

# JAVAPOS™

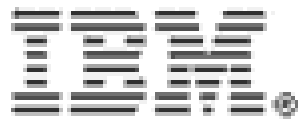
Java for POS Devices

## Overview and Status

*Curtiss Monroe, NCR*

JavaPOS Work Group

*Founding Companies*



# Agenda

- Mission and Goals
- Work Sessions and Participation
- Accomplishments
- Architecture
- Deliverables
- Next Steps
- Dependencies and Issues
- Summary

# Mission of the JavaPOS Committee

Produce a Retail Industry standard for a Point-Of-Sale I/O device subsystem that supports pure Java applications and leverages the OPOS standard.

# Goals

Our mission results in the following goals:

- Define an architecture for POS device access from Java applications.
- Define a set of POS device interfaces (APIs).
- Derive the Java APIs from OPOS.
- The JavaPOS APIs are platform independent but specific to the Java programming language.

# Work Sessions, 1997

- Formation Meeting : April 3.
  - Consortium of NRF members,
  - plus IBM, NCR, and Sun.
- JPOS-1 : April 29-30, in Raleigh.
- JPOS-2 : June 9-12, in Palo Alto.
- JPOS-3 : August 11-13, in Atlanta.
- JPOS-4 : September 14-16, in Raleigh.
- JPOS-5 : October 27-30, in Palo Alto.

# Industry Participation

- 12 companies providing ongoing technical input, representing:
  - Retailers
  - Software Vendors
  - Retail Hardware / Software Vendors
  - Sun / JavaSoft
- 20 - 25 representatives have attended each of the JPOS sessions.
- Other companies have expressed interest in U.S. and internationally.

