**Loyalty Customer Transaction**

|  |  |
| --- | --- |
| Date | 01/24/2010 |
| Version | 1.1 |
| Status | Wait to approve |
| Author | Hung Pham |
| Review By | Dat Tran |
| Approved By |  |

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Description | Author |
| 01/24/2010 | 1.0 | Initial draft | Hung Pham |
| 01/25/2010 | 1.1 | Modify Message Format | Hung Pham |
| 01/28/2010 | 1.2 | Add function and separate message for more details. | Hung Pham |
| 02/01/2010 | 1.3 | Separate Message for detail purpose. | Hung Pham |
| 03/02/2010 | 1.4 | Update for error message,MTI,ATC,TTC | Hung Pham |
| 04/15/2010 | 1.5 | Add message sample. | Hung Pham |

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# Transaction general description.

Loyalty Customer transaction is used to being payable in cash append with ATM card or Loyalty Card to get points from the system.

# Message format

## Add Point Transaction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field No | Data Element Name | Attribute | Request | Respone | Note |
|  | MTI | n 4 | M | M | HEX |
|  | Bitmap | b 8 |  |  | HEX |
| 3 | Processing code | n 6 | M | M | HEX |
| 4 | Amount Transaction | n 12 | M |  | HEX |
| 7 | Transaction Date and Time | n 14 | M | M | ASCII |
| 35 | Track 2 Data | z..37 | M |  | HEX |
| 39 | Response Code | an 2 |  | M | ASCII |
| 41 | Card Acceptor Terminal ID | ans 8 | M | M | ASCII |
| 42 | Card Acceptor Identification Code | ans 15 | M | M | ASCII |
| 62 | Reserse Private | ans…999 |  | M | Length of field (Hex) and Content of field (ASCII) |
| 63 | Reverse Private | n 8 |  | O | HEX |

### Specification Message Format:

#### MTI (Message Type Indicator) :

|  |  |  |
| --- | --- | --- |
| Request | Respone | Description |
| 0200 | 0210 | Add Point |

#### Field No : 3 Processing code

The processing code is the contructed data element composed of tree subfield :

* Transaction Type code,AN2
* Account Type Code 1,AN2
* Account Type Code 2,AN2 (skip : default : 00)
* **The transaction Type Code(TTC)** is used along with MTI as a key to uniquely identify the type of transaction being processed.

Request

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0200 | 40 | Add Point |

Response

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0210 | 40 | Add Point |

* **Account Type Code (ATC)**

The transaction code describes the specific transaction type.The Account Type Code 1 describes the account type for debits and inquiry and the “from” account for transfer.

|  |  |
| --- | --- |
| ATC | Description |
| 70 | Loyalty Card |

#### Field No : 35 Track 2 Data

The information encoded on the track 2 of the magnetic stripe including field seperator and excluding the start sentinel and end sentinel and longtitude redundancy check (LRC) characters.

|  |  |
| --- | --- |
| Name | Format |
| Primary Account Number | up to 16 digit |
| Field Separator | can be either “=” or “D” |
| Expiration Day | in YYMM format |
| Service Restriction Code | Three Digit |
| Discretionary Data | balance of avaiable digits |

#### Field No : 39 Response code

|  |  |
| --- | --- |
| **Value** | **Description** |
| 00 | TRANSACTION SUCESSFULLY |
| 03 | MID OR TID NOT FOUND |
| 14 | INVALID CARD NUMBER |
| 54 | EXPIRE CARD |
| 12 | OTHER ERROR |
| 15 | INVALID FIELD |

#### Filed No : 41 Card Acceptor Terminal ID “TID”

A code used to uniquely identify the terminal originating a transaction, this code is also referred to as the Terminal Identifier or “TID”.

#### Field No 42 Card Acceptor Identify Code “MID”

A code uniquely identify the card acceptor originating a transaction,this code is also reffered to as the Merchant Identifier or “MID”.

#### Field 62 :

Send Error message back to client when error occur and send given gift information in case trasaction sucessful.

