IBM 4690 OS V6.2 extends your POS with enhanced mode and power management

At a glance

IBM® 4690 V6.2 provides the following new functions:

• **Enhanced terminal mode:** Unlocks the 4690 V6 terminal, accelerates hardware support, and provides the latest Java™ runtime and tooling
• **Deep sleep support:** Dramatically reduces system energy consumption up to 47% and extends product life
• **Remote conversion utility (C2E):** Allows administrators to remotely manage the upgrade from 4690 OS V6 classic Multiple Controller Feature systems to enhanced mode
• Expanded support: Features support for new IBM SurePOS™ 700 Models 784 and C84, SureMark™ Model 1NR, enhanced cash drawers, and controllers, including X3200m3

Overview

As one of the premier point-of-sale (POS) platforms in the retail industry, the IBM 4690 Operating System is widely recognized for its high functionality and rock-solid reliability. Version 6.2 builds on this reputation, providing more functionality while remaining firmly committed to existing users. The new release of IBM 4690 leverages open standard technologies, providing a proven, retail-focused operating system that integrates with a wider range of hardware and applications. It also offers dual modes that allow retailers to determine their own timeline for making modifications to their business services and to plan business transformation in stages. Stores can use new applications and a broad array of hardware today, while migrating to more advanced capabilities in the future.

The enhanced mode of the IBM 4690 Operating System, adds innovations that make this operating platform a comfortable fit for a broad range of retail operations. The enhanced mode leverages an abstraction layer of the operating system to make the platform more hardware independent. This capability empowers you to run the system on some of the latest technologies and IBM hardware, such as IBM SurePOS 700 Models 784 and C84. IBM 4690 V6.2 supports enhanced mode on controllers and terminals and provides a classic-to-enhanced controller conversion utility.

Leveraging leading edge power management technology found only in the latest models of the SurePOS 700 line in enhanced mode, this latest release also provides enhanced power management support and an extended sleep state, including deep sleep when using enhanced mode. Deep sleep means that the system is in a low-power mode and conserving almost the same amount of energy as in the off state. But unlike powering down, deep sleep is much faster and more reliable to get your
system up and running when it is needed again. IBM Remote Management Agent (RMA) also supports deep sleep. This means the system can be turned off and back on remotely. For example, after store closing, systems can be scheduled to sleep then "wake up" in the morning before employees arrive. Or, a retailer can schedule system to go in deep sleep during slow periods of the day and resume when high traffic is expected. A retailer can save as much as 47% of their POS energy cost by going into deep sleep for 12 hours a day.

This announcement fulfills the Software requirements of Preview Announcement ZP10-0125, dated January 05, 2010.

**Statement of Direction De-commit: Enhancements for ANPOS Biometric Reader**

IBM is withdrawing the Statement of Direction for 4690 OS enhancements for ANPOS biometric reader found in Software Announcement ZP08-0577, dated December 09, 2008.

The statement being withdrawn is as follows:

It is IBM's intent to provide the following enhancements by 4Q2009:

- The modular ANPOS biometric reader

**Key prerequisites**

Refer to the Technical information section for details.

**Planned availability date**

- April 30, 2010: IBM 4690 Operating System Version 6.2
- July 9, 2010: PTF (Program Temporary Fix) required to implement deep sleep for enhanced mode

Availability of programs with encryption algorithm in France is subject to French government approval.

Cryptography in this product is limited to password encryption, authentication or digital signature.

**Description**

IBM delivers a new infrastructure to lay the groundwork for the future. IBM 4690 OS V6.2 is a key component of that infrastructure and provides two operating modes; **classic** and **enhanced** for both controller and terminal.

Classic mode continues to use the current OS infrastructure. This mode is intended to provide investment protection by allowing 4690 OS V6.2 to support the functions and most of the same hardware that has been supported in previous 4690 versions. Some new hardware and new functions available in 4690 OS V6.2 may require enhanced mode. Other functions, such as RMA software distribution support are available in both modes.

The current OS user interfaces and programming APIs continue to be available, allowing current applications to run in enhanced mode. Enhanced mode not only introduces a new hardware interface layer below classic 4690 OS, but it also supports some additional IBM System x® servers, including selected IBM blade server models, and IBM SurePOS 700 models. Enhanced mode is also required to exploit other new functions such as deep sleep automation.

The following new functions are available:
• Enhanced terminal mode unlocks the 4690 V6 terminal, accelerates hardware support, and provides the latest (Java 6) runtime and tooling.
• Wake on LAN® support allows enhanced power management from off state (S5) and add support for deep sleep (S3) - enhanced mode terminals only.
• Deep sleep support
  – Leverages the leading edge power management technology found only in the latest models of the SurePOS 700 line (Models 723, 743, 783, and 784).
  – Dramatically cuts energy usage for POS and Self Service Devices without having to turn the system off while not in use.
• Remote conversion utility (C2E) allows administrators to remotely manage the upgrade from 4690 OS V6 classic Multiple Controller Feature systems to enhanced mode.
• Support for new IBM SurePOS 700 Models 784 and C84 (supported in enhanced mode only).
• Support for new IBM SureMark printer Model 1NR.
• Support for new IBM I/O including enhanced cash drawers and SurePoint™ displays.
• Support for controllers including the new X3200m3.
• Ability to burn ISO images to CD in enhanced mode.
• Network boot of 4690 supplementals.
• Dual independent display resolution.

