# IBM RSS Windows Preloads **Preloads FAQ's**

**Product Versions:**All Windows Preloaded Terminals

Version: 2.0 December 12, 2007

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#### **Purpose**

The purpose of this document is to list, and answer, the most commonly asked questions specific to the IBM Windows preloads products. These FAQ's are specific to the IBM Retail Store Solutions Point of Sale and Point of Service line of products and are intended to help customers and business partners understand the IBM Windows Preloads options in order to make an informed business-decision specific to their Windows solution.

#### **General Windows Preloads Questions**

1-Why should I buy my Windows licenses from IBM?

There are several advantages to buying your Windows licenses directly from IBM, especially for the embedded Windows (i.e. WEPOS, XP Pro for Embedded Systems and Vista for Embedded Systems). The following are a few advantages you're encouraged to consider:

- Competitive pricing.
- You do NOT have to sign a Customer License Agreement (CLA) (required to purchase embedded operating systems). Beware... signing the CLA simply means that you own the support of the operating system (some vendors offer support for additional fee or on annual contract basis).
- You get FREE world-class Windows support directly from IBM, for the life of the operating system (up to 10 yrs for embedded operating systems). You do not have to contact Microsoft or any 3<sup>rd</sup> party for your support needs.
- IBM will own any Windows related bugs and will work directly with, Microsoft, as needed, to resolve the issue.
- You will get an IBM tested and approved Windows image. Hence, no need to develop and validate your own operating system image from scratch.
- The IBM Windows image is optimized for POS and includes the latest Windows critical updates, system-unit and UPOS drivers.
- The IBM image is ready for remote management and includes the IBM Remote Management Agent (RMA).
- For back-up and disaster recovery, you could order an IBM tested and approved Windows recovery CDs specifically for your IBM terminals
- For Multi-language support, you could order the Windows Multi-language User Interface (MUI) packs directly from IBM.
- 2-I have IBM and/or 3<sup>rd</sup> party POS terminals deployed in my stores and are running legacy operating systems (DOS, Windows 95, Windows 98, Windows NT, etc.). I need to upgrade these terminals (IBM and/or 3<sup>rd</sup> party) to newer versions of Windows (WEPOS, XP Pro, XPe, Vista). How do I upgrade?

You will need to contact your IBM representative and order "Windows Field Upgrade Kits" for your existing IBM or 3<sup>rd</sup> Party terminals. You will need to provide the following:

- A list of the Machine types, models and serial numbers for the terminals that you would like to upgrade.
- Indicate the operating system and version you would like to upgrade to (WEPOS 1.1 Update, XP Pro SP2, etc.)
- Indicate if you require an operating system image to be developed by IBM
- Indicate if you need any recovery media

The IBM representative will submit a Request for Price Quote (RPQ) on your behalf and will follow-up with you once the quote is approved (allow 2-4 weeks for processing). Please note that unless specified in your request, the Field Upgrade Kit will NOT include an operating system image nor recovery media. By default, and unless specified otherwise in the initial RPQ request, the Field Upgrade Kit will only provide the following:

- Windows Certificate of Authenticity (COA) label
- Windows Product Key (Product ID) Label
- Windows End User License Agreement (EULA)
- Label installation diagram
- 3-What is the "Windows Field Upgrade Kits"?

The Windows Field Upgrade Kits is a mechanism by which you could upgrade your existing field-deployed IBM and 3<sup>rd</sup> party POS terminals' operating systems to the newer supported Windows versions (i.e. WEPOS, Windows XP Pro for Embedded Systems, Vista for Embedded Systems, Windows XP Embedded, and Windows CE). Please contact your IBM representative or <u>Techline</u> for additional info.

4-When I attempt to boot my Windows preloaded SurePOS terminal I get a "Blue Screen of Death" (BSOD) with a STOP 7B error. What is the problem?

Some of the SurePOS terminals (400-7x2 and 7x3) are equipped with Hard Drive controllers that emulate several modes (IDE, AHCI, RAID). For these terminals, the IBM preloaded Windows images (WEPOS, XP Pro and/or Vista) are built for the optimum Hard Drive Controller setting, which is "RAID". This is mainly to enable the user to add a second hard drive in a RAID configuration without the need to rebuild the Windows image. Additionally, these Windows preloaded SurePOS terminals ship with the Hard Drive Controller BIOS setting set to "RAID". If this setting changed to AHCI or IDE mode, Windows will generate a BSOD with a STOP 7B error. Please, check your BIOS settings and insure that the Hard Drive Controller is set to "RAID".

## Windows Embedded for Point of Service (WEPOS) Questions

1-What is WEPOS and how does it differ from XP Professional?
WEPOS stands for Windows Embedded for Point of Service. It is the first
Microsoft operating system designed and optimized specifically for point-ofservice terminals (POS, Kiosks, self-Checkout, etc.). Technically, WEPOS is built
from the Windows XP Embedded with SP2 binaries and is fully compatible with
Windows XP Professional; yet, it lacks the complexity of XP Embedded and the
large space requirement of XP Professional.

In simple, WEPOS enables for building easy-to-use, secure, cost-effective POS solutions that provide the broad range of functionality that retail customers need and expect. WEPOS is the first POS platform that provides Plug-n-Play functionality for retail peripherals. It also provides support for device peripherals that implement the Unified POS interoperability specifications published by the Association of Retail Technology Standards (ARTS); this includes peripherals based on OLE for point of sale (OPOS) and JavaPOS (JPOS) implementations as well as peripherals based on the POS for .NET implementation. Furthermore, Microsoft has committed to support WEPOS for up to 10 years after its initial release. That said, the full functionality of WEPOS, the compact image size, the simplicity to install, deploy, maintain, and manage as well as the extended support and lower cost makes WEPOS ideal for the POS space. For additional WEPOS comparison information, WEPOS collateral and whitepapers please visit the Microsoft Embedded operating systems page at: http://www.microsoft.com/windows/embedded/default.mspx Or contact us via Techline.

2-What are the available versions of WEPOS?

As of this writing, Microsoft has released three versions of WEPOS - version 1.0, 1.1 and 1.1 Update.