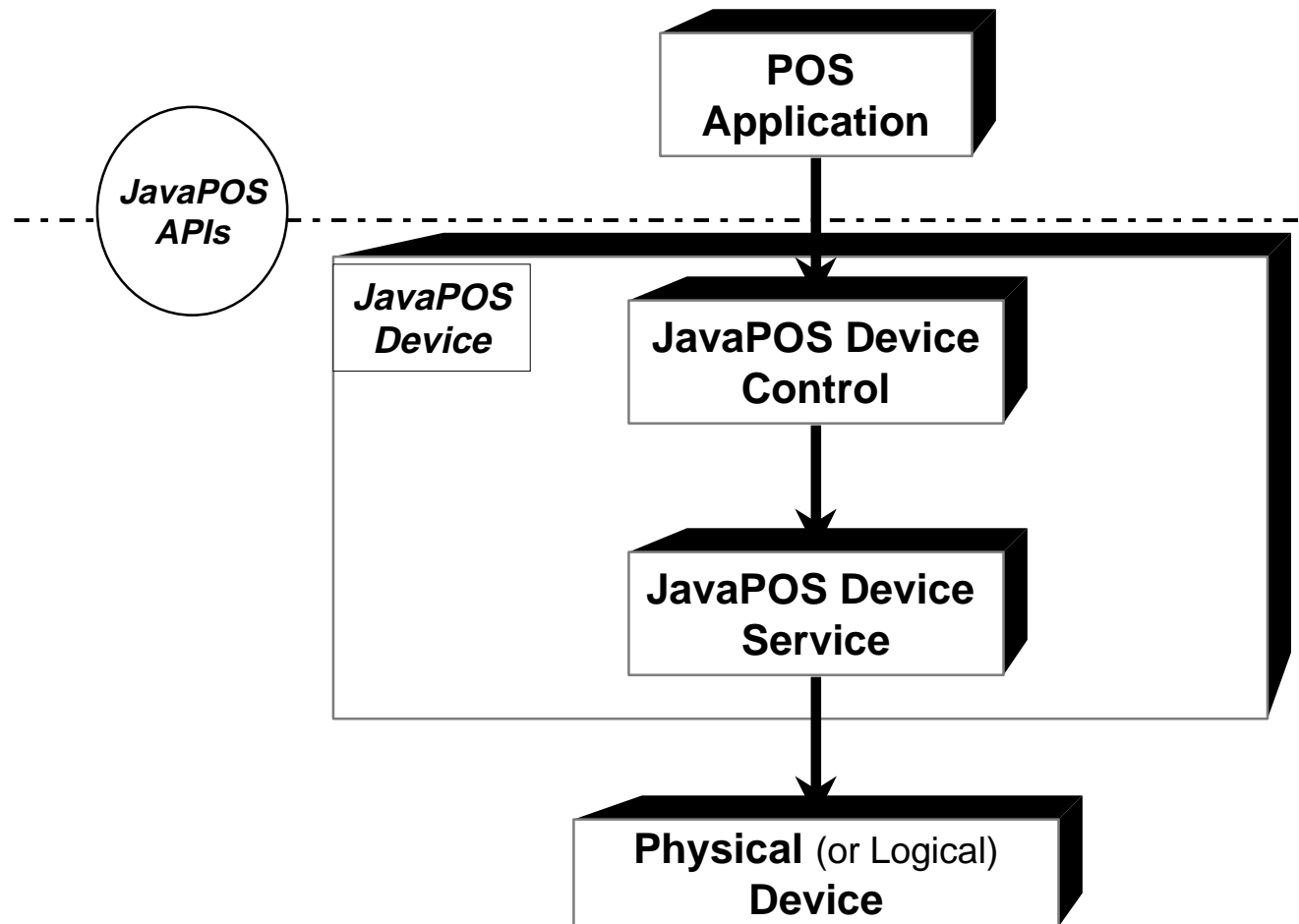
# Accomplishments

- White Paper available.
- Draft specification in public review period.
  - Architecture.
  - APIs for 14 POS devices.
- “JavaPOS” trademark in place.

➔ See web site...

