

# UPDATE

## Microsoft Discontinues Resale Rights for POS Hardware Operating System Upgrades

September 23, 2014  
Issue 2

Note: this Issue 2 updates the original announcement regarding the Microsoft® withdrawal of resale rights to Windows® Embedded operating systems for upgrades of previously deployed terminals. Final shipments were completed by the end of June 2014, and Microsoft's new policies are now in place.

Microsoft® has discontinued original equipment manufacturers' ability to resell field upgrades of Windows® Embedded operating systems for existing deployed devices. This announcement was made by Microsoft effective February 1, 2014. For NCR, the final ship date for all field upgrades of these operating systems had been extended to June 30, 2014.

NCR and other OEM manufacturers had previously resold embedded operating system upgrade licenses for their POS terminals, kiosks, self-checkout systems and other hardware platforms. Operating system upgrades of previously deployed platforms are now available *only* from Microsoft directly via volume licensing.

These changes do not affect initial operating system purchases with new devices: new NCR POS terminals, kiosks and SelfServ™ terminals will continue to be available with the Microsoft embedded OEM operating system licenses just as before. Only Microsoft embedded operating system licenses to upgrade deployed terminals are affected.

### WHAT HAS CHANGED?

- Upgrades for Microsoft Embedded operating systems – such as Windows Embedded POSReady 7, POSReady 2009, WePOS and XPe – are no longer available from hardware manufacturers. They may only be purchased directly from Microsoft.
- Microsoft also forbids end users from employing existing operating system images to implement Microsoft's volume-licensed upgrades. Users must create their own operating system images from scratch to implement the upgrade licenses purchased from Microsoft.
- Users are also forbidden from removing an OEM manufacturer's product key from an existing Microsoft operating system image, then inserting their own keys that have been acquired from Microsoft via Microsoft's Volume Licensing arrangement.
- Consistent ("flat-lined") operating system platforms will no longer be possible for an installed base of terminals, given the new upgrade methodology.
  - For example, a retailer may have purchased POS terminals with POSReady 2009 and later purchased more of the same terminals – but this time with POSReady 7. That retailer wishes to upgrade the previously deployed POSReady 2009 terminals to POSReady 7 to ensure consistency across their installed base inventory.
  - Unfortunately that is no longer possible because any new POSReady 7 image – which the retailer must now develop from scratch – inevitably will be different from the original POSReady 7 image provided with the original shipments. The retailer must therefore support *two* versions of the same operating system.

## HOW WILL EMBEDDED OPERATING SYSTEM UPGRADES WORK NOW?

New NCR devices will continue to be equipped with embedded Microsoft operating systems through NCR just as before. Distributors such as ScanSource that hold Microsoft TPI contracts will still be able to procure Microsoft operating system kits to pre-load new NCR terminals.

All embedded operating system upgrades for previously deployed terminals, however, may now only be ordered and fulfilled directly by the end user through Microsoft's Volume Licensing (VL) Channel. Microsoft offers different VL programs depending on the type and size of the company's or merchant's operations – users will need to contact their Microsoft Account manager directly to discuss their Volume licensing options.

Users are required to work with Microsoft according to the following rules to license operating system upgrades:

- Microsoft will provide upgrade operating system binaries on a user-by-user basis only.
- Each user will be supplied separately by Microsoft, and users will be responsible to create and maintain their own "gold" master images for each operating system.
- Original equipment manufacturers may no longer make a standard operating system image available for all users' upgrade purposes.
  - For example, a universal POSReady 7 field upgrade image for NCR's RealPOS 82XRT may no longer be provided by NCR. Instead, users must now individually and separately develop their own images for each POS terminal type.
- Each merchant is responsible for securing, configuring, and testing the Windows image for each of their installed POS terminal types.
- Creating an operating system image from the Microsoft operating system binaries requires deep technical knowledge of the operating system as well as detailed information regarding the architecture and operation of the target platform device.
  - In the past, the management of the Microsoft OPK, scripting, staging of unique drivers, product key injection, image preparation and creation, and the testing (unit, integration, platform software and applications test cycles) have proved to be far beyond the technical capabilities of any independent retailer.
  - The "answer file" for Windows XPe, for example, consists of about 20,000 line items, each of which having to be correctly specified to create a properly working image.
- In the past, the operating system field upgrades and licenses provided by NCR have been pre-registered and pre-activated: users did not have to manage these processes themselves. Under the new upgrade process, the user would be responsible for direct activation (telephone, Internet) or Indirect Activation via a Key Management Server (KMS), Multiple Activation Keys (MAK) or Volume Activation Management Tool (VAMT).
- *NCR applications such as ACS, ISS45, ScanMaster or SSCO cannot be certified or validated on user-developed operating system images. NCR operating system certifications apply only to the original OEM embedded images provided and shipped by NCR.*
- For users wishing to upgrade their operating systems via the newly required Microsoft Volume Licensing agreement, NCR plans to announce (in late 2014) a professional service to create Microsoft images for NCR POS devices. NCR is required to provide such services on a customer-by-customer basis: NCR may not simply provide the standard O/S images shipped with new hardware, or make a "one-size-fits-all" gold disk available to all users.

