The IBM 4690 Operating System

IBM Retail Store Solutions

Alan S. Lipson

Senior I/T Specialist

Raleigh, North Carolina

www.ibm.com/solutions/retail

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4690 Platform

- Designed for Retail Environment

- System of Choice for many market leaders

- IBM strategic Operating System for Retail

- Platform for future development

4690 Operating System - Highlights

- Reliability
- High Performance
- Multi-tasking
- Multi-user
- Communications
- Serviceability
- Vitality

4690 Operating System

- Reliability
  - Proven, Stable Operating System
  - Continuous operation
    - Multiple Controllers
    - Offline capability
  - Date Integrity
    - Mirrored file capability
    - Guaranteed data writing
  - Security
    - Multi-level authorization

- Benefits
  - Always available
  - Enhanced customer service
  - Protecting most critical data in retail business

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4690 Operating System

- High Performance
  - Architected for performance
  - Rapid price lookup
    - Keyed files
  - Checkout prioritization
    - Pre-emptive dispatching
    - Task switching

- Benefits
  - Improved customer service
  - Faster Checkout

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4690 Operating System

- **Multi-tasking**
  - Multiple concurrent applications
  - Prioritization set by user
  - Protected processing

- **Benefits**
  - Increased operating efficiency
  - Business process improvement
  - Improved customer service
  - Maximize system investment
  - Complex processing capabilities

4690 Operating System

- Multi-user
  - Multiple remote consoles
  - Multiple printers
  - Terminals all access server data

- Benefits
  - Reduced cost
  - Business process improvement
  - Improved customer service
  - Data available where needed

4690 Operating System

- Communcations
  - Terminal Connectivity
    - Ethernet
    - Token-Ring
    - Store Loop
    - Wireless
  - Async
  - SDLC
  - X.25
  - NetBios
  - TCP/IP (Feature)
  - 3270 Emulation
  - SNA

- Benefits
  - Share data across enterprise
  - Data accessible from other in-store systems
  - Connectivity to multiple platforms with Industry Standard protocols
  - Improved customer service
  - Reduced systems cost

4690 Operating System

- Serviceability
  - System status and logs
  - Apply Software Maintenance
    - On-Site
    - Remote
  - Host Alerts
  - Remote Operator
  - Problem Determination Aids
    - Problem analysis diskettes
    - Supplemental diskettes

- Benefits
  - High availability
  - Quick problem resolution
  - Dedicated support team

4690 OS Enhancements will continue to deliver the Functions, Performance and Reliability Required by Retail Market Leaders

- 4690 OS Enhancements

  - Functional Enhancements

  - New Technologies

  - Controller & Backup Device Support

  - Terminal Hardware Support

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4690 - Enhancement Features

- Previously Announced PRPQ's
  - TCP/IP for 4690
  - 4680-4690 'C' API
  - OEM and IBM Optical Drive Support
  - Dynamic Switching Function (US Only)
  - Event Log Access
  - Destination Service Access Point
  - Unique Store Configuration
  - Additional 3270 Emulation Sessions

4690 - Enhancement Features

- Previously Announced PRPQ's
  - Save/Restore 4690 Distribution Attributes
    - Backup Utility
  - Software Distribution Agent
  - Remote Time Change Facility

- Already available Features
  - Advanced Power Management
  - Support of 4694 terminals
  - Terminal Hard Disk
  - Symbol Wireless Support

4690 - Planned Projects

- PCI Adapter Support
  - Ethernet - 9820
  - Store Loop - 9900
- 4690 PCL Printer Data Stream (9840)
- 4694 Flash BIOS Update (9830)
- Telxon Wireless Support Feature (9900)
- 4690 Version 2
  - 4690 Java Support

4690 - Possibilities

- DBCS Enablement
- 4690 Support of MQSeries
- Terminal IPL
- CD-ROM/DVD Support
- Partitioned Hard File