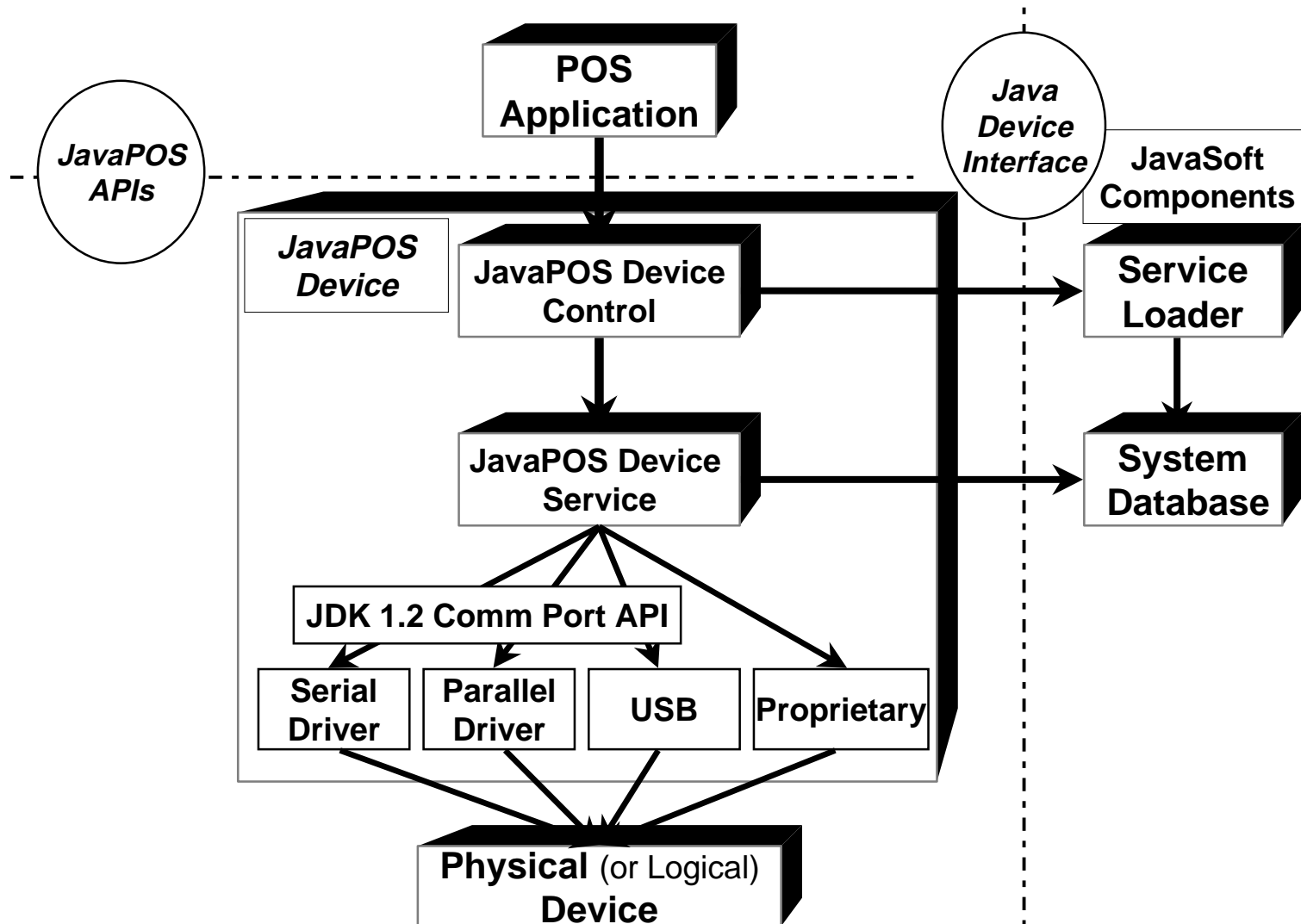
<http://www.javapos.com/>

# Architecture





# Architecture Details



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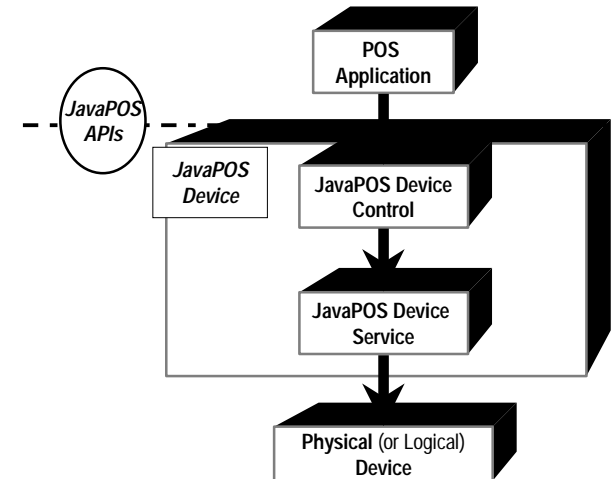
Java for POS Devices

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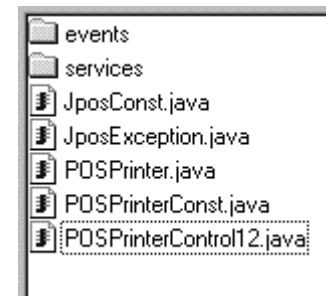
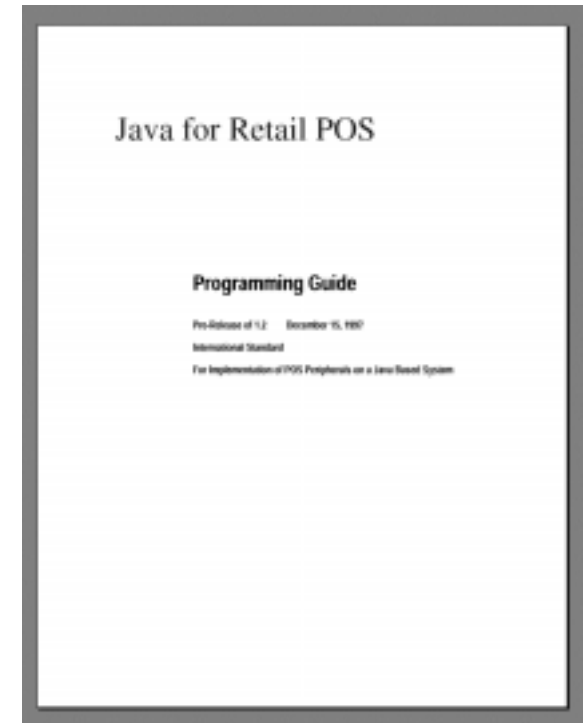
# Architecture

- In addition to the block diagram architecture...
- The following areas were addressed and defined:
  - API mapping rules (from OPOS to JavaPOS).
  - Versioning (compatibility rules).
  - Thread handling.
  - Event management.
  - Interfaces to Java Development Kit.



# Deliverables

- Documentation:
  - JavaPOS Programming Guide.
  - JavaPOS White Paper.
  - All documentation is in PDF format.  
Read with Adobe's Acrobat Reader.
- Java Files (at OPOS Release 1.2 level):
  - Device Control interface files.
  - Device Service interface files.
  - Constants.
  - Sample Device Control classes.



