CEN

CWA 15748-67

WORKSHOP

July 2008

AGREEMENT

ICS 35.240.50

English version

Extensions for Financial Services (XFS) interface specification - Release 3.10 - Part 67: Depository 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.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Table of Contents

F	Foreword3		
1.		Migration Information	5
2.		Depository Unit	6
3.		References	7
4.		Info Commands	8
	4.1	WFS_INF_DEP_STATUS	8
	4.2	WFS_INF_DEP_CAPABILITIES	12
5.		Execute Commands	.15
	5.1	WFS_CMD_DEP_ENTRY	15
	5.2	WFS_CMD_DEP_DISPENSE	17
	5.3	WFS_CMD_DEP_RETRACT	18
	5.4	WFS_CMD_DEP_RESET_COUNT	19
	5.5	WFS_CMD_DEP_RESET	20
	5.6	WFS_CMD_DEP_SET_GUIDANCE_LIGHT	21
	5.7	WFS_CMD_DEP_SUPPLY_REPLENISH	22
	5.8	WFS_CMD_DEP_POWER_SAVE_CONTROL	23
6.		Events	24
	6.1	WFS_SRVE_DEP_ENVTAKEN	24
	6.2	WFS_EXEE_DEP_ENVDEPOSITED	25
	6.3	WFS_EXEE_DEP_DEPOSITERROR	26
	6.4	WFS_USRE_DEP_DEPTHRESHOLD	27
	6.5	WFS_USRE_DEP_TONERTHRESHOLD	28
	6.6	WFS_USRE_DEP_ENVTHRESHOLD	29
	6.7	WFS_SRVE_DEP_CONTINSERTED	30
	6.8	WFS_SRVE_DEP_CONTREMOVED	31
	6.9	WFS_SRVE_DEP_ENVINSERTED	32
	6.1	0 WFS_SRVE_DEP_MEDIADETECTED	33
	6.1	1 WFS_EXEE_DEP_INSERTDEPOSIT	34
	6.1	2 WFS_SRVE_DEP_DEVICEPOSITION	35
	6.1	3 WFS_SRVE_DEP_POWER_SAVE_CHANGE	36
7		C Handar file	27

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

CWA 15748-8:2008

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/isss/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 Depository device class between version 3.0 and 3.10, by highlighting the additions and deletions to the text

2. Depository Unit

This specification describes the functionality of the services provided by the Depository (DEP) services under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

A Depository is used for the acceptance and deposit of media into the device or terminal. There are two main types of depository: an envelope depository for the deposit of media in envelopes and a night safe depository for the deposit of bags containing bulk media.

An envelope depository accepts media, prints on the media and deposits the media into a holding container or bin. Some envelope depositories offer the capability to dispense an envelope to the customer at the start of a transaction. The customer takes this envelope, fills in the deposit media, possibly inscribes it and puts it into the deposit slot. The envelope is then accepted, printed and transported into a deposit container.

The envelope dispense mechanism may be part of the envelope depository device mechanism with the same entry/exit slot or it may be a separate mechanism with separate entry/exit slot.

Envelopes dispensed and not taken by the customer can be retracted back into the device. When the dispenser is a separate mechanism the envelope is retracted back into the dispenser container. When the dispenser is a common mechanism the envelope is retracted into the depository container.

A night safe depository normally only logs the deposit of a bag and does not print on the media.

3. References

1. XFS Application Programming Interface (API)/Service Provider Interface (SPI), Programmer's Reference Revision 3.10

4. Info Commands

4.1 WFS_INF_DEP_STATUS

Description This command reports the full range of information available, including the information that is

provided by the Service Provider.

Input Param None

Output Param LPWFSDEPSTATUS lpStatus;

```
typedef struct _wfs_dep_status
     WORD
                     fwDevice;
                     fwDepContainer;
     WORD
     WORD
                     fwDepTransport;
     WORD
                     fwEnvSupply;
                     fwEnvDispenser;
     WORD
     WORD
                     fwPrinter;
     WORD
                     fwToner;
     WORD
                     fwShutter;
     WORD
                     wNumOfDeposits;
     LPSTR
                     lpszExtra;
     DWORD
                     dwGuidLights[WFS_DEP_GUIDLIGHTS_SIZE];
     WORD
                     fwDepositLocation;
                     wDevicePosition;
     WORD
     USHORT
                     usPowerSaveRecoveryTime;
     } WFSDEPSTATUS, *LPWFSDEPSTATUS;
```

fwDevice

Specifies the state of the Depository device as one of the following flags:

Value	Meaning
WFS_DEP_DEVONLINE	The device is online (i.e. powered on and operable).
WFS_DEP_DEVOFFLINE	The device is off-line (e.g. the operator has taken the device offline by turning a switch or pulling out the device).
WFS_DEP_DEVPOWEROFF	The device is powered off or physically not connected.
WFS_DEP_DEVNODEVICE	There is no device intended to be there; e.g. this type of self service machine does not contain such a device or it is internally not configured.
WFS_DEP_DEVHWERROR	The device is inoperable due to a hardware error. The device is present but a hardware fault prevents it from being used.
WFS_DEP_DEVUSERERROR	The device is present but a person is preventing proper operation. The application should suspend the device operation or remove the device from service until the Service Provider generates a device state change event indicating the condition of the device has changed, i.e. the error is removed or a permanent error condition has occurred.
WFS_DEP_DEVBUSY	The device is busy and not able to process an
WFS_DEP_DEVFRAUDATTEMPT	Execute command at this time. The device is present but has detected a fraud attempt.

fwDepContainer

Specifies the state of the deposit container that contains the deposited envelopes or bags as one of the following flags:

Value	Meaning
WFS_DEP_DEPOK	The deposit container is in a good state.
WFS_DEP_DEPHIGH	The deposit container is almost full
	(threshold).
WFS_DEP_DEPFULL	The deposit container is full.
WFS_DEP_DEPINOP	The deposit container is inoperable.
WFS_DEP_DEPMISSING	The deposit container is missing.
WFS_DEP_DEPUNKNOWN	Due to a hardware error or other condition,
	the state of the deposit container cannot be
	determined.
WFS_DEP_DEPNOTSUPP	The physical device is not able to determine
	the status of the deposit container.

fwDepTransport
Specifies the state of the deposit transport mechanism that transports the envelope into the deposit container. Specified as one of the following flags:

Value	Meaning
WFS_DEP_DEPOK	The deposit transport is in a good state.
WFS_DEP_DEPINOP	The deposit transport is inoperative due to a
	hardware failure or media jam.
WFS_DEP_DEPUNKNOWN	Due to a hardware error or other condition,
	the state of the deposit transport cannot be
	determined.
WFS_DEP_DEPNOTSUPP	The physical device has no deposit transport.

fwEnvSupply

Specifies the state of the envelope supply unit as one of the following flags:

Value	Meaning
WFS_DEP_ENVOK	The envelope supply unit is in a good state (and locked).
WFS DEP ENVLOW	The envelope supply unit is present but low.
WFS_DEP_ENVEMPTY	The envelope supply unit is present but empty. No envelopes can be dispensed.
WFS_DEP_ENVINOP	The envelope supply unit is in an inoperable state. No envelopes can be dispensed.
WFS_DEP_ENVMISSING	The envelope supply unit is missing.
WFS_DEP_ENVNOTSUPP	The physical device has no envelope supply.
WFS DEP ENVUNLOCKED	The envelope supply unit is unlocked.
WFS DEP ENVUNKNOWN	Due to a hardware error or other condition,
	the state of the envelope supply cannot be
	determined.

fwEnvDispenser

Specifies the state of the envelope dispenser. Specified as one of the following flags:

Value	Meaning
WFS_DEP_ENVOK	The envelope dispenser is present and in a
WFS_DEP_ENVINOP	good state. The envelope dispenser is present but in an inoperable state. No envelopes can be
WFS_DEP_ENVUNKNOWN	dispensed. Due to a hardware error or other condition, the state of the envelope dispenser cannot be
WFS_DEP_ENVNOTSUPP	determined. The physical device has no envelope dispenser.

fwPrinter

Specifies the state of the printer. Specified as one of the following flags:

Value	Meaning
WFS_DEP_PTROK	The printer is present and in a good state.
WFS_DEP_PTRINOP	The printer is inoperative.