3-I am interested in evaluating WEPOS. Where could I get an evaluation version?

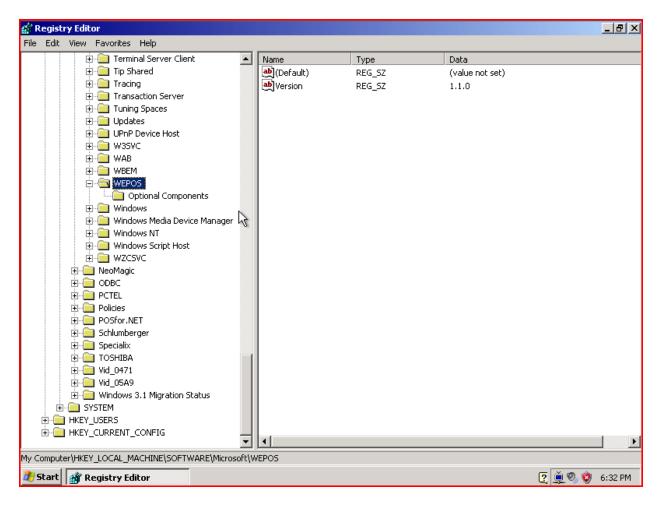
You could order a 120-days evaluation version of WEPOS directly from Microsoft at: <a href="http://www.microsoft.com/windows/embedded/eval/trial.mspx">http://www.microsoft.com/windows/embedded/eval/trial.mspx</a>
Once received, you will have to register your evaluation media with Microsoft in order to receive the Product ID (PID) key that is required for the WEPOS install. Kindly, refer to the documentation that came with your evaluation media for directions. The registration link should be listed on the sleeve of the WEPOS media that you received.

Please note that any images that are created using the WEPOS evaluation media WILL expire in a 120 days. Also, these evaluation images cannot be converted to full non-expiring images at any point. For urgent requests, please contact <u>Techline</u>.

- 4-Could I upgrade my WEPOS 1.0 to 1.1 or 1.1 Update by installing the latest version on-top of my existing 1.0 image?
  No. The currently available versions of WEPOS do not accommodate image updates. You will have to rebuild your WEPOS image using the later versions of the WEPOS install media.
- 5-What version of Windows Embedded for Point of Service do I have on my machine?

In order to find out the version of WEPOS that you have, open the registry editor (run **regedit** in the Windows Run command line) and browse to **HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\WEPOS**Once there, check the right pane of the registry editor for a "Version" key (see attached image). The value of the Version key should map to the WEPOS version per the following table:

Registry "Version" Value	WEPOS Version
No "Version" key under the HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WEPOS	
hive	1.0
1.1.0	1.1
1.1.0	1.1 Update



6- Is there a Microsoft Retail Support Desk that I could call for WEPOS questions or issues?

No. WEPOS Support comes directly from the authorized WEPOS distributors (OEM vendor that are authorized to preload WEPOS). If you purchased WEPOS from IBM, then you will get you will get support directly from IBM (please use <a href="Techline">Techline</a> for any WEPOS related questions). Otherwise, please contact the vendor where you purchased your WEPOS licenses for support.

7-Could I use Windows Update to install critical and security updates to my WEPOS image? If so, what are the differences between the WEPOS updates and the XP Pro updates?

Yes. You can download and install the WEPOS security, critical and optional updates directly from the main Microsoft Windows Update site at: http://www.windowsupdate.com

Please note that even though most WEPOS updates are built from the same XP Pro updates binaries, the WEPOS updates available from the Windows Update page are specific to WEPOS, and in some cases, to the version of the WEPOS image. Similar to XP Pro, the list of WEPOS updates available for your image is

determined based on an intelligent scan of your image. Upon completion of this scan, a list of available updates is presented to you for download and install. Additionally, the WEPOS updates are available shortly after the availability of the XP Pro ones. The period of time between the release of the XP Pro version and the WEPOS version is determined based on the criticality of the update. That said, in most cases, the WEPOS version of the updates is available within 30 days after the release of the XP Pro version.

8-I acquired IBM terminals that are preloaded with WEPOS 1.0. I would like to upgrade these terminals to WEPOS 1.1 or WEPOS 1.1 Update. How do I do that?

The easiest and speediest path to upgrading your preloaded WEPOS image is to order the Recovery CDs for the desired version of WEPOS then restore the image from these Recovery CDs. Please, refer to the IBM Sales Pages for the availability of the Recovery CDs for the desired WEPOS version. Otherwise, if not available, please contact your IBM representative or an IBM business partner and ask that a Request for Price Quote (RPQ) is submitted on your behalf for the desired version of the WEPOS image or Recovery CDs for your terminal.

9-I have deployed IBM (or 3<sup>rd</sup> party) terminals that has XP Pro. I want to "downgrade" from XP Pro to WEPOS. How do I do that?

You will have to purchase full-WEPOS licenses. There is no price-brake for "downgrading" from XP Pro to WEPOS. Please, contact your IBM representative or an IBM partner and request "WEPOS Field Upgrade Licenses" (refer to the Field Upgrade Licenses section for additional info and requirements).

## XP Embedded, XP Pro & Vista

1-Why doesn't IBM offer preloads for Windows XP Embedded?

By design, XP Embedded (XPe) is a complex development environment that allows for the creation and customization of the Windows environment by selecting only the desired functions or components (out of a pool of over 12,000 components) to be included in the Windows image. Although the XPe binaries are based on the XP Pro ones, developing, validating and deploying an XPe image is far more complex than a typical XP Pro one. To explain, a proper XPe image development process begins with understanding the entire environment's requirements, including the business, hardware and software requirements. Once identified, the XPe image is developed to meet this pre-identified set of requirements. The XPe image development is done by using the appropriate XPe development tool(s) to select (or in some cases build from scratch) then compile a set of componentized Windows features, applications and/or drivers that will

make up the final image. That said, and due to the fact that the environment's requirements are customer specific, it is almost impossible for anyone to build a single XPe image that will fit all. Hence, the decision to offer XPe licenses (via RPQ) but not to preload Windows XPe on the IBM POS terminals.