#### Field 63

|  |  |  |  |
| --- | --- | --- | --- |
| MTI | TTC | Attribute | Description |
| 0210 | 40 | n 8 | - First 4 digits: Points get from Range point Rule  - 2nd 4 digits: Total point |

#### Message sample :

##### Message request:

Header : 6000030000 🡺 5 byte (hex)

MTI : 0200 🡺 2 byte (hex)

Bitmap : 3200000020C00000 🡺 8 byte (Hex)

F3 : 407000 🡺 3 byte (Hex)

F4 : 000000200000 🡺 6 byte (hex)

F7 : 3135303432303130313534383336 🡺 14 byte(ASCII) 🡺 (15042010154836)

F35 : 379604215000000046D140610114680300000000 🡺 20 byte ( hex)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

Total Message length : 5 + 2 + 8 + 3 + 6 + 14 + 20 + 8 + 15 = 81 🡺 2 byte (hex) 0051

0051600003000002003200000020C000004070000000002000003135303432303130313534383336379604215000000046D1406101146803000000003232322020202020322020202020202020202020202020

##### Message Response :

Header : 6000000003 🡺 5 byte (hex)

MTI : 0210 🡺 2 byte (hex)

Bitmap : 2200000000C00006 🡺 8 byte (Hex)

F3 : 407000 🡺 3 byte (Hex)

F7 : 3135303432303130313534393330 🡺 14 byte(ASCII) 🡺 (15042010154930)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

F62 : 003831302042414e204e48414e20414f205448554e2032302042414e204e48414e20584520444150 🡺 10 BAN NHAN AO THUN 20 BAN NHAN XE DAP

F63 : 00020028 🡺 4 byte (hex)

Total Message length : 5 + 2 + 8 + 3 + 14 + 8 + 15 + 40 + 4 = 99 🡺 2 byte (hex) 0063

0063600000000302102200000000C0000640700031353034323031303135343933303232322020202020322020202020202020202020202020003831302042414e204e48414e20414f205448554e2032302042414e204e48414e2058452044415000020028

## Subtract Point Transaction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field No | Data Element Name | Attribute | Request | Respone | Note |
|  | MTI | n 4 | M | M | HEX |
|  | Bitmap | b 8 |  |  | HEX |
| 3 | Processing code | n 6 | M | M | HEX |
| 4 | Amount Transaction | n 12 | M |  | HEX |
| 7 | Transaction Date and Time | n 14 | M | M | ASCII |
| 35 | Track 2 Data | z..37 | M |  | HEX |
| 39 | Response Code | an 2 |  | M | ASCII |
| 41 | Card Acceptor Terminal ID | ans 8 | M | M | ASCII |
| 42 | Card Acceptor Identification Code | ans 15 | M | M | ASCII |
| 62 | Reserse Private | ans…999 |  | M | Length of field (Hex) and Content of field (ASCII) |
| 63 | Reverse Private | n 8 |  | O | HEX |

### Specification Message Format:

#### MTI (Message Type Indicator) :

|  |  |  |
| --- | --- | --- |
| Request | Respone | Description |
| 0200 | 0210 | Subtract Point |

#### Field No : 3 Processing code

The processing code is the contructed data element composed of tree subfield :

* Transaction Type code,AN2
* Account Type Code 1,AN2
* Account Type Code 2,AN2 (skip : default : 00)
* **The transaction Type Code(TTC)** is used along with MTI as a key to uniquely identify the type of transaction being processed.

Request

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0200 | 41 | Subtract Point |

Response

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0210 | 41 | Subtract Point |

* **Account Type Code (ATC)**

The transaction code describes the specific transaction type.The Account Type Code 1 describes the account type for debits and inquiry and the “from” account for transfer.

|  |  |
| --- | --- |
| ATC | Description |
| 70 | Loyalty Card |

#### Field No : 35 Track 2 Data

The information encoded on the track 2 of the magnetic stripe including field seperator and excluding the start sentinel and end sentinel and longtitude redundancy check (LRC) characters.

|  |  |
| --- | --- |
| Name | Format |
| Primary Account Number | up to 16 digit |
| Field Separator | can be either “=” or “D” |
| Expiration Day | in YYMM format |
| Service Restriction Code | Three Digit |
| Discretionary Data | balance of avaiable digits |

#### Field No : 39 Response code

|  |  |
| --- | --- |
| **Value** | **Description** |
| 00 | TRANSACTION SUCESSFULLY |
| 03 | MID OR TID NOT FOUND |
| 14 | INVALID CARD NUMBER |
| 54 | EXPIRE CARD |
| 12 | OTHER ERROR |
| 15 | INVALID FIELD |

#### Filed No : 41 Card Acceptor Terminal ID “TID”

A code used to uniquely identify the terminal originating a transaction, this code is also referred to as the Terminal Identifier or “TID”.