WFS_DEP_PTRUNKNOWN

Due to a hardware error or other condition, the state of the printer cannot be determined.

WFS_DEP_PTRNOTSUPP

The physical device has no printer.

fwToner

Specifies the state of the toner (or ink) for the printer. Specified as one of the following flags:

Value	Meaning
WFS_DEP_TONERFULL	The toner cassette is full.
WFS_DEP_TONERLOW	The toner in the printer is low.
WFS_DEP_TONEROUT	The toner in the printer is empty.
WFS_DEP_TONERUNKNOWN	Due to a hardware error or other condition,
	the state of the toner for the printer cannot be
	determined.
WFS_DEP_TONERNOTSUPP	The physical device has no toner.

fwShutter

Specifies the state of the shutter or door. Specified as one of the following flags:

Value	Meaning
WFS_DEP_SHTCLOSED	The shutter is closed.
WFS_DEP_SHTOPEN	The shutter is open.
WFS_DEP_SHTJAMMED	The shutter is jammed.
WFS_DEP_SHTUNKNOWN	Due to a hardware error or other condition,
	the state of the shutter cannot be determined.
WFS_DEP_SHTNOTSUPP	The physical device has no shutter.

wNumOfDeposits

Specifies the number of envelopes or bags in the deposit container. This value is persistent, i.e. maintained through power failures, opens, closes and system resets.

Pointer to a list of vendor-specific, or any other extended, information. The information is returned as a series of "key=value" strings so that it is easily extensible by Service Providers. Each string is null-terminated, with the final string terminating with two null characters. An empty list may be indicated by either a NULL pointer or a pointer to two consecutive null characters.

dwGuidLights [...]

Specifies the state of the guidance light indicators. A number of guidance light types are defined below. Vendor specific guidance lights are defined starting from the end of the array. The maximum guidance light index is WFS DEP GUIDLIGHTS MAX.

Specifies the state of the guidance light indicator as WFS_DEP_GUIDANCE_NOT_AVAILABLE, WFS_DEP_GUIDANCE_OFF or a combination of the following flags consisting of one type B, and optionally one type C.

Value	Meaning	<u>Type</u>
WFS DEP GUIDANCE NOT AVAILABLE	The status is not available.	A
WFS DEP GUIDANCE OFF	The light is turned off.	<u>A</u>
WFS DEP GUIDANCE SLOW FLASH	The light is blinking slowly.	В
WFS DEP GUIDANCE MEDIUM FLASH	The light is blinking medium	B
	frequency.	
WFS DEP GUIDANCE QUICK FLASH	The light is blinking quickly.	В
WFS DEP GUIDANCE CONTINUOUS	The light is turned on	В
	continuous (steady).	
WFS DEP GUIDANCE RED	The light is red.	<u>C</u>
WFS DEP GUIDANCE GREEN	The light is green.	C
WFS DEP GUIDANCE YELLOW	The light is yellow.	C
WFS DEP GUIDANCE BLUE	The light is blue.	C
WFS DEP GUIDANCE CYAN	The light is cyan.	C
WFS DEP GUIDANCE MAGENTA	The light is magenta.	C
WFS DEP GUIDANCE WHITE	The light is white.	<u>C</u>

dwGuidLights [WFS_DEP_GUIDANCE_ENVDEPOSITORY]

Specifies the state of the guidance light indicator on the envelope depository unit.

<u>dwGuidLights [WFS_DEP_GUIDANCE_ENVDISPENSER]</u>

Specifies the state of the guidance light indicator on the envelope dispenser unit.

fwDepositLocation

Specifies the location of the item deposited at the end of the last WFS_CMD_DEP_ENTRY command. Specified as one of the following flags:

Value	Meaning
WFS DEP DEPLOCNOTSUPP	Reporting the location of the last deposit is
	not supported.
WFS DEP DEPLOCUNKNOWN	Cannot determine the location of the last
	deposited item.
WFS_DEP_DEPLOCCONTAINER	The item is in the container.
WFS_DEP_DEPLOCTRANSPORT	The item is in the transport.
WFS DEP DEPLOCPRINTER	The item is in the printer.
WFS_DEP_DEPLOCSHUTTER	The item is at the shutter (available for
	removal).
WFS DEP DEPLOCNONE	No item was entered on the last
	WFS CMD DEP ENTRY.
WFS_DEP_DEPLOCREMOVED	The item was removed.

For devices capable of identifying item location, WFS_DEP_DEPLOCNONE is returned when the status is queried before any call to WFS_CMD_DEP_ENTRY.

wDevicePosition

Specifies the device position. The device position value is independent of the *fwDevice* value, e.g. when the device position is reported as WFS_DEP_DEVICENOTINPOSITION, *fwDevice* can have any of the values defined above (including WFS_DEP_DEVONLINE or WFS_DEP_DEVOFFLINE). If the device is not in its normal operating position (i.e. WFS_DEP_DEVICEINPOSITION) then media may not be presented through the normal customer interface. This value is one of the following values:

Value	Meaning
WFS_DEP_DEVICEINPOSITION	The device is in its normal operating
	position, or is fixed in place and cannot be
	moved.
WFS_DEP_DEVICENOTINPOSITION	The device has been removed from its
	normal operating position.
WFS DEP DEVICEPOSUNKNOWN	Due to a hardware error or other condition,
	the position of the device cannot be
	determined.
WFS DEP DEVICEPOSNOTSUPP	The physical device does not have the
	capability of detecting the position.

$\underline{usPowerSaveRecoveryTime}$

Specifies the actual number of seconds required by the device to resume its normal operational state from the current power saving mode. This value is zero if either the power saving mode has not been activated or no power save control is supported.

Error Codes

Only the generic error codes defined in [Ref. 1] can be generated by this command.

Comments

Applications which require or expect specific information to be present in the *lpszExtra* parameter may not be device or vendor-independent.

In the case where communications with the device has been lost, the *fwDevice* field will report WFS_DEP_DEVPOWEROFF when the device has been removed or WFS_DEP_DEVHWERROR if the communications are unexpectedly lost. All other fields should contain a value based on the following rules and priority:

- 1. Report the value as unknown.
- 2. Report the value as a general h/w error.
- 3. Report the value as the last known value.

4.2 WFS_INF_DEP_CAPABILITIES

Description This command is used to retrieve the capabilities of the Depository.