## “DO’S” — AND ONE “DON’T”:

- **Do:** Assume that the original operating system shipped on any hardware product will be the *last* O/S that will ever be loaded on that machine. The costs and difficulty of obtaining operating system upgrades preclude any other realistic expectations.
- **Do:** Always order new hardware with the most recent O/S available that supports the intended application. This choice will provide the longest support life cycle without the need for replacement.
- **Do:** Remember that Microsoft XPe support ends in early 2016: users who have not purchased operating system upgrades must either:
  1. Purchase all-new hardware with a supported NCR operating system, or
  2. Go through the Microsoft’s operating system image creation process, then pay for new operating system licenses directly from Microsoft, even though...
  3. *... no such images created directly from Microsoft for use on NCR terminal hardware are supportable by NCR and NCR POS applications!*
- **Do:** For a complete and detailed picture on the Microsoft changes and how they will affect users, [Click here for NCR’s PowerPoint](#).
- **Don’t:** Expect that used hardware with old operating systems is worth much.

## MIGRATION RIGHTS

**NOTE!** This section is **only** worth reading if you have users who must continue using an older operating system for compatibility reasons, but will need POSReady 7 upgrades in the future. If this does not apply to you, then skip the rest of this document and avoid further reading. Use your time more wisely and watch TV – consider perhaps “Judge Judy,” “Dr. Phil,” or “Real Housewives of Rio de Janeiro.”

1. **Migration Rights explanation:** Microsoft licensing rules can provide “Migration Rights” that allow the end user to temporarily use a downgrade of the operating system to another operating system within the original operating system’s “family,” then upgrade back to the purchased version within 24 months.
  - a. Migration Rights can be provided that allow ACS users, for example, to purchase POSReady 7 now, but downgrade to POSReady 2009 until they are ready to upgrade to a POSReady 7-compatible version of ACS. Migration Rights allow the user to restore the original POSReady 7 load when desired.
  - b. Migration Rights are not available **across** Microsoft product families. For example, users cannot purchase Windows 7 Professional Embedded and obtain Migration Rights to downgrade to a POSReady-type operating system, or the other way around.
  - c. Where Migration Rights are not available (like the example in (b) above) the user can still purchase an Embedded License Kit from NCR that will provide the desired product at a lower cost than the standard price for an off-the-shelf purchase in the open market. This requires, however, purchasing both licenses for the same product at the same time at initial delivery.
2. **Summary:** to accomplish the operating system changes for the user:
  - a. Order the POS hardware with an initial operating system.

- b. Along with that order, submit the request for the appropriate “Migration Rights” to allow operating system changes within the same Microsoft product “family” (see below about families).
  - c. Order the operating system media to enable loading the correct software and drivers for that machine during the downgrade/upgrade process.
  - d. Order a new/final operating system license in “kit” form if a migration will be needed to an O/S outside the initial operating system’s “family.”
- 3. Ordering the e-box hardware:** when the Channel Partner orders the NCR RealPOS hardware product, an operating system license and Certificate of Authenticity (COA) sticker are provided for the operating system purchased with the e-box.
- a. For example order RealPOS 82XRTs with Microsoft Windows POSReady 7 Embedded. POSReady 7 is in the same “family” as POSReady 2009 for example, so Migration Rights may be requested and apply to this situation.
- 4. Requesting Migration Rights:** when the e-boxes are ordered, the Channel Partner must request Migration Rights on behalf of the end user.
- a. The Channel Partner should attach a separate sheet to the P.O. as follows:
    - “**[End-User Name]** would like to request with their purchase of **[Final Software Version]** the ability to use Migration Rights to deploy **[Temporary Software Version]** for a period of time for their POS terminals before switching to **[Final Software Version]**.”
  - b. Order Entry will forward this Migration Rights request to ScanSource with the order, and ScanSource will relay the Migration Rights request to NCR Solutions Management.
- 5. Order the Media:** with the hardware order, the Channel Partner should be sure to order the (a) downgrade and (b) upgrade media for the operating system code, as well as the partition management and loading software media required. All three of these items are provided at no charge:
- a. Downgrade media: for POSReady 2009, order D370-0929-0100 (NCR RealPOS 40/50/72XRT/82XRT etc., Windows Embedded POSReady 2009 Recovery Media). Only one copy is needed, and there is no charge for this item.
  - b. Re-upgrade media: for POSReady 7, order D370-0931-0100 (NCR RealPOS 40/50/72XRT/82XRT etc., Windows Embedded POSReady 7 (32 bit) Recovery Media). One copy is needed, and there is no charge for this item.
  - c. Partition Image: order D370-0605-0100 (NCR Partition Image Application). This is a bootable CD-ROM that supports loading Windows and Linux OS recovery images. Only one copy is needed, and there is no charge for this item.