

# Software Release Notes

## 70 Series OS v1.62

Microsoft Windows Embedded Handheld

### Overview

This is an OS upgrade release of Windows Embedded Handheld for all configurations of the 70 Series computers.

### Supported Hardware

All CN70 and CN70e configurations.  
All CK70 and CK71 configurations.

### Version Numbers

	1.62 Release (Official)	1.61 Release (Official)	1.60 Release (Official)	1.50 Release (Official)	1.45 Release (Official)	1.44 Release (Official)
OS	1.62.27.6	1.61.22.0072	1.60.22.0066	1.50.19.0013	1.45.16.0075	1.44.16.0059
Microsoft WEH	6.5.3.12.43	6.5.3.12.26	6.5.3.12.26	6.5.3.12.10	6.5.3.12.5	6.5.3.12.5
DHCP_Client	1.05.03.36	1.05.03.36	1.05.03.36	1.03.00.0037	1.03.00.0022	1.03.00.0022
ITCFunkSupplicant	2.03.03.160	2.03.03.160	2.03.03.160	2.01.07.0458	2.01.07.0390	2.01.07.0390
IBI	6.20.04.130	6.20.04.130	6.20.04.130	6.01.00.0536	6.01.00.0139	6.01.00.0139
IDL_LSRK	1.40.02.40	1.40.02.40	1.40.02.40	1.21.00.0216	1.15.00.0153	1.15.00.0153
CESDK (IDL_Runtime)	4.03.01.35	4.03.01.35	4.03.01.35	4.02.00.2198	4.02.00.1858	4.02.00.1858
Intermec_Settings	6.10.04.168	6.10.04.168	6.10.04.168	5.80.00.0112	5.70.00.0061	5.70.00.0061
IVAUtilites (IVAEventlog)	6.10.04.102	6.10.04.102	6.10.04.102	5.80.00.0006	5.70.00.0017	5.70.00.0017
IVADCE	6.20.04.192	6.20.04.192	6.20.04.192	6.03.00.0684	6.03.00.0395	6.03.00.0395
IVADCEDrivers	1.20.04.381	1.20.04.381	1.20.04.381	1.07.05.0552	1.07.00.0335	1.07.00.0335
IVADeviceSettings	6.20.04.94	6.20.04.94	6.20.04.94	6.02.00.0412	6.02.00.0235	6.02.00.0235
IVAPAL	6.20.03.154	6.20.03.154	6.20.03.154	6.02.00.0581	6.02.00.0290	6.02.00.0290
In2Decode (STCDecodes)	1.20.04.48	1.20.04.48	1.20.04.48	2.2.3.0	2.1.8.5	2.1.8.5
IVAVirtualWedge	6.20.04.80	6.20.04.80	6.20.04.80	6.02.00.0520	6.02.00.0229	6.02.00.0229
Printer_Configlet	2.50.14.122	2.50.14.122	2.50.14.122	2.30.00.0115	2.20.00.0021	2.20.00.0021
SS_Client	4.92.03.343	4.92.03.343	4.92.03.280	4.60.00.0066	4.03.11.0596	4.03.11.0596
TCO_GUI	2.20.03.43	2.20.03.43	2.20.03.43	1.10.00.0310	1.03.01.0285	1.03.01.0278
TI WiFi Firmware	6.1.0.301.337	6.1.0.301.337	6.1.0.301.337	6.1.0.20.337	6.1.0.20.337	6.1.0.20.337
IVARFID	6.10.02.71	6.10.02.71	6.10.02.71	6.02.00.0461	-	-
IVACameraApp	1.01.01.22	1.01.01.22	1.01.01.22	1.00.00.0021	-	-
ITCWifiMgt	3.03.03.62	3.03.03.62	3.03.03.62	-	-	-
NetworkConfiglet	7.40.03.105	7.40.03.105	7.40.03.105	-	-	-
WWANConfiglet	2.20.03.74	2.20.03.74	2.20.03.74	-	-	-
WAPI	1.05.03.34	1.05.03.34	1.05.03.34	-	-	-

## New Functionality

### 1.62 Release

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

### 1.61 Release

- Fixed manufacturing issues.