Input Param None

Output Param LPWFSDEPCAPS lpCaps;

```
typedef struct _wfs_dep_caps
     WORD
                     wClass;
     WORD
                     fwType;
     WORD
                     fwEnvSupply;
     BOOL
                     bDepTransport;
     BOOL
                     bPrinter;
     BOOL
                     bToner;
     BOOL
                     bShutter;
                     bPrintOnRetracts;
     BOOL
                     fwRetractEnvelope;
     WORD
                     wMaxNumChars;
     WORD
                     fwCharSupport;
     WORD
     LPSTR
                     lpszExtra;
                     fwCharSupport;
     WORD
                     dwGuidLights[WFS_DEP_GUIDLIGHTS_SIZE];
     DWORD
     BOOL
                     bPowerSaveControl
     } WFSDEPCAPS, *LPWFSDEPCAPS;
```

wClass

Specifies the logical service class as WFS_SERVICE_CLASS_DEP.

fwType

Specifies the type of the depository device as a combination of the following flags:

Value	Meaning
WFS_DEP_TYPEENVELOPE	Depository accepts envelopes.
WFS_DEP_TYPEBAGDROP	Depository accepts bags.

fwEnvSupply

Defines what type of Envelope Supply Unit exists as one of the following flags:

Value	Meaning
WFS DEP ENVMOTORIZED	Envelope Supply can dispense envelopes.
WFS_DEP_ENVMANUAL	Envelope Supply is manual and must be
	unlocked to allow envelopes to be taken. The
	Service Event,
	WFS_SRVE_DEP_ENVTAKEN, can not be
	sent and the Execute Command,
	WFS_CMD_DEP_RETRACT can not be
	supported.
WFS_DEP_ENVNONE	No Envelope Supply or Envelope Supply is
	manual and envelopes can be taken at any
	time. The Service Event,
	WFS_SRVE_DEP_ENVTAKEN, can not be
	sent and the Execute Command,
	WFS_CMD_DEP_RETRACT can not be
	supported.

bDepTransport

Specifies whether a deposit transport mechanism is available.

bPrinter

Specifies whether a printer is available.

bTone

Specifies whether the printer has a toner (or ink) cassette.

bShutter

Specifies whether a deposit transport shutter is available.

bPrintOnRetracts

Specifies whether the device can print the string specified in the *lpszPrintData* or *lpszUNICODEPrintData* field of the WFS_CMD_DEP_RETRACT command on retracted envelopes.

fwRetractEnvelope

Specifies the ability of the envelope dispenser to retract envelopes as one of the following flags:

Value	Meaning
WFS_DEP_NORETRACT	The envelope dispenser does not have the
	capability to retract envelopes.
WFS_DEP_RETRACTDEP	Retracted envelopes are put in the deposit
	container.
WFS_DEP_RETRACTDISP	Retracted envelopes are retracted back to the
	envelope dispenser.

wMaxNumChars

Specifies the maximum number of characters that can be printed on the envelope.

fwCharSupport

One or more flags specifying the Character Sets supported by the Service Provider:

Value	Meaning
WFS_DEP_ASCII	ASCII is supported for execute command
	data values.
WFS_DEP_UNICODE	UNICODE is supported for execute
	command data values.

lpszExtra

Pointer to a list of vendor-specific, or any other extended, information. The information is returned as a series of "key=value" strings so that it is easily extensible by Service Providers. Each string is null-terminated, with the final string terminating with two null characters. An empty list may be indicated by either a NULL pointer or a pointer to two consecutive null characters.

dwGuidLights [...]

Specifies which guidance lights are available. A number of guidance light types are defined below. Vendor specific guidance lights are defined starting from the end of the array. The maximum guidance light index is WFS DEP GUIDLIGHTS MAX.

The elements of this array are specified as a combination of the following flags and indicate all of the possible flash rates (type B) and colors (type C) that the guidance light indicator is capable of handling. If the guidance light indicator only supports one color then no value of type C is returned. A value of WFS_DEP_GUIDANCE_NOT_AVAILABLE indicates that the device has no guidance light indicator or the device controls the light directly with no application control possible.

Value	Meaning	<u>Type</u>
WFS DEP GUIDANCE NOT AVAILABLE	There is no guidance light	A
	control available at this position.	
WFS_DEP_GUIDANCE_OFF	The light is turned off.	<u>A</u>
WFS_DEP_GUIDANCE_SLOW_FLASH	The light is blinking slowly.	В
WFS DEP GUIDANCE MEDIUM FLASH	The light is blinking medium	В
	frequency.	
WFS DEP GUIDANCE QUICK FLASH	The light is blinking quickly.	B
WFS DEP GUIDANCE CONTINUOUS	The light is turned on	B
	continuous (steady).	
WFS DEP GUIDANCE RED	The light is red.	C
WFS DEP GUIDANCE GREEN	The light is green.	C
WFS DEP GUIDANCE YELLOW	The light is yellow.	C
WFS DEP GUIDANCE BLUE	The light is blue.	C
WFS DEP GUIDANCE CYAN	The light is cyan.	C
WFS DEP GUIDANCE MAGENTA	The light is magenta.	C
WFS DEP GUIDANCE WHITE	The light is white.	C

Page 14

CWA 15748-8:2008

dwGuidLights [WFS_DEP_GUIDANCE_ENVDEPOSITORY]

Specifies whether the guidance light indicator on the envelope depository unit is available.

 $\underline{\textit{dwGuidLights}} \; [\underline{\textit{WFS_DEP_GUIDANCE_ENVDISPENSER}}]$

Specifies whether the guidance light indicator on the envelope dispenser unit is available.

<u>bPowerSaveControl</u>

Specifies whether power saving control is available. This can either be TRUE if available or

FALSE if not available.

Error Codes Only the generic error codes defined in [Ref. 1] can be generated by this command.

Comments Applications which require or expect specific information to be present in the *lpszExtra* parameter

may not be device or vendor-independent.

5. Execute Commands

5.1 WFS_CMD_DEP_ENTRY

Description

This command starts the entry of an envelope and deposits it into the deposit container. If the envelope entered has an incorrect size and the deposit was not completed, the envelope is returned to the exit slot for removal by the customer, if the deposit device is capable of this operation (either hardware capability or hardware problems such as a jam may prohibit the envelope from being returned). A WFS_SRVE_DEP_ENVTAKEN is sent when the envelope is removed. If the envelope entered has an incorrect size but the deposit was completed, WFS_SUCCESS is returned and a WFS_EXEE_DEP_DEPOSITERROR event is sent reporting a WFS_ERR_DEP_ENVSIZE value.

If a deposit takes place then this command will report a successful operation and any errors detected during the operation will be returned by the WFS_EXEE_DEP_DEPOSITERROR event. If the successful deposit causes the deposit bin to reach a high or full threshold, a WFS_USRE_DEP_DEPTHRESHOLD event will be sent.

The WFS_EXEE_DEP_INPUTDEPOSIT event will be generated when the device is ready to accept the deposit.

Input Param

LPWFSDEPENVELOPE lpEnvelope;

lpszPrintData

Specifies the data that will be printed on the envelope that is entered by the customer.

lpszUNICODEPrintData

Specifies the UNICODE data that will be printed on the envelope that is entered by the customer. The *lpszUNICODEPrintData* field should only be used if the Service Provider supports UNICODE. The *lpszPrintData* and *lpszUNICODEPrintData* fields are mutually exclusive.

Output Param

None.

Error Codes

In addition to the generic error codes defined in [Ref. 1], the following error codes can be generated by this command:

Value	Meaning
WFS ERR DEP DEPFULL	The deposit container is full.
WFS ERR DEP DEPJAMMED	An envelope jam occurred in the deposit
	transport between the entry slot and the
	deposit container.
WFS ERR DEP ENVSIZE	The envelope entered has an incorrect size.
WFS_ERR_DEP_PTRFAIL	The printer failed.
WFS ERR DEP SHTNOTCLOSED	The shutter failed to close.
WFS_ERR_DEP_SHTNOTOPENED	The shutter failed to open.
WFS_ERR_DEP_CONTMISSING	The deposit container is not present.
WFS_ERR_DEP_DEPUNKNOWN	The result of the deposit is not known.
WFS_ERR_DEP_CHARSETNOTSUPP	Character set(s) supported by Service
	Provider is inconsistent with use of
	lpszPrintData or lpszUNICODEPrintData
	fields.
WFS_ERR_DEP_TONEROUT	Toner or ink supply is empty or printing
	contrast with ribbon is not sufficient. This
	error can only occur when a print string was
	passed in the input parameter.

