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WORKSHOP

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AGREEMENT

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**Extensions for Financial Services (XFS) interface specification -
Release 3.10 - Part 64: Cash Dispenser Device Class Interface -
Migration from Version 3.0 (CWA 14050) to Version 3.10 (this
CWA) - Programmer's Reference**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

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Table of Contents

Foreword	4
1. Migration Information	6
2. Cash Dispensers	7
3. References	8
4. Info Commands	9
4.1 WFS_INF_CDM_STATUS	9
4.2 WFS_INF_CDM_CAPABILITIES	13
4.3 WFS_INF_CDM_CASH_UNIT_INFO	17
4.4 WFS_INF_CDM_TELLER_INFO	24
4.5 WFS_INF_CDM_CURRENCY_EXP	26
4.6 WFS_INF_CDM_MIX_TYPES	27
4.7 WFS_INF_CDM_MIX_TABLE	28
4.8 WFS_INF_CDM_PRESENT_STATUS	29
5. Execute Commands	31
5.1 WFS_CMD_CDM_DENOMINATE	31
5.2 WFS_CMD_CDM_DISPENSE	34
5.3 WFS_CMD_CDM_COUNT	37
5.4 WFS_CMD_CDM_PRESENT	40
5.5 WFS_CMD_CDM_REJECT	41
5.6 WFS_CMD_CDM_RETRACT	42
5.7 WFS_CMD_CDM_OPEN_SHUTTER	44
5.8 WFS_CMD_CDM_CLOSE_SHUTTER	45
5.9 WFS_CMD_CDM_SET_TELLER_INFO	46
5.10 WFS_CMD_CDM_SET_CASH_UNIT_INFO	47
5.11 WFS_CMD_CDM_START_EXCHANGE	49
5.12 WFS_CMD_CDM_END_EXCHANGE	51
5.13 WFS_CMD_CDM_OPEN_SAFE_DOOR	52
5.14 WFS_CMD_CDM_CALIBRATE_CASH_UNIT	53
5.15 WFS_CMD_CDM_SET_MIX_TABLE	55
5.16 WFS_CMD_CDM_RESET	56
5.17 WFS_CMD_CDM_TEST_CASH_UNITS	58
5.18 WFS_CMD_CDM_SET_GUIDANCE_LIGHT	60
5.19 WFS_CMD_CDM_POWER_SAVE_CONTROL	61
5.20 WFS_CMD_CDM_PREPARE_DISPENSE	62
6. Events	63
6.1 WFS_SRVE_CDM_SAFEDOOROPEN	63

6.2	WFS_SRVE_CDM_SAFEDOORCLOSED.....	64
6.3	WFS_USRE_CDM_CASHUNITTHRESHOLD	65
6.4	WFS_SRVE_CDM_CASHUNITINFOCHANGED	66
6.5	WFS_SRVE_CDM_TELLERINFOCHANGED	67
6.6	WFS_EXEE_CDM_DELAYEDDISPENSE.....	68
6.7	WFS_EXEE_CDM_STARTDISPENSE	69
6.8	WFS_EXEE_CDM_CASHUNITERROR.....	70
6.9	WFS_SRVE_CDM_ITEMSTAKEN	71
6.10	WFS_SRVE_CDM_COUNTS_CHANGED.....	72
6.11	WFS_EXEE_CDM_PARTIALDISPENSE	73
6.12	WFS_EXEE_CDM_SUBDISPENSEOK	74
6.13	WFS_EXEE_CDM_INCOMPLETEDISPENSE	75
6.14	WFS_EXEE_CDM_NOTEERROR.....	76
6.15	WFS_SRVE_CDM_ITEMSPRESENTED	77
6.16	WFS_SRVE_CDM_MEDIADETECTED	78
6.17	WFS_EXEE_CDM_INPUT_P6.....	79
6.18	WFS_SRVE_CDM_DEVICEPOSITION.....	80
6.19	WFS_SRVE_CDM_POWER_SAVE_CHANGE.....	81
7.	Sub-Dispensing Command Flow.....	82
8.	Rules for Cash Unit Exchange	85
9.	C - Header file	86

Foreword

This CWA is revision 3.10 of the XFS interface specification.

