

Toshiba Global Commerce Solutions adds Virtual Controller Feature to Toshiba 4690 OS V6.3 point-of-sale Enhanced environment

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At a glance

The Virtual Controller Feature (VCF):

- Enables a 4690 OS Virtual Controller to be hosted on a controller that hosts multiple virtual servers using the VMware ESX or ESXi environment.
- Can be used with the Multi Controller Feature (MCF) to enable multiple controllers, where one is designated as the master controller and another as the alternate controller. When the master controller fails in the store, this feature allows an alternate or backup controller to take over the operation, and transfer control back to the master controller when it is able to resume control of the store.

Overview

Toshiba® Global Commerce Solutions, a Toshiba and IBM Company, offers the Toshiba 4690 OS Enhanced environment as the premier point-of-sale platform for large retailers worldwide. It is designed to deliver superior functionality and reliability. A Virtual Controller Feature is now available for the 4690 OS V6.3 Enhanced environment. This new feature allows a 4690 OS controller to run as a guest OS in a VMware ESX or ESXi environment, enabling retailers to consolidate servers and streamline operations.

Key prerequisites

Refer to the [Technical information](#) section for details.

Planned availability date

January 25, 2013

Note: A Program Temporary Fix (PTF) 0CD0 (ASM) download is available now.

Description

When there is a 4690 OS controller in a store that is consolidated on a controller that hosts multiple virtual servers, then the Virtual Controller Feature is needed for

each instance of a 4690 OS Virtual Controller. For enhanced reliability, the master and alternate controller should be hosted on separate physical servers.

This feature requires the store to have a controller running VMware ESX or ESXi to host the virtual controller or controllers.

When the Multi Controller Feature (MCF) is ordered with the Virtual Controller Feature (VCF), the Toshiba 4690 OS V6.3 Enhanced environment is enabled for multiple controllers, where one controller is designated as the master controller (CC) and another as the alternate or backup controller (DD). When the master controller fails in the store, this feature allows an alternate or backup controller to take over the operation of the store, and transfer control back to the master controller when it is able to resume control of the store.

Section 508 of the US Rehabilitation Act

Although IBM® makes no representation about the Section 508 status of third-party electronic and information technology products, IBM provides for informational purposes that the developer of this product has indicated that it is capable of satisfying the applicable requirements of Section 508 of the Rehabilitation Act. Contact Toshiba for specific, current information on the conditions and limitations of this capability.

Program number

Program number	VRM	Program name
5639-P70	6.3.2	Toshiba 4690 Operating System Version 6.3

Product identification number

Program PID number	Maintenance 1 year PID number	Maintenance 3 year PID number
5639-P70	5639-BB3 1yr Reg/Ren 5639-BB5 1yr AftLic	5639-GG2 3yr Reg 5639-GG3 3yr Ren 5639-GG4 3yr AftLic

Education support

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

Toshiba and Business Partner sales education:

Title	Course number
4690 V6: A Smart Platform for Retail	RE1096S

Toshiba, customer, and Business Partner technical education:

Title	Course number
4690 Operating System Workshop (classroom - 4 1/2 days)	RE1050

To enroll in these courses and view additional Toshiba Global Commerce Solutions education offerings, go to

<http://www.toshibagcs.com/education>

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

Offering Information

Product information is available via the Offering Information website

<http://www.ibm.com/common/ssi>

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM , you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=213-049>

Publications

One copy of the following publication is automatically supplied with the base and migration machine-readable material:

Title	Order number
License Information	GI11-7903

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

<http://www.toshibagcs.com/support>

1. Under Links, select Publications
 2. Under Operating Systems, select 4690 V6
- IBM 4690 OS Planning, Installation, and Configuration Guide Version 6 Release 3, G362-0571
 - IBM 4690 OS Users Guide Version 6 Release 3, G362-0572
 - IBM 4690 OS Messages Guide Version 6 Release 3, G362-0573
 - IBM 4690 OS Programming Guide Version 6 Release 3, G362-0574
 - IBM 4690 OS V6.3: Communications Programming Reference Version 6 Release 3, G362-0575
 - IBM 4690 OS Master Index Version 6 Release 3, G362-0576
 - IBM 4690 OS Application Interface Specification for IBM 4610 printers G362-0579

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.

Specified operating environment

Hardware requirements

Controller hardware must support VMware ESX or ESXi environment.

Running multiple virtual instances (4690 OS or otherwise) will impact performance and resource requirements (memory, processor, CSS sessions, and so on). To ensure desired performance for the workload, a server consolidation study must be done for your environment.

Software requirements

4690 V6.3 Enhanced environment with a Program Temporary Fix (PTF) 0CD0

The base/migrate distribution will be updated to 0CD0 on January 25, 2013. Prior to that date, the Virtual Controller Feature is available only by 0CD0 Program Temporary Fix (PTF) (ASM) download.

When there is a 4690 OS controller in a store that is consolidated on a controller that hosts multiple virtual servers, then the Virtual Controller Feature is needed for each instance of a 4690 OS Virtual Controller.