### 1.60 Release

- Supports a new LCD on new production hardware. This LCD improves image quality and outdoor visibility while consuming less power.
- Supports new snap-dome keypads on new production hardware. This improves user interface by providing tactile key press feedback.
- Increased the default Flash File Store size from 16 MB to 64 MB on new hardware.
- Supports a new Honeywell N5603ER scan engine option on new CK71 production hardware.
- Added Han Xin decodes to the list of symbologies.
- Improved Intermec Settings password entry. The last character is now displayed when entered and becomes masked when the next character is entered.
- Added \_Autoflash support to boot directly into the OS after flashing. This bypasses the Autoflash Complete screen and eliminates the need for a manual reboot.
- Added language selection persistence during flashing. Languages selected on the first boot of an LP flash can be set to persist through future LP flashes. This eliminates the manual step of selecting the language after each LP flash.
- Added visibility of Software Update information. Details can be found in Device Health Monitor and Intermec Settings.
- Added OS upgrade and file transfer functionality to CloneNGo by default. SR1211080\*\_TOOL\_WM65\_ALL.CAB is no longer required.
- Added support for negative image reading to the Data Collection Resource Kit. This provides the ability to receive negative images from the imager in order to create a robust OCR solution when light lettering is printed on dark backgrounds.
- Added support to launch webpages by scanning a barcode. This works with PIE, IE6, and HTML5.
- Added a 2D quick connect barcode to the Wireless Scanning app. This is primarily for use with the SR61B.
- Added support for ATA and ISO6B tag types to Mobile RFID.
- Added black and white high visibility Windows Embedded Handheld themes.
- Added video image rotation and snapshot image rotation support to the Data Collection Resource Kit.
- Improved Device Health abuse counter to filter out rapid hits ("shaking the unit").
- Added capability to remap the Camera viewfinder to side buttons. This is now the default setting for the lower left side button on CK71.
- Updated EX25 baud rate to 480 kbps which allows it to process data more quickly.
- Fixed the Read Disturb issue.
- Fixed the OpenSSL Heartbleed issue.

### 1.50 Release

- Added camera enhancements that include 3 new menus in the main menu of Pictures & Videos to enable control of digital zoom, focus and torch. The application also contains a Scenes function to enable auto-selection of a group of settings to suit a specific environment.
- Added CloneNGo application that provides peer-to-peer device management
- Added RFID support for 70 Series RFID configurations

### 1.45 Release

- Improved performance stability for UMTS, CDMA, and GOBI configurations
- Improved memory usage for components using USB

## 1.44 Release

- Final improvements made on memory usage for USB audio

## 1.43 Release

- Improved memory usage for components using USB
- Improved memory usage for components using SmartSystems

## 1.42 Release

- Final stabilization for release

## 1.41 Release

- Added cool-down to enable the camera to support NANI configurations with camera enabled.
- Improved suspend/resume functionality
  - Added configuration settings for TWL4030 that will improve reliability when the device enters different power states
- Added split-scan configuration for 802.11 to eliminate ping loss during roaming scan

## 1.40 Release

- Added support for the GOBI3000 WAN configurations
- Added support for the 1GHz CPU configurations
- Updated to Microsoft Windows Embedded Handheld AKU 6.5.3.12.5
- Added abuse count information to the Device Health screen
- Added a Focus Lock feature to enable an eMDI user to lock the focus position to the last captured picture
- Added a Flashlight feature that uses the EA30 scanner for illumination
- Added APIs to control audio input and output levels and to mute/unmute the audio paths
- Added support for full duplex VoIP applications
- Added a control panel application to calibrate the device sensors
- Added a control panel application that provides the ability to select and change the WAN carrier on GOBI3000 configurations
- Added WAPI support for China WAN configurations (CN70, CN70E, CK70)
- Flash File Store now persists through OS upgrades
- Intermec Settings
  - Added configuration settings for MicroQR symbology
  - Added a configuration item to enable/disable audible key click sounds
  - Added a configuration item to remap the left and right side buttons
  - Added a timeout value for the EA30 scanner when “turn off after good read” is disabled
  - Added a configuration item to set the Flashlight timeout value
  - Added a configuration item to select and change the WAN carrier on GOBI3000 devices

## 1.30 Release

- Improved file system performance with Datalight Reliance Nitro™
- Improved overall system performance
- Improved power usage in suspend and hibernate modes
- User feedback on proper document alignment for eMDI
- Camera improvements
- Enabled RAM Drive by default. RAM Drive is mounted as an additional file system off of the root. It is volatile and the contents will be lost on any reboot of the system (but are preserved during suspend or hibernate modes). The RAM Drive is useful as a fast-access file location for database indexes or similar files which need to be referenced often at runtime, but can be rebuilt upon reboot. The default size is 32MB.
- Added scanner diagnostics application

- Additional Device Health information
  - Touch Screen
  - Abuse Strike Counts
  - Real Time Clock Resets
  - Battery Temperature
- Intermec Settings
  - Added Boost mode configuration to Data Collection Imager Settings. Provides ability to disable the imager's maximum lighting and exposure time if greater power savings (extended battery life) are desired. Note: disabling Boost mode will affect scanning performance by shortening reading distance.
  - Connected Bluetooth scanners menus are now backed up.
  - Additional Camera Flash option added. Options are now Off, On, Auto.

## Patches Included In This Release

Patches listed here are no longer required with this release.