#### Field No 42 Card Acceptor Identify Code “MID”

A code uniquely identify the card acceptor originating a transaction,this code is also reffered to as the Merchant Identifier or “MID”.

#### Field 62

Send Error message back to client when error occured and send given gift information in case trasaction has been sucessful.

#### Field 63

|  |  |  |  |
| --- | --- | --- | --- |
| MTI | TTC | Attribute | Description |
| 0210 | 40 | n 8 | - First 4 digits: Points subtract from Range point Rule  - 2nd 4 digits: Total point reserve. |

#### Message sample :

##### Message request:

Header : 6000030000 🡺 5 byte (hex)

MTI : 0200 🡺 2 byte (hex)

Bitmap : 3200000020C00000 🡺 8 byte (Hex)

F3 : 417000 🡺 3 byte (Hex)

F4 : 000000300000 🡺 6 byte (hex)

F7 : 3135303432303130313534383336 🡺 14 byte(ASCII) 🡺 (15042010154836)

F35 : 379604215000000046D140610114680300000000 🡺 20 byte ( hex)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

Total Message length : 5 + 2 + 8 + 3 + 6 + 14 + 20 + 8 + 15 = 81 🡺 2 byte (hex) 0051

0051600003000002003200000020C000004170000000003000003135303432303130313534383336379604215000000046D1406101146803000000003232322020202020322020202020202020202020202020

##### Message Response :

Header : 6000000003 🡺 5 byte (hex)

MTI : 0210 🡺 2 byte (hex)

Bitmap : 2200000000C00006 🡺 8 byte (Hex)

F3 : 417000 🡺 3 byte (Hex)

F7 : 3135303432303130313534393330 🡺 14 byte(ASCII) 🡺 (15042010154930)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

F62 : 003831302042414e204e48414e20414f205448554e2032302042414e204e48414e20584520444150 🡺 10 BAN NHAN AO THUN 20 BAN NHAN XE DAP

F63 : 00030025 🡺 4 byte (hex)

Total Message length : 5 + 2 + 8 + 3 + 14 + 8 + 15 + 40 + 4 = 99 🡺 2 byte (hex) 0063

0063600000000302102200000000C0000641700031353034323031303135343933303232322020202020322020202020202020202020202020003831302042414e204e48414e20414f205448554e2032302042414e204e48414e2058452044415000030025

## Balance Inquiry Transaction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field No | Data Element Name | Attribute | Request | Respone | Note |
|  | MTI | n 4 | M | M | HEX |
|  | Bitmap | b 8 |  |  | HEX |
| 3 | Processing code | n 6 | M | M | HEX |
| 7 | Transaction Date and Time | n 14 | M | M | ASCII |
| 35 | Track 2 Data | z..37 | M |  | HEX |
| 39 | Response Code | an 2 |  | M | ASCII |
| 41 | Card Acceptor Terminal ID | ans 8 | M | M | ASCII |
| 42 | Card Acceptor Identification Code | ans 15 | M | M | ASCII |
| 62 | Reserse Private | ans…999 |  | M | Length of field (Hex) and Content of field (ASCII) |
| 63 | Reverse Private | n 4 |  | O | HEX |

### Specification Message Format:

#### MTI (Message Type Indicator) :

|  |  |  |
| --- | --- | --- |
| Request | Respone | Description |
| 0200 | 0210 | Balance Inquiry |

#### Field No : 3 Processing code

The processing code is the contructed data element composed of tree subfield :

* Transaction Type code,AN2
* Account Type Code 1,AN2
* Account Type Code 2,AN2 (skip : default : 00)
* **The transaction Type Code(TTC)** is used along with MTI as a key to uniquely identify the type of transaction being processed.