2-What are IBM's Windows Vista support plans?

At this time Windows Vista support and preloads are planned for 1Q 2008. Additional details will be provided as they become available.

3-Which versions of Windows Vista will IBM RSS preload and support on their POS terminals?

The current plans are to offer and support Windows Vista Business and Windows Vista Ultimate using the embedded systems licensing (i.e. using the DTOS-e licensing).

4-Does IBM provide and/or support 64-bit drivers for Windows XP Pro and/or Windows Vista?

At this time, no 64-bit Windows XP Pro/Vista preloads are planned. Additionally, IBM RSS does not provide 64-bit drivers nor support 64-bit Windows for any of its terminals.

## **IBM Windows Image Specific**

1-Where can I find the default user ID and password used for the original IBM Windows preloaded image?

The default user ID and password used for the IBM preloaded image is documented in the Preload README.TXT file. You could find this README.TXT file in the C:\RSS or on the Windows Desktop.

2-I just received my IBM Windows preloaded terminal and plan to start installing my POS application(s). What are the proper steps to finalizing my POS solution?

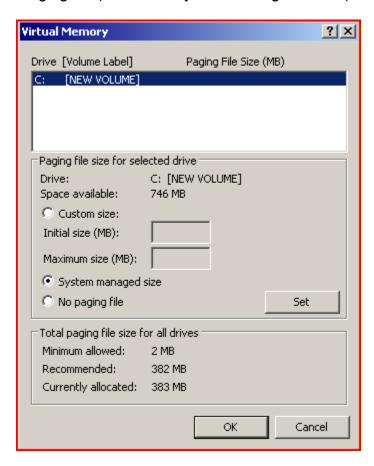
To finalize your Windows POS solution, please follow these steps:

- I. Visit the IBM RSS main support page
- II. Download your terminal's latest BIOS, UPOS (OPOS or JavaPOS) drivers and Windows system-unit drivers (video, network, audio, touch, etc.)
- III. Update the system BIOS, if need be
- IV. Install the latest system-unit drivers, if need be
- V. If you plan on using either OPOS or JavaPOS, install and configure the UPOS drivers

- VI. Install and configure the required POS application(s) and/or utilities
- VII. Your image should now be finalized (sysprep, sealed, etc.)
- VIII. Validate and test your final golden image
- IX. Capture a backup of your golden image then deploy to the store
- 3-What are the unique IBM configuration settings used in the IBM Windows preloaded image?

The following are a list of the unique IBM configuration settings used in the various IBM Windows preloaded images:

- The IBM image Windows image uses a single primary partition of the 1<sup>st</sup> hard drive found in the terminal (Drive 0).
- The primary partition where Windows is installed occupies 31 GB of the entire drive space.
- The primary partition is formatted using the FAT32 file system. For NTFS, users need to use the "convert.exe" command in order to convert the file system to NTFS.
- The video driver in the Windows image is set to use the 800x600 resolution.
- For the IBM WEPO images, the System's Virtual Memory Size setting (i.e. size of Paging File) is set to "System Managed Size" (see image below)



- All the available Windows security & critical updates (at the time of the image development) are pre-installed. For a complete list of the installed updates, please refer to the "Add/Remove Programs" (in the Control Panel) or to the C:\RSS\MS\_Updates.txt file
- As of the time of the image development, the latest system-unit drivers (network, video, audio, wireless, etc.) are pre-installed. For the exact versions of the pre-installed drivers, please refer to the Windows Preload README.TXT file that is included in your image (found on the Windows Desktop or in the **C:\RSS** directory)
  - NOTE: Users are strongly encouraged to visit the IBM <u>RSS main support</u> page to download and install the latest versions of the system-unit drivers
- As of the time of the image development, the latest version of the UPOS drivers' package is included in the IBM Windows preload image. The UPOS drivers however are not pre-installed. Users can install these drivers, if needed.
  - NOTE: Users are strongly encouraged to visit the IBM <u>RSS main support</u> <u>page</u> for the latest version of the UPOS drivers, if needed
- As of the time of the image development, the latest version of the Remote Management Agent (RMA) client and the IBM JRE are either pre-installed or included in the image (under C:\RSS\RMA directory) but not pre-installed. Please, refer to the "Add/Remove Programs" under the "Control Panel" to determine if the RMA client and the required version of the JRE are pre-installed. If desired, users could uninstall the RMA client and the IBM JRE using the "Add/Remove Programs".
  - NOTE: Users are strongly encouraged to visit the IBM <u>RSS main support</u> page to download and install the latest versions of the RMA client and the required JRE
- The default Internet Explorer main page is set to: http://www.ibm.com/products/retail/products/
- A startup link to the End User License Agreement (EULA) is added
- A link to the IBM RSS main support page is added and will be visible under the "General" tab of the "System Properties"
- Additional IBM branding (IBM logo and Desktop Wallpaper) are added to the image
- Two IBM required support files are added to the root of the C:\ partition (ID.TXT, DIR CHK.TXT)
- 4-My customer believes that the Windows image that he/she has was preloaded by IBM. How could I validate this?

Check the root of the C:\ drive for an **ID.TXT** file. If found, then check the contents of this file. The **ID.TXT** file should have the following four entries:

- -The IBM Machine Type and Model supported by the Windows preloaded image
- -The type and version of the installed operating system
- -The IBM ASM Part Number of the image