### 1.62 Release

No Patches Included

### 1.61 Release

No Patches Included

### 1.60 Release

SR Name	SR Description
<b>SU02_1.50_Cx70</b> <ul style="list-style-type: none"> <li>○ SR13031300_KEY_WM65_ALL</li> <li>○ SR13042600_RSG_Cx70WM65_ALL</li> <li>○ SR14013100_CAM_Cx70WM65_ALL</li> <li>○ SR13060601_ETH_Cx70WM65_ALL</li> <li>○ SR13081801_TCH_Cx70WM65_ALL</li> <li>○ SR14011600_EBT_WM65_ALL</li> <li>○ SR12110600_802T_WM65_ALL</li> <li>○ SR12110808_TOOL_WM65_ALL</li> <li>○ SR13102900_BAT_Cx70WM65_ALL</li> <li>○ SR13100101_TOOL_WM65_ALL</li> </ul>	
<b>SU01_1.50_Cx70</b> <ul style="list-style-type: none"> <li>○ SR12110600_802T_WM65_ALL</li> <li>○ SR12110802_TOOL_WM65_ALL</li> <li>○ SR13010300_EBT_WM65_ALL</li> <li>○ SR13011700_CAM_Cx70WM65_ALL</li> </ul>	
SR12110600_802T_WM65_ALL	Contains fixes for: <ul style="list-style-type: none"> <li>○ ICM00020788: CNG v2.0: Device fails to clone whenever Master is set to Microsoft security or vice versa.</li> <li>○ ICM00020336: Once a device has entered ad-hoc mode a static IP address may fail to show up on an interface.</li> <li>○ ICM00020242: Wireless driver's Wi-Fi scan can be inaccurate.</li> </ul>
SR13031101_AUD_WM65_ALL	Contains fix for ICM00020900: Device audio is not controlled by Intermec Settings with new audio SR's loaded.

SR13102900_BAT_Cx70WM65_ALL	Contains fixes for: <ul style="list-style-type: none"> <li>○ CPR 131023-000175: Units sitting in Ethernet docks won't charge sometimes.</li> <li>○ CPR 130722-000031: CN70e - Battery expands and will not charge.</li> </ul>
SR13032800_BTH_Cx70WM65_ALL	This SR addresses the issue that the Bluetooth connection would not re-establish after the device goes into unattended

SR13022200_BTH_Cx70WM65_ALL	mode. It contains fixes for: <ul style="list-style-type: none"> <li>○ CPR 120507-000150: Bluetooth does not reconnect after suspend/resume.</li> <li>○ CPR 130206-000168: Device times out and will not re-establish the Bluetooth connection</li> </ul>
SR14013100_CAM_Cx70WM65_ALL SR13121100_CAM_Cx70WM65_ALL SR13050601_CAM_Cx70WM65_ALL SR13050600_CAM_Cx70WM65_ALL SR13040500_CAM_Cx70WM65_ALL SR13022200_CAM_Cx70WM65_ALL SR13011700_CAM_Cx70WM65_ALL SR12110600_CAM_Cx70WM65_ALL	Contains fixes for: <ul style="list-style-type: none"> <li>○ CPR 131209-000089: CN70 Camera functionality issues.</li> <li>○ CPR 121206-000184: CN70 (Aimforce Sdn Bhd.) DirectShow Timeout &amp; Hang</li> <li>○ 130108-000085: CN70 Camera Issues with MMRK.</li> <li>○ CPR 121002-000004: DirectShow Timeout &amp; Hang</li> <li>○ ICM00020557: Camera has mostly black images except for bright objects.</li> <li>○ ICM00020574: Document Imaging doesn't provide LED feedback when image is captured.</li> <li>○ ICM00020164: Camera has focus issues at about 2-3 feet (frame rate issue).</li> </ul>
SR12071900_CAM_Cx70WM65_ALL	Contains fix for inconsistent camera focus for yellow carbon copy in document capture.
SR12121200_CDMA_Cx70WM65_ALL	Contains fix for CPR 121024-000136: Unable to reconnect in extended network location - Polling of RSSI caused lockup in RIL command handler.
SR13020400_CDMA_Cx70WM65_ALL	1. WWAN Configlet no longer creates/makes unsolicited mods to connection entries. 2. CDMA RIL builds NationalAccess/PCS Vision connections upon install or *22899.
SR13111200_CFG_WM65_ALL	Contains fix for CPR 130408-000100: AL-284 (ICM00021708): Duplicate Device ID's
SR14032000_DCL_Cx70WM65_ALL SR13120500_DCL_Cx70WM65_ALL SR13102500_DCL_Cx70WM65_ALL SR13083000_DCL_Cx70WM65_ALL SR13070300_DCL_Cx70WM65_ALL	This SR installs all necessary software components to optimize EX25 performance. Addresses Jira issues: <ul style="list-style-type: none"> <li>○ WIVA-559 Reverse Image failed on CK71/EX25 with video preview</li> <li>○ WIVA-78 EX25 baud rate changed to 480kbps</li> <li>○ WIVA-644 EX25C new FW: Resolve Container Label Scanning application issues</li> </ul>
SR14012701_DCL_Cx70WM65_ALL	This SR installs an updated PAL to fix a problem with remapping the side buttons. It addresses the following JIRA issues: <ul style="list-style-type: none"> <li>○ WIVA-495 Problems remapping side buttons back to Windows defaults.</li> </ul>
SR14050100_DCL_Cx70WM65_ALL SR13112100_DCL_Cx70WM65_ALL SR13091800_DCL_Cx70WM65_ALL	This SR installs all necessary software components to support Direct Product Marking (DPM) licensing. Addresses the following issues: <ul style="list-style-type: none"> <li>○ WIVA-88 DCE DPM2 changes to request a license.</li> <li>○ WIVA-226 Method for users to select a mode that optimizes DPM reading performance.</li> </ul>
SR13072300_DCL_Cx70WM65_ALL	Contains fix for CPR 130701-000180 RFIDWedge issues: <ul style="list-style-type: none"> <li>○ Grid not used after a reboot.</li> <li>○ Initial RFID scan data after a reboot may be preceded with incorrect data.</li> <li>○ No error beeps when scanned data does not meet the grid spec.</li> </ul>