Events

In addition to the generic events defined in [Ref. 1], the following events can be generated by this command:

Value	Meaning
WFS SRVE DEP ENVTAKEN	The envelope has been taken by the user.
WFS_EXEE_DEP_ENVDEPOSITED	The envelope has been deposited in the deposit container.
WFS_EXEE_DEP_DEPOSITERROR	An error occurred during the deposit operation.
WFS_USRE_DEP_DEPTHRESHOLD	This user event is used to specify that the state of the deposit container reached a threshold.
WFS_USRE_DEP_TONERTHRESHOLD	This user event is used to specify that the state of the toner supply reached a threshold.
WFS SRVE DEP ENVINSERTED	An envelope has been inserted by the user.
WFS EXEE DEP INSERTDEPOSIT	Device is ready to accept deposit from the
	user.

Comments

If the data specified in *lpszPrintData* or *lpszUNICODEPrintData* is longer than the maximum allowed characters, the error code WFS_ERR_INVALID_DATA will be returned.

5.2 WFS_CMD_DEP_DISPENSE

Description This command is used to dispense an envelope from the envelope supply. This command will

either action the dispensing of an envelope from the envelope supply or will unlock the envelope

supply for manual access.

Input Param None. **Output Param** None.

Error Codes In addition to the generic error codes defined in [Ref. 1], the following error codes can be

generated by this command:

Meaning WFS ERR DEP ENVEMPTY There is no envelope in the envelope unit. WFS_ERR_DEP_ENVJAMMED An envelope jam occurred in the dispenser transport between the envelope supply and the output slot.

WFS_ERR_DEP_SHTNOTOPENED The shutter failed to open.

Events In addition to the generic events defined in [Ref. 1], the following events can be generated by this

command:

Value Meaning WFS SRVE DEP ENVTAKEN The envelope has been taken by the user. WFS_USRE_DEP_ENVTHRESHOLD This user event is used to specify that the state of the envelope supply reached a threshold.

Comments None.

WFS_CMD_DEP_RETRACT 5.3

Description

This command is used to retract an envelope that was not taken by a customer after an envelope dispense operation. The given string is printed on the envelope and the envelope is retracted into the deposit container or back to the envelope dispenser, depending on the capabilities of the physical device. If a retract to the deposit bin causes the deposit bin to reach a high or full threshold, a WFS USRE DEP DEPTHRESHOLD event will be sent.

This command will only return with an error code if the retract has not taken place. The error code will then describe the reason for the failure.

Input Param

LPWFSDEPENVELOPE lpEnvelope;

```
typedef struct wfs dep envelope
     LPSTR
                     lpszPrintData;
                     lpszUNICODEPrintData;
     } WFSDEPENVELOPE, *LPWFSDEPENVELOPE;
```

lpszPrintData

Specifies the data that will be printed on the envelope that is retracted.

lpszUNICODEPrintData

Specifies the UNICODE data that will be printed on the envelope that is retracted. The *lpszUNICODEPrintData* field should only be used if the Service Provider supports UNICODE. The *lpszPrintData* and *lpszUNICODEPrintData* fields are mutually exclusive.

Output Param None.

Error Codes

In addition to the generic error codes defined in [Ref. 1], the following error codes can be generated by this command:

Value	Meaning
WFS ERR DEP DEPFULL	The deposit container is full.
WFS ERR DEP DEPJAMMED	An envelope jam occurred in the deposit
	transport between the entry slot and the
	deposit container (may only occur with
	hardware that retracts to the deposit container).
WFS_ERR_DEP_ENVJAMMED	An envelope jam occurred between the entry
	slot and the envelope container (may only
	occur with hardware that retracts to the
	envelope container).
WFS_ERR_DEP_NOENV	No envelope to retract.
WFS_ERR_DEP_PTRFAIL	The printer failed.
WFS_ERR_DEP_SHTNOTCLOSED	The shutter failed to close.
WFS_ERR_DEP_CONTMISSING	The deposit container is not present.
WFS_ERR_DEP_CHARSETNOTSUPP	Character set(s) supported by Service
	Provider is inconsistent with use of
	lpszPrintData or lpszUNICODEPrintData
	fields.
WFS_ERR_DEP_TONEROUT	Toner or ink supply is empty or printing contrast with ribbon is not sufficient.

Events

In addition to the generic events defined in [Ref. 1], the following events can be generated by this command:

Value	Meaning
WFS_USRE_DEP_DEPTHRESHOLD	This user event is used to specify that the state of the deposit container reached a
WFS_USRE_DEP_TONERTHRESHOLD	threshold. This user event is used to specify that the state of the toner supply reached a threshold.

Comments

If the data specified in *lpszPrintData* or *lpszUNICODEPrintData* is longer than the maximum allowed characters, the error code WFS_ERR_INVALID_DATA will be returned.

5.4 WFS_CMD_DEP_RESET_COUNT

Description This command is used to reset the present value for number of envelopes/bags in the deposit

container to zero.

Input Param None.

Output Param

Error Codes Only the generic error codes defined in [Ref. 1] can be generated by this command.

Events In addition to the generic events defined in [Ref. 1], the following events can be generated by this

command:

None.

Value Meaning

WFS_USRE_DEP_DEPTHRESHOLD This user event is used to specify that the state of the deposit container reached a threshold.

Comments None.

5.5 WFS_CMD_DEP_RESET

Description

Sends a service reset to the Service Provider. The Service Provider may reset the deposit device and also the envelope dispenser, if possible. Any media found in the device can be either captured or completely ejected (depending on hardware). If a capture into the deposit bin causes the deposit bin to reach a high or full threshold, a WFS_USRE_DEP_DEPTHRESHOLD event will be sent. If the WFS_CMD_DEP_RESET command is requested to eject the media and the hardware is not capable of this operation either due to hardware capability or hardware error such as a jam, the Service Provider will retract the media in order to attempt to make the device operational. The WFS_SRVE_DEP_MEDIADETECTED event will indicate the position of the detected media following completion of the command. If the input parameter to the WFS_CMD_DEP_RESET command is NULL, the Service Provider will go through default actions to clear the deposit transport. The WFS_SRVE_DEP_MEDIADETECTED event will indicate the position of any detected media following completion of the command. The envelope dispenser will go through the most effective means to clear any jammed media.

Input Param

LPDWORD lpdwDepMediaControl;

Specifies the action that should be done if deposited media is detected during the reset operation, as one of the following values:

Value	Meaning
WFS_DEP_CTRLEJECT	Any media detected in the device should be
	completed ejected (depending on the hardware).
WFS_DEP_CTRLRETRACT	Any media detected in the device should be deposited into the deposit container during the reset operation.

If <code>lpdwDepMediaControl</code> is set to NULL, the Service Provider will go through default actions to clear the deposit transport.

Output Param

None.

Error Codes

In addition to the generic error codes defined in [Ref. 1], the following error codes can be generated by this command:

Value	Meaning
WFS_ERR_DEP_DEPFULL	The deposit container is full.
WFS_ERR_DEP_DEPJAMMED	An envelope jam occurred in the deposit
	transport.
WFS_ERR_DEP_ENVJAMMED	An envelope jam occurred in the dispenser
	transport between the envelope supply and
	the output slot.
WFS_ERR_DEP_SHTNOTOPENED	The shutter failed to open.
WFS_ERR_DEP_SHTNOTCLOSED	The shutter failed to close.
WFS_ERR_DEP_CONTMISSING	The deposit container is not present.

