For a powerful, profitable e-business strategy

IBM

IBM 4690 Operating System Version 2 Release 4

4690

Highlights

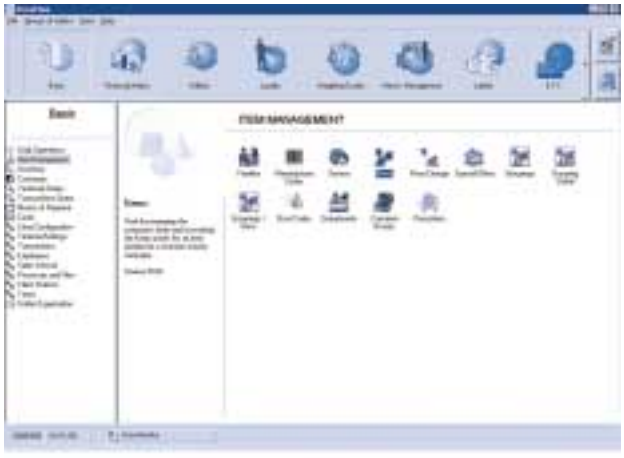
Provides the foundation for e-business

- *Allows Web-based programs to run concurrently with point-of-sale/point-of-service applications*
  - *Access to Internet (for e-commerce, customer service)*
  - *Access to intranet (for corporate policy, HR, store procedures, training)*
  - *Access to extranet (for vendor/supplier information, shipping status, inventory)*

- *Helps sales associates and store managers improve productivity*
  - *Single access point to multiple applications – web, POS, back-office – from POS terminal*
  - *Allows addition of Java™ GUI to make POS applications more user-friendly and reduce training time dramatically*

Optimized for the latest POS solutions from IBM

- *Runs on IBM SurePOS™ 700 Series, models 730 and 750*
- *Supports USB technology, including hot plugging of 4690 OS-supported USB peripheral devices*



- *Supports the IBM 4694 POS System, including models 206 and 246*
- *Supports IBM StoreFlow® Version 1.5.1 for the U.S. and Canada*

Improves investment protection

- *Supports current hardware and application software, as well as emerging POS solutions*
- *Enables enhancement of current applications with Java extensions*
- *Delivers application transparency and portability*
- *Increases the number of applications available to store personnel from the POS, which can reduce the need for additional workstations in the store*
- *Provides access to a larger pool of qualified developers*

Reduces total cost of ownership

- *Applications written in Java can run on 4690-enabled systems as well as non-POS hardware and software platforms*
- *Enables "write once, run anywhere" capability*
- *Thin-client computing helps lower the cost of systems management*

Designed for retail

- *Retail-hardened, building on the proven reliability of the IBM 4690 OS*
- *Terminal offline support for Java applications maximizes availability for demanding store hours*
- *Provides scalability to accommodate various store environments*
- *Positions retailers to take advantage of advanced hardware solutions and new peripherals*
- *Supports DBCS and SBCS applications, providing a single software solution for global retailers*
- *Protects data in the event of power loss*
- *Euro-ready*

Open for business and ready to grow

Enhancements in Release 4

- *Terminal offline support for Java applications*
- *Serial device support for Java applications*
- *Double Byte Character Set (DBCS) support for retailers operating in China, Korea, Japan and Taiwan*
- *Controller and terminal memory support increased to 256 MB each*
- *Terminal RAM disk raised to 128 MB (up to 64 MB per disk)*
- *Supports the IBM 4694 POS System, including models 206 and 246*
- *Supports the single-station IBM SureMark™ Printers, models TM6 and TM7*

Open for business and ready to grow

The latest release of the proven IBM 4690 OS – the IBM 4690 Operating System Version 2 Release 4 – delivers the complete foundation retailers need to support in-store e-business strategies. It allows retailers to run a pure Java Web browser at the point of sale (POS), so you can run traditional programs alongside Internet, intranet and extranet applications. This opens up significant e-business opportunities, and helps transform the POS to a point of service.

With a Web browser at the POS, operators can access applications, such as customer loyalty and time-and-attendance, and connect to the Internet, intranet or extranet. This helps link everyone in the supply chain, including vendors, suppliers, merchandisers and other retailers. And it gives sales associates a direct link to training materials, policy guides and other centralized information. Plus, with a Web browser at the POS, retailers can give customers access to e-commerce or electronic catalogs.

