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English version

**Extensions for Financial Services (XFS) interface  
specification - Release 3.40 - Part 64: Cash Dispenser  
(CDM) Device Class Interface - Migration from Version 3.30  
(CWA 16926) to Version 3.40 (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.

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## Table of Contents

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European Foreword.....	4
1. Migration Information.....	8
2. Cash Dispensers .....	9
3. References .....	10
4. Note Classification .....	11
5. Info Commands .....	12
5.1 WFS_INF_CDM_STATUS.....	12
5.2 WFS_INF_CDM_CAPABILITIES.....	17
5.3 WFS_INF_CDM_CASH_UNIT_INFO.....	22
5.4 WFS_INF_CDM_TELLER_INFO .....	29
5.5 WFS_INF_CDM_CURRENCY_EXP .....	31
5.6 WFS_INF_CDM_MIX_TYPES.....	32
5.7 WFS_INF_CDM_MIX_TABLE.....	33
5.8 WFS_INF_CDM_PRESENT_STATUS.....	34
5.9 WFS_INF_CDM_GET_ITEM_INFO .....	36
5.10 WFS_INF_CDM_GET_BLACKLIST .....	38
5.11 WFS_INF_CDM_GET_ALL_ITEMS_INFO.....	39
5.12 WFS_INF_CDM_GET_CLASSIFICATION_LIST .....	42
6. Execute Commands .....	44
6.1 WFS_CMD_CDM_DENOMINATE .....	44
6.2 WFS_CMD_CDM_DISPENSE .....	47
6.3 WFS_CMD_CDM_COUNT.....	51
6.4 WFS_CMD_CDM_PRESENT.....	54
6.5 WFS_CMD_CDM_REJECT .....	56
6.6 WFS_CMD_CDM_RETRACT .....	57
6.7 WFS_CMD_CDM_OPEN_SHUTTER .....	60
6.8 WFS_CMD_CDM_CLOSE_SHUTTER.....	61
6.9 WFS_CMD_CDM_SET_TELLER_INFO.....	62
6.10 WFS_CMD_CDM_SET_CASH_UNIT_INFO .....	63
6.11 WFS_CMD_CDM_START_EXCHANGE.....	65
6.12 WFS_CMD_CDM_END_EXCHANGE.....	67
6.13 WFS_CMD_CDM_OPEN_SAFE_DOOR.....	69
6.14 WFS_CMD_CDM_CALIBRATE_CASH_UNIT .....	70
6.15 WFS_CMD_CDM_SET_MIX_TABLE .....	72
6.16 WFS_CMD_CDM_RESET.....	73
6.17 WFS_CMD_CDM_TEST_CASH_UNITS .....	75

6.18	WFS_CMD_CDM_SET_GUIDANCE_LIGHT .....	77
6.19	WFS_CMD_CDM_POWER_SAVE_CONTROL .....	79
6.20	WFS_CMD_CDM_PREPARE_DISPENSE .....	80
6.21	WFS_CMD_CDM_SET_BLACKLIST .....	81
6.22	WFS_CMD_CDM_SYNCHRONIZE_COMMAND .....	82
6.23	WFS_CMD_CDM_SET_CLASSIFICATION_LIST .....	83
7.	Events .....	84
7.1	WFS_SRVE_CDM_SAFEDOOROPEN .....	84
7.2	WFS_SRVE_CDM_SAFEDOORCLOSED .....	85
7.3	WFS_USRE_CDM_CASHUNITTHRESHOLD .....	86
7.4	WFS_SRVE_CDM_CASHUNITINFOCHANGED .....	87
7.5	WFS_SRVE_CDM_TELLERINFOCHANGED .....	88
7.6	WFS_EXEE_CDM_DELAYEDDISPENSE .....	89
7.7	WFS_EXEE_CDM_STARTDISPENSE .....	90
7.8	WFS_EXEE_CDM_CASHUNITERROR .....	91
7.9	WFS_SRVE_CDM_ITEMSTAKEN .....	92
7.10	WFS_SRVE_CDM_COUNTS_CHANGED .....	93
7.11	WFS_EXEE_CDM_PARTIALDISPENSE .....	94
7.12	WFS_EXEE_CDM_SUBDISPENSEOK .....	95
7.13	WFS_EXEE_CDM_INCOMPLETEDISPENSE .....	96
7.14	WFS_EXEE_CDM_NOTEERROR .....	97
7.15	WFS_SRVE_CDM_ITEMSPRESENTED .....	98
7.16	WFS_SRVE_CDM_MEDIADETECTED .....	99
7.17	WFS_EXEE_CDM_INPUT_P6 .....	100
7.18	WFS_SRVE_CDM_DEVICEPOSITION .....	101
7.19	WFS_SRVE_CDM_POWER_SAVE_CHANGE .....	102
7.20	WFS_EXEE_CDM_INFO_AVAILABLE .....	103
7.21	WFS_EXEE_CDM_INCOMPLETERETRACT .....	104
7.22	WFS_SRVE_CDM_SHUTTERSTATUSCHANGED .....	105
8.	Sub-Dispensing Command Flow .....	106
9.	Rules for Cash Unit Exchange .....	109
10.	Events Associated with Cash Unit Status Changes .....	110
10.1	One Physical Cash Unit Goes LOW .....	110
10.2	Last Physical Cash Unit Goes LOW .....	111
10.3	One Physical Cash Unit Goes INOP .....	112
10.4	Last Physical Cash Unit Goes EMPTY .....	113
11.	Multiple Dispense Command Flow .....	114
12.	C - Header file .....	116