Events

In addition to the generic events defined in [Ref. 1], the following events may be generated by this command, if the appropriate situation occurs and the device service has the capability to detect the situation:

Value	Meaning
WFS_SRVE_DEP_ENVTAKEN	The envelope has been taken by the user.
WFS_USRE_DEP_DEPTHRESHOLD	This user event is used to specify that the
	state of the deposit container reached a
	threshold.
WFS_SRVE_DEP_MEDIADETECTED	Media is detected in the device during a reset
	operation.

Comments

This command is used by an application control program to cause a device to reset itself to a known good condition. Persistent values may change, but will not be reset as a result of this command (i.e. if an envelope is captured, the *wNumOfDeposit*' value in the WFSDEPSTATUS structure will be incremented, but never reset to zero).

5.6 WFS CMD DEP SET GUIDANCE LIGHT

Description

This command is used to set the status of the DEP guidance lights. This includes defining the flash rate and the color. When an application tries to use a color that is not supported then the Service Provider will return the generic error WFS_ERR_UNSUPP_DATA.

Input Param

LPWFSDEPSETGUIDLIGHT lpSetGuidLight;

typedef struct _wfs_dep_set_guidlight

{		
WOR	D wGuid	dLight;
DWO	RD dwCon	nmand;
} W	FSDEPSETGUIDLIGHT	<pre>, *LPWFSDEPSETGUIDLIGHT;</pre>

wGuidLight

Specifies the index of the guidance light to set as one of the values defined within the capabilities section.

<u>dwCommand</u>

Specifies the state of the guidance light indicator as WFS_DEP_GUIDANCE_OFF or a combination of the following flags consisting of one type B, and optionally one type C. If no value of type C is specified then the default color is used. The Service Provider determines which color is used as the default color.

Value	Meaning	Type
WFS DEP GUIDANCE OFF	The light indicator is turned off.	A
WFS DEP GUIDANCE SLOW FLASH	The light indicator is set to flash	В
	slowly.	
WFS DEP GUIDANCE MEDIUM FLASH	The light indicator is set to	B
	flash medium frequency.	
WFS_DEP_GUIDANCE_QUICK_FLASH	The light indicator is set to	В
	flash quickly.	
WFS DEP GUIDANCE CONTINUOUS	The light indicator is turned	В
	on continuously (steady).	
WFS_DEP_GUIDANCE_RED	The light indicator	C
	color is set to red.	
WFS_DEP_GUIDANCE_GREEN	The light indicator	C
	color is set to green.	
WFS DEP GUIDANCE YELLOW	The light indicator	C
	color is set to yellow.	
WFS_DEP_GUIDANCE_BLUE	The light indicator	C
	color is set to blue.	
WFS_DEP_GUIDANCE_CYAN	The light indicator	<u>C</u>
	color is set to cyan.	
WFS DEP GUIDANCE MAGENTA	The light indicator	<u>C</u>
	color is set to magenta.	
WFS_DEP_GUIDANCE_WHITE	The light indicator	<u>C</u>
	color is set to white.	

Output Param None.

Error Codes In a

In addition to the generic error codes defined in [Ref. 1], the following error codes can be generated by this command:

Value	Meaning
WFS ERR DEP INVALID PORT	An attempt to set a guidance light to a new
	value was invalid because the guidance light
	does not exist

Events

Only the generic events defined in [Ref. 1] can be generated by this command.

Comments

Guidance light support was added into the DEP primarily to support guidance lights for workstations where more than one instance of a DEP is present. The original SIU guidance light mechanism was not able to manage guidance lights for workstations with multiple DEPs. This command can also be used to set the status of the DEP guidance lights when only one instance of a DEP is present.

5.7 WFS CMD DEP SUPPLY REPLENISH

After the supplies have been replenished, this command is used to indicate that the specified supplies have been replenished and are expected to be in a healthy state.

Hardware that cannot detect the level of a supply and reports on the supply's status using metrics (or some other means), must assume the supply has been fully replenished after this command is issued. The appropriate threshold event must be broadcast.

Hardware that can detect the level of a supply must update its status based on its sensors, generate a threshold event if appropriate and succeed the command even if the supply has not been replenished. If it has already detected the level and reported the threshold before this command was issued, the command must succeed and no threshold event is required.

Input Param LPWFSDEPSUPPLYREPLEN lpSupplyReplen;

typedef struct wfs dep supply replen
{
 WORD fwSupplyReplen;
} WFSDEPSUPPLYREPLEN, *LPWFSDEPSUPPLYREPLEN;

fwSupplyReplen

Specifies the supply that was replenished as a combination of the following values:

Value	Meaning
WFS DEP REPLEN ENV	The envelope supply was replenished.
WES DEP REPLEN TONER	The toner supply was replenished

Output Param None.

Error Codes Only the generic error codes defined in [Ref. 1] can be generated by this command.

Events In addition to the generic events defined in [Ref. 1], the following events can be generated by this command:

Value	Meaning
WFS USRE DEP ENVTHRESHOLD	This user event is used to specify that the
	state of the envelope supply threshold has
	been cleared.
WFS_USRE_DEP_TONERTHRESHOLD	This user event is used to specify that the
	state of the toner (or ink supply or the state
	of a ribbon) supply threshold has been
	<u>cleared.</u>

Comments If any one of the specified supplies is not supported by a Service Provider,

WFS ERR UNSUPP DATA should be returned, and no replenishment actions will be taken by the Service Provider.

WFS CMD DEP POWER SAVE CONTROL 5.8

Description This command activates or deactivates the power-saving mode.

If the Service Provider receives another execute command while in power saving mode, the Service Provider automatically exits the power saving mode, and executes the requested command. If the Service Provider receives an information command while in power saving mode, the Service Provider will not exit the power saving mode.

LPWFSDEPPOWERSAVECONTROL lpPowerSaveControl; **Input Param**

typedef struct wfs dep power save control

USHORT usMaxPowerSaveRecoveryTime; WFSDEPPOWERSAVECONTROL, *LPWFSDEPPOWERSAVECONTROL;

$\underline{usMaxPowerSaveRecoveryTime}$

Specifies the maximum number of seconds in which the device must be able to return to its normal operating state when exiting power save mode. The device will be set to the highest possible power save mode within this constraint. If usMaxPowerSaveRecoveryTime is set to zero then the device will exit the power saving mode.

Output Param None.

Error Codes In addition to the generic error codes defined in [Ref. 1], the following error codes can be

generated by this command:

Meaning WFS ERR_DEP_POWERSAVETOOSHORT The power saving mode has not been activated because the device is not able to resume from the power saving mode within the specified usMaxPowerSaveRecoveryTime value. WFS ERR DEP POWERSAVEMEDIAPRESENT

The power saving mode has not been activated because media is present inside the device.

In addition to the generic events defined in [Ref. 1], the following events can be generated by this **Events** command:

Meaning

WFS SRVE DEP POWER SAVE CHANGE The power save recovery time has changed.

Comments None.

6. Events

6.1 WFS_SRVE_DEP_ENVTAKEN

Description This service event is used to specify that the envelope has been taken by the customer.

Event Param None. **Comments** None.

6.2 WFS_EXEE_DEP_ENVDEPOSITED

Description This execute event is used to specify that the envelope has been deposited in the deposit container.

Event Param None. **Comments** None.