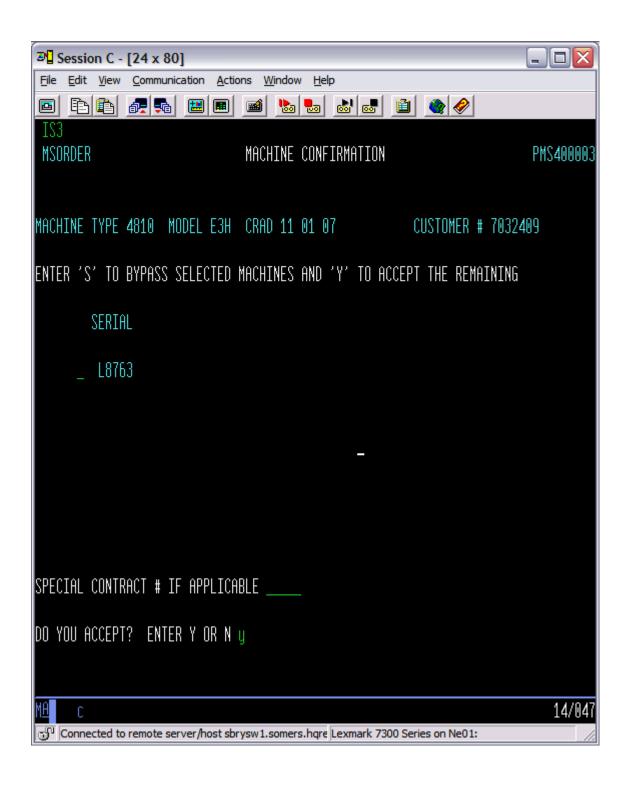
-The date the image was built

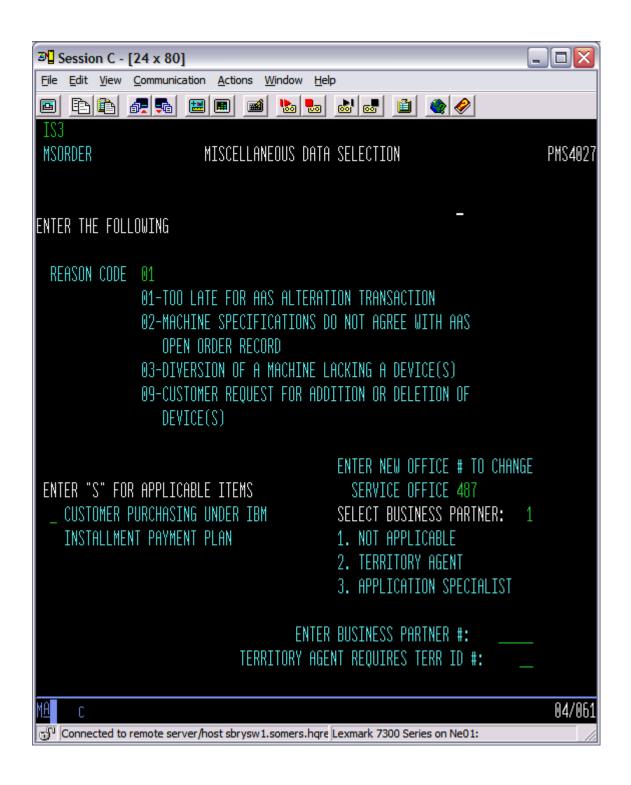
## **Recovery CDs**

- 1-I plan to order Windows preloaded IBM point of service terminals (SurePOS 300, 500, 700, AnyPlace Kiosk, IBM Self-Checkout). Do recovery CDs automatically ship with these terminals?
  - No. The recovery CDs are NOT included automatically with your Windows preloaded terminal(s). In order to get the IBM Windows recovery CDs for your particular point of sale or point of service terminal(s), you must order the recovery CDs feature code for your particular Windows platform as a part of your order. IBM recommends that each customer order at least a couple of recovery CDs per order.
- 2-I have multiple preloaded systems, is it necessary to obtain multiple copies of the Recovery CD, or may I use a single copy of the recovery CD to restore all my preloaded machines?
  - No. It is not necessary to obtain multiple copies of the Recovery CDs. You can use the same set of Recovery CDs to restore the IBM preloaded image to multiple licensed terminals that were originally preloaded with the SAME operating system (has the Windows COA label affixed to the terminal). That said, IBM strongly recommends that you acquire at least a single set of recovery CDs per staging location (Store, Integration Lab, etc.) and per machine type/model.
- 3-Am I allowed to make multiple copies of my Windows recovery CD?
  - No. Doing so will be a direct violation of the copyrights laws and your End User License Agreement.
- 4-Do I have to use a specific CD-ROM drive in order to restore my recovery CD?
  - No. The vast majority of CD-ROM drives will work just fine. That said, please keep in mind that IBM cannot validate, nor guarantee, that all available CD-ROM option will work. Therefore, IBM recommends that you purchase one of the IBM RSS offered CD-ROM options for your specific terminal. For available options, please refer to the IBM RSS Sales Pages.
- 5-Can I use the Windows PE (WinPE) environment on my recovery CD to create my own customized recovery mechanism?
  - Yes. You are certainly entitled, and encouraged, to use the WinPE environment included in your Recovery CDs to create a customized backup and restore solution for your entitled terminals

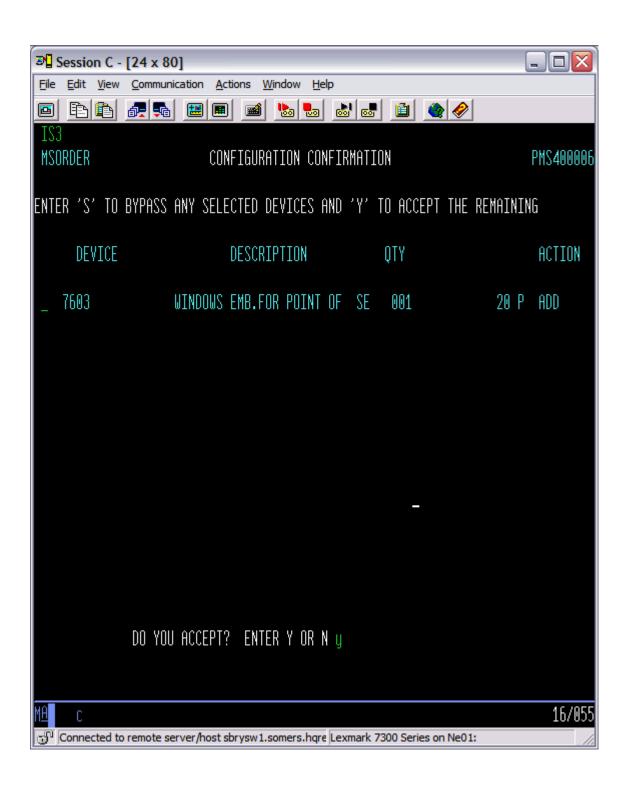
6-I have previously ordered Windows preloaded point of service terminals (SurePOS 300, 500, 700, AnyPlace Kiosk, IBM Self-Checkout) from IBM without any recovery CDs. Can I place an order for the recovery CDs now?

