICM00003462 | The OS version in the registry does not reporting leading zeros in the version number. This may cause remote device management systems to read the version incorrectly. | Device Management |
| ICM00003675 ICM00003674 | SmartSystems will display unavailable 802.11 Radio Bands. | Device Management |
| ICM00004299 | Screen orientation will not persist through a reboot. | Display |
| ICM00003465 | Voicemail count will display as zero after a reboot. | WAN |
| ICM00003673 | There is a rare possibility for the device to automatically reboot when attempting to transmit data over a WAN connection in low coverage areas. | WAN |
| ICM00003468 | Configuring WPA/PSK through MS Zero-Config will cause the passkey to be deleted after every reboot. Using SmartSystems to setup WPA/PSK will ensure the key is maintained through all reboots. (see ICM00003168) | Wi-Fi |
| ICM00003483 ICM00003676 | Cannot set WEP or Pre-Shared key through SmartSystems. The profile can be setup through SmartSystems but the keys will have to be entered manually on the terminal. This occurs the first time only. Subsequent reconnects or resumes will not require reentry of keys. | Wi-Fi |
| ICM00003670 | Occasionally the Wi-Fi radio will disappear in Wireless Manager after a suspend/resume cycle. At this point the Wi-Fi radio will not be functional. Rebooting the terminal should recover the Wi-Fi radio. | Wi-Fi |

Patches Included In This Release

Patches listed here are no longer required with this release.

2.10.32.0002 Release

None

2.10.00.0656 Release

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|------------------------------|--|
| SR11052400_GSM_CN50UWM61_KOR | 110407-000006 - CN50 display broken Korean SMS (when CN50 receives a Korean SMS) |
| SR11042925_CAM_CN50UWM61_ALL | CPR 110419-000124 - (Herbert Retail Ltd) Camera image exif date does not match file creation date. ICM00010988: Captiva Picture taken date is not matching |
| SR10110400_MSC_CN50UWM61_ALL | CPR 100831-000089 - When transferring large files using WMDC over Bluetooth using Win7 PC, the CN50 hangs and locks up. |
| SR10102700_GSM_CN50UWM61_ALL | CPR - 101024-000007 - Improves WWAN RSSI reporting to more accurate values. |
| SR10062400_AUD_CN50UWM61_USA | Audio recording is distorted in CN50. |

1.70.21.0038 Release

None

1.70.21.0035 Release

None

1.61.15.0063 Release

None

1.61.15.0054 Release

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|-------------------------------|--|
| SR11030300_CDMA_CN50CWM61_ALL | Locking the apps partition on CDMA Sprint Devices |
| SR11071200_CDMA_CN50CWM61_ALL | Locking the apps partition on CDMA Verizon Devices |

1.61.15.0043 Release

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|---|--|
| SR10022200_CAB_CN50WM61_ALL SR10021700_INET_CN50WM61_ALL SR10051900_INET_CN50WM61_ALL SR10021700_DHCP_CN50WM61_ALL SR10021700_802A_CN50WM61_ALL SR10021700_FUNK_CN50WM61_ALL | W-Fi issues (Intermec Supplicant/Inet/DHCP) |
| SR09102800_KEY_CN50WM61_ALL | Scan button does not resume backlight |
| SR10060900_KEY_CN50UWM61_ALL | Keyboard issues |
| SR10011803_MSC_CN50WM61_ALL SR09102301_MSC_CN50WM61_ALL SR09081200_CAM_CN50WM61_ALL | Camera/DirectShow issues |
| SR10061600_CDMA_CN50CWM61_ALL SR10081800_CDMA_CN50CWM61_ALL | CDMA speaker phone issue |
| SR09092900_DCL_CN50WM61_ALL | DCEInit after warmboot |
| SR09072900_PRT_WM50_ALL | Printer configuration support |
| SR10080500_GPRS_CN50UWM61_ALL | UMTS – network status notifications not received |
| SR10070800_GSM_CN50UWM61_ALL | UMTS – SPN not displayed |
| SR10060400_USB_CN50WM61_ALL | USB issues |

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| SR10082601_CDMA_CN50CWM61_ALL | Verizon reboot fix |
| SR10082600_CDMA_CN50CWM61_ALL | Sprint reboot fix |

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|-----------------------------|--|
| SR09102801_KEY_CN50WM61_ALL | Keyboard |
| SR09092400_GSM_WM61_ALL | Missing emergency dialing numbers for New Zealand |
| SR10010600_DCL_CN50WM61_ALL | Backup settings shows "-blank-" in the preamble field. |

1.40 Release

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|-----------------------------|---|
| SR09092900_DCL_CN50WM61_ALL | DCEInit does not always launch after reboot |
| SR09081200_CAM_CN50WM61_ALL | Camera application |

Additional Information

The CN50 series handheld computer manuals and downloads can be located at:
www.intermec.com | Products | Computers | Handheld Computers | CN50

Installation Instructions

CN50 devices may be updated using smart systems upgrade packages or Firmware Management Tool. Please check the Downloads page periodically for updates and instructions.

Device Management

SmartSystems

SmartSystems Console 4.0 or later is required for upgrading and configuring CN50 devices.

Application Support

Features Demo

The Features Demo application is available for download on the Intermec Software download site, as well as through the Scan-N-Go feature. Instructions for Scan-N-Go are located on the product page.

.NET Application Support

Microsoft recommends that .NET applications use the form property 'TopMost' set to True in order to ensure the applications remain maximized.

Windows Mobile Gesture Support

Gesturing is now supported by Windows Embedded Handheld. This means that applications using listbox, listview, treeview, webview, or tab controls will need to be aware of how the Windows GUI interprets the gestures.

Version History

| Version | Date Available |
|-------------------------------|-----------------------|
| 2.10.32.0002 (WEHH 6.5) | 10/2015 |
| 2.10.00.0656 (WEHH 6.5) | 05/2012 |
| 1.70.21.0038 (WEHH 6.5) | 08/2011 |
| 1.70.21.0035 (WEHH 6.5) | 01/2011 |
| 1.61.15.0063 (WM 6.1) | 05/2012 |
| 1.16.15.0054 (WM 6.1) | 08/2011 |
| 1.61.15.0043 (WM 6.1) | 12/2010 |
| 1.51.76.0018 (CDMA – Sprint) | 4/2010 |
| 1.51.53.0017 (CDMA – Verizon) | 4/2010 |
| 1.51.10.0019 (UMTS) | 4/2010 |
| 1.46.52.0008 (CDMA – Verizon) | 3/2010 |
| 1.45.07.0005 (UMTS) | 3/2010 |
| 1.40.51.0002 (CDMA – Verizon) | 11/2009 |
| 1.40.06.0001 (UMTS) | 11/2009 |
| 1.25.05.0007 (UMTS) | 8/2009 |