**Note:** Deep sleep is defined as 'suspend to RAM' (random access memory); this means that the power supply is in a reduced power mode. The system appears off; the CPU has no power; RAM is in slow refresh. The ACPI standard defines deep sleep as 'S3'.

**Accessibility by people with disabilities**

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


**Reference information**


**Availability of national languages**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Description</th>
<th>Availability Date</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>5829</td>
<td>4690 OS V6 Base+Migr CDROM</td>
<td>April 30, 2010</td>
<td>Spanish</td>
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<td>5859</td>
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<td>German</td>
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<td>5889</td>
<td>4690 OS V6 Base+Migr CDROM</td>
<td>April 30, 2010</td>
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Program number

<table>
<thead>
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<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
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<tbody>
<tr>
<td>5639-P70</td>
<td>6.2</td>
<td>IBM 4690 Operating System V6.2</td>
</tr>
</tbody>
</table>

Product identification number

<table>
<thead>
<tr>
<th>Program PID number</th>
<th>Maintenance 1 year PID number</th>
<th>Maintenance 3 year PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-P70</td>
<td>5639-BB3/BB5</td>
<td>5639-GG2/GG3/GG4</td>
</tr>
</tbody>
</table>

Education support

Multimedia and classroom education is available for IBM Business Partners, customers, and IBM personnel who sell or support the IBM 4690 Operating System. The following courses are available.

IBM and Business Partner sales education:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE1095S</td>
<td>IBM 4690 V6: A Smart Platform for Retail</td>
</tr>
</tbody>
</table>

IBM, customer, and Business Partner technical education:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE1050</td>
<td>IBM 4690 Operating System workshop (classroom - 4 1/2 days)</td>
</tr>
</tbody>
</table>

To enroll in these courses and view additional IBM Retail Store Solutions education offerings, go to the appropriate Web site.

IBM customers


IBM Business Partners


IBM employees


If you have education-related questions, please contact grse@us.ibm.com.

Offering Information

Product information is available via the Offering Information Web site
Publications

A program directory and one copy of the following publications are automatically supplied with the base and migration machine-readable material:

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Directory</td>
<td>GI11-7902</td>
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<tr>
<td>License Information</td>
<td>GI11-7903</td>
</tr>
<tr>
<td>Support Agreement Addendum</td>
<td>GI19-0246</td>
</tr>
</tbody>
</table>

Displayable softcopy publications: IBM 4690 OS V6 documentation is offered in displayable softcopy form on the Internet. Copies of the following unlicensed publications are available online


1. Under Links, select Publications
2. Under Operating Systems, select 4690 V6

- IBM 4690 OS Planning, Installation, and Configuration Guide Version 6 Release 2, G362-0571-00
- IBM 4690 OS Users Guide Version 6 Release 2, G362-0572-00
- IBM 4690 OS Messages Guide Version 6 Release 2, G362-0573-00
- IBM 4690 OS Programming Guide Version 6 Release 2, G362-0574-00
- IBM 4690 OS V6.2: Communications Programming Reference Version 6 Release 2, G362-0575-00
- IBM 4690 OS Master Index Version 6 Release 2, G362-0576-00
- IBM 4690 OS Application Interface Specification for IBM 4610 printers, G362-0579-00
- IBM 4680 BASIC Reference, SC30-3356
- TR-4 Tape Drive User's Guide
- OnLine System Probe

These displayable manuals can be viewed with the Adobe® Acrobat Reader, which is offered free on the Internet. Terms and conditions for use of the machine-readable files are shipped with the files. Instructions for displaying the manuals is contained in the README file on the media.

Technical information

Specified operating environment

Hardware requirements

Hardware requirements for 4690 OS Version 6.2 are as follows:

- Classic controller
  - Minimum/maximum memory - 256 MB/1 GB
- Enhanced controller
  - Minimum/maximum memory - 512 MB/1 GB
- Classic Terminal Memory
  - Minimum requirement:
    -- Classic terminal memory with Java - 128 MB
- Maximum used by 4690 OS:
  -- Classic terminal memory - 512 MB

Please note that only the IBM SurePOS 700 Series and select models of the IBM SurePOS 4694 POS System can run Java applications.

- Enhanced terminal memory
  -- Minimum requirements:
    -- Enhanced terminal memory - 256 MB
    -- Enhanced terminal memory for 723, 743, and 783 - 512 MB
    -- Enhanced terminal memory with Java - 512 MB
  -- Maximum used by 4690 OS:
    -- Enhanced terminal memory - 1 GB

Please note that in enhanced mode, the maximum memory listed above refers to memory used by the 4690 OS. In enhanced mode, the hardware abstraction layer can actually make use of code above the 1 GB limit. For example running a Java 6 application, such as RMA or ICE Browser, on an enhanced mode controller or terminal will run outside of the 4690 OS code space, thus would make use of memory above 1 GB, up to 4 GB maximum.