4690 New Version

- Version 1 Plus:
  - Current PRPQs and Features
  - Extensions of Existing Functions
    - TCP/IP at the Terminal
    - Mouse Support
    - VGA Support
  - Java Virtual Machine (JVM)
    - 4683 not supported

4690 Version 2
Features included (no additional charge)

- TCP/IP for 4690 Controllers
- 4690 'C' API in the Terminal
- Touch Screen for 4690
- OEM Optical Drive Support
- IBM Optical Drive Support
- 4690 Communications Dynamic Switching
- Event Log Access
- Destination Service Access Point
- Store Unique Configuration File
- Symbol Wireless Feature

- Locally Administered LAN Addresses
- Backup Utility
- Additional 3270 Sessions
- IBM TR/4 Tape Drive
- Seagate TR/4 Tape Drive
- Token-Ring & Ethernet on Same Controller
- Remote Time Management
- XE Editor for 4680/4690
- On-Line System Probe
- Telxon Wireless Feature

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4690 New Version Chargeable Features

- Multiple Controller Feature
- NetBIOS Feature
- Communications Feature
- LAN TCC
- Loop TCC
- Terminal Feature
- Distributed Data Management
- Software Distribution Agent

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4690 Version 2
Separately orderable products

- 4690 Regression Tester (PRPQ, AISPO)
- 4680/4690 Application Debugger V3 (PRPQ,AISPO)
- 4690 Enhanced Remote Operator (LPP)
- Terminal Services for Windows/NT(LPP)
- Terminal Services for OS/2 (PRPQ)

4690 Version 2
Functions no longer supported

- Bisync communications
- Support for 286 based controllers
- Terminal Services for DOS
- 4680/4690 POS Operator/2
- TecMar tape support
- Store Loop Load Simulator/Trace
- 4680/4690 Trace Formatter
- 4680/4690 Screen Utilities
- POS Simulator for LAN
- Store Loop Trace
- LAN Trace Decoder
- Symbol Wireless in 4683
- 4684 as controller or terminal
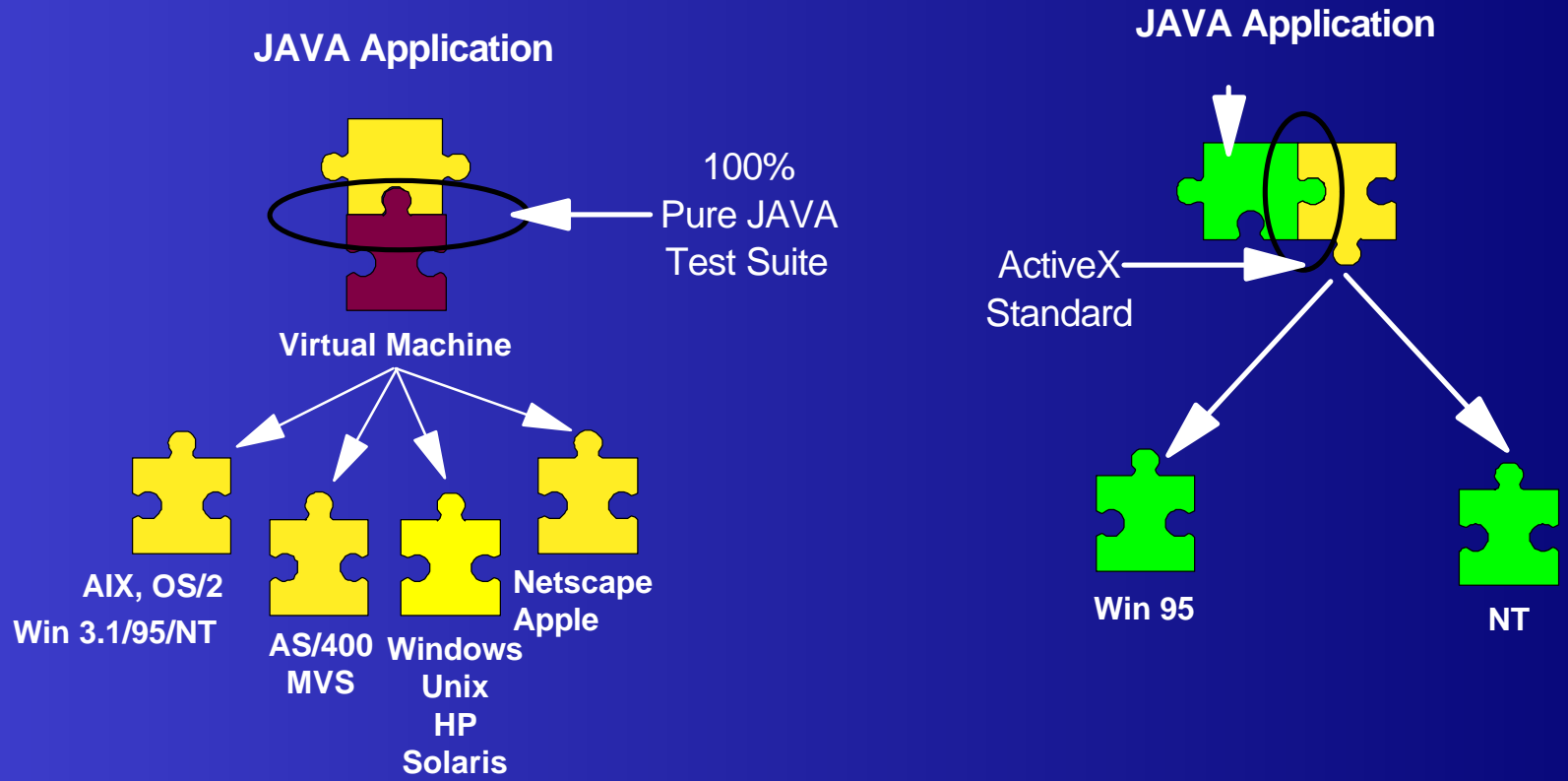
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IBM 4690 Operating System

