



PanWorld-Net GateWay Guide

General Manual(v1.0)

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1. What is the PWN_GateWay

1. Introduction

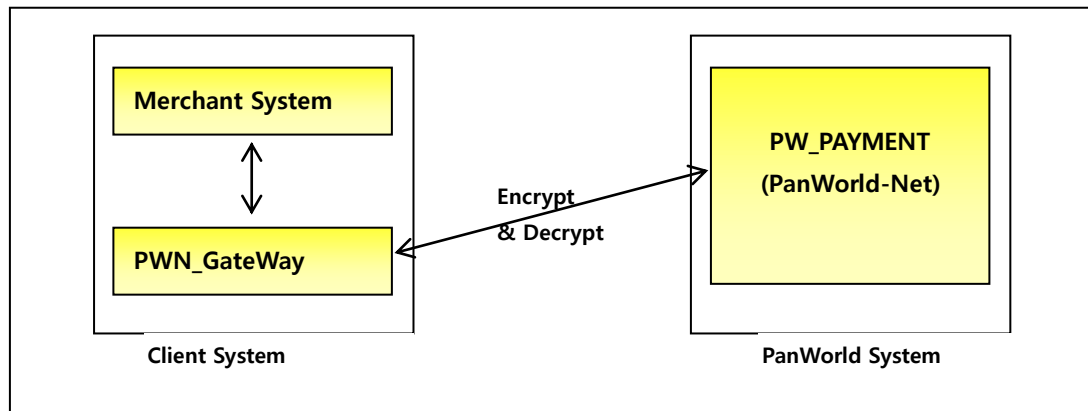
- 1> PWN_GateWay is a Client Side communication module provided by PanWorld-Net**
- 2> PWN_GateWay is TCP/IP based API to communicate with encrypted data between Client and Server**
- 3> Merchant System <-- TCP/IP (Plain Text) --> PWN_GateWay <-- TCP/IP (Encrypted Text) --> PWN_PAYMENT**

2. System Installation Requirments

- 1> PWN_GateWay which is consisted of pureJAVA is able to install and operate with all the platforms using JVM, and also developed for various end-user interface (Unix, Linux, Windows)**
- 2> PWN_GateWay provides executive files (batch file, shell file) in Unix, Linux, and Windows system.**
- 3> PWN_GateWay operates under Java 1.5 system. For the stable user interface, it has to be upgraded to JVM version 1.5**
- 4> For a compatability of client side developer, PWN_GateWay provides daily or increment log as a file type.**

2. System Configuration and Installation Guide

1. Network Flow



2. PWN_GATEWAY Configuration

PWN_GATEWAY

- | - lib : library Directory
- | - bin : Executable File (shell , batch file)
- | - doc : Manual
- | - logs : Log File Directory
- | - conf : Configuration File Directory

3. JDK,JRE Installation Guide

- 1> J2SDK,JRE Download URL : <http://java.sun.com> >> Downloads >> Java SE >> Previous Releases >> J2SE 5.0 Downloads >> JDK 5.0 Update 17 >> select Platform & Language
- 2> Parameter configuration
 - * Windows
 - My computer properties >> Advanced (Tab) >> Environment Variable >> System Variable >> Add Path : ;C:\Program Files\Java\jdk1.5.0_17\bin
 - * Unix & Linux : vi /etc/profile
 - JAVA_HOME=/usr/java/jdk1.5.0_17
 - export JAVA_HOME
 - PATH=\$PATH:\$JAVA_HOME/bin
 - CLASSPATH=\$CLASSPATH:\$JAVA_HOME/lib
- 3> Confirm Java installation interface
 - cmd >> java -version >> Enter
 - cmd >> java version "1.5.0_17"
 - * If it installed correctly, you can find version information.

4. PWN_GateWay Installation Guide

- 1> Unzip "PWN_GATEWAY.zip" in a preferred directory folder
- 2> Windows System

- * Execute "PWN_GATEWAY/bin/install.bat" with "NTService"
 - * It will drive correctly, when "PWN_GATEWAY/bin/start.bat" is executed
- 3> Unix & Linux
- * move PWN_GATEWAY/bin >> dos2unix *.sh
 - * PWN_GATEWAY/bin/start.sh >> You can see PWN_GATEWAY Started. ^^
- 4> Definition of each file of "bin"
- * start.sh,start.bat : Program Start
 - * stop.sh,stop.bat : Program End
 - * restart.sh,restart.bat : Program Restart
 - * install.bat,uninstall.bat : Program Install and uninstall in NT platform

5. Definition of "service.xml" configuration file

- 1> PATH : PWN_GATEWAY/conf/service.xml
- 2> It includes network configuration information between PWN_GATEWAY and PW_PAYMENT
- 3> PWN_GATEWAY must be re-executed for normal system process when "Service.xml" was customized
- 4> Element Name of XML is unable to change. When it is changed, a module will not be executed

	Element Name	VALUE
1	serverPort	Default "20000" Port information for PWN_GATEWAY Able to change regarding to MERCHANT configuration
2	serverTimeout	TIMEOUT between PWN_GATEWAY and MERCHANT SYSTEM It consists of Millisecond
3	pwnServerIp	IP address of PW_PAYMENT Server
4	pwnServerPort	Port information of PW_PAYMENT server.
5	pwnTimeout	Timeout information of PW_PAYMENT server

6. Definition of "NTWrapper.conf", and "log4j.properties"

- 1> "NTWrapper.conf" and "log4j.properties" is optimized for PWN_GATEWAY module
- *Please do not change above configuration on the franchise.