The following table shows controllers, terminals, and controller/terminal models that are supported in classic and/or enhanced mode on 4690 OS V6.2:

<table>
<thead>
<tr>
<th>Model</th>
<th>Controller</th>
<th>Terminal</th>
<th>Contr/Term</th>
<th>Classic</th>
<th>Enhanced</th>
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<tr>
<td>SurePOS 700:</td>
<td>X</td>
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<td>4800-741,781,722,742,782,723,743,783</td>
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<tr>
<td>4800-784</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>4800-721</td>
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<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>4800-c41,c42, c43</td>
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<td></td>
<td>X</td>
<td>X</td>
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<td>eserver 206m:</td>
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<td>Seriesx 206m:</td>
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<td>8485,8490,8485</td>
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<td>BladeCenter S</td>
<td>X</td>
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<td>Chassis 8886-MAZ</td>
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<td>HS12 blades:</td>
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<td>8014-1az, 8028-44z</td>
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<td>IBM System</td>
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<tr>
<td>x3200 4362,4363</td>
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<tr>
<td>x3200m2 4367-xxx (SATA and SAS models)</td>
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<tr>
<td>(SAS model is supported in enhanced (as shown).</td>
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<tr>
<td>(SATA model is supported in classic and enhanced.)</td>
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<tr>
<td>IBM System</td>
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<td>X</td>
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<td>x3200m3 7327-xxx, 7328-xxx</td>
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<td>4694-all models</td>
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<td>4693-all models</td>
<td>X</td>
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</table>
4690 OS V6.2 will support the following hardware adapters only in classic mode and only on servers announced prior to October 2007:

- MPCA
- ARCTIC
- Loop
- Token Ring
- PCI Internal Modem

For more detailed information about the hardware supported on V6.2, refer to the controller matrix located in the Knowledgebase at


**Software requirements**

- Web browser is provided by the ICE Browser product, which is PRPQ P85687 (5799-RWQ).
- ICEsoft PDF Viewer is available to view PDF files. This product is PRPQ P85739 (5799-RZT).
- The 4690 Remote Access provides the capability to do Remote Console for both controller character screens and graphical screens, file transfers, and a remote command processor. This product is PRPQ P85728 (5799-RYG) and is only supported in classic mode.

All three of these PRPQs must be ordered separately from the OS.

Defect support and upgrade charges for the browser, the PDF Viewer, and 4690 Remote Access are included with the 4690 OS Software Maintenance PIDs 5639-BB3, 5639-BB5, 5639-GG2, 5639-GG3, and 5639-GG4.

Refer to the Web site for Technical Support for the 4690 OS PTF download information


The program’s specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a README file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

**Limitations**

**Hardware limitations**

IBM 4690 OS V6.2 **only** runs on IBM hardware.

Some older devices may not be supported in enhanced mode. For more information, check the Knowledgebase article at


10M Ethernet hubs are not supported when using enhanced terminals. 100 MB or switch is required.
Enhanced terminals do not support standard PS/2 Keyboards. The ANPOS keyboard is supported.

When using an external Lenovo® USB Multiburner drive, DVD-RW media should be used.

Deep sleep state will be supported in enhanced mode only on a PTF that will be available as shown in the Planned availability date section. Deep sleep is defined as "suspend to RAM" (random access memory); this means that the power supply is in a reduced power mode. The system appears off; the CPU has no power; and RAM is in slow refresh.

An NVRAM adapter continues to be required for System x and Blade servers used as store controllers for operation with 4690 OS V6.2.

IBM 4683 and 4693 terminals can support only the IBM 4690 OS V1 functions, not the Java- or terminal-based TCP/IP functions. As a result, system management functions are not supported on these terminals.

IBM support for the IBM SurePoint Solution is provided so that Java-based applications can access IBM SurePoint Solution as a touch-screen interface. Current CBASIC applications can use the IBM SurePoint Solution only as a VGA display unless Java extensions are added.

The size of the terminal load shrink file, ADXRT8GF.DAT, must not exceed the memory size of any terminal that is connected.

Ethernet-attached 4694-2x7 and 4694-3x7 terminals and the SurePOS 700 models use the Preboot Execution Environment (PXE) loading mechanism.

JavaPOS support for fiscal printers will not be included in IBM 4690 OS V6.2.

IBM 4694 Models 2x7 and 3x7 and the SurePOS 700 models are not supported as terminals via the Store Loop.

IDE tape drives are not supported on the SurePOS 700.

Boot messages may not be displayed on 2X20 USB attached displays.

PS/2 attached IBM Modular ANPOS keyboard will be supported in compatibility mode only and will not support firmware flashing.

The display must be able to support SVGA 800 x 600 resolution for enhanced mode.

**Software limitations**

Java 2 application support requires the use of the Java Terminal Offline Function (TOF) or terminal Java preload bundles in the 4690 OS.

Java will not run on loop-attached terminals.

Graphics on SurePOS 721 models using 1024x768x64K colors are not supported by the 4690 OS.

4690 OS does not support USB POS devices attached via a 5V USB port.

Java 1 is removed from 4690 OS.

4690 Remote Access is only supported in classic mode.

Store Integrator (SI) V3.1 (PTF 116) is supported running 4690 V6.2. Support for virtual sessions in 4690 V6.2 is supported on enhanced controllers.

