Computer Network Protocol Project

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Structure List

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Namespace Documentation

cnp Namespace Reference

Structures

- struct BALANCE QUERY REQUEST
- Balance Query Request Primitive. struct BALANCE QUERY RESPONSE
- Balance Query Result Primitive. struct CNP_BALANCE_QUERY_REQUEST
- Balance query request message. struct CNP_BALANCE_QUERY_RESPONSE
- Balance query response message. struct <u>CNP CONNECT REQUEST</u>
- The connection request message establishes an authenticated connection with the server. struct CNP CONNECT RESPONSE
- Connection response message. struct <u>CNP_CREATE_ACCOUNT_REQUEST</u>
- Create account request message. struct <u>CNP_CREATE_ACCOUNT_RESPONSE</u>
- Create account response message. struct CNP DEPOSIT REQUEST
- Deposit request message. struct <u>CNP_DEPOSIT_RESPONSE</u>
- Deposit response message. struct <u>CNP_LOGOFF_REQUEST</u>
- Logoff request message. struct <u>CNP_LOGOFF_RESPONSE</u>
- Logoff response message. struct <u>CNP_LOGON_REQUEST</u>
- Logon request message. struct <u>CNP LOGON RESPONSE</u>
- Logon response message. struct <u>CNP STD HDR</u>
- CNP Standard Message Header. struct CNP TRANSACTION QUERY REQUEST
- Transaction query request message. struct <u>CNP_TRANSACTION_QUERY_RESPONSE</u>
- Transaction query response message. struct CNP_WITHDRAWAL_REQUEST
- Withdrawal request message. struct <u>CNP_WITHDRAWAL_RESPONSE</u>
- Withdrawal response message. struct **CONNECTION REQUEST**
- Connection Request Primitive. struct **CONNECTION RESPONSE**
- Connection Response Result Primitive. struct <u>CREATE ACCOUNT REQUEST</u>
- Create Account Request Primitive. struct CREATE_ACCOUNT_RESPONSE
- Create Account Response Result Primitive. struct DEPOSIT REQUEST
- Deposit Request Primitive. struct DEPOSIT_RESPONSE
- Deposit Response Result Primitive. struct LOGOFF_REQUEST
- Logoff Request Primitive. struct LOGOFF RESPONSE
- Logoff Response Result Primitive. struct <u>LOGON_REQUEST</u>
- Logon Request Primitive. struct LOGON RESPONSE
- Logon Response Result Primitive. struct STAMP_PURCHASE_REQUEST
- Purchase Stamp Request Primitive. struct STAMP PURCHASE RESPONSE
- Purchase Stamp Result Primitive. struct <u>TRANSACTION</u>
- A transaction record. struct <u>TRANSACTION_QUERY_REQUEST</u>
- Transaction Query Request Primitive. struct <u>TRANSACTION_QUERY_RESPONSE</u>
- Transaction Query Result Primitive. struct WITHDRAWAL_REQUEST
- Withdrawal Request Primitive. struct WITHDRAWAL RESPONSE

Typedef Documentation

typedef unsigned short cnp::WORD

16bit type definition

typedef unsigned int cnp::DWORD

32bit type definition

typedef unsigned long long cnp::QWORD

64bit type definition

Enumeration Type Documentation

enum cnp::CNP MESSAGE TYPE

Supported CNP Message Types.

Enumerator

CMT_INVALID used for initialization and error checking
CMT_CONNECT
CMT_CREATE_ACCOUNT
CMT_LOGON
CMT_LOGOFF
CMT_DEPOSIT
CMT_WITHDRAWAL
CMT_BALANCE_QUERY
CMT_TRANSACTION_QUERY
CMT_PURCHASE_STAMPS

enum cnp::CNP_MESSAGE_SUBTYPE

Supported CNP Message Subtypes.

Enumerator

CMS_INVALID used for initialization and error checking CMS_REQUEST CMS_RESPONSE

enum cnp::CFC TYPE

CNP Facility Code Types (CFC)

This enum is used in the creation of result codes returned to the client. The purpose is to help provide the client useful diagnostic information regarding associating specific errors with a particular facility or functional subsystem.

Enumerator

CFC_CONNECT Connection validation related issues.

CFC_CREDENTIALS Logon related issues.

CFC_FUNCTIONAL Invalid arguments or Client state.

CFC_ACCOUNT Account related errors related to balances, etc.