6.3 WFS_EXEE_DEP_DEPOSITERROR

Description This execute event is used to specify that an error occurred during the deposit operation. For every

error that occurred a single execute event is generated.

Event Param LPLONG lplError;

lplError

For a list of possible error conditions see the description of the WFS_CMD_DEP_ENTRY

command.

Comments None.

6.4 WFS_USRE_DEP_DEPTHRESHOLD

This user event is used to specify that the state of the deposit container reached a threshold. Description

LPWORD lpwDepositThreshold; **Event Param**

lpwDepositThreshold
Specified as one of the following flags:

Value	Meaning
WFS_DEP_DEPOK	The deposit container is in a good state.
WFS_DEP_DEPHIGH	The deposit container is almost full
	(threshold).
WFS DEP DEPFULL	The deposit container is full.

Comments None.

6.5 WFS_USRE_DEP_TONERTHRESHOLD

Description This user event is used to specify that the state of the toner (or ink supply or the state of a ribbon)

reached a threshold.

 $\begin{tabular}{ll} \textbf{Event Param} & LPWORD \ lpwTonerThreshold; \\ \end{tabular}$

lpwTonerThreshold

Specified as one of the following flags:

Value	Meaning
WFS_DEP_TONERFULL	The toner or ink supply is full or the ribbon is OK.
WFS_DEP_TONERLOW	The toner or ink supply is low or the print contrast with a ribbon is weak.
WFS_DEP_TONEROUT	The toner or ink supply is empty or the print contrast with a ribbon is not sufficient any more.

Comments None.

6.6 WFS_USRE_DEP_ENVTHRESHOLD

This user event is used to specify that the state of the envelope supply reached a threshold. Description

 $LPWORD\ lpwEnvelopeThreshold;$ **Event Param**

lpwEnvelopeThreshold
Specified as one of the following flags:

Value	Meaning
WFS_DEP_ENVOK	The envelope supply is present and in a good
	state.
WFS_DEP_ENVLOW	The envelope supply is present but low.
WFS DEP ENVEMPTY	The envelope supply is present but empty.
	No envelopes can be dispensed.

Comments None.

6.7 WFS_SRVE_DEP_CONTINSERTED

Description This service event is used to specify that the deposit container has been reinserted into the device.

Event Param None.Comments None.

6.8 WFS_SRVE_DEP_CONTREMOVED

Description This service event is used to specify that the deposit container has been removed from the device.

Event Param None. **Comments** None.

6.9 WFS_SRVE_DEP_ENVINSERTED

Description This service event is used to specify that an envelope has been inserted by the customer.

Event Param None. **Comments** None.

6.10 WFS_SRVE_DEP_MEDIADETECTED

Description

This event is generated when media is detected in the device during a reset operation. The media may be detected as a result of the reset operation on the envelope dispenser, the envelope depositor, or both.

Event Param

LPWFSDEPMEDIADETECTED lpMediaDetected;

w Dispense Media

Specifies the dispensed envelope position after the reset operation, as one of the following values:

Value	Meaning
WFS_DEP_NOMEDIA	No dispensed media was detected during the
	reset operation.
WFS_DEP_MEDIARETRACTED	The media was retracted into the deposit
	container during the reset operation.
WFS_DEP_MEDIADISPENSER	The media was retracted into the envelope
	dispenser during the reset operation.
WFS_DEP_MEDIAEJECTED	The media is in the exit slot.
WFS_DEP_MEDIAJAMMED	The media is jammed in the device.
WFS DEP MEDIAUNKNOWN	The media is in an unknown position.

wDepositMedia

Specifies the deposited media position after the reset operation, as one of the following values:

Value	Meaning
WFS_DEP_NOMEDIA	No deposited media was detected during the reset operation.
WFS DEP MEDIARETRACTED	The media was retracted into the deposit
WFS_DEP_MEDIARETRACTED	container during the reset operation.
WFS_DEP_MEDIAEJECTED	The media is in the exit slot.
WFS_DEP_MEDIAJAMMED	The media is jammed in the device.
WFS_DEP_MEDIAUNKNOWN	The media is in an unknown position.

Comments

None.

6.11 WFS EXEE DEP INSERTDEPOSIT

This event notifies the application when the device is ready for the user to make the deposit. This event is mandatory. Description

None. **Event Param**

None. Comments

6.12 WFS SRVE DEP DEVICEPOSITION

Description	This service event reports that the device has change	ped its position status
-		
Event Param	LPWFSDEPDEVICEPOSITION lpDevicePosition	<u>u</u>
	typedef struct wfs_dep_device_position	on
	WORD wPosition;	
	} WFSDEPDEVICEPOSITION, *LPWFSDE	PDEVICEPOSITION;
	wPosition	
	Position of the device as one of the following value	es:
	Value	Meaning
	WFS_DEP_DEVICEINPOSITION	The device is in its normal operating
		position.
	WFS DEP DEVICENOTINPOSITION	The device has been removed from its
		normal operating position.
	WFS DEP DEVICEPOSUNKNOWN	The position of the device cannot be
		determined.
Comments	None.	

6.13 WFS SRVE DEP POWER SAVE CHANGE

Description	This service event specifies that the power save recovery time has changed.	
Event Param	LPWFSDEPPOWERSAVECHANGE lpPowerSaveChange;	
	<pre>typedef struct wfs_dep power_save change {</pre>	
	USHORT usPowerSaveRecoveryTime;	
	<pre>} WFSDEPPOWERSAVECHANGE, *LPWFSDEPPOWERSAVECHANGE;</pre>	
	<u>usPowerSaveRecoveryTime</u> Specifies the actual number of seconds required by the device to resume its normal operational state. This value is zero if the device exited the power saving mode.	
Comments	None.	