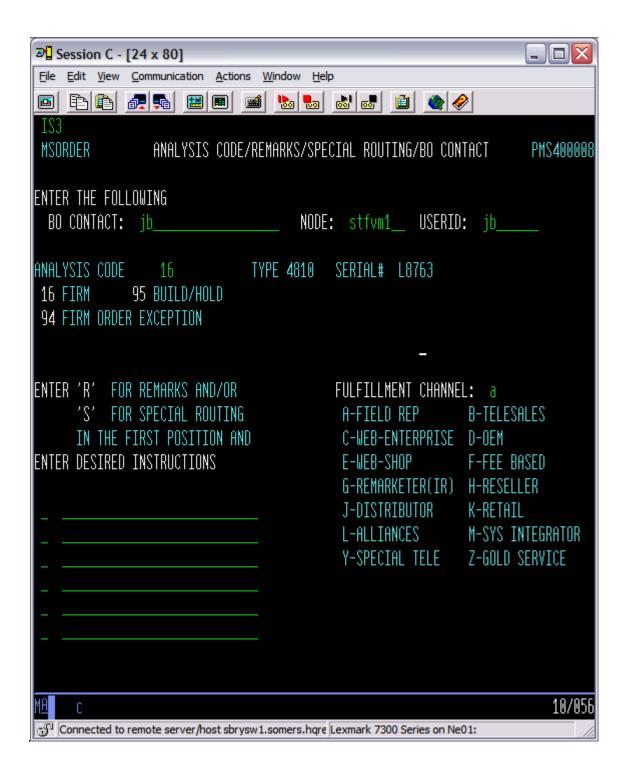
Yes, you can. To do this, you must place an order for the recovery CDs MES feature code for your particular point of sale terminal. In order to do this, you will need access to the Miscellaneous Equipment Specification (MES) ordering system. If you do not have access to the MES ordering system, then you will need to contact your IBM sales representative or the IBM distributor where you purchased your terminals. Please note that licensing requirements and entitlement require that you supply the machine type, model and serial number(s) for the Windows preloaded terminals that you wish to order recovery CDs for. The following is a step-by-step process to ordering the recovery CDs using the MES ordering system:

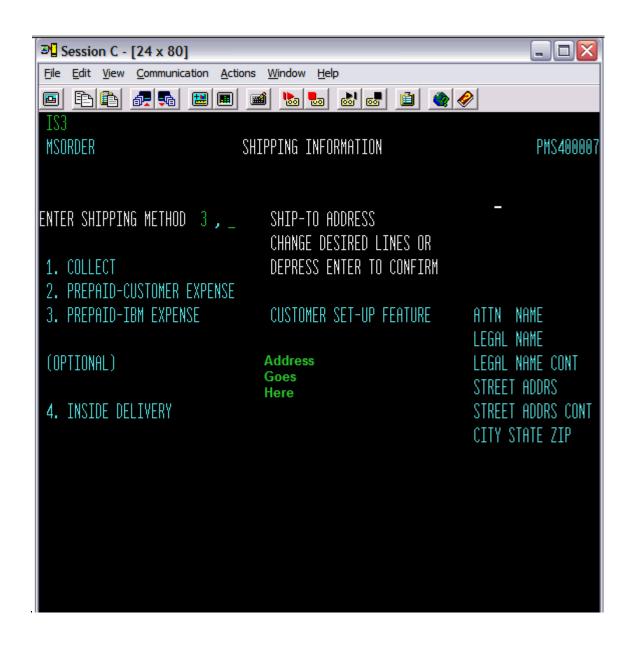


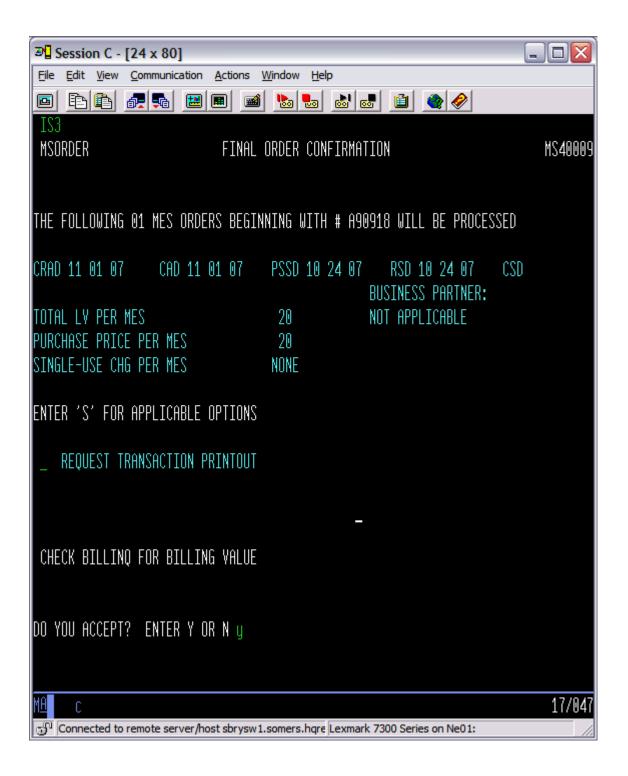


<b>⋑</b> ☐ Session C - [24 x 80]	
<u>File Edit View Communication Actions Window Help</u>	
IS3 MSORDER CONFIGURATION SELECTION	MS400083
MODEL CHANGE FROM TO RPQ REFERENCE # APPROVAL # _	_
ENTER DESIRED FEATURES/RPQS AND QUANTITY (IF GREATER THAN 1)	
FEAT/RPQ ADD 7603 / 1 /	_
FEAT/RPQ REMOVE / / / / / /	_
ENTER RPQ APPROVAL #	
FEAT/RPQ GROUP EXCHANGE/QTY: PARTS REMOVED MUST BE RETURNED TO IBM  ADD /	
FEATURE CONVERSION FROM TO QTY FROM TO QTY ENTER CHARGEABLE TO STANDARD OR STANDARD TO CHARGEABLE FEATURES/QTY / _ / / / / _ / _ / _ / _ / _ / _ / / / _ / _ / _ / _ / _ / _ / _ / _ / _ / _ / / / _ / _ / _ / _ / _ / _ / _	
PF1 = HELP PF6 = ADDITIONAL ENTRIES	
Connected to remote server/host sbrysw1.somers.hqre Lexmark 7300 Series on Ne01:	07/066









7-I bought a used IBM terminal that was preloaded with Windows. Am I entitled to order the IBM Recovery CDs for this used terminal?