4690 OS V6.2 will support the following hardware adapters only in classic mode and only on servers announced prior to October 2007:
• MPCA
• ARCTIC
• Loop
• Token Ring
• PCI Internal Modem

With the announce of IBM 4690 OS V6.2, the following hardware is no longer supported by the 4690 OS:

• TR7 Tape Drives in servers prior to November 2008
• External attached USB CD drives on all System x servers

For additional information, refer to **Usage restrictions** in the Terms and conditions section of this announcement, or to the license information document that is available on the IBM Software License Agreement Web site


Planning information

**Packaging**

IBM 4690 OS V6.2 is distributed in one package with the following:

• The PoE (Proof of Entitlement) is now the packing list or invoice that is included with the package.
• Three CD-ROMs (Base is LCD7-3407 and LCD7-4511 English, Classic Supps is LCD7-3424, or LCD7-3411 and LCD7-4514 Spanish, Classic Supps is LCD7-3428) including the IBM International Program License Agreement (IPLA)
• Program Directory (GI11-7902)
• Support Agreement Addendum (GI19-0246)
• License Information (LI) (GI11-7903 in hardcopy form)

IBM 4690 OS V6.2 is distributed in one package with the following:

• The PoE (Proof of Entitlement) is now the packing list or invoice that is included with the package.
• Three CD-ROMs depending on language including the IBM International Program License Agreement (IPLA):
  – English Base/Migrate LCD7-3407
  – English Base/Migrate LCD7-4511
  – English Classic Supps LCD7-3424
  – Spanish Base/Migrate LCD7-3411
  – Spanish Base/Migrate LCD7-4514
  – Spanish Classic Supps LCD7-3428
  – Can Frn Base/Migrate LCD7-3404
  – Can Frn Base/Migrate LCD7-4510
  – Can Frn Classic Supps LCD7-3421
  – French Base/Migrate LCD7-3412
  – French Base/Migrate LCD7-4512
  – French Classic Supps LCD7-3429
  – German Base/Migrate LCD7-3408
  – German Base/Migrate LCD7-4513
  – German Classic Supps LCD7-3425
• Program Directory (GI11-7902)
• Support Agreement Addendum (GI19-0246)
License Information (LI) (GI11-7903 in hardcopy form)
- Three CD-ROM depending on language including the IBM International Program License Agreement (IPLA):
  - Chinese Simpl Base/Migrate LCD7-3405
  - Chinese Simpl Base/Migrate LCD7-3430
  - Chinese Simpl Classic Supps LCD7-3422
  - Japanese Base/Migrate LCD7-3409
  - Japanese Base/Migrate LCD7-3432
  - Japanese Classic Supps LCD7-3426
  - Korean Base/Migrate LCD7-3410
  - Korean Base/Migrate LCD7-3433
  - Korean Classic Supps LCD7-3427
  - Traditional Chinese Base/Migrate LCD7-3406
  - Traditional Chinese Base/Migrate LCD7-3431
  - Traditional Chinese Classic Supps LCD7-3423
- Program Directory (GI11-7902)
- Support Agreement Addendum (GI19-0246)
- License Information (LI) (GI11-7903 in hardcopy form)

**Security, auditability, and control**

The announced programs use the security and auditability features of the IBM 4690 OS V6.2.

The security and auditability feature of the IBM 4690 OS V6.2 includes:

- Authorization services (password) for each user and files protected from unauthorized access, which may be specified by the user during configuration.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

**Global Technology Services**

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings for the efficient installation, implementation, or integration of this product.

**Ordering information**

Consult your IBM representative.

**Charge metric**

IBM 4690 Operating System V6.2 is a product that has two charge units: Controller and terminal.

<table>
<thead>
<tr>
<th>Program name</th>
<th>PID number</th>
<th>Charge metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM 4690 Operating System V6</td>
<td>5639-P70</td>
<td>Per controller</td>
</tr>
<tr>
<td>IBM 4690 Operating System V6</td>
<td>5639-P70</td>
<td>Per terminal</td>
</tr>
</tbody>
</table>

The following features are included in the base product of 4690 OS as of Version 5 Release 1:

- Communication feature
• LAN feature for TCC
• Loop feature for TCC

The following features are optional and may be ordered separately:

• NetBIOS feature
• Multiple Controller Feature (MCF)
• Small Store feature

The product is licensed per controller and per terminal in a store with the first year of support included. There is a media feature code if media is desired.

IBM 4690 Operating System, 1 or 3 Year SWM is the support offering, which has the same structure as the product with a controller and terminal charge.

**Note:** The base, migration and classic supplemental packages of the product are available on CD-ROM.

**Server or Controller**

Server or controller is the unit of measure by which this program is licensed. A server or controller is a computer system that executes requested procedures, commands, or applications to one or more user or terminals. A Proof of Entitlement (PoE) must be obtained for each server or controller regardless of the number of processor cores or partitions in the server or controller on which the program runs or each server or controller managed by the program. Where blade technology is employed, each blade is considered a separate server or controller.

**Terminal**

Terminal is the unit of measure by which this program is licensed. A terminal is a computing device that requests the execution of a set of commands, procedures, or applications from another computer system that is typically referred to as a server or controller. Multiple terminals may share access to a common server or controller. A terminal generally has some processing capability or is programmable to allow a user to do work. A Proof of Entitlement (PoE) must be obtained for each terminal accessing the program in any manner on each and every server or controller where the program is installed.

