



NSAI
Standards

Irish Standard Recommendation
S.R. CWA 16926-1:2020

Extensions for Financial Services (XFS)
interface specification Release 3.40 - Part
1: Application Programming Interface (API)
- Service Provider Interface (SPI) -
Programmer's Reference

S.R. CWA 16926-1:2020

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National Foreword

S.R. CWA 16926-1:2020 is the adopted Irish version of the European Document CWA 16926-1:2020, Extensions for Financial Services (XFS) interface specification Release 3.40 - Part 1: Application Programming Interface (API) - Service Provider Interface (SPI) - Programmer's Reference

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CEN

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WORKSHOP

February 2020

AGREEMENT

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English version

**Extensions for Financial Services (XFS) interface
specification Release 3.40 - Part 1: Application
Programming Interface (API) - Service Provider Interface
(SPI) - 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-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

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Table of Contents

European Foreword	6
1 Introduction	10
1.1 Background to Release 3.40	10
2 References	11
3 XFS (eXtensions for Financial Services) Overview	12
3.1 Architecture	13
3.2 API and SPI Summary	16
3.3 Device Classes	17
3.4 Unicode Encoding Summary	18
4 Architectural and Implementation Issues	19
4.1 The XFS Manager	20
4.2 Service Providers	21
4.2.1 Service Provider Functionality	21
4.2.2 Service Provider “Packaging”	21
4.3 Asynchronous, Synchronous and Immediate Functions	22
4.3.1 Asynchronous Functions	22
4.3.2 Synchronous Functions	22
4.3.3 Immediate Functions	23
4.4 Processing API Functions	24
4.5 Opening a Session	25
4.6 Closing a Session	26
4.7 Configuration Information.....	27
4.8 Exclusive Service and Device Access	31
4.8.1 Lock Policy for Independent Devices	31
4.8.2 Compound Devices	32
4.9 Timeout	34
4.10 Function Status Return	35
4.11 Notification Mechanisms - Registering for Events	36
4.12 Application Processes, Threads and Blocking Functions	38
4.13 Vendor Dependent Mode.....	40
4.14 Memory Management	41
4.15 Command Synchronization	43
4.16 Binary Interface	44
5 Application Programming Interface (API) Functions	45
5.1 WFSCancelAsyncRequest	47
5.2 WFSCancelBlockingCall	48
5.3 WFSCleanup.....	49
5.4 WFSClose	50

5.5	WFSAsyncClose.....	51
5.6	WFSCreateAppHandle	52
5.7	WFSDeRegister	53
5.8	WFSAsyncDeRegister	54
5.9	WFSDestroyAppHandle.....	56
5.10	WFSExecute	57
5.11	WFSAsyncExecute.....	59
5.12	WFSFreeResult.....	61
5.13	WFSGetInfo.....	62
5.14	WFSAsyncGetInfo.....	64
5.15	WFSIsBlocking	66
5.16	WFSLock.....	67
5.17	WFSAsyncLock	69
5.18	WFSOpen	71
5.19	WFSAsyncOpen	74
5.20	WFSRegister.....	77
5.21	WFSAsyncRegister	78
5.22	WFSSetBlockingHook	80
5.23	WFSStartUp	81
5.24	WFSUnhookBlockingHook	83
5.25	WFSUnlock	84
5.26	WFSAsyncUnlock	85
6	Service Provider Interface (SPI) Functions	86
6.1	WFPCancelAsyncRequest	87
6.2	WFPClose	88
6.3	WFPDeRegister	89
6.4	WFPExecute	91
6.5	WFPGetInfo.....	93
6.6	WFPLock.....	95
6.7	WFPOpen	96
6.8	WFPRegister.....	99
6.9	WFPSetTraceLevel.....	100
6.10	WFPUnloadService	101
6.11	WFPUnlock	102
7	Support Functions.....	103
7.1	WFMAlocateBuffer	103
7.2	WFMAlocateMore	104
7.3	WFMFreeBuffer	105
7.4	WFMGetTraceLevel.....	106
7.5	WFMKillTimer	107