This feature requires the store to have a controller running VMware ESX or ESXi to host the virtual controller or controllers.

4690 OS V6.3 Program Temporary Fix (PTF) 0CD0 Enhanced will be supported as a guest OS in the following versions of VMware ESX or ESXi:

- ESX or ESXi 4.1 U3, or any other subsequent version made generally available by VMware.
- ESXi 5.0 U1 (vSphere 2011), or any other subsequent version made generally available by VMware.
- ESXi 5.1 (vSphere 2012), or any other subsequent version made generally available by VMware.

Refer to the website for technical support for 4690 OS PTF download information

<http://www.toshibagcs.com/support>

When the Multi Controller Feature (MCF) is ordered with Virtual Controller Feature (VCF), the Toshiba 4690 OS V6.3 Enhanced environment is enabled for multiple controllers, where one controller is designated as the master controller (CC) and another as the alternate or backup controller (DD). When the master controller fails in the store, this feature allows an alternate or backup controller to take over the operation of the store, and transfer control back to the master controller when it is able to resume control of the store.

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 Toshiba, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Limitations

Some functions will be impacted in a virtual controller environment:

- NVRAM will be virtualized with the potential to impact reliability. Data loss could occur in a power outage. Your physical server should be protected by a UPS.

- Memory data dump capability could be lost with the potential to impact serviceability. Keystrokes will be required to initiate a memory dump.
- No serial devices will be supported in a virtual controller environment.
- No parallel printer is supported in a virtual controller environment.
- No floppy drive support in a virtual controller environment.
- No Memory Key support in a virtual controller environment.
- CD/DVD is read only.
- CD/DVD support is limited to mounting a virtual CD/DVD device or ISO image to the client. Mounting to the host machine is not supported.
- Shared resources may impact performance and availability (for example, memory, processor, disk).
- Physical servers must have enabled Intel™ processors with Intel Virtualization Technology (VT) and Virtualization Technology needs to be enabled in BIOS.
- Processors with at least Intel VT-x which includes Extended Page Table support improve the performance of Store Integrator (SI) Client Session Server (CSS) performance in the virtual controller environment. Performance of CSS sessions in the virtual controller environment can be impacted if the physical server's processors do not support Extended Page Table.

Planning information

A knowledgebase article will be available at Planned Availability, search the link below for keyword '4690VCF'.

<http://www.toshibagcs.com/support>

Packaging

Toshiba 4690 OS V6.3 is distributed in two packages with the following:

- Package 1 which includes the Virtual Controller feature
 - The Proof of Entitlement (PoE) is now the packing list or invoice that is included with the package.
 - Three CD-ROMs (Base/Migration consists of Disk 1 and 2, and Disk 3 is the Classic Supplementals, for each language).
 - Program Directory (GI11-7902).
 - The IBM Agreement for Acquisition of Software Maintenance Z125-6011.
 - International Program License Agreement Z125-3301.
 - License Information (LI) (GI11-7903 in hardcopy form).
- Package 2 for the 4690 OS Terminal License
 - 4690 OS Version 6 terminal license for IBM Self Checkout lanes is provided by shipping the paper document LI GI11-7903.

Maintenance level V6.3 OCD0 will be available before the base migrate package is updated.

The base/migrate distribution will be updated to OCD0 on January 25, 2013. Prior to that date, the VCF is available only by OCD0 PTF (ASM) download.

Security, auditability, and control

The announced programs use the security and auditability features of the Toshiba 4690 OS V6.3.

The security and auditability feature of the Toshiba 4690 OS V6.3 includes:

- Authorization services (password) which may be specified for each user during configuration to protect against unauthorized access.

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

Software Services

Toshiba Worldwide Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our Toshiba Global Services team.

To learn more about Toshiba Worldwide Services or to contact a Software Services sales specialist, visit

<http://www-03.ibm.com/products/retail/services>

Ordering information

Charge metric

Toshiba 4690 Operating System V6.3 is a product that has three charge units: Controller, terminal, and virtual server.

Program name	PID number	Charge metric
Toshiba 4690 Operating System Version 6.3	5639-P70	Per controller
Toshiba 4690 Operating System Version 6.3	5639-P70	Per terminal
Toshiba 4690 Operating System Version 6.3	5639-P70	Per virtual server

The following features are optional and may be ordered separately:

- NetBIOS feature
- Multiple Controller Feature (MCF)
- Small Store feature
- Virtual Controller Feature (VCF)
- 4690 Terminal License feature for Self Checkout

The product is licensed per controller, per terminal, or per virtual server in a store with the first year of support included. The media feature code for the Virtual Controller feature is the same as the media feature code for the 4690 OS product.

Toshiba 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.

Virtual server

Virtual server is a unit of measure by which the program can be licensed. A server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate server. A virtual server is either a virtual computer created by partitioning the resources available to a physical server or an unpartitioned physical server. Licensee must obtain virtual server entitlements for each virtual server made available to the program, regardless of the number of processor cores in the virtual server or the number of copies of the program on the virtual server.