- Enable Java applications or applets
  - Port Java Virtual Machine (JVM) to 4690 OS
  - Support at both the controller and terminal
  - Utilize Java Development environment (JDK) on other platforms to develop applications

- Add native graphics support for Java applications

- Enable TCP/IP communications (to the register)

- Best of Breed thin client operating system for retail

Java !

JAVA Application

JAVA Application

100%
Pure JAVA
Test Suite

Virtual Machine

ActiveX
Standard

AIX, OS/2
Win 3.1/95/NT

AS/400
MVS

Windows
Unix
HP
Solaris

Netscape
Apple

Win 95

NT

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4690 OS Java Implementation

- Controller Support
  - Java applications and applets
  - Java extensions to existing applications
  - Mouse and VGA(256 color) support
  - Java access to OS/Application files
  - Runtime only

4690 OS Java Implementation

- Terminal Support
  - Multiple Terminal Applications
    - Existing Application only
    - Existing Application with Java extensions
    - Existing Application & Java Application
    - Java Application only
    - Existing Application & 3270 Emulation
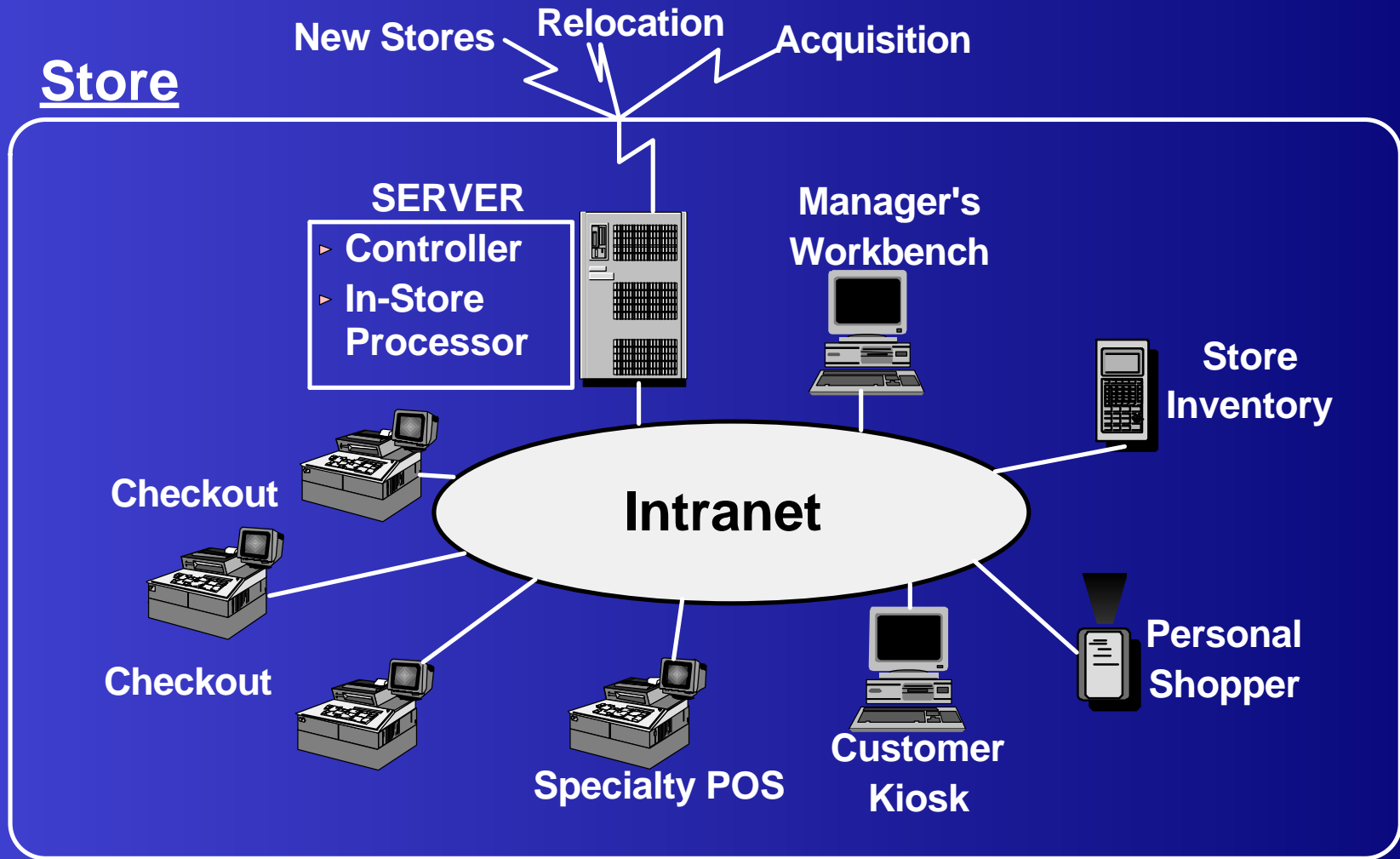   - Existing Application, 3270 and Java
  - Shared I/O
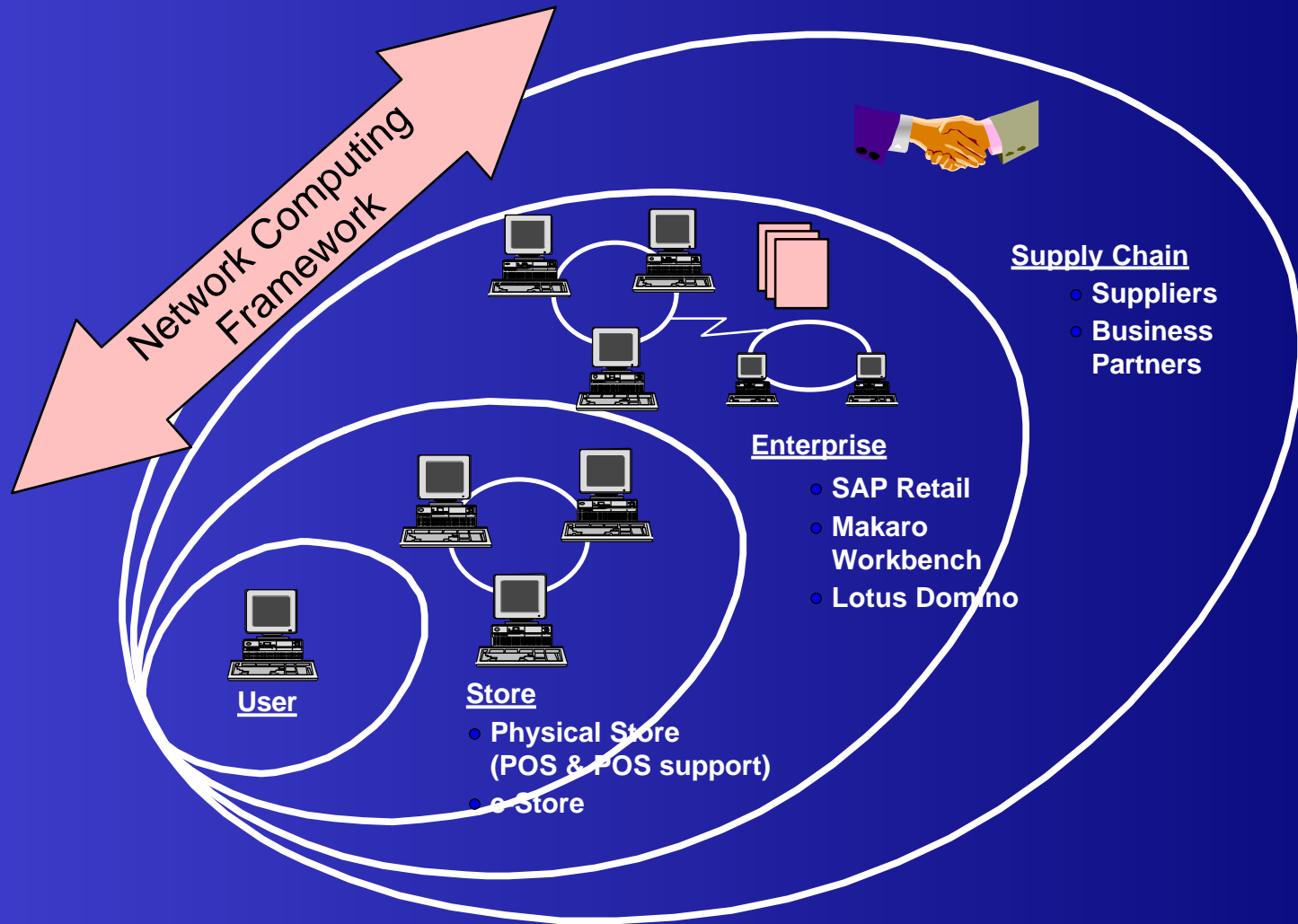   - Keyboard & Display only (1st release)

Why put Java on 4690 OS?

- Preserve your application investment
  - Extend current applications with Java
- Java skills easier to find
  - Faster development
  - Cross platform capabilities
- 4690 Provides a thin client base for Java
  - Lower hardware costs
  - Lower systems management costs
- Use off the shelf Java applications

A server-centric model that concentrates software in fewer servers reduces the complexity

Store

New Stores   Relocation   Acquisition

SERVER
- Controller
- In-Store Processor

Manager's Workbench

Store Inventory

Intranet

Checkout

Checkout

Specialty POS

Customer Kiosk

Personal Shopper

The Networked Enterprise

Network Computing Framework

Supply Chain
- Suppliers
- Business Partners

Enterprise
- SAP Retail
- Makaro Workbench
- Lotus Domino

Store
- Physical Store (POS & POS support)
- e-Store

User

✓ Universal client
✓ Write Once, run anywhere, access from anywhere
✓ Rollup function to highest level

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Thank you !