CFC_UNDEFINED Other error categories not explicitly defined.

enum cnp::CER TYPE CNP Error Result Types (CER) Enumerator CER SUCCESS Success! CER_AUTHENICATION_FAILED Invalid validation key. CER_UNSUPPORTED_PROTOCOL Protocol version not supported. CER_INVALID_CLIENTID Invalid client ID found. CER_INVALID_NAME_PIN Invalid name or pin. CER_INVALID_ARGUMENTS Invalid arguments used. CER_CLIENT_NOT_LOGGEDON Client not logged-on. CER DRAWER BLOCKED Mechanical Failure. CER_INSUFFICIENT_FUNDS Insufficient funds available. CER ERROR Generic error result. enum cnp::DEPOSIT TYPE CNP Deposit types (DT) Enumerator **DT_INVALID** for initialization and error checking DT CASH DT_CHECK enum cnp::TRANSACTION TYPE CNP Transaction types (TT) Enumerator TT_INVALID for initialization and error checking TT DEPOSIT TT_WITHDRAWAL **Variable Documentation** const WORD cnp::g_wMajorVersion = 1 Global message sequence number. const WORD cnp::g_wMinorVersion = 0 Protocol minor version (i.e. x.3) const DWORD cnp::g_dwValidationKey = 0x00DEAD01

CNP Validation Key.

const size_t cnp::MAX_NAME_LEN = 32

[first,last] name field lengths

See also:

CNP_CREATE_ACCOUNT_REQUEST, CNP_LOGON_REQUEST

const WORD_cnp::INVALID_CLIENT_ID = (~0)

Used for error checking & default initialization.

```
const <u>DWORD</u> cnp::CNP_INVALID_ID = (( <u>CMS_INVALID_</u> << 16) + <u>CMT_INVALID_</u>)
const <u>DWORD</u>cnp::CNP_CONNECT_REQUEST_ID = (( <u>CMS_REQUEST_<< 16) + CMT_CONNECT_</u>)
const <u>DWORD</u>cnp::CNP_CONNECT_RESPONSE_ID = (( <u>CMS_RESPONSE</u> << 16)
+ CMT CONNECT)
const DWORD cnp::CNP CREATE ACCOUNT REQUEST ID = (( CMS REQUEST << 16)
+ CMT CREATE ACCOUNT)
const DWORD cnp::CNP CREATE ACCOUNT RESPONSE ID = (( CMS RESPONSE << 16)
+ CMT CREATE ACCOUNT)
const <u>DWORD</u>cnp::CNP_LOGON_REQUEST_ID = (( <u>CMS_REQUEST_</u><< 16) + <u>CMT_LOGON</u>) const
DWORD cnp::CNP LOGON RESPONSE ID = (( CMS RESPONSE << 16) + CMT LOGON) const
DWORD cnp::CNP LOGOFF REQUEST ID = (( CMS REQUEST << 16) + CMT LOGOFF) const
<u>DWORD</u> cnp::CNP LOGOFF RESPONSE ID = (( <u>CMS RESPONSE</u> << 16) + <u>CMT LOGOFF</u>) const
DWORD cnp::CNP DEPOSIT REQUEST ID = (( CMS REQUEST << 16) + CMT DEPOSIT ) const
DWORD cnp::CNP DEPOSIT RESPONSE ID = (( CMS RESPONSE << 16) + CMT DEPOSIT )
const DWORD cnp::CNP WITHDRAWAL REQUEST ID = (( CMS REQUEST << 16)
+ CMT WITHDRAWAL)
const <u>DWORD</u>cnp::CNP_WITHDRAWAL_RESPONSE_ID = (( <u>CMS_RESPONSE_</u> << 16)
+ CMT WITHDRAWAL)
const DWORD cnp::CNP BALANCE_QUERY_REQUEST_ID = (( CMS REQUEST_<< 16)
+ CMT BALANCE QUERY)
const <u>DWORD</u>cnp::CNP_BALANCE_QUERY_RESPONSE_ID = (( <u>CMS_RESPONSE</u> << 16)
+ CMT BALANCE QUERY)
const <u>DWORD</u>cnp::CNP_TRANSACTION_QUERY_REQUEST_ID = (( <u>CMS_REQUEST_</u><< 16)
+ CMT TRANSACTION QUERY)
const DWORD cnp::CNP TRANSACTION QUERY RESPONSE ID = (( CMS RESPONSE << 16)
+ CMT TRANSACTION QUERY)
const <a href="DWORD">DWORD</a> cnp::CNP_PURCHASE_STAMPS_REQUEST_ID = (( <a href="CMS REQUEST">CMS REQUEST</a> < 16)
+ CMT PURCHASE STAMPS)
const DWORD cnp::CNP PURCHASE STAMES RESPONSE ID = (( CMS RESPONSE << 16)
+ CMT PURCHASE STAMPS)
```