The 4690 OS V2 R4 includes a Java Runtime Environment (JRE), available for the server (controller) and the client (terminal). The JRE allows retailers to write applications once and run them anywhere, and integrate applications written in Java, such as a gift registry, at the POS. Java also lets you add graphics to existing, retail-proven 4690 applications, so you can give proven POS applications a dynamic, Java-based graphical user interface (GUI) while reusing the underlying business logic.

Traditional and Java-based POS programs run in a solid, retail-hardened operating environment that delivers the high availability you need to ensure customer satisfaction and productive, profitable operations. This is just one way the IBM 4690 OS V2 R4 builds on the leadership of IBM in retail – by delivering exceptional reliability and investment protection that gives retailers a competitive advantage.

The 4690 OS V2 R4 provides a reliable thin-client platform for the latest retail application initiative from IBM: StoreFlow Version 1.5.1 (for the United States and Canada), an all-encompassing store management solution that connects POS, back-office and enterprise-level systems.

The 4690 OS V2 R4 also functions as a retail-hardened operating system for the latest, most advanced IBM POS solutions. It supports the IBM SurePOS 700 Series, models 730 and 750. When you combine the IBM SurePOS 700 Series with the 4690 OS V2 R4, you can take advantage of the USB interface. It also supports the IBM 4694 POS System, including models 206 and 246.

The 4690 OS V2 R4 supports the IBM SurePoint™ Solution as well. This flexible display and interface lets you enhance existing applications with touch-screen technology to optimize hand-eye coordination and operator accuracy. Touch-screen performance not only adds a whole new look and feel to the POS, it helps reduce training time with a more intuitive visual presentation.

Single-station thermal models of the IBM SureMark Printer (TM6, TM7) are supported. Supported features include scalable fonts, high-quality printing and upside-down printing, as well as thermal papers that print an additional accent color on receipts.

IBM delivers the services and support you need to expand current applications for full-screen displays or touch-screen performance. We can provide these services directly, or valued IBM Business Partners or customers can make these modifications independently.

Multinational and global retailers will appreciate the fact that the 4690 OS V2 R4 supports both Single Byte Character Set (SBCS) and Double Byte Character Set (DBCS) applications. That means retailers who operate stores in China, Korea, Japan, Taiwan and other parts of the world can use the 4690 OS in every store.

With these capabilities, the 4690 OS V2 R4 equips retailers to power virtually any retail application – including next-generation GUI and Web-based tools your business is demanding. Yet you can preserve the technology investment you've already made.

As competition in the retail industry intensifies, a key area for profitable differentiation is the ability to customize store operations. The IBM 4690 OS V2 R4 greatly extends this customization capability by supporting versatile and easy-to-modify Java applications for use in retail.

Perhaps the most critical benefit of the JRE is that it enables you to incorporate networking and graphical capabilities over time, then utilize these functions on a wide variety of clients and servers. In this way, the IBM 4690 OS V2 R4 provides a strong bridge between the systems you have in place today and the Java applications that will support your e-business strategy, while ensuring reliability and building on your current investment.

Position your business for the future

Developing state-of-the-art checkout and back-office applications is easier with the 4690 OS V2 R4. It simplifies the interface between applications written in Java and C or C++ through the Java Native Interface (JNI), as well as support for the IBM VisualAge® Compiler for C or C++. Building a retail development team to implement Java will help you get ahead and stay ahead of the competition. With the growing number of Java developers, there are more skilled resources to address your specific needs. So, you can take advantage of opportunities with the rapidly growing numbers of off-the-shelf Java applications, as well as your own custom-written solutions. Most important, you can lead the way in expanding productivity and profitability.

Strength and flexibility for competitive advantage

The IBM 4690 OS V2 R4 meets the relentless challenges of the total store environment with the same "retail-hardened" performance that makes the 4690 OS the worldwide leader for POS. When you need faster checkout as well as more functionality, the 4690 OS V2 R4 is an ideal choice for a small store or a large chain with many registers. The task prioritization and multiuser/multitasking capabilities of the 4690 OS keep store operations moving swiftly and effectively.