Examples include, but are not limited to appliances, automated teller machines, cash registers, desktop computers, kiosks, notebook computers, personal digital assistant, point-of-sale terminals, and technical workstations.

**Retail Store Solutions - product offering**

The Product Identification (PID) number for the new initial base license of IBM 4690 OS V6.2 is 5639-P70. The following is a description of each of the new feature codes:

• **Feature - Multiple Controller:**
  When there are two or more controllers in the store, the main controller is designated as the Master Controller (CC) and the Alternate Controller (DD). When the Master Controller goes down in the store this feature allows Alternate or Backup Controller to take over the operation of the store and transfer control back to the Master Controller once it is able to resume control of the store. If you order MCF, you do **not** need to order NetBIOS.

• **Feature - NetBIOS feature:**
  This feature must be selected if there is only one controller running 4690 OS in the store. It provides the ability for the controller to communicate from one controller to another outside of the 4690 OS.
• **Feature - Small Store Terminal:**
  This feature must be selected for each terminal that 4690 OS will be loaded on and running in the store. The quantity of this feature code ordered **must** be equal to the number of terminals in the store. The definition of a small store is from one to **no more than** a maximum of five terminals in a store.

• **Feature - Small Store Controller:**
  This feature must be selected for each controller that 4690 OS will be loaded on and running in the store. The quantity of this feature code ordered **must** be equal to the number of controllers in the store. The definition of a small store is from one to **no more than** a maximum of five terminals in a store.

• **Feature - Per Terminal 4690 OS Base:**
  This feature must be selected for the terminal license for each terminal that 4690 OS loaded and running on in the store. The quantity of this feature code ordered **MUST** be equal to the number of terminals in the store.

• **Feature - Per Controller 4690 OS Base:**
  This feature must be selected for the controller license for each controller 4690 OS will be loaded and running on in the store. The quantity of this feature code ordered **MUST** be equal to the number of controllers in the store.

Below represents how to order an initial base license for 4690 OS V6.2. The econfig tool is available to help you create a 4690 OS order. If for some reason econfig is not available, you can place a basic order as follows:

Order 5639-P70 for the base 4690 OS license code
- For 4690 Terminal
  -- Select feature "Per Terminal 4690 OS Base" for the base software license
  -- Select the quantity equal to the total number of terminal
- For 4690 Controller
  -- Select feature "Per Controller 4690 OS Base" for the base software license
  -- Select the quantity equal to the total number of 4690 controllers
- To get media select feature code 5889

You **must** also include either the 1 year or 3 year Software Maintenance PID to register for Software Maintenance and to be entitled for Software Subscription and Support. Please refer to the section on Software Maintenance for additional information.

Those users current on the SWM for previous Versions, can obtain V6.2, without cost by ordering 5639-P70 and specifying the media code (5889) only.

**Retail Store Solutions - Support Offering**

All software licenses include Software Maintenance (Software Subscription and Technical Support) for a period of 12 months from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses. Extending coverage for a total of three years from date of acquisition may be elected.

While your Software Maintenance is in effect, IBM provides you with assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details consult your IBM Software Support Handbook at

Software Maintenance does not include assistance for the design and development of your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.

In an effort to provide additional detail to our customers, below is more information regarding the Software Maintenance offering for IBM 4690 OS V6.2.

This offering provides access to the customer support Web site, voice access to personnel, support for configuration and installation questions, maximum two-hour initial response during prime shift and four hours during off shift (off shift is defined as the hours outside of prime shift), and 24 x 7 coverage for "store down" situations.

- Technical support provides assistance electronically or via telephone during prime shift. Prime shift means 8:00 a.m. to 5:00 p.m. in the local time zone where service is available Monday through Friday (excluding national holidays). This support:
  - Determines problem cause for configuration, installation, and defect-type problems
  - Identifies the source of the problem for unmodified IBM 4690 OS V6.2 code using problem analysis
  - Provides information for existing code corrections, restrictions, or known bypasses for reported problems
  - Provides circumventions (when available)
  - Supplies a reasonable amount of assistance for product interpretation and understanding
- Program Temporary Fixes (PTFs) provide maintenance for various fixes of the base product and releases, documentation, and online updates.
- IBM 4690 OS V6.2 updates include improvements, extensions, and other changes to IBM 4690 OS V6 programs which IBM determines to be logical improvements, upgrades, versions, or new releases.

To order support, specify program number 5639-BB3 for one-year support or 5639-GG2 for three-year and the appropriate registration feature code. Support for the first year, even though there is no charge, must be ordered using the registration feature code. If Software Maintenance has expired, then customers wishing to reinstate their Software Maintenance must order the After License product number.

The following items are orderable:
- Media - these are the physical media, such as CD-ROMs, that deliver the product code.
- License and Software Maintenance 1 and 3 year Registration - this is the product authorization with maintenance to the first or third anniversary date. There is no charge for the first year.
- Software Maintenance 1 and 3 Year Renewal to Anniversary Date - this is the maintenance renewal for one year or three years which applies when a customer renews their existing coverage period prior to the anniversary date at which it expires.
- Software Maintenance after License to Anniversary Date - this is for customers who have allowed their Software Maintenance to expire, and later wish to reinstate their Software Maintenance.

