June 25, 2004 update to course:

RE4840C: Introducing the IBM SurePOS 533, 543, 553, and 563

Note: This document is intended to supplement the base course. We recommend that you complete the base course prior to viewing this update.

Overview

Select IBM SurePOS^{TM} 500 Terminals may now be ordered with a Microsoft® Windows® XP Professional preload. The Microsoft Windows XP Professional operating system is licensed for use in a store environment, running retail point of sale applications on these select SurePOS Terminals.

The preload is available on the SurePOS W33 (533 base unit), W43 (543 base unit), W53 (553 base unit), W63 (563 base unit), W3Z (53Z base unit), W4Z (54Z base unit), W5Z (55Z base unit), and W6Z (56Z base unit).

All hardware and equipment features for the SurePOS 500 Series Models W33, W43, W53, and W63 are identical to the SurePOS 500 Series Models 533, 543, 553, and 563. You can review the features of these models in the base course or on the Retail Store Solutions Web site at: www.ibm.com/industries/retail/store. Click **POS Systems**, then **SurePOS 500 Series**.

The model numbers ending in Z are administrative model numbers specifying that the machines have a depot maintenance agreement. From a hardware perspective, there is nothing different between these depot maintenance machines and the corresponding machines whose model numbers end in 3. In fact, the model number sticker attached to the Z models actually shows the model number that ends in 3. For example, the 4840-W6Z model number sticker shows 4840-W63.

Key prerequisites

Customer review of the licensing terms for the Microsoft Windows XP Professional operating system preload.

Highlights of the license terms:
- Limited use of office applications (that is, browsers, databases, spreadsheets, e-mail, and word processors) is provided for store management operations only.
- The Microsoft Windows XP Professional standard desktop interface may not be used as a Retail Application interface to the end user.
- The ability to overwrite the installed image is limited to the same Windows operating system release. Customers are not authorized to install a different version of a Microsoft Windows operating system.

Key points

- Make sure that you understand and follow the Microsoft Windows XP Professional license agreement for the preload software.
- If you have unique hardware configurations, require downgrade rights, want to preload a different Windows operating system, or cannot comply with the restrictions of this agreement, these issues can be addressed with your IBM Representative or Business Partner.

The complete license agreement is available for viewing or download at: www.ibm.com/industries/retail/store. Click **News**, then the preload article.

The SurePOS 500 portion of the document that ships with all preloaded terminals will provide you additional information on working with the Microsoft Windows XP Professional preload. The document is provided here for your convenience.

Instructions for Use of the IBM Retail Store Solutions Windows XP Preloaded Terminals

These instructions tell you what is needed to complete your solution on IBM SurePOS 500 Series terminals that have been preloaded with Microsoft Windows XP Professional. Generally, you have two choices. You can use the image preloaded on your system as the basis for your final solution image, or you can overwrite the preloaded image with a complete image of your own. This document addresses the situation where you are going to use the preloaded image as the basis for your final solution image.

Microsoft Windows XP Professional with embedded restrictions is preloaded on the hard drive. The End User License Agreement specifies the restrictions placed on the use of the operating system. If you have questions regarding the End User License Agreement, please contact Tamara Garneau of IBM Retail Store Solutions at TGARNEAU@US.IBM.COM.

When booted, the machines come up to a NOTEPAD session with the IBM License Agreement displayed. You have access to the Windows Desktop as a tool to complete your solution image. However, when the complete solution image is constructed, you must prevent access to the Windows Desktop. The terminal sales application running on the terminal owns the entire user interface and provides all the functionality of the machine. Please read the license agreement for the complete view of how the operating system may be used.

There is more software that must be loaded onto the terminal to provide the functionality you expect of a complete solution image.