7. C-Header file

```
xfsdep.h XFS - Depository (DEP) definitions
             Version 3.10 (29/11/2007)
                                                                                                   Deleted: 00 (
Deleted: /18/00)
#ifndef __INC_XFSDEP__H
#define __INC_XFSDEP__H
#ifdef __cpl
extern "C" {
        _cplusplus
#endif
#include <xfsapi.h>
/* be aware of alignment
#pragma pack(push,1)
/* values of WFSDEPCAPS.wClass */
            WFS_SERVICE_CLASS_DEP
#define
             WFS_SERVICE_CLASS_VERSION_DEP
                                                    (0x0A03) /* Version 3.10 */ Deleted: (0x0003)
#define
#define
             WFS_SERVICE_CLASS_NAME_DEP
                                                    "DEP"
            DEP_SERVICE_OFFSET
#define
                                                   (WFS_SERVICE_CLASS_DEP * 100)
/* DEP Info Commands */
#define
            WFS_INF_DEP_STATUS
                                                    (DEP_SERVICE_OFFSET + 1)
            WFS INF DEP CAPABILITIES
                                                   (DEP SERVICE OFFSET + 2)
#define
/* DEP Execute Commands */
#define
            WFS_CMD_DEP_ENTRY
                                                   (DEP SERVICE OFFSET + 1)
            WFS_CMD_DEP_DISPENSE
WFS_CMD_DEP_RETRACT
                                                   (DEP_SERVICE_OFFSET + 2)
(DEP_SERVICE_OFFSET + 3)
#define
#define
            WFS_CMD_DEP_RESET_COUNT
                                                    (DEP_SERVICE_OFFSET + 5)
#define
                                                   (DEP_SERVICE_OFFSET + 6)
#define
            WFS_CMD_DEP_RESET
#define
            WFS_CMD_DEP_SET_GUIDANCE_LIGHT
                                                    (DEP_SERVICE_OFFSET + 7)
#define
            WFS CMD DEP SUPPLY REPLENISH
                                                    (DEP SERVICE OFFSET + 8)
            WFS CMD DEP POWER SAVE CONTROL
                                                    (DEP SERVICE OFFSET + 9)
#define
/* DEP Messages */
#define
             WFS SRVE DEP ENVTAKEN
                                                    (DEP SERVICE OFFSET + 1)
            WFS_EXEE_DEP_ENVDEPOSITED
WFS_EXEE_DEP_DEPOSITEROR
                                                   (DEP_SERVICE_OFFSET + 2)
(DEP_SERVICE_OFFSET + 3)
#define
#define
             WFS_USRE_DEP_DEPTHRESHOLD
                                                    (DEP_SERVICE_OFFSET + 4)
#define
            WFS_USRE_DEP_TONERTHRESHOLD
WFS_USRE_DEP_ENVTHRESHOLD
WFS_SRVE_DEP_CONTINSERTED
                                                    (DEP_SERVICE_OFFSET + 5)
#define
                                                    (DEP_SERVICE_OFFSET + 6)
#define
#define
                                                    (DEP_SERVICE_OFFSET + 7)
#define
             {\tt WFS\_SRVE\_DEP\_CONTREMOVED}
                                                    (DEP_SERVICE_OFFSET + 8)
#define
             WFS SRVE DEP ENVINSERTED
                                                    (DEP SERVICE OFFSET + 9)
#define
             WFS_SRVE_DEP_MEDIADETECTED
                                                    (DEP_SERVICE_OFFSET + 10)
             WFS EXEE DEP INSERTDEPOSIT
WFS SRVE DEP DEVICEPOSITION
                                                    (DEP_SERVICE_OFFSET + 11)
#define
                                                    (DEP_SERVICE_OFFSET + 12)
#define
                                                    (DEP_SERVICE_OFFSET + 13)
#define
             WFS SRVE DEP POWER SAVE CHANGE
/* values of WFSDEPSTATUS.fwDevice */
            WFS_DEP_DEVONLINE WFS_DEP_DEVOFFLINE
                                                   WFS_STAT_DEVONLINE
#define
                                                   WFS_STAT_DEVOFFLINE
#define
                                                   WFS_STAT_DEVPOWEROFF
#define
            WFS_DEP_DEVPOWEROFF
#define
            WFS_DEP_DEVBUSY
                                                   WFS_STAT_DEVBUSY
```

```
#define
             WFS DEP DEVNODEVICE
                                                       WFS STAT DEVNODEVICE
                                                      WFS_STAT_DEVHWERROR
WFS_STAT_DEVUSERERROR
             WFS DEP DEVHWERROR
#define
             WFS DEP DEVUSERERROR
#define
                                                       WFS_STAT_DEVFRAUDATTEMPT
#define
             WFS DEP DEVFRAUDATTEMPT
/* values of WFSDEPSTATUS.fwDepContainer, fwDepTransport */
#define
             WFS_DEP_DEPOK
                                                       (0)
#define
             WFS_DEP_DEPHIGH
                                                       (1)
#define
             WFS_DEP_DEPFULL
                                                       (2)
#define
             WFS_DEP_DEPINOP
                                                       (3)
#define
              WFS DEP DEPMISSING
                                                       (4)
             WFS DEP DEPUNKNOWN
#define
                                                       (5)
             WFS DEP DEPNOTSUPP
#define
                                                       (6)
/* values of WFSDEPSTATUS.fwEnvSupply, fwEnvDispenser */
#define
             WFS_DEP_ENVOK
                                                       (0)
             WFS_DEP_ENVLOW
#define
                                                       (1)
#define
             WFS_DEP_ENVEMPTY
                                                       (2)
             WFS_DEP_ENVINOP
#define
                                                       (3)
#define
             WFS DEP ENVMISSING
                                                       (4)
#define
             WFS_DEP_ENVUNKNOWN
                                                       (5)
#define
             WFS_DEP_ENVNOTSUPP
                                                       (6)
#define
             WFS_DEP_ENVUNLOCKED
                                                       (7)
/* values of WFSDEPSTATUS.fwPrinter */
#define
             WFS DEP PTROK
                                                       (0)
             WFS_DEP_PTRINOP
WFS_DEP_PTRUNKNOWN
WFS_DEP_PTRNOTSUPP
#define
                                                       (1)
#define
                                                       (2)
#define
                                                       (3)
/* values of WFSDEPSTATUS.fwToner */
             WFS_DEP_TONERFULL
WFS_DEP_TONERLOW
WFS_DEP_TONEROUT
#define
                                                       (0)
#define
                                                       (1)
#define
                                                       (2)
#define
             WFS_DEP_TONERUNKNOWN
                                                       (3)
#define
             WFS DEP TONERNOTSUPP
/* values of WFSDEPSTATUS.fwShutter */
#define
             WFS_DEP_SHTCLOSED
                                                       (0)
             WFS_DEP_SHTOPEN
WFS_DEP_SHTJAMMED
WFS_DEP_SHTUNKNOWN
WFS_DEP_SHTNOTSUPP
#define
                                                       (1)
#define
                                                       (2)
#define
                                                       (3)
#define
                                                       (4)
/* Size and max index of dwGuidLights array */
              WFS DEP GUIDLIGHTS SIZE
#define
                                                       (32)
                                                       (WFS DEP GUIDLIGHTS SIZE - 1)
#define
             WFS DEP GUIDLIGHTS MAX
/* Indices of WFSDEPSTATUS.dwGuidLights [...]
                WFSDEPCAPS.dwGuidLights [...]
#define
             WFS DEP GUIDANCE ENVDEPOSITORY
WFS DEP GUIDANCE ENVDISPENSER
                                                       (0)
#define
                                                       (1)
/* Values of WFSDEPSTATUS.dwGuidLights [...]
               WFSDEPCAPS.dwGuidLights [...]
#define
              WFS_DEP_GUIDANCE_NOT_AVAILABLE
                                                       (0x00000000)
#define
              WFS DEP GUIDANCE OFF
                                                       (0x0000001)
              WFS DEP GUIDANCE SLOW FLASH
                                                       (0x00000004)
#define
              WFS DEP GUIDANCE MEDIUM FLASH
                                                       (0x00000008)
#define
              WFS DEP GUIDANCE QUICK FLASH
#define
                                                       (0x0000010)
              WFS DEP GUIDANCE CONTINUOUS
                                                       (0x00000080)
#define
              WFS DEP GUIDANCE RED
                                                       (0x00000100)
#define
```

```
WFS DEP GUIDANCE GREEN
#define
                                                   (0x00000200)
            WFS DEP GUIDANCE YELLOW
#define
                                                   (0x00000400)
            WFS DEP GUIDANCE BLUE
#define
                                                   (0x00000800)
            WFS DEP GUIDANCE CYAN
#define
                                                   (0x00001000)
            WFS DEP GUIDANCE MAGENTA
                                                   (0x00002000)
#define
            WFS DEP GUIDANCE WHITE
                                                   (0x00004000)
#define
/* values of WFSDEPSTATUS.fwDepositLocation */
#define WFS DEP DEPLOCNOTSUPP
                                                   (0)
#define WFS DEP DEPLOCUNKNOWN
                                                   (1)
#define WFS DEP DEPLOCCONTAINER
                                                   (2)
#define WFS DEP DEPLOCTRANSPORT
                                                   (3)
#define WFS DEP DEPLOCPRINTER
                                                   (4)
#define WFS DEP DEPLOCSHUTTER
                                                   (5)
#define WFS DEP DEPLOCNONE
                                                   (6)
#define WFS DEP DEPLOCREMOVED
                                                   (7)
/* values of WFSDEPSTATUS.wDevicePosition
             WFSDEPDEVICEPOSITION.wPosition */
#define
            WFS_DEP_DEVICEINPOSITION
#define
            WFS DEP DEVICENOTINPOSITION
                                                   (1)
#define
            WFS DEP DEVICEPOSUNKNOWN
#define
            WFS DEP DEVICEPOSNOTSUPP
                                                   (3)
/* values of WFSDEPCAPS.fwType */
            WFS_DEP_TYPEENVELOPE
WFS_DEP_TYPEBAGDROP
#define
                                                   (0x0001)
                                                   (0x0002)
#define
/* values of WFSDEPCAPS.fwEnvSupply */
            WFS_DEP_ENVMOTORIZED
                                                   (1)
#define
#define
            WFS_DEP_ENVMANUAL
                                                   (2)
#define
            WFS DEP ENVNONE
                                                   (3)
/* values of WFSDEPCAPS.fwRetractEnvelope */
#define
            WFS DEP NORETRACT
                                                   (1)
            WFS DEP RETRACTDEP
#define
                                                   (2)
            WFS DEP RETRACTDISP
#define
                                                   (3)
/ * \  \, \text{values of WFSDEPCAPS.fwCharSupport, WFSDEPENVELOPE.fwCharSupport */ } \\
            WFS_DEP_ASCII
WFS_DEP_UNICODE
#define
                                                   (0x0001)
#define
                                                   (0x0002)
/* values of dwDepMediaControl */
#define
            WFS DEP CTRLEJECT
                                                   (0x0001)
            WFS DEP CTRLRETRACT
/* values of WFSDEPMEDIADETECTED.wDispenseMedia, wDepositMedia */
#define
            WFS_DEP_NOMEDIA
                                                   (1)
#define
            WFS_DEP_MEDIARETRACTED
                                                   (2)
            WFS_DEP_MEDIADISPENSER
#define
                                                   (3)
#define
            WFS DEP MEDIAEJECTED
                                                   (4)
#define
            WFS_DEP_MEDIAJAMMED
                                                   (5)
#define
            WFS DEP MEDIAUNKNOWN
                                                   (6)
#define
            WFS ERR DEP DEPFULL
                                                   (-(DEP SERVICE OFFSET + 0))
#define
            WFS ERR DEP DEPJAMMED
                                                   (-(DEP SERVICE OFFSET + 1))
            WFS ERR DEP ENVEMPTY
                                                   (-(DEP SERVICE OFFSET + 2))
#define
            WFS_ERR_DEP_ENVJAMMED
                                                   (-(DEP_SERVICE_OFFSET + 3))
#define
            WFS ERR DEP ENVSIZE
                                                   (-(DEP SERVICE OFFSET + 4))
#define
                                                   (-(DEP SERVICE OFFSET + 5))
            WFS ERR DEP NOENV
#define
```

```
Page 40
CWA 15748-8:2008
#define
           WFS ERR DEP PTRFAIL
                                             (-(DEP SERVICE OFFSET + 6))
           WFS_ERR_DEP_SHTNOTCLOSED
WFS_ERR_DEP_SHTNOTOPENED
                                             (-(DEP_SERVICE_OFFSET + 7))
#define
                                             (-(DEP SERVICE OFFSET + 8))
#define
          WFS_ERR_DEP_CONTMISSING
WFS_ERR_DEP_DEPUNKNOWN
                                             (-(DEP_SERVICE_OFFSET + 9))
(-(DEP_SERVICE_OFFSET + 10))
#define
#define
                                             (-(DEP_SERVICE_OFFSET + 11))
#define
           WFS_ERR_DEP_CHARSETNOTSUPP
#define
           WFS_ERR_DEP_TONEROUT
                                             (-(DEP SERVICE OFFSET + 12))
           WFS ERR DEP INVALID PORT
#define
                                             (-(DEP SERVICE OFFSET + 13))
#define
           WFS ERR DEP POWERSAVETOOSHORT
                                             (-(DEP SERVICE OFFSET + 14))
           WFS ERR DEP POWERSAVEMEDIAPRESENT
                                             (-(DEP SERVICE OFFSET + 15))
/* values of WFSDEPSUPPLYREPLEN.fwSupplyReplen */
           WFS DEP REPLEN ENV
                                                 (0x0001)
          WFS DEP REPLEN TONER
#define
                                                 (0x0002)
/*============*/
/* DEP Info Command Structures and variables
/*===========*/
typedef struct _wfs_dep_status
    WORD
               fwDevice;
    WORD
                fwDepContainer;
    WORD
               fwDepTransport;
    WORD
               fwEnvSupply;
    WORD
               fwEnvDispenser;
    WORD
               fwPrinter;
    WORD
               fwToner;
    WORD
               fwShutter:
    WORD
               wNumOfDeposits;
    LPSTR
               lpszExtra:
               dwGuidLights[WFS_DEP_GUIDLIGHTS_SIZE];
    DWORD
    WORD
                fwDepositLocation;
    WORD
               wDevicePosition;
    USHORT
               usPowerSaveRecoveryTime;
} WFSDEPSTATUS, *LPWFSDEPSTATUS;
typedef struct _wfs_dep_caps
    WORD
               wClass;
    WORD
               fwType;
               fwEnvSupply;
    WORD
    BOOL
               bDepTransport;
    BOOT.
               bPrinter:
    BOOL
               bToner;
    BOOL
               bShutter:
    BOOL
               bPrintOnRetracts:
    WORD
               fwRetractEnvelope;
    WORD
               wMaxNumChars;
    WORD
                fwCharSupport;
    LPSTR
               lpszExtra;
               dwGuidLights[WFS DEP GUIDLIGHTS SIZE];
    DWORD
    BOOL
               bPowerSaveControl;
 WFSDEPCAPS, *LPWFSDEPCAPS;
/*-----*/
   DEP Execute Command Structures
/*_____*/
typedef struct _wfs_dep_envelope
    LPSTR
               lpszPrintData;
    LPWSTR
               lpszUNICODEPrintData;
} WFSDEPENVELOPE, *LPWFSDEPENVELOPE;
typedef struct wfs dep set guidlight
```