Request

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0200 | 42 | Balance Inquiry |

Response

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0210 | 42 | Balance Inquiry |

* **Account Type Code (ATC)**

The transaction code describes the specific transaction type.The Account Type Code 1 describes the account type for debits and inquiry and the “from” account for transfer.

|  |  |
| --- | --- |
| ATC | Description |
| 70 | Loyalty Card |

#### Field No : 35 Track 2 Data

The information encoded on the track 2 of the magnetic stripe including field seperator and excluding the start sentinel and end sentinel and longtitude redundancy check (LRC) characters.

|  |  |
| --- | --- |
| Name | Format |
| Primary Account Number | up to 16 digit |
| Field Separator | can be either “=” or “D” |
| Expiration Day | in YYMM format |
| Service Restriction Code | Three Digit |
| Discretionary Data | balance of avaiable digits |

#### Field No : 39 Response code

|  |  |
| --- | --- |
| **Value** | **Description** |
| 00 | TRANSACTION SUCESSFULLY |
| 03 | MID OR TID NOT FOUND |
| 14 | INVALID CARD NUMBER |
| 54 | EXPIRE CARD |
| 12 | OTHER ERROR |
| 15 | INVALID FIELD |

#### Filed No : 41 Card Acceptor Terminal ID “TID”

A code used to uniquely identify the terminal originating a transaction, this code is also referred to as the Terminal Identifier or “TID”.

#### Field No 42 Card Acceptor Identify Code “MID”

A code uniquely identify the card acceptor originating a transaction,this code is also reffered to as the Merchant Identifier or “MID”.

#### Field 62

Send Error message back to client when error occur and send given gift information in case trasaction sucessful.

#### Field 63

|  |  |  |  |
| --- | --- | --- | --- |
| MTI | TTC | Attribute | Description |
| 0210 | 42 | N 4 | Total points of card. |

#### Message sample :

##### Message request:

Header : 6000030000 🡺 5 byte (hex)

MTI : 0200 🡺 2 byte (hex)

Bitmap : 2200000020C00000 🡺 8 byte (Hex)

F3 : 427000 🡺 3 byte (Hex)

F7 : 3135303432303130313534383336 🡺 14 byte(ASCII) 🡺 (15042010154836)

F35 : 379604215000000046D140610114680300000000 🡺 20 byte ( hex)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

Total Message length : 5 + 2 + 8 + 3 + 14 + 20 + 8 + 15 = 75 🡺 2 byte (hex) 004b

004b600003000002003200000020C000004270003135303432303130313534383336379604215000000046D1406101146803000000003232322020202020322020202020202020202020202020

##### Message Response :

Header : 6000000003 🡺 5 byte (hex)

MTI : 0210 🡺 2 byte (hex)

Bitmap : 2200000000C00006 🡺 8 byte (Hex)

F3 : 427000 🡺 3 byte (Hex)

F7 : 3135303432303130313534393330 🡺 14 byte(ASCII) 🡺 (15042010154930)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

F62 : 003831302042414e204e48414e20414f205448554e2032302042414e204e48414e20584520444150 🡺 10 BAN NHAN AO THUN 20 BAN NHAN XE DAP

F63 : 0025 🡺 2 byte (hex)

Total Message length : 5 + 2 + 8 + 3 + 14 + 8 + 15 + 40 + 2 = 97 🡺 2 byte (hex) : 0061

0061600000000302102200000000C0000642700031353034323031303135343933303232322020202020322020202020202020202020202020003831302042414e204e48414e20414f205448554e2032302042414e204e48414e205845204441500025

## Redemption Transaction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field No | Data Element Name | Attribute | Request | Respone | Note |
|  | MTI | n 4 | M | M | HEX |
|  | Bitmap | b 8 |  |  | HEX |
| 3 | Processing code | n 6 | M | M | HEX |
| 4 | Amount Transaction | n 12 | M |  | HEX(Point is contained here) |
| 7 | Transaction Date and Time | n 14 | M | M | ASCII |
| 35 | Track 2 Data | z..37 | M |  | HEX |
| 39 | Response Code | an 2 |  | M | ASCII |
| 41 | Card Acceptor Terminal ID | ans 8 | M | M | ASCII |
| 42 | Card Acceptor Identification Code | ans 15 | M | M | ASCII |
| 62 | Reserse Private | ans…999 |  | M | Length of field (Hex) and Content of field (ASCII) |
| 63 | Reverse Private | n 4 |  | O | HEX |

### Specification Message Format:

#### MTI (Message Type Indicator) :

|  |  |  |
| --- | --- | --- |
| Request | Respone | Description |
| 0200 | 0210 | Redemption |

#### Field No : 3 Processing code

The processing code is the contructed data element composed of tree subfield :

* Transaction Type code,AN2
* Account Type Code 1,AN2
* Account Type Code 2,AN2 (skip : default : 00)
* **The transaction Type Code(TTC)** is used along with MTI as a key to uniquely identify the type of transaction being processed.