SR12070300_DCL_Cx70WM65_ALL	Contains fix for CPR 120621-000173: EX25 running Intermecc applications. Scan engine turns off on a manual Suspend/Hibernate.
SR14020500_DCL_CK3XWM65_ALL	Contains fix for CPR 140124-000029, JIRA CSA-510: This SR installs an update to Intermecc Settings to correctly create a backup file for devices with Intermecc Launcher installed.
SR13022200_DHCP_Cx70WM65_ALL	Contains fix for KC 130130-000060: CK71 not releasing/renewing IP when changing wireless profile.
SR13092600_DCL_Cx70WM65_ALL	Contains fix for CPR 130829-000092: Read Ahead Scan buffer filling up during very rapid scanning with EA30.
SR14011600_EBT_WM65_ALL.CAB SR13010300_EBT_WM65_ALL.CAB SR13010401_EBT_Cx70WM65_ALL	Contains fix for KC Bulletin - 14411 There is a potential that certain shipped 70 series, 600MHz product may not boot correctly. Cold temperatures may exacerbate this issue. If the handheld does not boot up due to this issue, it is not recoverable and must be returned to service.
SR13060601_ETH_Cx70WM65_ALL	Contains fix for CPR 130108-000066: Flexdock fails to transmit files properly / Upload delays
SR14031100_FFX_WM65_ALL	Contains fix for CN7X and CK3X read disturb issue. Devices stuck on blue screen, won't boot - need to be reflashed. [Incident: 140204-000107]
SR12120300_FUNK_Cx70WM65_ALL	Contains fix for CPR 121107-000173: CN70 will not connect on channel 12/13 if SSID is hidden.
SR14042500_GPRS_Cx70WM65_ALL	Contains fix for CPR 140404-000009: Cx70 UMTS does not report 2G data connection as suspended during a voice call.
SR14040900_GPRS_Cx70WM65_ALL	Contains fix for CPR 140326-000152: CN70 UMTS - 3G High Data Usage\8795 module incorrectly reports that it is unregistered.
SR13011100_GPRS_Cx70WM65_ALL	Contains fix for CPR 130110-000134: Intermittent error dialing "proxy" - 1.50 - WAN APN over AT&T
SR13020500_GPRS_Cx70WM65_ALL	WWAN Configlet no longer creates/makes unsolicited mods to connection entries.
SR13041200_GPRS_Cx70WM65_ALL	Contains fix for CPR 130221-000023: E_FAIL from ENTERGPRSDATAMODE causes CM to crash.
SR13070800_GSM_Cx70WM65_ALL	Contains fix for CPR 130628-000023: Several second delay before incoming call notification is shown.
SR13082900_KEY_WM65_ALL	Contains fix for CPR 130827-000067: The screen timeout occurs even though the scan button has been pressed within the timeout value.
SR12102900_KEY_Cx70WM65_USA	US1139: Configuring side buttons to trigger RFID
SR13031300_KEY_WM65_ALL	Contains fix for Large Key Numeric keypad is getting a sporadic key repeat.
SR12121701_PRT_Cx70WM65_ALL	Contains fix for KC 121210-000119 and KC 121217-000018: Printers with no authentication will not connect to CN70 with OS 1.50.19.0013. This SR modifies a registry location so no authentication will be processed. This SR is NOT intended for use with printers that do use BT authentication.
SR13101600_PRT_WM50_ALL	Contains fix for Printer Configlet does not start UpdatePrinter.exe using a SmartSystems command or SmartSystems XML file.
SR13012500_PRT_WM50_ALL	Contains fix for Wireless Printing/Printer Configlet won't test print to the PR2, PR3, PB20, PB40, and PB41.
SR14012800_REG_WM61_ALL	Contains fix for CPR 140123-000125: Losing static IP when configured before connecting to a Flexdock.