The 4690 OS V2 R4 maximizes reliability through multiple levels of backup not found in other retail operating systems. Disk writes at the server are protected by nonvolatile memory, so data integrity is protected – even in the event of a power outage. Multiple servers can back each other up to ensure no interruption of checkout due to server failure. Both Java and traditional applications continue to operate in terminal offline mode if server connectivity is lost.

With its modular design, the 4690 OS V2 R4 lets you tailor your system to meet specific requirements for store operations. Multiple LAN options – including Ethernet, Token-Ring and IBM Store Loop – can accommodate any network requirement for the store. Wireless client/server attachment, including the Symbol® Technologies implementation of the IEEE 802.11 standard, maximizes flexibility in locating, adding and removing checkout stations to meet customer demands.

IBM is with you – through thick and thin

The IBM 4690 OS V2 R4 continues to support the thin-client implementation provided by the 4690 OS, which minimizes hardware cost while protecting reliability. The thin-client model not only dramatically reduces hardware requirements with no mandatory hard disk drive, it minimizes memory requirements. Store clients are automatically loaded and maintained by the server, which helps keep support costs down. The cost and complexity of systems management are minimized, and this model is enabled for the Tivoli™ Point of Sale Manager. IBM StoreFlow Version 1.5.1 can also exploit these reliable thin-client capabilities.

Simple migration path

Specially designed upgrade code makes it easy to migrate to the 4690 OS V2 R4 from earlier versions and releases of the 4690 OS. The migration is similar to applying a new maintenance package. Migration can be handled remotely from the central office, with no store visits. Install the IBM 4690 OS V2 R4 today to take advantage of new retail technologies while maximizing your existing investment.

IBM 4690 OS V2 R4 at a glance

Enhancements in Release 4	• Terminal offline support for Java applications • Serial device support for Java applications • Double Byte Character Set (DBCS) support for retailers operating in China, Korea, Japan and Taiwan • Controller and terminal memory support increased to 256 MB each • Terminal RAM disk raised to 128 MB (up to 64 MB per disk) • Supports the IBM 4694 POS System, including models 206 and 246 • Supports the single-station IBM SureMark Printers, models TM6 and TM7

4690 OS V2 R4 Supported Terminals	**JRE Supported**	**Memory Requirements***
IBM SurePOS 730** IBM SurePOS 750**	Yes	32 – 256 MB
IBM 4694 POS System Models 244, 205, 245	Yes	32 – 256 MB
IBM 4694 POS System Models 206,246	Yes	64 – 256 MB
IBM 4694 POS System Models 104, 144	No	–
IBM 4694 POS System Models 004, 044	No	–
IBM 4693 POS System	No	–
IBM 4683 POS System	No	–

*Processor and memory requirements in the terminals and controllers are dependent upon the needs of the Java application being utilized.
**The SurePOS 730 can only be configured as a terminal. The SurePOS 750 can be configured as a terminal, controller/terminal, or controller. In the controller or controller/terminal configurations, a PCI NVRAM card is required.

Networks Supported	Ethernet, Token-Ring, IBM Store Loop

4690 OS V1 functions included in the 4690 OS V2 base	
Enhanced Communications Capabilities	TCP/IP for 4690 Controllers and Terminals Symbol Wireless Communications Telxon® Wireless Communications Communications Dynamic Switching Locally Administered LAN Addresses Destination Service Access Point Token-Ring and Ethernet on same controller
Enhanced Backup Capability	Optical Drive Support (IBM and OEM) Save/Restore Distribution Attributes (Backup Utility) Seagate® TapeStor 8000 TR/4 Tape Drive IBM TR/4 and TR/5 Tape Drives
Enhanced Development Environment	'C' API in the Controller and Terminal Online System Probe Touch for 4690 Applications XE Editor for 4680-4690
Enhanced Operational Environment	Additional 3270 Sessions Event Log Access Remote Time Management Store Unique Configuration File
Optional Priced Features (can be ordered separately)	Communications feature Distributed Data Management Loop terminal to controller communications (TCC) LAN TCC (Ethernet or Token-Ring) Multiple Controller feature Terminal feature NetBIOS feature Software Distribution Agent

For more information
If you would like to learn more about the IBM 4690 OS V2 R4 or other IBM solutions for retail, please contact your IBM representative or call IBM Direct at 1 800 IBM-CALL (1 800 426-2255) or (770) 863-1000 outside the U.S. and Canada.

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