The model numbers of the terminals that this document applies to are:

- 4840-W33
- 4840-W3Z
- 4840-W43
- 4840-W4Z
- 4840-W53
- 4840-W5Z
- 4840-W63
- 4840-W6Z

Install System Unit Device Drivers

System unit device drivers must be installed. The drivers make the system operate more efficiently and at greater performance than the base Windows XP Professional.   You will find these drivers at the following URL:
http://www2.clearlake.ibm.com/store/support/index.html

This is the main screen of the IBM Retail Store Solutions hardware support website:
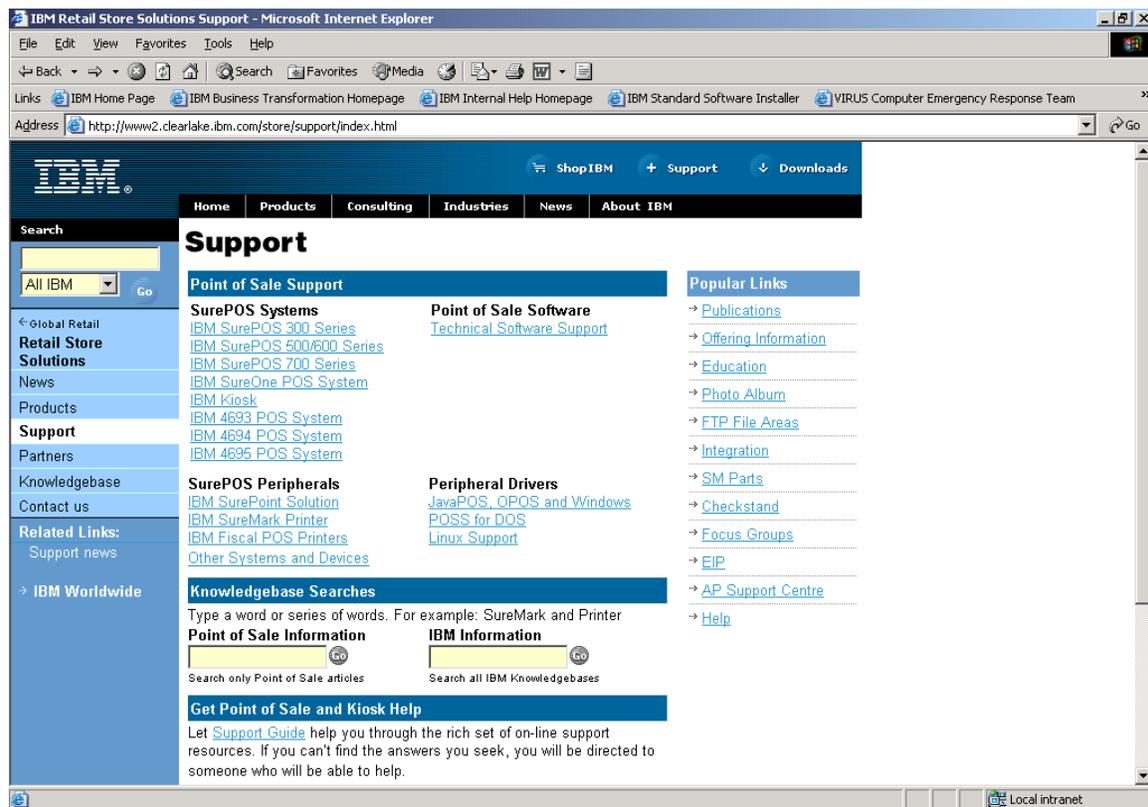
The system unit device drivers can be found by clicking on IBM SurePOS 500/600 Series found on the left hand side of the support screen under the headings SurePOS Systems and Point of Sale Support.

You can install all the system unit device drivers through the CD-ROM drive or you can install the network driver first using the CD-ROM drive and then attach the machine to a network and download and install the drivers from the website. The basic image has the support necessary to attach an external CD-ROM drive.