Message Structure Documentation

cnp::BALANCE_QUERY_REQUEST Struct Reference

Balance Query Request Primitive.

Detailed Description

Balance Query Request Primitive.

cnp::BALANCE_QUERY_RESPONSE Struct Reference

Balance Query Result Primitive.

Public Attributes

- <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.
- <u>DWORD m_dwBalance</u> Client account balance.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::BALANCE_QUERY_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

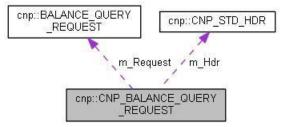
DWORD cnp::BALANCE_QUERY_RESPONSE::m_dwBalance

Client account balance.

cnp::CNP_BALANCE_QUERY_REQUEST Struct Reference

Balance query request message.

Collaboration diagram for cnp::CNP_BALANCE_QUERY_REQUEST:



Public Attributes

- CNP_STD_HDR m_Hdr
- BALANCE QUERY REQUEST m Request

Member Data Documentation

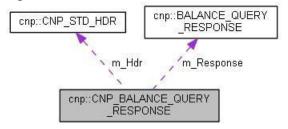
CNP STD HDR cnp::CNP_BALANCE_QUERY_REQUEST::m_Hdr

BALANCE QUERY REQUEST cnp::CNP_BALANCE_QUERY_REQUEST::m_Request

cnp::CNP_BALANCE_QUERY_RESPONSE Struct Reference

Balance query response message.

Collaboration diagram for cnp::CNP_BALANCE_QUERY_RESPONSE:



Public Attributes

- CNP_STD_HDR m_Hdr
- BALANCE_QUERY_RESPONSE m_Response

Member Data Documentation

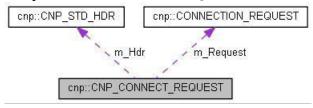
CNP STD HDR cnp::CNP_BALANCE_QUERY_RESPONSE::m_Hdr

BALANCE QUERY RESPONSE cnp::CNP_BALANCE_QUERY_RESPONSE::m_Response

cnp::CNP_CONNECT_REQUEST Struct Reference

The connection request message establishes an authenticated connection with the server.

Collaboration diagram for cnp::CNP_CONNECT_REQUEST:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- <u>CONNECTION_REQUEST_m_Request_</u>

Member Data Documentation

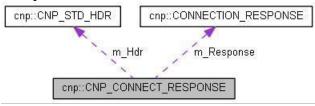
CNP STD HDR cnp::CNP_CONNECT_REQUEST::m_Hdr

CONNECTION REQUEST cnp::CNP_CONNECT_REQUEST::m_Request

cnp::CNP_CONNECT_RESPONSE Struct Reference

Connection response message.

Collaboration diagram for cnp::CNP_CONNECT_RESPONSE:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- <u>CONNECTION_RESPONSE m_Response</u>

Member Data Documentation

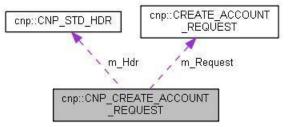
CNP STD HDR cnp::CNP_CONNECT_RESPONSE::m_Hdr

CONNECTION RESPONSE cnp::CNP_CONNECT_RESPONSE::m_Response

cnp::CNP_CREATE_ACCOUNT_REQUEST Struct Reference

Create account request message.

Collaboration diagram for cnp::CNP_CREATE_ACCOUNT_REQUEST:



Public Attributes

- CNP_STD_HDR m_Hdr
- CREATE ACCOUNT REQUEST m Request

Member Data Documentation

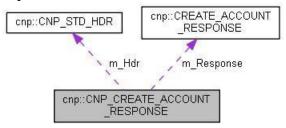
CNP STD HDR cnp::CNP_CREATE_ACCOUNT_REQUEST::m_Hdr

CREATE ACCOUNT REQUEST cnp::CNP_CREATE_ACCOUNT_REQUEST::m_Request

cnp::CNP_CREATE_ACCOUNT_RESPONSE Struct Reference

Create account response message.