When support is purchased, it must be ordered for every installed license of this product. The quantity of the billable feature codes for support must be equal to the quantity of the billable feature codes for the product license. Support is not transferable among products.

Note that one terminal feature should be ordered for each POS terminal supported the IBM 4690 OS. Also note that separate controller features must be obtained for each controller utilizing the feature.
The features can be enabled using the featurization code provided with the package. It is a violation of IBM’s licensing policy to enable functions using the featurization code without ordering the selected functions for a one-time charge. Features are listed below. Some of these charge features require ordering a media feature as well.

Program Number: 5639-P70

<table>
<thead>
<tr>
<th>Description</th>
<th>One-Time Charge Feature Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>4690 OS Base (Per Terminal w/ 1 Yr SW Maint)</td>
<td>U8A4C1</td>
</tr>
<tr>
<td>4690 OS Base (Per Controller w/ 1 Yr SW Maint)</td>
<td>U8A5C1</td>
</tr>
<tr>
<td>Small Store Terminal (Per terminal)</td>
<td>U8A8C1</td>
</tr>
<tr>
<td>Small Store Controller (Per controller)</td>
<td>U8A9C1</td>
</tr>
<tr>
<td>NetBIOS feature (Per controller)</td>
<td>U8A7C1</td>
</tr>
<tr>
<td>Multiple Controller (Per controller)</td>
<td>U8A6C1</td>
</tr>
</tbody>
</table>

Media feature code

<table>
<thead>
<tr>
<th>Description</th>
<th>Feature Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base+Migr (ENU) CD-ROM</td>
<td>5889</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Feature Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base+Migr CD-ROM US</td>
<td>5889</td>
</tr>
<tr>
<td>Base+Migr CD-ROM Spanish</td>
<td>5829</td>
</tr>
<tr>
<td>Base+Migr CD-ROM German</td>
<td>5859</td>
</tr>
<tr>
<td>Base+Migr CD-ROM French</td>
<td>5839</td>
</tr>
</tbody>
</table>

Customization Options for 5639-P70: Select the appropriate feature codes to customize your order with delivery options desired. These features can be specified on the initial or MES orders.

Initial Shipments

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3444</td>
<td>Serial Number Only (suppresses shipment of media and documentation)</td>
</tr>
</tbody>
</table>

There are two options for Software Maintenance (SWMA) for 4690 OS V6.2. You can choose either a one year or a three year option.

You must order Software Maintenance Registration with the initial order. It entitles the end user/customer to receive new Versions and/or Releases during the initial 12-month period, and also to receive support. It also registers them in the entitlement database, allowing them to open and report problems. If you do not include the Software Maintenance Registration PID with the initial order, it will not update the entitlement system to allow the end user/customer to get support.

Also, you must ensure that the number of base 4690 OS terminal and controller licenses match the number of 4690 OS terminal and controller software maintenance licenses. There should be a one for one match.

You do not need to order the SWMA Renewal the first year since it is already included in the base license price of the package. This needs to be ordered once the registration period is up (after the first 12 months). It starts with year number two through the life of the installation.

Please make sure you always order the latest announced Software Maintenance PID for 4690 OS. The 4690 OS Software Maintenance PID number will always be the same PID number for the life of 4690 OS.

The following are the Software Maintenance Product Identification (PID) Numbers for 4690 OS V6.2:

- 5639-P70 - IBM 4690 Operating System Version 6.2 Base Software license (most current)
• 5639-BB3 - IBM 4690 Operating System 1 Year Software Maintenance Registration/Renewal
• 5639-BB5 - IBM 4690 Operating System 1 Year Software Maintenance After License
• 5639-GG2- IBM 4690 Operating System 3 Year Software Maintenance Registration
• 5639-GG3 - IBM 4690 Operating System 3 Year Software Maintenance Renewal
• 5639-GG4 - IBM 4690 Operating System 3 Year Software Maintenance After License

The following products are covered under 4690 OS Software Maintenance:

• 5799-RWQ - ICEsoft Browser, V2 for 4690 Operating System Base Software license
• 5799-RZT - ICEsoft PDF Viewer Base Software license
• 5799-RYG - IBM 4690 Remote Access Base Software license

¹ There is not a separate Software Maintenance Product Identification (PID) number for ICEsoft Browser, ICEsoft PDF Viewer or IBM 4690 Remote Access. Software Maintenance for these products is covered under the 4690 OS Software Maintenance product identification numbers. In order to receive support for the products above, you must be current on your 4690 OS SWM.