SR13082101_RFID_Cx70WM65_ALL SR13071801_RFID_Cx70WM65_ALL SR13071800_RFID_Cx70WM65_ALL	Contains support for CRISP 0580: Install revised MobileRFID, IVARFID, IVAVirtualWedge, and ITCUSBVCP to support IP2L Snap-On RFID Reader. These SRs have only been included on premium builds. Continue using the SRs on WAN devices.
SR13011500_RFID_Cx70WM65_ALL	Re-establishes IM11 module connection when device is dropped
SR13042600_RSG_Cx70WM65_ALL NOTE: Must have SmartSystems 4.80 or newer to remove this SR.	Contains fix for ICM00021727 RoamScanEnable is getting set to 0.
SR13011600_TCH_Cx70WM65_ALL	Contains fix for CPR 130116-000037: Device sends a tap event when the screen comes out of Idle state.
SR13071602_TCH_Cx70WM65_ALL	Contains fix for CPR 130715-000047: Losing screen alignment after screen has been re-aligned.
SR13081801_TCH_Cx70WM65_ALL	Contains fix for CPR 130715-000047: Touch screen needs recalibrated on the production line
SR12110808_TOOL_WM65_ALL SR12110802_TOOL_WM65_ALL	Contains fixes for: <ul style="list-style-type: none"> <li>o ICM00020788: Device fails to clone whenever the Master is set to Microsoft security.</li> <li>o ICM00020755: Settings are not getting restored on the Master after an OS Upgrade.</li> <li>o ICM00020818: File Transfer - Special Cases after cloning the device is not working as expected.</li> <li>o ICM00020536: Clone Master corrupted settings when driver failed to allow switch from a/b/g to b/g. Additionally fixed an issue with Heap Corruption that caused CloneNGo to crash during file transfer.</li> <li>o ICM00021599: Client can fail to find a master with the same hardware version string when multiple masters are available.</li> <li>o ICM00021651: Improved channel selection.</li> <li>o ICM00021599: Improved master selection.</li> <li>o ICM00021632: CloneNGo GUI in master mode throws ObjectDisposedException on exit.</li> <li>o ICM00021604: Automatically reset stack and reconnect to network to work around a Microsoft stack issue that causes devices to be unable to communicate on the network.</li> </ul>
SR13100101_TOOL_WM65_ALL SR13100100_TOOL_WM65_ALL	Software Updates are following a new process going forward. This will install the new process on legacy devices.
SR13011100_WAN_Cx70WM65_ALL	Contains fix for CPR 130108-000132: WWAN Configuration on 70 Series version 1.50 truncates long user names.
SR13081900_WAN_Cx70WM65_ALL	Contains fix for CPR 130524-000079: WWAN radio disappearing from Cx70 devices.
SR13020500_WAN_Cx70GobiWM65_ALL	WWAN Configlet no longer creates/makes unsolicited mods to connection entries.

## 1.50 Release

SR Name	SR Description
SR12071600_GSM_Cx70WM65_ALL	Contains fix for CPR 120716-000036 where devices not recognizing incoming data when in "screen off" mode until fully resumed
SR12062800_USB_Cx70WM65_ALL	Contains fixes for ICM00018383, ICM00018414, and ICM00018367. This SR allows for more stable function of the USB RNDIS (Ethernet) driver used in our UMDs and snap-ons. It allows



	for stability without the delays introduced in the 1.43 OS. It also disables those delays from those builds by default
SR12062517_802T_Cx70WM65_ALL	Contains fix for CPR 120614-000134 where device was unable to roam on radar channels using 802.11a
SR12032200_FUNK_Cx70WM65_ALL SR12031601_802T_Cx70WM65_ALL	Contains fix for ICM00018698 to improve 802.11 roaming performance
SR12070300_DCL_Cx70WM65_ALL	Contains fix for CPR 120621-000173 addressing devices with an EX25 scanner running Intermec applications will turn on scanner after suspend/resume or hibernate/resume.
SR12042400_WAN_Cx70GobiWM65_ALL	Contains fix for CPR 120406-000055 (SetSystemPowerState to UserIdle causes device.exe error in certain application)
SR12052500_SS_Cx70WM65_ALL	Contains fixes for the following: <ul style="list-style-type: none"> <li>o KC 120715-000008 "?" button returns no information, many abuse records</li> <li>o KC 120703-000049 ITE VT/ANSI Devices freeze up, many abuse records</li> <li>o KC 120820-000046 Units become non-responsive then recover</li> <li>o KC 120830-000086 Units become non-responsive, many abuse records</li> <li>o KC 120831-000061 CK71 Slowness, many abuse records</li> <li>o ICM00015909 (Buttons are displayed incorrectly after TCO)</li> <li>o ICM00017228 (Shifted states(Keyboard) are not retained when leaving TCO)</li> </ul>
SR12083003_IRDA_Cx70WM65_ALL	Contains fix for CPR 120820-000106 where devices using IrDA may potentially lock up when trying to discover other devices using IrDA
SR12052501_CAB_Cx70WM65_ALL	Contains fixes for the following: <ul style="list-style-type: none"> <li>o CPR 120507-000150 (Bluetooth does not reconnect after suspend/resume)</li> <li>o CPR 120312-000049 (Wi-Fi radio disabled on power up after suspend and battery removal)</li> <li>o ICM00015909 (Start Menu Buttons do not appear after reboot)</li> <li>o ICM00017228 (Shifted states (Keyboard) are not retained when leaving TCO)</li> </ul>
SR12041900_NDIS_Cx70WM65_ALL	Contains fix for CPR 409-000026 (Wi-Fi lockups/TCP stack crashes)
SR12080800_MSC_Cx70WM65_ALL	Contains fix for CPR 120725-000042 (CK70 - Power management settings problems)
SR12071600_CAM_Cx70WM65_ALL	Contains support for CRISP #746 (CK70 camera night options)
SR12051800_REG_Cx70WM65_ALL	Contains fix for CPR 120514-000155 (Unable to transfer large UDP packets over Ethernet Dock)
SR12050317_SS_Cx70WM65_ALL	Contains fix for CPR 120309-000079 where device lockups were occurring when switching between ad-hoc and infrastructure modes
SR12032200_RFID_Cx70WM65_ALL	Contains support for CRISP #647 (Cx70 RFID IP30 Support)
SR12010550_REG_Cx70WM65_ALL	Contains fix for CPR 120103-000066 where an application could possibly crash if installed on RAM drive
SR11121650_LCD_Cx70WM65_ALL	Contains fix for CPR 111216-000082 where using the magnifier could distort the display
SR12011600_SER_Cx70WM65_ALL	Contains fix for ICM00017633 (Open of serial port in C# application can fail when a DEX adapter is connected)

