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J/eXtensions for Financial Services (J/XFS) for the Java Platform - Part 10: Check Reader/Scanner Device Class Interface - Programmer's Reference

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Ref. No CWA 13937-10:2000 E

Page 2 CWA 13937-10:2000

Foreword

This CWA contains the specifications that define the J/eXtensions for Financial Services (J/XFS) for the Java TM Platform, as developed by the J/XFS Forum and endorsed by the CEN/ISSS J/XFS Workshop. J/XFS provides an API for Java applications which need to access financial devices. It is hardware independent and, by using 100% pure Java, also operating system independent.

The CEN/ISSS J/XFS Workshop gathers suppliers (among others the J/XFS Forum members), service providers as well as banks and other financial service companies. A list of companies participating in this Workshop and in support of this CWA is available from the CEN/ISSS Secretariat. The specification was agreed upon by the J/XFS Workshop Meeting of 1999-12-15/16 in Geneva and a subsequent electronic review by the Workshop participants, and the final version was sent to CEN for publication on 2000/06-21.

The specification is continuously reviewed and commented in the CEN/ISSS J/XFS Workshop. It is therefore expected that an update of the specification will be published in due time as a CWA, superseding this one. The information published in this CWA is furnished for informational purposes only. CEN/ISSS makes no warranty expressed or implied, with respect to this document. Updates of the specification will be available from the CEN/ISSS J/XFS Workshop public web pages pending their integration in a new version of the CWA (see: http://www.cenorm.be/isss/workshop/j-XFS/cwa-updates).

The J/XFS specifications are now further developed in the CEN/ISSS J/XFS Workshop. CEN/ISSS Workshops are open to all interested parties offering to contribute. Parties interested in participating should contact the CEN/ISSS Secretariat (isss@cenorm.be). To submit questions and comments for the J/XFS specifications, please contact the CEN/ISSS Secretariat (isss@cenorm.be) who will be forwarding them to the J/XFS Workshop.

Questions and comments can also be submitted to the members of the J/XFS Forum, who are all CEN/ISSS J/XFS Workshop members, through the J/XFS Forum web-site http:///www.jxfs.com

This CWA is composed of the following parts:

- Part 1: J/eXtensions for Financial Services (J/XFS) for the Java Platform Base Architecture Programmer's Reference
- Part 2: J/eXtensions for Financial Services (J/XFS) for the Java Platform Pin Keypad Device Class Interface Programmer's Reference
- Part 3: J/eXtensions for Financial Services (J/XFS) for the Java Platform Magnetic Stripe & Chip Card Device Class Interface Programmer's Reference
- Part 4: J/eXtensions for Financial Services (J/XFS) for the Java Platform Text Input/Output Device Class Interface Programmer's Reference
- Part 5: J/eXtensions for Financial Services (J/XFS) for the Java Platform Cash Dispenser, Recycler and ATM Interface Programmer's Reference
- Part 6: J/eXtensions for Financial Services (J/XFS) for the Java Platform Printer Device Class Interface Programmer's Reference
- Part 7: J/eXtensions for Financial Services (J/XFS) for the Java Platform Alarm Device Programmer's Reference
- Part 8: J/eXtensions for Financial Services (J/XFS) for the Java Platform Sensors and Indicators Unit Device Class Interface Programmer's Reference
- Part 9: J/eXtensions for Financial Services (J/XFS) for the Java Platform Depository Device Class Interface Programmer's Reference
- Part 10: J/eXtensions for Financial Services (J/XFS) for the Java Platform Check Reader/Scanner Device Class Interface Programmer's Reference

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Contents

S	COPE	4
0	VERVIEW	5
2.1	Description	5
2.2 2.3	CLASSES AND INTERFACES	
	Support Classes	
	EVICE BEHAVIOR	
3.1	DEVICE OPEN()	
C	LASSES AND INTERFACES	
4.1 4.2	ACCESS TO PROPERTIES	
4.2 4.3	LACEPTIONS	
4.4	IJXFSCOMPLEXCHECKDEVICE	15
SU	JPPORT CLASSES	20
5.1	JXFSCHKDATA	
5.2	JXFSCHKPROCESSDATA	
C	ODES	
6.1	Error Codes	
6.2 6.3	STATUS CODES	
6.4	Constants	25
		25

1 Scope

This document describes the Check Reader/Scanner class based on the basic architecture of J/XFS which is similar to the JavaPOS architecture. It is event driven and asynchronous.

Three basic levels are defined in JavaPOS. For J/XFS this model is extended by a communication layer, which provides device communication that allows distribution of applications and devices within a network. So we have the following layers in J/XFS:

- Application
- **Device Control and Device Manager**
- **Device Communication**
- . **Device Service**

Application developers program against control objects and the Device Manager which reside in the Device Control layer. This is the usual interface between applications and J/XFS devices. Device Control objects access the Device Manager to find an associated Device Service. Device Service objects provide the functionality to access the real device (i.e. like a device driver).

During application startup the Device Manager is responsible for locating the desired Device Service object and attaching this to the requesting Device Control object. Location and/or routing information for the Device Manager reside in a central repository.

To support Check Reader/Scanner devices the basic Device Control structure is extended with various properties and methods specific to this device which are described on the following pages.

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