The CEN/ISSS XFS Workshop gathers suppliers 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.

This CWA was formally approved by the XFS Workshop meeting on 2007-11-29. The specification is continuously reviewed and commented in the CEN/ISSS Workshop on XFS. It is therefore expected that an update of the specification will be published in due time as a CWA, superseding this revision 3.10.

The CWA is published as a multi-part document, consisting of:

Part 1: Application Programming Interface (API) - Service Provider Interface (SPI) - Programmer's Reference

Part 2: Service Classes Definition - Programmer's Reference

Part 3: Printer and Scanning Device Class Interface - Programmer's Reference

Part 4: Identification Card Device Class Interface - Programmer's Reference

Part 5: Cash Dispenser Device Class Interface - Programmer's Reference

Part 6: PIN Keypad Device Class Interface - Programmer's Reference

Part 7: Check Reader/Scanner Device Class Interface - Programmer's Reference

Part 8: Depository Device Class Interface - Programmer's Reference

Part 9: Text Terminal Unit Device Class Interface - Programmer's Reference

Part 10: Sensors and Indicators Unit Device Class Interface - Programmer's Reference

Part 11: Vendor Dependent Mode Device Class Interface - Programmer's Reference

Part 12: Camera Device Class Interface - Programmer's Reference

Part 13: Alarm Device Class Interface - Programmer's Reference

Part 14: Card Embossing Unit Device Class Interface - Programmer's Reference

Part 15: Cash-In Module Device Class Interface - Programmer's Reference

Part 16: Card Dispenser Device Class Interface - Programmer's Reference

Part 17: Barcode Reader Device Class Interface - Programmer's Reference

Part 18: Item Processing Module Device Class Interface - Programmer's Reference

Parts 19 - 28: Reserved for future use.

Parts 29 through 47 constitute an optional addendum to this CWA. They define the integration between the SNMP standard and the set of status and statistical information exported by the Service Providers.

Part 29: XFS MIB Architecture and SNMP Extensions - Programmer's Reference

Part 30: XFS MIB Device Specific Definitions - Printer Device Class

Part 31: XFS MIB Device Specific Definitions - Identification Card Device Class

Part 32: XFS MIB Device Specific Definitions - Cash Dispenser Device Class

Part 33: XFS MIB Device Specific Definitions - PIN Keypad Device Class

Part 34: XFS MIB Device Specific Definitions - Check Reader/Scanner Device Class

Part 35: XFS MIB Device Specific Definitions - Depository Device Class

Part 36: XFS MIB Device Specific Definitions - Text Terminal Unit Device Class

Part 37: XFS MIB Device Specific Definitions - Sensors and Indicators Unit Device Class

Part 38: XFS MIB Device Specific Definitions - Camera Device Class

Part 39: XFS MIB Device Specific Definitions - Alarm Device Class

Part 40: XFS MIB Device Specific Definitions - Card Embossing Unit Class

Part 41: XFS MIB Device Specific Definitions - Cash-In Module Device Class

Part 42: Reserved for future use.

Part 43: XFS MIB Device Specific Definitions - Vendor Dependent Mode Device Class

Part 44: XFS MIB Application Management

Part 45: XFS MIB Device Specific Definitions - Card Dispenser Device Class

Part 46: XFS MIB Device Specific Definitions - Barcode Reader Device Class

Part 47: XFS MIB Device Specific Definitions - Item Processing Module Device Class

Parts 48 - 60 are reserved for future use.

Part 61: Application Programming Interface (API) - Service Provider Interface (SPI) - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 62: Printer Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 63: Identification Card Device Class Interface - Migration from Version 3.02 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 64: Cash Dispenser Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 65: PIN Keypad Device Class Interface - Migration from Version 3.03 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 66: Check Reader/Scanner Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 67: Depository Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 68: Text Terminal Unit Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 69: Sensors and Indicators Unit Device Class Interface - Migration from Version 3.01 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 70: Vendor Dependent Mode Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 71: Camera Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 72: Alarm Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 73: Card Embossing Unit Device Class Interface - Migration from Version 3.0 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

Part 74: Cash-In Module Device Class Interface - Migration from Version 3.02 (CWA 14050) to Version 3.10 (this CWA) - Programmer's Reference

In addition to these Programmer's Reference specifications, the reader of this CWA is also referred to a complementary document, called Release Notes. The Release Notes contain clarifications and explanations on the CWA specifications, which are not requiring functional changes. The current version of the Release Notes is available online from <http://www.cen.eu/iss/Workshop/XFS>.