The following is a description of each of the feature codes for 4690 OS 1 Year Software Maintenance Registration/Renewal 5639-BB3:

**Feature - Per Terminal SW Maintenance Registration:** Feature Code U4G1C2

This feature must be selected when initially ordering the 4690 OS terminal base license code. It is a no charge feature that registers the end user/customer so they are entitled to their 12 months of Software Maintenance on the 4690 OS terminal base code. The total number of the quantity of the terminal Software Maintenance feature code ordered must match the total number of the quantity of the terminal base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Terminal SW Maintenance 1 Year Renewal:** Feature Code U4G1C3

This feature must be selected for each terminal that needs to be renewed before their 12-month no charge Software Maintenance for the terminals is up for renewal. The quantity of the terminal renewal feature code ordered must be equal to the number of terminal base licenses. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance Registration:** Feature Code U4G2C2

This feature must be selected when initially ordering the 4690 OS controller base license code. It is a no charge feature that registers the end user/customer so they are entitled to their 12 months of Software Maintenance on the 4690 OS controller base code. The total number of the quantity of the controller Software Maintenance feature code ordered must match the total number of the quantity of the controller base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance 1 Year Renewal:** Feature Code U4G2C3

This feature must be selected for each controller that needs to be renewed before their 12-month no charge Software Maintenance for the terminals is up for renewal. The quantity of the terminal renewal feature code ordered must be equal to the number of terminal base licenses. It should be a one for one match. There is not a separate renewal feature code for the optional controller features under 4690 OS.

**Feature - Per Terminal Small Store (1-5 Ln) SW Maintenance Registration:** Feature Code U4J8C2
This feature must be selected when initially ordering the 4690 OS terminal base license code for a small store. A small store is defined as being from one to a maximum of five terminal lanes in a store. It is a no charge feature that registers the end user/customer so they are entitled to their 12 months of Software Maintenance on the 4690 OS terminal base code. The total number of the quantity of the terminal Software Maintenance feature code ordered must match the total number of the quantity of the terminal small store base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Terminal Small Store (1-5 Ln) SWM 1 Year Renewal:** Feature Code U4J8C3

This feature must be selected for each terminal small store that needs to be renewed before their 12-month no charge Software Maintenance for the terminals is up for renewal. The quantity of the terminal small store renewal feature codes ordered must be equal to the number of terminal base small store feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller Small Store (1-5 Ln) SWM Registration:** Feature Code U4J9C2

This feature must be selected when initially ordering the 4690 OS controller base license code for a small store. A small store is defined as being from one to a maximum of five terminal lanes in a store. It is a no charge feature that registers the end user/customer so they are entitled to their 12 months of Software Maintenance on the 4690 OS controller base code. The total number of the quantity of the controller Software Maintenance feature codes ordered must match the total number of the quantity of the controller small store base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance 1 Year Renewal:** Feature Code U4J9C3

This feature must be selected for each controller small store that needs to be renewed before their 12-month no charge Software Maintenance for the controllers is up for renewal. The quantity of the controller small store renewal feature codes ordered must be equal to the number of controller base small store feature code base licenses. It should be a one-for-one match.

The following is a description of each of the feature codes for the 4690 OS 1 Year After License 5639-BB5.

**Feature - Per Terminal SW Maintenance 1 Year After License:** Feature Code U4G3C4

This feature must be selected when a customer/end user has let their terminal Software Maintenance lapse. This can happen by either a customer/end user not ordering Software Maintenance after the initial 12-month registration period is over OR a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Terminal 1 Year After License feature code ordered must match the total number of the quantity of the terminal base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance 1 Year After License:** Feature Code U4G4C4

This feature must be selected when a customer/end user has let their controller Software Maintenance lapse. This can happen by either a customer/end user not ordering the Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Controller 1 Year After License Software Maintenance feature code ordered must match the total number of the quantity of the controller base license feature codes ordered. It should be a one-for-one match.
Feature - Per Terminal Small Store (1-5 Ln) 1 Year After License: Feature Code U4KAC4

This feature must be selected when a customer/end user has let their terminal small store Software Maintenance lapse. This can happen by either a customer/end user not ordering Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Terminal Small Store 1 Year After License Software Maintenance feature codes ordered must match the total number of the quantity of the terminal small store base license feature codes ordered. It should be a one-for-one match.

Feature - Per Controller Small Store (1-5 Ln) 1 Year After License: Feature Code U4KBAC4

This feature must be selected when a customer/end user has let their controller small store Software Maintenance lapse. This can happen by either a customer/end user not ordering the Software Maintenance after the initial 12 month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Controller Small Store 1 Year After License Software Maintenance feature codes ordered must match the total number of the quantity of the controller small store base license feature codes ordered. It should be a one-for-one match.

The following is a description of each of the feature codes for 4690 OS Three Year Software Maintenance Registration 5639-GG2.

Feature - Per Terminal Small Store (1-5 Ln) SW Maintenance 3 YR Registration: Feature Code U6N8C5

This feature must be selected when initially ordering the 4690 OS terminal base license code for a small store. A small store is defined as being from one to a maximum of five terminal lanes in a store. It is a feature that registers the end user/customer so they are entitled to their first 12 months of Software Maintenance on the 4690 OS terminal base code. The total number of the quantity of the terminal Software Maintenance feature code ordered must match the total number of the quantity of the terminal small store base license feature codes ordered. It should be a one-for-one match.

Feature - Per Controller Small Store (1-5 Ln) SWM 3 YR Registration: Feature Code U6N9C5

This feature must be selected when initially ordering the 4690 OS controller base license code for a small store. A small store is defined as being from one to a maximum of five terminal lanes in a store. It is a feature that registers the end user/customer so they are entitled to their first 12 months of Software Maintenance on the 4690 OS controller base code. The total number of the quantity of the controller Software Maintenance feature codes ordered must match the total number of the quantity of the controller small store base license feature codes ordered. It should be a one-for-one match.