SR11102600_BLT_Cx70WM65_ALL	Contains support for CRISP #684 (CN70 LCD Brightness)
SR12080900_CAM_Cx70WM65_ALL	Contains fix for CPR 120719-000086 (CN70 having issues using the Multimedia Resource Kit)
SR13010300_EBT_WM65_ALL	Contains fix for KC #14411 where devices may potentially lock up especially in colder temperatures

#### 1.45 Release

SR Name	SR Description
SR12030100_GSM_Cx70WM65_ALL	Contains the fix for ICM00019329 to improve performance stability on UMTS devices.

#### 1.44 Release

SR Name	SR Description
SR11101800_GPS_Cx70WM65_ALL	Contains the fix for ICM00018443 (GPS speed reporting invalid when it is at 0).
SR11120600_KEY_CN70WM65_ALL	Contains the fix for ICM00018441 (Devices may exhibit symptoms of stuck keys) and ICM00017527 (Keys can get stuck repeating numbers)
SR12012701_AUD_Cx70WM65_ALL	Contains the fix for ICM00018447 (Button key click on some devices is too quiet).
SR12013000_MSC_Cx70WM65_ALL	Contains the fix for ICM00017938 (Intermec Launcher will inform user that a config has changed and then needs to warm-boot every boot).
SR12021600_OHCI_Cx70WM65_ALL	Contains the fix for ICM00018439 (Suspend/Resume and double attach issues occurring on USB).

#### 1.43 Release

SR Name	SR Description
SR12011800_USB_Cx70WM65_ALL	Contains the fix for ICM00018426 (Device will lock up sitting in dock due to memory leak in Device.exe).
SR12021600_SS_Cx70WM65_ALL	Contains the fix for ICM00018428 (Memory leaks caused by Abuse Count entries as well as IQueue).

#### 1.42 Release

SR Name	SR Description
SR12011600_OHCI_Cx70WM65_ALL	Contains the fix for KC120106-000039 (DEX open issue)

#### 1.41 Release

SR Name	SR Description
SR11110300_CAM_Cx70WM65_ALL	Contains the fix for ICM00014905 (Enhances camera flash for low light non reflective environments).
SR11072200_DCL_CK71WM65_ALL	Contains the fix for ICM00014573 (Improved barcode support for 225 char size barcodes with CR postamble).
SR11081800_DCL_Cx70WM65_ALL	Delivers new EA30 triggering options.

SR11110946_802T_Cx70WM65_ALL	Improves RF scanning and Bluetooth coexistence.
SR11110700_MSC_Cx70WM65_ALL	Contains the fix for ICM00014472 (Device locks up on power after a couple days).

### 1.40 Release

SR Name	SR Description
SR11061000_GPS_Cx70WM65_ALL	Contains the fix for CPR 110614-000138 (device may lock up after returning from hibernate while GPS is in use by an application).
SR11071100_AUD_CN70WM65_ALL	Enables support for TwistedPair VoIP application.
SR11072800_USB_Cx70WM65_ALL	Contains the fix for ICM00014153 (ESD events causing USB Audio adapter for vehicle dock to become unresponsive).
SR11080100_REG_Cx70WM65_ALL SR11081226_802T_Cx70WM65_ALL SR11082430_802T_Cx70WM65_ALL SR11090115_802T_Cx70WM65_ALL	Contains the fix for ICM00014732 (device hanging on to access points too long causing ITE to disconnect or drop sessions).
SR11081600_SS_Cx70WM65_ALL	Contains the fix for ICM00014577 (ZeroConfig: Radio Power Management not persisting across warm boot).
SR11081900_MSC_Cx70WM65_ALL	Contains a partial resolution of CPR 110725-000148 (device may lock up after several days on power).
SR11090100_KEY_Cx70WM65_ALL	Contains the fix for ICM00014612 (F6/F7 keys display volume up/down in Intermec Terminal Emulation).
SR11081750_BTH_Cx70WM65_ALL	Contains partial fix for ICM00015049 (CN70E WM6.5 Bluetooth radio shuts off automatically on suspend/resume) and fix for ICM00015061 (Bluetooth: Wake a device from low power state and place back in a low power state leaves Bluetooth off).