Machine Type Details

SurePOS 500 Models

Choose IBM SurePOS 500/600 Series, from the main hardware support screen, and you are presented with the following screen:
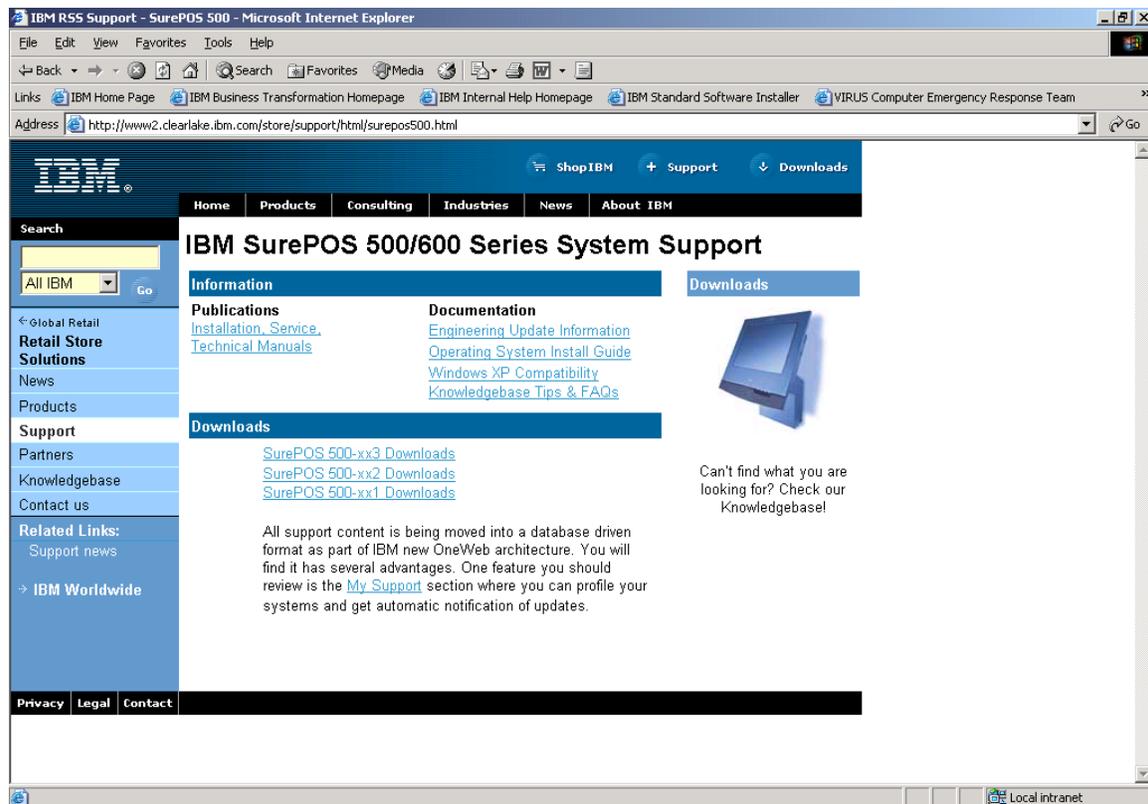
Click on SurePOS 500-xx3 Downloads under the Downloads heading to be able to download the drivers needed for any of the SurePOS 500-Wxx models. You should download the following drivers and follow the installation instructions for each one:

- SurePOS 500-xx3 Primary Video Driver
- SurePOS 500-xx3 BIOS Update
- SurePOS 500-xx3 Secondary Video Driver
- SurePOS 700-7x1, SurePOS 500-xx3, Avance AC'97 Audio Driver

- SurePOS 700-7x1 & SurePOS 500-xx3 Intel Pro/100 Ethernet Driver
- SurePOS 500-xx3, PCI Serial Port Driver
- SurePOS 500-xx3 & SurePoint 4820-2xx/5xx Touch Driver & Configurator
- SurePOS 700-7x1 & SurePOS 500-xx3 Intel Application Accelerator

Note that the BIOS upgrade may not be necessary since the machines are shipped with the BIOS. You should check the level of BIOS on the machine to determine if the BIOS on the website is more up to date than the BIOS on the machine.

There are utilities related to this machine type that you will want to consider using:
- SurePOS 500-xx3 Diagnostic/Service Diskette
- SurePOS 700-7x1 & SurePOS 500-xx3 Intel INF Utility

There are README files associated with each of these utilities that describe what the utilities are used for.