# Next Steps, 1998

- In progress : Programming Guide public review period.
  - Published to web 1997/12/20.
- End of public review period : February 6.
- JPOS-6 Meeting: February 16 - 18.
- Initial release as JavaPOS 1.2 : March 13.
  - Unless level of rework due to public feedback is greater than anticipated.

# Future Steps, 1998

- Endorsement and/or administration by a standards body.
- Expansion with additional ...
  - Companies.
  - International input.

# Dependencies

- Sun/JavaSoft to deliver the following:
  - Java Communications API (JDK 1.2).
  - Java System Database (future).
  - Java Service Loader (future).
- ➔ *Needed for deployment of fully compliant JavaPOS implementations.*
- USB support currently undefined.

# Issues

- Device Control implementations.
  - Only one Device Control implementation is needed for any Device Service of its class, but ...
  - The JavaPOS organizational structure precludes implementation and support of software components.
- ➔ *Committee's sample Controls can be verified by vendor and delivered.*
- Initial deployment.
  - Until Sun/JavaSoft deliverables are available, Device Controls and Services may have have interoperability variations.
- ➔ *No API impacts at the Application.*

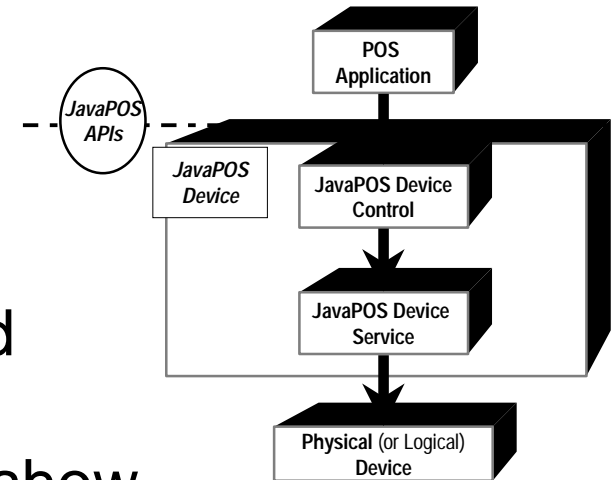
# Summary and Call to Action

- **Summary:**

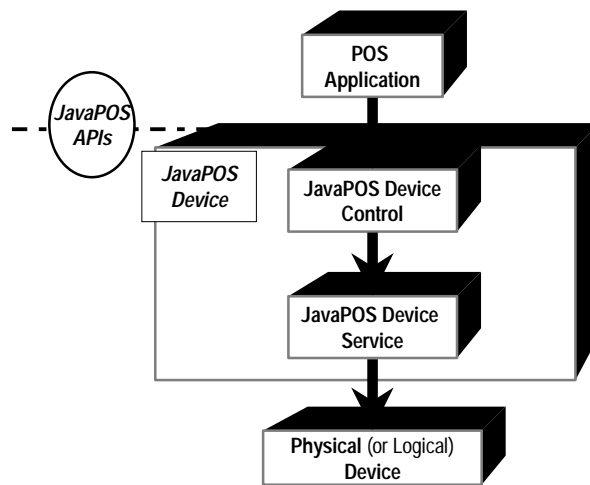
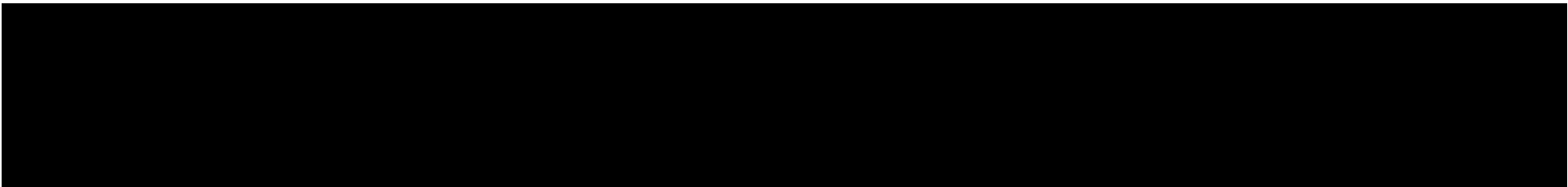
- JavaPOS delivers POS device accessibility to Java applications.
- Relationship to OPOS fosters broad support and device coverage.
- Technology demonstrations at this show.

- **Get involved...** see [www.javapos.com](http://www.javapos.com)

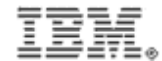
- Download and review the Programming Guide.
- Send us your comments and corrections.
- Watch for additional happenings.







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