Request

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0200 | 44 | Redemption |

Response

|  |  |  |
| --- | --- | --- |
| MTI | TTC | Description |
| 0210 | 44 | Redemption |

* **Account Type Code (ATC)**

The transaction code describes the specific transaction type.The Account Type Code 1 describes the account type for debits and inquiry and the “from” account for transfer.

|  |  |
| --- | --- |
| ATC | Description |
| 70 | Loyalty Card |

#### Field No : 4 Amout Transaction

Point of gift to exchange of redemption transaction is contained here.

#### Field No : 35 Track 2 Data

The information encoded on the track 2 of the magnetic stripe including field seperator and excluding the start sentinel and end sentinel and longtitude redundancy check (LRC) characters.

|  |  |
| --- | --- |
| Name | Format |
| Primary Account Number | up to 16 digit |
| Field Separator | can be either “=” or “D” |
| Expiration Day | in YYMM format |
| Service Restriction Code | Three Digit |
| Discretionary Data | balance of avaiable digits |

#### Field No : 39 Response code

|  |  |
| --- | --- |
| **Value** | **Description** |
| 00 | TRANSACTION SUCESSFULLY |
| 03 | MID OR TID NOT FOUND |
| 14 | INVALID CARD NUMBER |
| 54 | EXPIRE CARD |
| 12 | OTHER ERROR |
| 15 | INVALID FIELD |

#### Filed No : 41 Card Acceptor Terminal ID “TID”

A code used to uniquely identify the terminal originating a transaction, this code is also referred to as the Terminal Identifier or “TID”.

#### Field No 42 Card Acceptor Identify Code “MID”

A code uniquely identify the card acceptor originating a transaction,this code is also reffered to as the Merchant Identifier or “MID”.

#### Field 62

Send Error message back to client when error occured and send given gift information in case trasaction has been sucessful..

#### Field 63

|  |  |  |  |
| --- | --- | --- | --- |
| MTI | TTC | Attribute | Description |
| 0210 | 44 | n 4 | Point reserve after transaction |

#### Message sample :

##### Message request:

Header : 6000030000 🡺 5 byte (hex)

MTI : 0200 🡺 2 byte (hex)

Bitmap : 3200000020C00000 🡺 8 byte (Hex)

F3 : 447000 🡺 3 byte (Hex)

F4 : 000000000010 🡺 6 byte (hex)

F7 : 3135303432303130313534383336 🡺 14 byte(ASCII) 🡺 (15042010154836)

F35 : 379604215000000046D140610114680300000000 🡺 20 byte ( hex)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

Total Message length : 5 + 2 + 8 + 3 + 6 + 14 + 20 + 8 + 15 = 81 🡺 2 byte (hex) 0051

0051600003000002003200000020C000004470000000000000103135303432303130313534383336379604215000000046D1406101146803000000003232322020202020322020202020202020202020202020

##### Message Response :

Header : 6000000003 🡺 5 byte (hex)

MTI : 0210 🡺 2 byte (hex)

Bitmap : 2200000000C00006 🡺 8 byte (Hex)

F3 : 447000 🡺 3 byte (Hex)

F7 : 3135303432303130313534393330 🡺 14 byte(ASCII) 🡺 (15042010154930)

F41 : 3232322020202020 🡺 8 byte(ASCII) 🡺 (222)

F42: 322020202020202020202020202020 🡺 15 byte (ASCII)

F62 : 002542414e20565541204e48414e2044554f4320414f205448554e 🡺 BAN VUA NHAN DUOC AO THUN

F63 : 0018 🡺 2 byte (hex)

Total Message length : 5 + 2 + 8 + 3 + 14 + 8 + 15 + 27 + 2 = 84 🡺 2 byte (hex) 0054

0054600000000302102200000000C0000644700031353034323031303135343933303232322020202020322020202020202020202020202020002542414e20565541204e48414e2044554f4320414f205448554e0018

# Conditional Code

|  |  |
| --- | --- |
| Type | Comment |
| O | Option |
| M | Mandantory |