### 1.30 Release

SR Name	SR Description
SR11020400_WAN_WM65_ALL	Contains the fix for ICM00012421 (Data & Incoming calls missed when device in UserIdle mode)
SR11051501_AUD_CN70WM65_ALL	Contains the fix for CPR 110422-000030 (Bluetooth Audio Problems when VOIP is channeled through system audio)
SR11042200_2577_Cx70WM65_ALL	Contains the fix for KC110323-000045 (AutoCab should install files from the SD card as well as the object store.)
SR11060814_802T_Cx70WM65_ALL	Contains the fix for KC110606-000057, KC 110608-000195, and KC110223-000086 (Cannot connect using mixed mode security)
SR11050300_SER_WM65_ALL	Contains support for CRISP #0627 (Enables RAW IR mode on 70 Series devices)
SR11051371_FUNK_WM65_ALL	Contains the fix for CPR 110512-000121 (Not able to get authenticated using WPA/WPA2 and hex PSK)
SR11062700_REG_Cx70WM61_ALL	Contains the fix for CPR 110627-000044 and 110624-000141 (Devices dropping off from a Cisco LWAPP controller)
SR11071900_MSC_Cx70WM65_ALL	Contains the fix for KC110712-000118 (device stuck on "loading OS" on reboot)

## Additional Information

The 70 Series handheld computer manuals and downloads can be located at:  
[www.intermec.com](http://www.intermec.com) | Products | Computers | Handheld Computers | CN70/CN70e/CK70/CK71

### Installation Methods

This OS upgrade package is intended to be used on devices running OS v1.50.19.0013 or v1.60.22.0066. For devices running older OS versions, please contact Intermec product support.

### SmartSystems

Drag and drop the OS upgrade bundle on the device or folder. See the SmartSystems help file for more information.

### SD Card

Find the AutoFlash.img file that is installed in the SmartSystems library on your PC. This is typically located here:

C:\Program Files\Intermec\SmartSystem\SS\_Lib\Software\OS\_70Series\_v1.61.22.72

Note: Please contact Intermec product support if you are unsure of the correct AutoFlash.img file for your hardware configuration.

1. Place the "AutoFlash.img" file on a microSD card.
- NOTE: A 4GB or smaller SD card must be used when upgrading devices via SD card.
2. Remove the battery and insert the SD card.
  3. Press the Reset button and replace the battery.
  4. Put the device on charge and the OS upgrade will begin.
  5. During the upgrade process, status messages will update along the bottom of the screen.
  6. When the "Autoflash Complete" message is displayed you can remove the SD card and reboot the device.

### Clean Boot Instructions

1. Reboot the device.
2. Press and hold the yellow I/O button.
3. Hold until message pops up stating "Release IO button".
4. A new message will pop up stating "Caution! You are about to reset your device to factory defaults. If you wish to proceed, enter first key in 20 seconds". Press any key on the keyboard.
5. Another new message will pop up stating "Enter second key in 6 seconds". Press any other key on the keyboard.
6. New message "Reconfirm first key in 6 seconds". Press same key from step 4.
7. New message "Reconfirm second key in 6 seconds". Press same key from step 5.
8. If completed correctly, a message will pop up stating "Cleanboot Confirmed". If not, restart at step 1. If any of the time restrictions are exceeded in steps 4-7, the clean boot will be aborted.

### Software Updates

Software updates are now a standard process we use to bundle groups of SRs after release. SU00 is a base software update with no content. The current software update you have on the device can be found in two locations:

1. Intermec Settings > SmartSystems Information > Identity > Software Update
2. Device Health ("?" key) > Information > Software Update

### Time Zone Changes

Due to a Microsoft AKU change many of the time zones available have had their names changed since the 1.50 release.

### EX25 Downgrade Instructions

If a device with an EX25 scanner needs to be returned to 1.50.19.0013 the scanner will not function until SR14022600\_DCL\_Cx70WM65\_ALL.CAB has been installed on the device. Please contact Product Support if you require this SR.

## **WAN Auto Config**

In Intermec Settings, the new "Carrier Settings Auto Config" field gives the user the freedom of managing their own data connections. When "enabled", the device behaves the same as 1.50.19.0013, and will manage the data connections for the user across cellular networks. When it is "disabled", data connections will not be managed by the device. This field can be found at the following menu in Intermec Settings: Communications->WWAN->Carrier Settings Auto Config.

## **Device Management**

### **CloneNGo**

CloneNGo is a license free application that ships on every 70 Series terminal that greatly simplifies and expedites configuration. This powerful application will clone all settings from a fully configured "master" unit, to a completely un-configured "client" unit, via an 802.11 connection with minimal user intervention.