CWA 16926-1:2020 (E)

7.6	WFMOutputTraceData	108
7.7	WFMReleaseDLL	109
7.8	WFMSetTimer	110
7.9	WFMSetTraceLevel	111
8	Configuration Functions	113
8.1	WFMCloseKey	113
8.2	WFMCreateKey	114
8.3	WFMDeleteKey	115
8.4	WFMDeleteValue	116
8.5	WFMEnumKey	117
8.6	WFMEnumValue	118
8.7	WFMOpenKey	119
8.8	WFMQueryValue	120
8.9	WFMSetValue	121
9	Data Structures	122
9.1	WFSRESULT	122
9.2	WFSVERSION	123
10	Messages	124
10.1	Command Completions and Events	124
10.1.1	Command Completion Messages	124
10.1.2	Event Messages	124
10.2	WFS_TIMER_EVENT	125
10.3	WFS_SYSE_DEVICE_STATUS	126
10.4	WFS_SYSE_UNDELIVERABLE_MSG	127
10.5	WFS_SYSE_APP_DISCONNECT	128
10.6	WFS_SYSE_HARDWARE_ERROR, WFS_SYSE_SOFTWARE_ERROR, WFS_SYSE_USER_ERROR and WFS_SYSE_FRAUD_ATTEMPT	129
10.7	WFS_SYSE_LOCK_REQUESTED	131
10.8	WFS_SYSE_VERSION_ERROR	132
11	Error Codes	133
12	Common GetInfo, Execute Commands and Messages	136
12.1	Common GetInfo Commands	136
12.1.1	WFS_INF_API_TRANSACTION_STATE	136
12.1.2	WFS_INF_API_SERVICE_INFO	137
12.2	Common Execute Commands	140
12.2.1	WFS_CMD_API_SET_TRANSACTION_STATE	140
12.3	Common Messages	141
12.3.1	WFS_SRVE_API_STATUS_CHANGED	141
12.3.2	WFS_EXEE_API_ERROR_INFO	142
13	Appendix A - Planned Enhancements and Extensions	143
13.1	Event and System Management	144

14	Appendix B - XFS Workshop Contacts	145
15	Appendix C - ATM Devices Synchronization Flow	146
15.1	Synchronized Media Ejection	146
16	Appendix D – Win64 Migration Considerations	147
17	Appendix D - C-Header files	148
17.1	XFSAPI.H	148
17.2	XFSADMIN.H	155
17.3	XFSCONF.H	156
17.4	XFSSPI.H	158

CWA 16926-1:2020 (E)

European Foreword

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

CWA 16926-1:2020 (E)

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

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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.

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.

CWA 16926-1:2020 (E)**1 Introduction**

1.1 Background to Release 3.40

The CEN/XFS Workshop aims to promote a clear and unambiguous specification defining a multi-vendor software interface to financial peripheral devices. The XFS (eXtensions for Financial Services) specifications are developed within the CEN (European Committee for Standardization/Information Society Standardization System) Workshop environment. CEN Workshops aim to arrive at a European consensus on an issue that can be published as a CEN Workshop Agreement (CWA).

The CEN/XFS Workshop encourages the participation of both banks and vendors in the deliberations required to create an industry standard. The CEN/XFS Workshop achieves its goals by focused sub-groups working electronically and meeting quarterly.

Release 3.40 of the XFS specification is based on a C API and is delivered with the continued promise for the protection of technical investment for existing applications. This release of the specification extends the functionality and capabilities of the existing devices covered by the specification. Notable enhancements include:

- Common API level based 'Service Information' command to report Service Provider information, data and versioning.
- Common API level based events to report changes in status and invalid parameters.
- Support for Advanced Encryption Standard (AES) in PIN.
- VDM Entry Without Closing XFS Service Providers.
- Addition of a Biometrics device class.
- CDM/CIM Note Classification List handling.
- Support for Derived Unique Key Per Transaction (DUKPT) in PIN.
- Addition of Transaction Start/End commands.
- Addition of explicit CIM Prepare/Present commands.

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