## European Foreword

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This CEN Workshop Agreement has been developed in accordance with the CEN-CENELEC Guide 29 “CEN/CENELEC Workshop Agreements – The way to rapid consensus” and with the relevant provisions of CEN/CENELEC Internal Regulations – Part 2. It was approved by a Workshop of representatives of interested parties on 2019-10-08, the constitution of which was supported by CEN following several public calls for participation, the first of which was made on 1998-06-24. However, this CEN Workshop Agreement does not necessarily include all relevant stakeholders.

The final text of this CEN Workshop Agreement was provided to CEN for publication on 2019-12-12.

The following organizations and individuals developed and approved this CEN Workshop Agreement:

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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

Part 19: Biometrics Device Class Interface - Programmer's Reference

Parts 20 - 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
- Part 48: XFS MIB Device Specific Definitions - Biometrics Device Class
- Parts 49 - 60 are reserved for future use.
- Part 61: Application Programming Interface (API) - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Service Provider Interface (SPI) - Programmer's Reference
- Part 62: Printer and Scanning Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 63: Identification Card Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 64: Cash Dispenser Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 65: PIN Keypad Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 66: Check Reader/Scanner Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 67: Depository Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 68: Text Terminal Unit Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 69: Sensors and Indicators Unit Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 70: Vendor Dependent Mode Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 71: Camera Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 72: Alarm Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference
- Part 73: Card Embossing Unit Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40

(this CWA) - Programmer's Reference

Part 74: Cash-In Module Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference

Part 75: Card Dispenser Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference

Part 76: Barcode Reader Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (this CWA) - Programmer's Reference

Part 77: Item Processing Module Device Class Interface - Migration from Version 3.30 (CWA 16926) to Version 3.40 (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: [https://www.cen.eu/work/Sectors/Digital\\_society/Pages/WSXFS.aspx](https://www.cen.eu/work/Sectors/Digital_society/Pages/WSXFS.aspx).

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

## 1. Migration Information

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XFS 3.40 has been designed to minimize backwards compatibility issues. This document highlights the changes made to the CDM device class between version 3.30 and 3.40, by highlighting the additions and deletions to the text.



## 2. Cash Dispensers

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This specification describes the functionality of an 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.

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\_END**  
**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**  
**WFS\_CMD\_CIM\_REPLENISH**  
**WFS\_CMD\_CIM\_CASH\_UNIT\_COUNT**

### 3. References

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|---|
| 1. XFS Application Programming Interface (API)/Service Provider Interface ( SPI), Programmer's Reference, Revision 3.40 |
| 2. ISO 4217 at <a href="http://www.iso.org">http://www.iso.org</a>  |
| 3. XFS Cash-In Module Device Class Interface, Programmer's Reference, Revision 3.40                                     |