wGuidLight;

dwCommand;

WORD

```
} WFSDEPSETGUIDLIGHT, *LPWFSDEPSETGUIDLIGHT;
typedef struct wfs_dep_supply_replen
WORD fwSupplyReplen;

WFSDEPSUPPLYREPLEN, *LPWFSDEPSUPPLYREPLEN;
typedef struct wfs dep power save control
    USHORT
              usMaxPowerSaveRecoveryTime;
} WFSDEPPOWERSAVECONTROL, *LPWFSDEPPOWERSAVECONTROL;
/*----*/
/* DEP Message Structures
/*----*/
{\tt typedef\ struct\ \_wfs\_dep\_media\_detected}
    WORD
               wDispenseMedia;
    WORD
               wDepositMedia;
} WFSDEPMEDIADETECTED, *LPWFSDEPMEDIADETECTED;
typedef struct _wfs_dep_device_position
               wPosition;
} WFSDEPDEVICEPOSITION, *LPWFSDEPDEVICEPOSITION;
typedef struct _wfs_dep_power_save_change
USHORT usPowerSaveRecoveryTime;
WFSDEPPOWERSAVECHANGE, *LPWFSDEPPOWERSAVECHANGE;
    restore alignment */
#pragma pack(pop)
#ifdef __cplusplus
} /*extern "C"*/
#endif
```

#endif /* __INC_XFSDEP__H */