In order to insure compliance with the copyright laws and the terms and conditions of the Microsoft licensing agreements, IBM will not provide Windows recovery CDs except for terminals that were preloaded by IBM. If this terminal

was originally preloaded by IBM, then you are entitled to receiving the recovery CDs. You will have to contact your IBM representative or an IBM partner and provide the IBM machine type, model and serial number for entitlement verification then order the SME Feature Code for the recovery CDs specific to your terminal. Otherwise, please, contact the vendor where you purchased your terminal for recovery media.

- 8-I previously purchased an IBM POS terminal (without a Windows preload), then purchased Windows license(s) from a local store, an IBM Partner or a Microsoft Distributor. Am I entitled to receiving the IBM Windows recovery CDs?
  - In order to insure compliance with the copyright laws and the terms and conditions of the Microsoft licensing agreements, IBM will not provide Windows recovery CDs except for terminals that was preloaded by IBM. Please, contact the vendor where you purchased your Windows licenses for recovery media.
- 9-My IBM Windows preloaded terminal has just crashed and I have an urgent need (store down scenario) for Recovery CDs to restore the original IBM image. I did not order recovery CDs when I ordered my terminals as recommended by IBM. What should I do?

Please, submit a <u>Techline</u> inquiry. Kindly, specify the following in your inquiry:

- The details of the urgency
- The Windows preloaded machine type, model and serial number
- The operating system that you need recovery CDs for including the version
- The contact name, ship-to address, phone number and e-mail where you want the recovery CDs shipped.

Once received, the request will be evaluated and fulfilled based on the validity of the urgency and availability of the recovery CDs.

#### **Multi-Languages and Localization**

- 1-I know that IBM offers Windows preloads for the English language? Does IBM also offer Windows preloads for other languages?
  - No. All the IBM RSS Windows preloaded images are for U.S./U.K. English only. However, in order to enable our customers with localized versions of Windows, we are beginning to offer the Windows Multilanguage User Interface (MUI) packs as a feature for the newer Windows preloaded terminals. Kindly, refer to the Sales Pages to identify the MUI pack feature code number for your particular operating system. Depending on your Windows operating system, the MUI pack feature may also be available under the 4611 machine type.
- 2-What is the Windows MUI pack and how do I use it with my Windows image to enable support for languages other than U.S./U.K. English?

The Windows Multilanguage User Interface (MUI) pack is a set of optional supplement CDs (or DvDs) that can be installed on top of the base English Windows image to allow an End User to view the user interface ("UI") of the underlying operating system in a particular localized language. Depending on the operating system, files that are not localized may include:

- 16 bit code
- Bitmaps
- Registry keys and/or values
- Help information
- Folders and/or file names
- .INF files

#### 3-How do I order the Windows MUI pack?

You can order the Windows MUI pack via the specific MUI pack feature code for your particular machine type, model and operating system. Kindly, refer to the Sales Pages to identify the feature code for your configuration. Again, please note that the MUI pack is operating system specific.

4-What are the languages supported in the MUI Packs?

The image provided by IBM is in English. You can add other languages as necessary using the Multilingual User Interface pack for XP Pro. This pack can be ordered from IBM using Feature Code XXXX (refer to you're the IBM Sales Pages to determine the your machine specific Feature Code number).

There are 32 languages supported on five MUI Pack CDs (total 33 supported languages when English is counted):

**CD1:** German, French, Japanese, Chinese Simplified, Chinese Traditional & Korean.

CD2: Arabic, Dutch, Hebrew, Italian, Portuguese(Brazil), Spanish & Swedish.

CD3: Czech, Danish, Finnish, Norwegian & Russian.

**CD4:** Greek, Hungarian, Polish, Portuguese(Portugal) & Turkish.

**CD5:** Bulgarian, Croatian, Estonian, Latvian, Lithuanian, Romanian, Slovak, Slovenian & Thai.

## DTOS vs. DTOS-e and Licensing

1-What is DTOS Windows and how does it differ from DTOS-e Windows?

DTOS Windows are those Desktop Operating Systems (DTOS) that are designed and licensed for use with general purpose PCs (i.e. Windows 95, 98, NT, 2000, XP Pro and Vista). On the other hand, DTOS-e Windows are those

operating systems that are licensed and, in some cases, are optimized for embedded implementations such as point-of-sale and point-of-service terminals (i.e. Windows XP Embedded, WEPOS, Windows XP Pro for Embedded Systems, Windows Vista for Embedded Systems, etc.).

2-I purchased IBM terminals that were preloaded with DTOS-e Windows (WEPOS, XP Pro for Embedded Systems, Vista for Embedded Systems, XP Embedded). Could I sell these terminals and transfer the Windows licenses to the new owner?

Yes, with restrictions. You may permanently sell and/or transfer the rights of this DTOS-e operating system licenses only as part of permanent sale or transfer of the DEVICE (the terminal), and only if the recipient agrees to your specific DTOS-e operating system's EULA (refer to the EULA that came with your operating system image). If your DTOS-e Windows was purchased initially as an upgrade, any transfer must also include all previous versions of the Windows operating system(s) that were originally upgraded.

3-I would like to transfer my Windows licenses from one POS terminal to another within my enterprise? Is that allowed?

Yes. Please, refer to the End User License Agreement that came with your POS terminal for the specific terms and restrictions.

4-My IBM terminal came preloaded with the IBM Windows image (WEPOS, XP Pro, etc.). However, I have an IT requirement to reinstall and deploy a new Windows image built and validated by my organization. Where could I get the Windows installation media (a.k.a. Windows OEM Pre-installation Kit – OPK)?