### **SmartSystems**

SmartSystems Console 4.0 or newer is required for upgrading and configuring 70 Series Premium, UMTS and CDMA devices. SmartSystems Console 4.02 or later is required for use with Gobi devices. **Note:** The current release of SmartSystems Console is 4.80.01.76.

## **Application Support**

### **Autorun Support**

Autorun is available on the device to automate cab file installation and configuration of application launch sequences. Refer to KC Answer #13000 for more information:

[http://intermec.custhelp.com/app/answers/detail/a\\_id/13000/](http://intermec.custhelp.com/app/answers/detail/a_id/13000/)

### **Features Demo**

The Features Demo application is available for download on the Intermec Software download site, as well as through the ScanNGo feature. Instructions for ScanNGo 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 Embedded Handheld Gesture Support**

Gesturing is 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.

## **Application Removal**

### **Microsoft Office**

Microsoft Office applications have been excluded from WWE configurations. By default, text files will now open in Internet Explorer since Pocket Word is not available. As an alternative, text files can be opened in Notes. Refer to KC Answer #14045 for more information:

[http://intermec.custhelp.com/app/answers/detail/a\\_id/14045/](http://intermec.custhelp.com/app/answers/detail/a_id/14045/)

## **WAN Gobi Radio Limitations**

The Gobi radio provides a data-only WAN connection that can be configured for UMTS or CDMA networks. Gobi devices differ from the dedicated UMTS and CDMA WAN devices in a number of important ways. Listed below are some limitations of the Gobi devices that you should be aware of.

**Issue:** Gobi devices do not allow automatic update of the time because they do not support Network Identity and Time Zone (NITZ). This is a limitation of the Gobi module.

**Impact:** The cellular network cannot be used to set the system date/time automatically. Also, when switching time zones the time zone will not automatically change on the device.

**Workaround:** Several other methods may be used to set the time on devices. Using the NTP protocol allows for setting the time directly from time servers on the internet. ActiveSync can also synchronize the time when the device is cradled to a desktop. SmartSystems will also allow for

setting the date and time of a device. Changing the time zone must be done manually by the end user or through some other mechanism.

**Issue:** Gobi devices will spontaneously wake up while suspended. This is due to the inability to control certain radio indicators that are solicited by the radio. Any Gobi based device that keeps the radio ON over suspend with the remote wake-up feature enabled by the host is susceptible to this issue.

**Impact:** What this means in terms of impact to the end user is that when the device is suspended, it will occasionally wake the terminal even though there is no apparent reason for the wakeup. Known indicators that will wake the device include:

- Out of range/coverage indicator
- Roaming indicator
- GPS will wake the device ~65 seconds after suspend.

**Workaround 1:** Devices can be configured to enter useridle/screen off mode when the I/O button is pressed rather than allowing the unit to go into full suspend mode.

**Workaround 2:** For GPS issue: close the GPS port and then wait 65 seconds before suspending the unit. This will not prevent the device from waking up due to out of range/roaming indicators.

**Workaround 3:** For users who do not need the Gobi radio to be functional during suspend (ie, incoming SMS/data does NOT need to wake the system), using the Hibernate mode may be a practical workaround. Since Hibernate mode will completely shut off the Gobi radio, upon resume the radio will need more time to power up and re-register to the network before being useable.

**Issue:** Assisted GPS (aGPS) is not supported on Gobi devices.

**Issue:** GPS polling intervals greater than 4 seconds will cause GPS to lose its fix temporarily due to power management of GPS radio.

**Impact:** GPS applications will appear to cycle between having a fix and then losing GPS fix.

**Workaround:** If you change the polling interval from the default setting, do not set it to a value greater than 4 seconds.

**Issue:** The phone dialer application is not available in Gobi devices.

**Impact:** Users may not know how to get to the Phone Setting Options of the radio.

**Workaround:** The phone options application available on Gobi devices by navigating to "Start->Settings->Personal->Phone".

**Issue:** SimToolKit is not supported on Gobi devices.

**Impact:** Applications that make use of the SimToolKit will not work.

### Best Practices

1. When using Bluetooth audio and Wi-Fi together, performance will be improved if the 802.11 radio is associated to an Access Point when powered on. It is also recommended to limit the radio band to only the band that you are using. When not using Wi-Fi, turn off the 802.11 radio to maximize Bluetooth performance.
2. For maximum battery life, it is recommended to power down the camera when not in use.
3. For best results, it is recommended to resume the device before attaching and detaching snap-on adapters.

## Version History

<b>Version</b>	<b>Date Available</b>
1.62.27.6 (Official Release)	Oct 2015
1.61.22.0072 (Official Release)	Jul 2014
1.60.22.0066 (Official Release)	Jun 2014
1.50.19.0013 + Eboot Patch (Official Release)	Jan 2013
1.50.19.0013 (Official Release)	Nov 2012
1.45.16.0075 (Official Release)	Jun 2012
1.44.16.0059 (Official Release)	Mar 2012
1.30.14.0045 (Official Release)	Aug 2011
1.21.11.0035 (Official Release)	Jan 2011