Collaboration diagram for cnp::CNP_CREATE_ACCOUNT_RESPONSE:



Public Attributes

- CNP_STD_HDR m_Hdr
- CREATE ACCOUNT RESPONSE m Response

Member Data Documentation

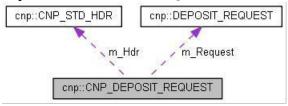
CNP STD HDR cnp::CNP_CREATE_ACCOUNT_RESPONSE::m_Hdr

CREATE ACCOUNT RESPONSE cnp::CNP_CREATE_ACCOUNT_RESPONSE::m_Response

cnp::CNP DEPOSIT REQUEST Struct Reference

Deposit request message.

Collaboration diagram for cnp::CNP_DEPOSIT_REQUEST:



Public Member Functions

- <u>CNP DEPOSIT REQUEST</u> (<u>WORD</u> wClientID, <u>DWORD</u> dwAmount, <u>DEPOSIT TYPE</u> Type) *Initialization constructor*.
- size_t get Size (void) const

Public Attributes

- <u>CNP STD HDR m Hdr</u>
- DEPOSIT_REQUEST m_Request

Member Data Documentation

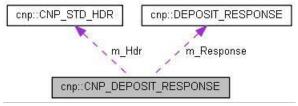
CNP STD HDR cnp::CNP DEPOSIT REQUEST::m Hdr

DEPOSIT REQUEST cnp::CNP_DEPOSIT_REQUEST::m_Request

cnp::CNP_DEPOSIT_RESPONSE Struct Reference

Deposit response message.

Collaboration diagram for cnp::CNP_DEPOSIT_RESPONSE:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- <u>DEPOSIT_RESPONSE m_Response</u>

Member Data Documentation

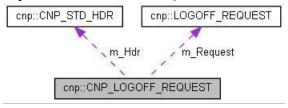
CNP STD HDR cnp::CNP_DEPOSIT_RESPONSE::m_Hdr

DEPOSIT RESPONSE cnp::CNP_DEPOSIT_RESPONSE::m_Response

cnp::CNP_LOGOFF_REQUEST Struct Reference

Logoff request message.

Collaboration diagram for cnp::CNP_LOGOFF_REQUEST:



Public Member Functions

- <u>CNP LOGOFF REQUEST</u> (<u>WORD</u> wClientID) *Initialization constructor*.
- size_t get Size (void) const

Public Attributes

- <u>CNP STD HDR m Hdr</u>
- LOGOFF_REQUEST m_Request

Detailed Description

Logoff request message.

Member Data Documentation

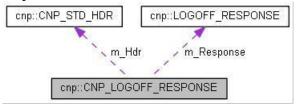
CNP STD HDR cnp::CNP_LOGOFF_REQUEST::m_Hdr

LOGOFF REQUEST cnp::CNP_LOGOFF_REQUEST::m_Request

cnp::CNP_LOGOFF_RESPONSE Struct Reference

Logoff response message.

Collaboration diagram for cnp::CNP_LOGOFF_RESPONSE:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- LOGOFF_RESPONSE m_Response

Detailed Description

Logoff response message.

Member Data Documentation

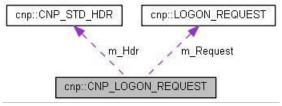
CNP STD HDR cnp::CNP_LOGOFF_RESPONSE::m_Hdr

<u>LOGOFF_RESPONSE</u> cnp::CNP_LOGOFF_RESPONSE::m_Response

cnp::CNP_LOGON_REQUEST Struct Reference

Logon request message.

Collaboration diagram for cnp::CNP_LOGON_REQUEST:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- LOGON_REQUEST m_Request

Member Data Documentation

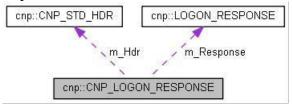
CNP STD HDR cnp::CNP_LOGON_REQUEST::m_Hdr

LOGON REQUEST cnp::CNP_LOGON_REQUEST::m_Request

cnp::CNP_LOGON_RESPONSE Struct Reference

Logon response message.