Per the current terms and conditions of the IBM/Microsoft licensing agreements, IBM cannot offer ship Windows installation media to end users. If this is a hard requirement for your business, kindly contact <u>Techline</u> and specify your business need. Techline will work directly with Microsoft for an exception.

5-What are the restrictions of the DTOS-e Windows licenses (the "embedded restrictions")?

In order to understand the DTOS-e embedded restrictions, users are required to read, understand and before using the software, agree to, the DTOS-e End User License Agreement (EULA) that came with your terminal. For reference, a sample WEPOS EULA is included in Appendix A of this document.

6-I need Windows support. Is that free or is there a cost involved?

If you have purchased your Windows licenses from IBM, then you are entitled for Windows support for the life of the Windows product. Please, send your Windows question or inquiry to IBM <u>Techline</u>. Otherwise, if you have purchased your

Windows licenses directly from Microsoft, a Microsoft distributor, or any 3<sup>rd</sup> party, then please contact that vendor where you purchased your licenses for support.

#### **Quick Links**

WEPOS Main Page:

http://www.microsoft.com/windows/embedded/eval/xpe/default.mspx

WEPOS Evaluation CDs (120-days) Order page:

http://www.microsoft.com/windows/embedded/eval/trial.mspx

The WEPOS and POS for .NET Blog page:

http://blogs.msdn.com/pointofservice/default.aspx

WEPOS Newsgroup:

http://msdn.microsoft.com/newsgroups/default.aspx?dg=microsoft.public.windows.embedded.pointofservice

Deploying WEPOS from a Remote Installation Server (RIS):

http://msdn2.microsoft.com/en-us/library/ms912373.aspx

Microsoft OS Comparison for Point of Service Devices:

http://download.microsoft.com/download/f/9/9/f99958c6-c624-435f-8afe-185d429fc3e5/WindowsOSComparisonforPOS.doc

Windows Vista for Embedded Systems Main Page:

http://www.microsoft.com/windows/embedded/eval/vista/default.mspx

## Appendix A

#### Sample WEPOS End User License Agreement (EULA):

"You have acquired a ("DEVICE") that includes software licensed by IBM from an affiliate of Microsoft Corporation ("MS"). Those installed software products of MS origin, as well as associated media, printed materials, and "online" or electronic documentation (collectively, "SOFTWARE") are protected by copyright and other intellectual property laws and treaties. IBM, MS and its suppliers (including Microsoft Corporation) own the title, copyright, and other intellectual property rights in the SOFTWARE. The SOFTWARE is licensed, not sold. All rights are reserved END USER PROOF OF LICENSE. If you acquired the SOFTWARE installed on the DEVICE, or on a compact disc or other media, a genuine Microsoft "Proof of License"/Certificate of Authenticity label with a genuine copy of the SOFTWARE identifies a licensed copy of the SOFTWARE. To be valid, the label must be affixed to the DEVICE, or appear on IBM's software packaging. If you receive the label separately other than from the IBM it is invalid. You should keep the label on the DEVICE or packaging to prove that you are licensed to use the SOFTWARE. This End User License Agreement ("EULA") is valid and grants the end-user rights ONLY if the SOFTWARE is genuine and a genuine Certificate of Authenticity for the SOFTWARE is included. For more information on identifying whether your SOFTWARE is genuine, please see http://www.microsoft.com/piracy/howtotell. IF YOU DO NOT AGREE TO THIS EULA, DO NOT USE THE DEVICE OR COPY THE SOFTWARE. INSTEAD, PROMPTLY CONTACT IBM FOR INSTRUCTIONS ON RETURN OF THE UNUSED DEVICE(S) IN ACCORDANCE WITH IBM's RETURN POLICIES. ANY USE OF THE SOFTWARE. INCLUDING BUT NOT LIMITED TO USE ON THE DEVICE, WILL CONSTITUTE

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(i) systems utilities, resource management or similar software (including without limitation anti-virus software) (collectively, "Support Software") solely for the purpose of administration, performance enhancement and/or preventive maintenance of the DEVICE; and (ii) software applications (each, an "RPOS Application"), the sole functionality of which may be any of the following: (A) to process retail sales transactions, scan and track inventory, record and/or transmit customer information, and/or perform related retail store management functions; (B) provide information about products available from the retailer directly to customers; (C) provide gift registry information to customers; and/or (D) process banking transactions. (b) You acknowledge and agree that with respect to any Support Software or RPOS Applications installed on the DEVICE: (i) the Support Software or RPOS Application may not be compatible with the SOFTWARE installed on your DEVICE; (ii) no warranty is provided by MS, Microsoft Corporation or their affiliates for any Support Software or RPOS Application that you may install on your DEVICE; and (iii) neither MS, Microsoft Corporation nor their affiliates is responsible for technical support of any Support Software or RPOS Application you may install on your DEVICE. In addition, you acknowledge and accept that (i) certain updates to the SOFTWARE may not be suitable for installation on or use with Support Software or RPOS Applications; and (ii) if installed or attempted to be installed on your DEVICE, the update may not function on the DEVICE or may malfunction and/or cause harm to the DEVICE, to operators of the DEVICE or to other persons or property. If you install Support Software or a RPOS Application, you agree that neither MS, nor Microsoft Corporation nor their affiliates has any risk or liability with regard to any update to the SOFTWARE that you install or attempt to install on your DEVICE, notwithstanding any other agreement you may have with MS, Microsoft Corporation or their affiliates affecting the update. Please contact IBM if you have any questions regarding any Support Software or RPOS Application Software that you are considering installing on your DEVICE. (c) The DEVICE may use terminal services protocols (such as Remote Desktop Protocol, Remote Assistance or Independent Computer Architecture) to connect or access Applications (as defined below) running on a server; however, these Applications may not run locally on the DEVICE. For purposes of this provision, "Applications" mean software that provides any of the following functionality: consumer or business tasks or processes performed by a computer or computing device, including email, word processing, spreadsheets, database, scheduling, or personal finance. v WIN PE COMPONENT. You may use the Microsoft 