Feature - Per Terminal SW Maintenance 3 YR Registration: Feature Code U6N6C5

This feature must be selected when initially ordering the 4690 OS terminal base license code. It is a feature that registers the end user/customer so they are entitled to their first 12 months of Software Maintenance on the 4690 OS terminal base code. The total number of the quantity of the terminal Software Maintenance feature code ordered must match the total number of the quantity of the terminal base license feature codes ordered. It should be a one-for-one match.

Feature - Per Controller SW Maintenance 3 YR Registration: Feature Code U6N7C5

This feature must be selected when initially ordering the 4690 OS controller base license code. It is a feature that registers the end user/customer so they are entitled...
to their first 12 months of Software Maintenance on the 4690 OS controller base code. The total number of the quantity of the controller Software Maintenance feature code ordered must match the total number of the quantity of the controller base license feature codes ordered. It should be a one-for-one match.

The following is a description of each of the feature codes for 4690 OS Three Year Software Maintenance Renewal 5639-GG3:

**Feature - Per Terminal SW Maintenance 3 Year Renewal:** Feature Code U6PAC6

This feature must be selected for each terminal that needs to be renewed before their 12-month Software Maintenance for the terminals is up for renewal. The quantity of the terminal renewal feature code ordered must be equal to the number of terminal base licenses. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance 3 Year Renewal:** Feature Code U6PBC6

This feature must be selected for each controller that needs to be renewed before their 12-month Software Maintenance for the terminals is up for renewal. The quantity of the terminal renewal feature code ordered must be equal to the number of terminal base licenses. It should be a one-for-one match. There is not a separate renewal feature code for the optional controller features under 4690 OS.

**Feature - Per Terminal Small Store (1-5 Ln) SWM 3 Year Renewal:** Feature Code U6PCC6

This feature must be selected for each terminal small store that needs to be renewed before their 12-month Software Maintenance for the terminals is up for renewal. The quantity of the terminal small store renewal feature codes ordered must be equal to the number of terminal base small store feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller Small Store (1-5 Ln) SWM 3 Year Renewal:** Feature Code U6PDC6

This feature must be selected for each controller small store that needs to be renewed before their 12-month Software Maintenance for the controllers is up for renewal. The quantity of the controller small store renewal feature codes ordered must be equal to the number of controller base small store feature code licenses. It should be a one-for-one match.

The following is a description of each of the feature codes for 4690 OS Three Year Software Maintenance After License 5639-GG4:

**Feature - Per Terminal SW Maintenance 3 Year After License:** Feature Code U6N2C7

This feature must be selected when a customer/end user has let their terminal Software Maintenance lapse. This can happen by either a customer/end user not ordering Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Terminal 3 Year After License feature code ordered must match the total number of the quantity of the terminal base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Controller SW Maintenance 3 Year After License:** Feature Code U6N4C7

This feature must be selected when a customer/end user has let their controller Software Maintenance lapse. This can happen by either a customer/end user not ordering the Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Controller 3 Year After License Software Maintenance feature codes ordered must match the total number of the quantity of the controller base license feature codes ordered. It should be a one-for-one match.
feature code ordered **must match** the total number of the quantity of the controller base license feature codes ordered. It should be a one-for-one match.

**Feature - Per Terminal Small Store (1-5 Ln) 3 Year After License:** Feature Code U6N3C7

This feature must be selected when a customer/end user has let their terminal small store Software Maintenance lapse. This can happen by either a customer/end user not ordering Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Terminal Small Store 3 Year After License Software Maintenance feature codes ordered **must match** the total number of the quantity of the terminal small store base license feature codes ordered. It should be a one-for-one match.

**Feature 0004- Per Controller Small Store (1-5 Ln) 3 Year After License:**
Feature Code U6N5C7

This feature must be selected when a customer/end user has let their controller small store Software Maintenance lapse. This can happen by either a customer/end user not ordering the Software Maintenance after the initial 12-month registration period is over or a customer/end user forgot to renew their Software Maintenance. The total number of the quantity of the Controller Small Store 3 Year After License Software Maintenance feature codes ordered **must match** the total number of the quantity of the controller small store base license feature codes ordered. It should be a one-for-one match.

**Terms and conditions**

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage® Agreement, and the IBM Agreement for Acquisition of Software Maintenance.
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This software license includes Software Subscription and Support (also referred to as Software Maintenance).

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**License Information form number**

GI11-7903

The program’s License Information will be available for review on the IBM Software License Agreement Web site


**Limited warranty applies**

Yes

**Limited warranty**

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the *IBM Software Support Handbook* found at

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IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

**Money-back guarantee**

If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you
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You may not copy and use this program on another computer without paying additional license fees.

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Yes. Contact your IBM representative.

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**Passport Advantage applies**

No

**Usage restriction**

Yes

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Yes. All distributed software licenses include Software Subscription and Support (also referred to as Software Maintenance) for a period of 12 months from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses. Extending coverage for a total of three years from date of acquisition may be elected.

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**System i Software Maintenance applies**

No
Variable charges apply
No

Educational allowance available
Yes. When ordering through the program number process, a 15% education allowance applies to qualified education institution customers.

Education Software Allowance Program applies when ordering through the program number process.

ESAP available
Yes, to qualified customers.

Prices
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