Collaboration diagram for cnp::CNP_LOGON_RESPONSE:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- LOGON_RESPONSE m_Response

Member Data Documentation

CNP STD HDR cnp::CNP_LOGON_RESPONSE::m_Hdr

LOGON RESPONSE cnp::CNP_LOGON_RESPONSE::m_Response

cnp::CNP STD HDR Struct Reference

CNP Standard Message Header.

Public Attributes

- <u>DWORD m_dwMsgType</u> *Message Type*.
- WORD m_wDataLen
 Message data length excluding this header.
- WORD m wClientID

 Client ID, set by the CNP Server.
- <u>DWORD m_dwSequence</u>

Incremented by the Client, used for the client to match server responses to client requests.

• <u>DWORD m_dwContext</u> Optional field, reserved for the Client.

Detailed Description

CNP Standard Message Header.

This is the header message that is provided as part of all CNP Request and Response messages. The m_wDataLen field is subsequently calculated as:

```
sizeof(m Request) or sizeof(m Response)
```

to get the size of message excluding the size of the header.

The m_dwContext field is exclusively reserved for application use. The contents of this field is returned to the user in the corresponding result message structure without modification.

The m_wClientID value is return by the server in the <u>CONNECTION_RESPONSE</u> message and is required in all subsequent messages sent by the client to the server.

See also:

CONNECTION_RESPONSE

Member Data Documentation

DWORD cnp::CNP_STD_HDR::m_dwMsgType

Message Type.

WORD cnp::CNP STD HDR::m wDataLen

Message data length excluding this header.

WORD cnp::CNP_STD_HDR::m_wClientID

Client ID, set by the CNP Server.

DWORD cnp::CNP_STD_HDR::m_dwSequence

Incremented by the Client, used for the client to match server responses to client requests.

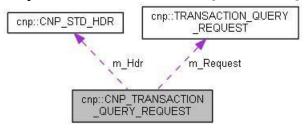
DWORD cnp::CNP_STD_HDR::m_dwContext

Optional field, reserved for the Client.

cnp::CNP_TRANSACTION_QUERY_REQUEST Struct Reference

Transaction query request message.

Collaboration diagram for cnp::CNP_TRANSACTION_QUERY_REQUEST:



Public Attributes

- CNP_STD_HDR m_Hdr
- TRANSACTION QUERY REQUEST m Request

Member Data Documentation

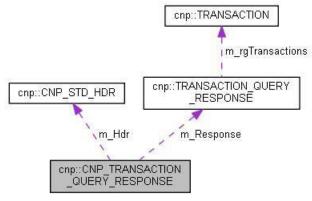
CNP STD HDR cnp::CNP_TRANSACTION_QUERY_REQUEST::m_Hdr

TRANSACTION QUERY REQUEST cnp::CNP_TRANSACTION_QUERY_REQUEST::m_Request

cnp::CNP_TRANSACTION_QUERY_RESPONSE Struct Reference

Transaction query response message.

Collaboration diagram for cnp::CNP_TRANSACTION_QUERY_RESPONSE:



Public Attributes

- <u>CNP STD HDR m Hdr</u>
- TRANSACTION_QUERY_RESPONSE m_Response

Member Data Documentation

CNP STD HDR cnp::CNP_TRANSACTION_QUERY_RESPONSE::m_Hdr

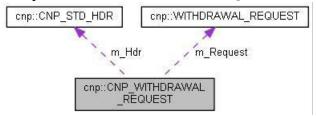
TRANSACTION QUERY RESPONSE

cnp::CNP TRANSACTION QUERY RESPONSE::m Response

cnp::CNP_WITHDRAWAL_REQUEST Struct Reference

Withdrawal request message.

Collaboration diagram for cnp::CNP_WITHDRAWAL_REQUEST:



Public Attributes

- CNP_STD_HDR m_Hdr
- WITHDRAWAL REQUEST m Request

Member Data Documentation

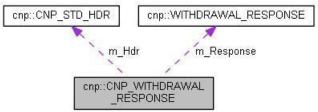
CNP STD HDR cnp::CNP_WITHDRAWAL_REQUEST::m_Hdr

WITHDRAWAL REQUEST cnp::CNP_WITHDRAWAL_REQUEST::m_Request

cnp::CNP_WITHDRAWAL_RESPONSE Struct Reference

Withdrawal response message.