Windows Pre-installation Environment component ("WinPE Component") located in the Software's I386 directories on the Software media only for your internal

use and solely for purposes of installing the Software on point of service DEVICES. For purposes of this provision, you may use the WinPE component and the set-up components

included in the Software to modify the Software to do the following in connection with installation, as described in the Software documentation: (a) install device drivers for known device classes that are not supported by the WinPE Component and/or the setup components included in the Software; and (b) add unattended.xml and/or driverinstall.xml files to the setup folder of the Software and the files referred to in unattended.xml and/or driverinstall.xml files to enable unattended mode set up of the Software. v DEVICE CONNECTIONS. The SOFTWARE may not be used by more than two (2) processors at any one time on the DEVICE. Provided that the DEVICE continues to comply with the terms of the "Restricted Functionality" paragraph above, you may permit a maximum of ten (10) computers or other electronic devices to connect via Server Message Block (SMB) to the DEVICE to utilize one or more of the following services of the SOFTWARE: (a) file services, print services, (b) Internet information services and/or (c) remote access (including connection sharing). The ten connection maximum includes any indirect connections made through "multiplexing" or other software or hardware which pools or aggregates connections. This ten connection maximum does not apply to other uses of the SOFTWARE. Unlimited simultaneous inbound connections are permitted via TCP/IP. v CLIENT ACCESS LICENSES. If you use the DEVICE to access or utilize the services or functionality of Microsoft Windows Server products (such as Microsoft Windows Server 2003), or use the DEVICE to permit workstation or computing devices to access or utilize the services or functionality of Microsoft Windows Server products, you may be required to obtain a Client Access License for the DEVICE and/or each such workstation or computing device. Please refer to the end user license agreement for your Microsoft Windows Server product for additional information. v REMOTE DESKTOP FEATURES/REMOTE ASSISTANCE. The SOFTWARE may contain Remote Assistance, and Remote Desktop technologies that enable the SOFTWARE or other applications installed on the DEVICE to be used remotely between two or more computing devices, even if the SOFTWARE or application is installed on only one DEVICE. Provided that the DEVICE continues to comply with the terms of the "Restricted Functionality" paragraph above, you may use Remote Assistance and Remote Desktop with all Microsoft products; provided however, use of these technologies with certain Microsoft products may require an additional license. For both Microsoft products and non-Microsoft products, you should consult the license agreement accompanying the applicable product or contact the applicable licensor to determine whether use of Remote Assistance or Remote Desktop is permitted without an additional license. v REMOTE BOOT FEATURE. Your DEVICE may be enabled with a Remote Boot feature which includes Remote Boot Installation Services tool. You may (i) use the Remote Boot Installation Services tool to install one (1) copy of the SOFTWARE onto your server solely for the purpose of deploying the SOFTWARE to one or more DEVICEs on which you are licensed to run the SOFTWARE (i.e. DEVICEs to which the appropriate Certificate of Authenticity is affixed); (ii) download the SOFTWARE over your internal network only onto such licensed DEVICEs; (iii) use the Remote Boot Installation Service only for deployment of the SOFTWARE to licensed DEVICEs as part of the Remote Boot process. Please refer

to the DEVICE documentation, if provided with your DEVICE, or contact IBM for additional information; and (iv) the image and the Remote Boot Service Installation shall be maintained by you on the original media solely for use as archival copies for recovery purposes of the Embedded System. v AUTOMATIC INTERNET-BASED SERVICES. The SOFTWARE features described below are enabled by default to connect via the Internet to Microsoft computer systems automatically, without separate notice to you. You consent to the operation of these features, unless you choose to switch them off or not use them. Microsoft does not use these features to collect any information that will be used to identify you or contact you. For more information about these features, please see the privacy statement at

http://go.microsoft.com/fwlink/?LinkId=37674. v Windows Update Features. If you connect hardware to your DEVICE, it may not have the drivers needed to communicate with that hardware. The Software's update feature may be able to obtain the correct drivers from Microsoft and install them on your DEVICE. You can switch this update feature off. v Web Content Features. Under the SOFTWARE's default configuration, if you are connected to the Internet, some SOFTWARE features may be enabled by default to retrieve content from Microsoft computer systems and display it to you. When you activate such a feature, it uses standard Internet protocols, which transmit the type of operating system, browser and language code of your DEVICE to the Microsoft computer system so that the content can be viewed properly from your DEVICE. These features only operate when you activate them, and you may choose to switch them off or not use them. v Digital Certificates. The SOFTWARE uses digital certificates based on the x.509 standard. These digital certificates confirm the identity of Internet users sending x.509 standard encrypted information. The SOFTWARE retrieves certificates and updates certificate revocation lists. These security features operate only when you use the Internet, v Auto Root Update. The Auto Root Update feature updates the list of trusted certificate authorities. You can switch off the Auto Root Update feature. v Windows Media Player. Some features of Windows Media Player automatically contact Microsoft computer systems if you use Windows Media Player or specific features of it: features that (A) check for new codecs if your DEVICE does not have the correct ones for content you attempt to play (this feature may be switched off), and (B) check for new versions of Windows Media Player (this feature will operate only when you are using Windows Media Player). v Windows Media Digital Rights Management. Content providers are using the digital rights management technology for Windows Media contained in this SOFTWARE ("WM-DRM") to protect the integrity of their content ("Secure Content") so that their intellectual property, including copyright, in such content is not misappropriated. Portions of this SOFTWARE and third party applications such as media players use WM-DRM to play Secure Content ("WM-DRM Software"). If the WM-DRM Software's security has been compromised, owners of Secure Content ("Secure Content Owners") may request that Microsoft revoke the WM-DRM Software's right to copy, display and/or play Secure Content. Revocation does not alter the WM-DRM Software's ability to play unprotected content. A list of revoked WM-DRM Software is sent to your DEVICE whenever you download a license for Secure Content from the Internet. Microsoft may, in conjunction with such license, also download revocation lists onto your DEVICE on behalf of Secure Content Owners. Secure Content Owners may also require you to upgrade some of the WM-DRM components in this SOFTWARE

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