Toshiba Global Commerce Solutions - product offering

The Product Identification (PID) number for the new initial base license of Toshiba 4690 OS V6.3 is 5639-P70. The following is a description of the new feature code for the virtual controller:

- **Feature - 4690 OS Virtual Controller Feature:** Feature code 0008.
This feature allows a 4690 OS controller to run as a Guest OS in a VMware ESX/ESXi environment.
- To get media select feature code 5889

Support for this feature is provided by Software Subscription and Support for the 4690 OS V6. Refer to the [Toshiba Global Commerce Solutions - Support offering](#) section on Software Maintenance for additional information.

Toshiba Global Commerce 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 Toshiba 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, Toshiba provides you with assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. Toshiba provides assistance by 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 Toshiba support center. (This assistance is not available to your users.) Toshiba provides Severity 1 assistance 24 hours a day, every day of the year. For more details, consult your *Toshiba Software Support Handbook* at

<http://www.toshibagcs.com/support/software/documents/handbook>

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 Toshiba is not responsible under this agreement.

In an effort to provide additional detail to clients, information regarding the Software Maintenance offering for Toshiba 4690 OS Version 6 is included below.

This offering provides access to the client support website, 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 Toshiba 4690 OS Version 6 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.
- Toshiba 4690 OS V6 updates include improvements, extensions, and other changes to programs which Toshiba 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 clients wishing to reinstate their Software Maintenance must order the After License product number.

The following items are orderable:

- 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 client renews their existing coverage period prior to the anniversary date at which it expires.
- Software Maintenance after License to Anniversary Date - this is for clients 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 or Self Checkout lane supported by the Toshiba 4690 OS.

The features can be enabled using the featurization code provided with the package. It is a violation of Toshiba'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. The media feature code for the Virtual Controller Feature is the same as the media feature code for the 4690 OS product.

Program Number: 5639-P70:

Description	One-Time Charge Feature Code
4690 OS virtual controller feature	0008

For the other feature codes for 5639-P70, refer to:

- Software Announcement [212-001](#), dated January 17, 2012
- Software Announcement [212-169](#), dated May 22, 2012

There are two options for Software Maintenance (SWMA) for 4690 OS V6. 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 user or 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 user or 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.

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:

- 5639-P70 - IBM 4690 Operating System Version 6 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-RYG¹ - IBM 4690 Remote Access Base Software license

¹ There is **not** a separate Software Maintenance Product Identification (PID) number for IBM 4690 Remote Access. Software Maintenance for this product is covered under the 4690 OS Software Maintenance product identification numbers. In order to receive support for the product 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 2730.

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 2731.

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 2732.

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 or 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 2733.

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 2869.

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 user or 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 2870.

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 2871.

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 user or 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 2872.

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 2734.

This feature must be selected when a customer or user has let their terminal Software Maintenance lapse. This can happen by either a customer or user not ordering Software Maintenance after the initial 12-month registration period is over **or** a customer or 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 2735.

This feature must be selected when a customer or user has let their controller Software Maintenance lapse. This can happen by either a customer or user not ordering the Software Maintenance after the initial 12-month registration period is over **or** a customer or 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 2873.

This feature must be selected when a customer or user has let their terminal small store Software Maintenance lapse. This can happen by either a customer or user not ordering Software Maintenance after the initial 12-month registration period is over **or** a customer or 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 2874- Per Controller Small Store (1-5 Ln) 1 Year After License: Feature Code 2874.

This feature must be selected when a customer or user has let their controller small store Software Maintenance lapse. This can happen by either a customer or user not ordering the Software Maintenance after the initial 12 month registration period is over **or** a customer or 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 0001.

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 user or 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 0002.

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 user or 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 0003.

This feature must be selected when initially ordering the 4690 OS terminal base license code. It is a feature that registers the end user or 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 0004.

This feature must be selected when initially ordering the 4690 OS controller base license code. It is a feature that registers the user or 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 0001.

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 0002.

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 0003.

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 0004.

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 base 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 0001.

This feature must be selected when a customer or user has let their terminal Software Maintenance lapse. This can happen by either a customer or user not ordering Software Maintenance after the initial 12-month registration period is over **or** a customer or 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 2 Year After License: Feature Code 0002.

This feature must be selected when a customer or user has let their controller Software Maintenance lapse. This can happen by either a customer or user not ordering the Software Maintenance after the initial 12-month registration period is over **or** a customer or user forgot to renew their Software Maintenance. The total number of the quantity of the Controller 3 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) 3 Year After License: Feature Code 0003.

This feature must be selected when a customer or user has let their terminal small store Software Maintenance lapse. This can happen by either a customer or user not ordering Software Maintenance after the initial 12-month registration period is over **or** a customer or 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 0004.

This feature must be selected when a customer or user has let their controller small store Software Maintenance lapse. This can happen by either a customer or user not ordering the Software Maintenance after the initial 12-month registration period is over **or** a customer or 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.

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License Information form number

GI11-7903

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Yes

Limited warranty

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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 obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

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No

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IBM Operational Support Services - SoftwareXcel

No

System i Software Maintenance applies

No

Variable charges apply

No

Educational allowance available

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