Collaboration diagram for cnp::CNP_WITHDRAWAL_RESPONSE:



Public Attributes

- CNP_STD_HDR m_Hdr
- WITHDRAWAL RESPONSE m Response

Member Data Documentation

CNP STD HDR cnp::CNP_WITHDRAWAL_RESPONSE::m_Hdr

WITHDRAWAL RESPONSE cnp::CNP_WITHDRAWAL_RESPONSE::m_Response

cnp::CONNECTION_REQUEST Struct Reference

Connection Request Primitive.

Public Attributes

- <u>WORD m_wMajorVersion</u> Client Major Protocol version number.
- <u>WORD m_wMinorVersion</u> Client Minor Protocol version number.
- <u>DWORD m dwValidationKey</u> Used by server to authenticate the connection.

Member Data Documentation

WORD cnp::CONNECTION REQUEST::m wMajorVersion

Client Major Protocol version number.

WORD cnp::CONNECTION_REQUEST::m_wMinorVersion

Client Minor Protocol version number.

DWORD cnp::CONNECTION_REQUEST::m_dwValidationKey

Used by server to authenticate the connection.

cnp::CONNECTION RESPONSE Struct Reference

Connection Response Result Primitive.

Public Attributes

- <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.
- <u>WORD m_wMajorVersion</u> Server Major Protocol version number.
- WORD m wMinorVersion
 Server Minor Protocol version number.
- <u>WORD m_wClientID</u>

 this field is generated by the server and is required in all subsequent request messages by the client

See also:

CER_TYPE

Member Data Documentation

DWORD cnp::CONNECTION_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

WORD cnp::CONNECTION_RESPONSE::m_wMajorVersion

Server Major Protocol version number.

WORD cnp::CONNECTION RESPONSE::m wMinorVersion

Server Minor Protocol version number.

WORD cnp::CONNECTION_RESPONSE::m_wClientID

this field is generated by the server and is required in all subsequent request messages by the client

cnp::CREATE_ACCOUNT_REQUEST Struct Reference

Create Account Request Primitive.

Public Attributes

- char <u>m_szFirstName</u> [<u>MAX_NAME_LEN</u>]
 User's First Name.
- char <u>m_szLastName</u> [<u>MAX_NAME_LEN</u>] *User's Last Name*.
- <u>WORD m wPIN</u>

 User's Personal Identification Number.
- <u>DWORD m_dwSSNumber</u> (optional) User's Social Security Number
- <u>DWORD m_dwDLNumber</u> (optional) User's Drivers License Number

Member Data Documentation

char cnp::CREATE_ACCOUNT_REQUEST::m_szFirstName[MAX NAME LEN]

User's First Name.

User's Last Name.

WORD cnp::CREATE_ACCOUNT_REQUEST::m_wPIN

User's Personal Identification Number.

DWORD cnp::CREATE_ACCOUNT_REQUEST::m_dwSSNumber

(optional) User's Social Security Number

<u>DWORD</u> cnp::CREATE_ACCOUNT_REQUEST::m_dwDLNumber

(optional) User's Drivers License Number

cnp::CREATE_ACCOUNT_RESPONSE Struct Reference

Create Account Response Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

Member Data Documentation

DWORD cnp::CREATE_ACCOUNT_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

cnp::DEPOSIT_REQUEST Struct Reference

Deposit Request Primitive. .

Public Attributes

- <u>DWORD m_dwAmount</u>

 Amount excluding decimal point (i.e. \$100.00 would be 10000)
- WORD m_wType DT_CASH or DT_CHECK.

See also:

DEPOSIT TYPE

Member Data Documentation

DWORD cnp::DEPOSIT_REQUEST::m_dwAmount

Amount excluding decimal point (i.e. \$100.00 would be 10000)

WORD cnp::DEPOSIT_REQUEST::m_wType

DT_CASH or DT_CHECK.

cnp::DEPOSIT_RESPONSE Struct Reference

Deposit Response Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::DEPOSIT_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

cnp::LOGOFF_REQUEST Struct Reference

Logoff Request Primitive.

cnp::LOGOFF_RESPONSE Struct Reference

Logoff Response Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::LOGOFF_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

cnp::LOGON_REQUEST Struct Reference

Logon Request Primitive.

Public Attributes

- char <u>m_szFirstName</u> [<u>MAX_NAME_LEN</u>] *User's first name.*
- <u>WORD m_wPIN</u>
 Personal Identification Number.