The information in this document represents the Workshop's current views on the issues discussed as of the date of publication. It is furnished for informational purposes only and is subject to change without notice. CEN/ISSS makes no warranty, express or implied, with respect to this document.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN : AENOR, AFNOR, ASRO, BDS, BSI, CSNI, CYS, DIN, DS, ELOT, EVS, IBN, IPQ, IST, LVS, LST, MSA, MSZT, NEN, NSAI, ON, PKN, SEE, SIS, SIST, SFS, SN, SNV, SUTN and UNI.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.

1. Migration Information

XFS 3.10 has been designed to minimize backwards compatibility issues. This document highlights the changes made to the CDM device class between version 3.0 and 3.10, by highlighting the additions and deletions to the text.

This document is a preview generated by EVS

2. Cash Dispensers

This specification describes the functionality of a XFS compliant Cash Dispenser Module (CDM) Service Provider. It defines the service-specific commands that can be issued to the Service Provider using the **WFSGetInfo**, **WFSAsyncGetInfo**, **WFSExecute** and **WFSAsyncExecute** functions.

Persistent values are maintained through power failures, open sessions, close session and system resets.

This specification covers the dispensing of items. An “item” is defined as any media that can be dispensed and includes coupons, documents, bills and coins. However, if coins and bills are both to be dispensed separate Service Providers must be implemented for each.

All currency parameters in this specification are expressed as a quantity of minimum dispense units, as defined in the description of the **WFS_INF_CDM_CURRENCY_EXP** command (see Section 4.5).

There are two types of CDM: Self-Service CDM and Teller CDM. A Self-Service CDM operates in an automated environment, while a Teller CDM has an operator present. The functionality provided by the following commands is only applicable to a Teller CDM:

WFS_CMD_CDM_SET_TELLER_INFO

WFS_INF_CDM_TELLER_INFO

It is possible for the CDM to be part of a compound device with the Cash-In Module (CIM). This CIM/CDM combination is referred to throughout this specification as a “Cash Recycler”. For details of the CIM interface see Ref. 3.

If the device is a Cash Recycler then, if cash unit exchanges are required on both interfaces, the exchanges cannot be performed concurrently. An exchange on one interface must be complete (the **WFS_CMD_CDM_END_EXCHANGE** must have completed) before an exchange can start on the other interface. The **WFS_ERR_CDM_EXCHANGEACTIVE** error code will be returned if the correct sequence is not adhered to.

The CIM interface can be used for all exchange operations on recycle devices, and the CIM interface should be used if the device has recycle units of multiple currencies and/or denominations (including multiple note identifiers associated with the same denomination).

The event **WFS_SRVE_CDM_COUNTS_CHANGED** will be posted if an operation on the CIM interface affects the cash unit counts which are available through the CDM interface.

The following commands on the CIM interface may affect the CDM counts:

WFS_CMD_CIM_CASH_IN
WFS_CMD_CIM_CASH_IN_ROLLBACK
WFS_CMD_CIM_RETRACT
WFS_CMD_CIM_SET_CASH_IN_UNIT_INFO
WFS_CMD_CIM_END_EXCHANGE
WFS_CMD_CIM_RESET

Deleted: If the device has recycle units of multiple currencies and/or denominations, then the CDM

Deleted: should

Deleted: CDM interface and the Cash-In cash unit counts will be available through the CIM interface. Counts for recycle cash units are available through both interfaces.

Deleted: recycle

Deleted: **WFS_CMD_CIM_TEST_CASH_UNITS**

3. References

- | |
|---|
| 1. XFS Application Programming Interface (API)/Service Provider Interface (SPI), Programmer's Reference, Revision 3.10 |
| 2. ISO 4217 at http://www.iso.org |
| 3. XFS Cash-In Module Device Class Interface, Programmer's Reference, Revision 3.10 |