Install Point of Sale Peripheral Drivers

The next level of software that must be installed is the Point of Sale peripheral drivers. You will find them at the same URL identified above.
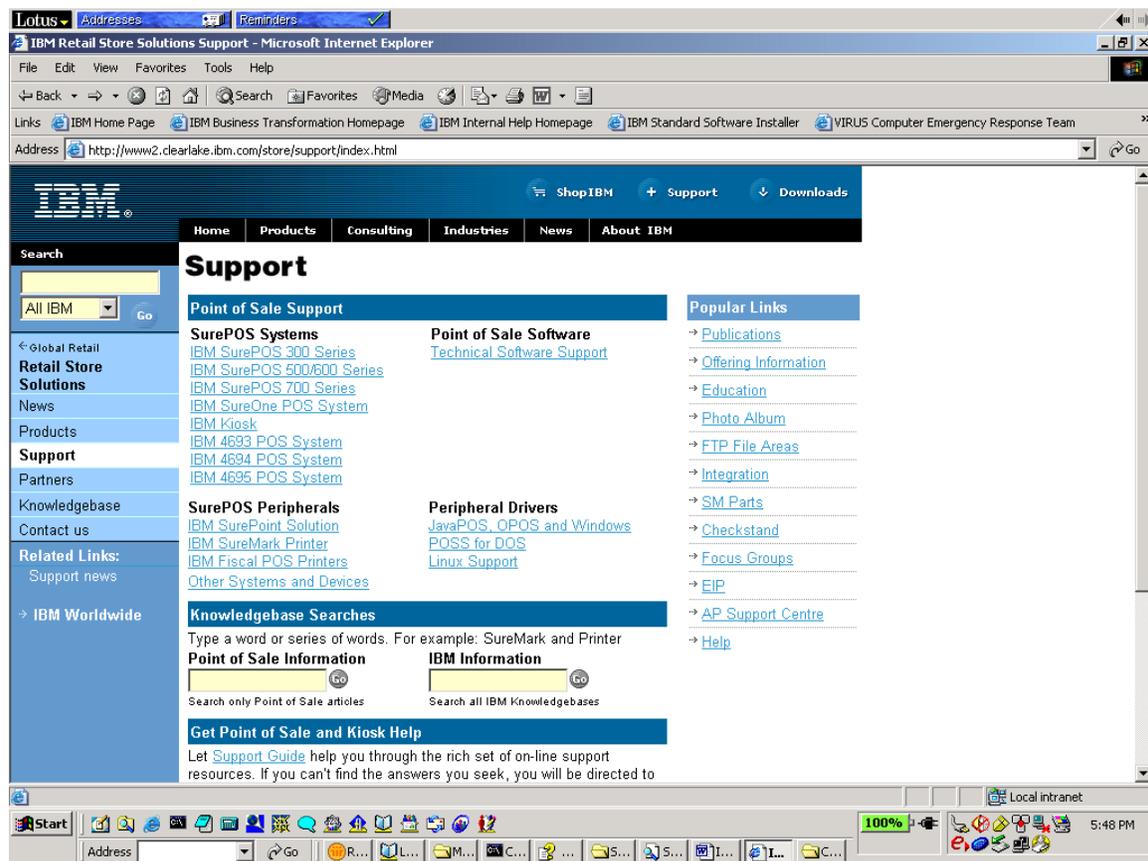
Look for the section of the web page titled "Peripheral Drivers". The drivers you choose will be dictated by the type of application you are running. C language applications use the OPOS or POSS drivers. Java applications use the JavaPOS drivers.

Install Terminal Sales Application

The final level of software to be installed is the terminal sales application. This is an application you've written yourself or purchased from an application provider. The application provides the total user interface for the terminal. Access to the Windows Desktop is not allowed under the license agreement for this version of Windows.

There may be other software packages you install for your complete solution but the software identified in this document is the minimum necessary for a complete functioning system.

Final Steps

You may be considering making a copy of the image you've constructed which you can apply to the rest of your terminals. If this is the case, there is one more step you will want to take before making a copy of the image.

The following web site contains instructions on the use of the SYSPREP tool:

http://www.microsoft.com/windowsxp/pro/using/itpro/deploying/introduction.asp

The tool will alter the image such that when you boot the machine onto which the image has been placed for the first time, a unique security ID is constructed by Windows uniquely identifying that machine. If this step is not taken, then all your terminals will have the same security ID.

IBM Retail Store Systems Windows XP Recovery CD

A recovery CD is available if you need to recover the original IBM Retail Store Solutions Windows XP image. You can order the recovery CD by contacting IBM Retail Store Solutions PartnerLine at 1-800-426-9990 and ask for POS.

Usually, you would make a copy of your complete image and use that copy rather than using the recovery CD. However, this CD is available as a tool. Please understand that the image is the original image applied to the machine when the machine was shipped from IBM. It does not contain drivers or your applications. You will need to follow the

steps outlined in this document to make the recovered image a complete operational image by installing the drivers and applications needed for your environment.

This CD will replace the contents of the hard drive with the base Windows XP image. Usually, the CD is used when you have to replace the hard drive on your system and you want to get back to the base image.