Member Data Documentation

char cnp::LOGON_REQUEST::m_szFirstName[MAX NAME LEN]

User's first name.

WORD cnp::LOGON_REQUEST::m_wPIN

Personal Identification Number.

cnp::LOGON_RESPONSE Struct Reference

Logon Response Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::LOGON_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

cnp::STAMP_PURCHASE_REQUEST Struct Reference

Purchase Stamp Request Primitive.

Public Attributes

• <u>DWORD m_dwAmount</u>

Amount excluding decimal point (i.e. \$100.00 would be 10000)

Member Data Documentation

DWORD cnp::STAMP_PURCHASE_REQUEST::m_dwAmount

Amount excluding decimal point (i.e. \$100.00 would be 10000)

cnp::STAMP_PURCHASE_RESPONSE Struct Reference

Purchase Stamp Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::STAMP_PURCHASE_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE.

cnp::TRANSACTION Struct Reference

A transaction record.

Public Attributes

- <u>DWORD m_dwID</u> unique sequential ID associated with each transaction
- QWORD m_qwDateTime
 a 64bit UTC value that represents number of seconds since Epoch
- <u>DWORD m dwAmount</u>

 Amount excluding decimal point (i.e. \$100.00 would be 10000)
- <u>WORD m_wType</u> the type of transaction, represented as TT_DEPOSIT or TT_WITHDRAWAL

See also:

TRANSACTION TYPE

Member Data Documentation

DWORD cnp::TRANSACTION::m_dwID

unique sequential ID associated with each transaction

QWORD cnp::TRANSACTION::m gwDateTime

a 64bit UTC value that represents number of seconds since Epoch

DWORD cnp::TRANSACTION::m_dwAmount

Amount excluding decimal point (i.e. \$100.00 would be 10000)

WORD cnp::TRANSACTION::m_wType

the type of transaction, represented as TT_DEPOSIT or TT_WITHDRAWAL

cnp::TRANSACTION_QUERY_REQUEST Struct Reference

Transaction Query Request Primitive.

Public Attributes

- <u>DWORD m_dwStartID</u> the transaction number to begin the query from
- <u>WORD m_wTransactionCount</u> the number of transactions requested

Member Data Documentation

DWORD cnp::TRANSACTION_QUERY_REQUEST::m_dwStartID

the transaction number to begin the query from

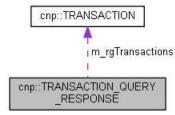
WORD cnp::TRANSACTION_QUERY_REQUEST::m_wTransactionCount

the number of transactions requested

cnp::TRANSACTION QUERY RESPONSE Struct Reference

Transaction Query Result Primitive.

Collaboration diagram for cnp::TRANSACTION_QUERY_RESPONSE:



Public Attributes

- <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.
- <u>WORD m_wTransactionCount</u> number of transactions returned in array
- TRANSACTION HYPERLINK \1 "page43" m rgTransactions [] array of unspecified size of Transaction records

See also:

CER_TYPE

Member Data Documentation

DWORD cnp::TRANSACTION QUERY RESPONSE::m dwResult

Contain Success or Error code from CER_TYPE.

WORD cnp::TRANSACTION_QUERY_RESPONSE::m_wTransactionCount

number of transactions returned in array

TRANSACTION cnp::TRANSACTION_QUERY_RESPONSE::m_rgTransactions[]

array of unspecified size of Transaction records

cnp::WITHDRAWAL_REQUEST Struct Reference

Withdrawal Request Primitive.

Public Member Functions

- <u>WITHDRAWAL_REQUEST</u> () *Default constructor.*
- <u>WITHDRAWAL_REQUEST</u> (<u>DWORD</u> dwAmount) *Initialization constructor*.

Public Attributes

• <u>DWORD m_dwAmount</u>

Amount excluding decimal point (i.e. \$100.00 would be 10000)

Member Data Documentation

DWORD cnp::WITHDRAWAL_REQUEST::m_dwAmount

Amount excluding decimal point (i.e. \$100.00 would be 10000)

cnp::WITHDRAWAL_RESPONSE Struct Reference

Withdrawal Response Result Primitive.

Public Attributes

• <u>DWORD m_dwResult</u> Contain Success or Error code from CER_TYPE.

See also:

CER TYPE

Member Data Documentation

DWORD cnp::WITHDRAWAL_RESPONSE::m_dwResult

Contain Success or Error code from CER_TYPE

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