3. Communication Packet Definition

1. Consist of Specification

- 1> Specification is consisted of HEADER Part and DATA Part
- 2> Method to specification construction

LENGTH	HEADER Part	DATA Part
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- 3> Transmission Method

TCP/IP is formed of 1 HandShake, but Connection maintenance method is not supported.

* Steps to Transmission

- a> Construction and Socket Connect
 - b> Send
 - c> Receive
 - d> Socket Close
- 4> PWN_GATEWAY

For a normal data transmission, Company's encrypted communication with PW_PAYMENT server is required.

2. Character Construction Formation

- 1> CHAR : C(20) : Character stands for "C", and "20" means length of 20 characters
Not enough space for character length, you can put trailing Space (Filler) on the right of CHAR
Ex) C(20) : [ABCDEFGHJ]
- 2> NUMBER : N(10) : Numbers are described as "N", and "10" means 10 digits
Not enough space for Number, you can put "0" at left prior to number
Ex) N(10) : [0001234567]

3. Symbols for Sending & Receiving Transmission

- 1> © : Essential Sending/Receiving Transmission Zone
- 2> ○ : Option Zone

4. Transmission Specification

1> Header Part

	NAME	DESC	TYPE	Sending	Receiving
1	SPEC_LENGTH	Total Length	N(4)	◎	◎
2	SPEC_TYPE	"CFIX" : Fixed specification	C(4)	◎	◎
3	TRN_TYPE	"T001" : Credit Card Payment "T002" : Inquiry payment result "T003" : Cancel payment "T004" : Card Authentication	C(4)	◎	◎
4	MERCHANT_ID	ID for Each Merchant	C(20)	◎	◎
5	MALL_ID	ID for Low Level Merchant Mall	C(20)	◎	◎
6	SERVICE_TYPE	Connection Route Information for Merchant's Payment Ex) TERMINAL,MOBILE,WEB	C(8)	◎	◎
7	IP_ADDRESS	Customer's IP Information	C20)	◎	◎
8	TRN_DATE	Transaction Date (YYYYMMDDHHMMSS)	C(14)	◎	◎
9	TRN_RES_DATE	Transaction Response Date (YYYYMMDDHHMMSS)	C(14)		◎
10	PAY_NO	Merchant Order Number	C(50)	◎	◎
11	TRANSACTION_ID	Transaction Number (Accept Order / Cancel Order)	C(12)		◎
12	RESULT_CD	Respond Code regarding Payment Request "0" : Transaction Completed "1" : Transaction Failed "2" : System Error	C(1)		◎
13	RESULT_MSG	Respond Code regarding Payment	C(4)		◎
14	EXTRA	Extra Space	C(25)	○	○
			C(200)		

2> Credit Card Approval (T001)

	NAME	DESC	TYPE	Symbol	Sending/Receiving
1	CARD_NUMBER	Credit Card Number	C(20)	◎	◎
2	CARD_EXPIRE	Credit Card Expiration Date (YYMM)	C(4)	◎	◎
3	CARD_CVV	Credit Card CVV number	C(3)	○	○
4	CARD_PASSWORD	Pin number	C(4)	○	○
5	CARD_EXTRA	Extra Parameter except for Credit Card.	C(10)	○	○
6	PAY_USERID	Merchant Membership ID (en-English)	C(50)	◎	◎
7	PAY_NAME	Name of Merchant Membership (en quad-English)	C(50)	◎	◎
8	PAY_TELNO	Member Telephone Number	C(20)	◎	◎
9	PAY_EMAIL	Member Email Address	C(100)	◎	◎
10	PRODUCT_TYPE	Type of Product ("0" :Goods "1":Contents)	C(2)	◎	◎
11	PRODUCT_NAME	Name of Product	C50)	◎	◎
12	AMOUNT	Amount of USD Ex) \$39.09 → "0000003909" Form of Amount x 100	N(10)	◎	◎
13	CUR_TYPE	Currency Type - "USD,JPY,EUR"	C(3)	◎	◎
14	APPROVAL_NO	Approval Number	C(8)		○
15	DOMAIN	MERCHANT URL	C(50)	○	○
16	CAVV	3D SECURE 사용할 때만 사용됩니다. 3D SECURE 인증코드 CAVV(40) +XID(40) + ECI(2) + FILLER(18)	C(100)	○	○
17	EXTRA	예비	C(66)	○	○
			C(400)		

* SPACE is declared as "_" for readability

-REQ

```

=[0746CFIXT001PANWORLD_____20010001_____WEB____192.168.10.1_____20081224203347____
_____PANWORLD_20081224203347171_____4444
555566667777____1009_____PAYUSERID_____PAYUSERNAME_____
_____PAYTELNUMBER_____PAYUSEREMAIL_____
_____1_PRODUCTNAME_____0000050000JP
Y_____
_____]

```

-RES

```
[0746CFIXT001PANWORLD_____20010001_____WEB____192.168.10.1_____200812242033472008
1224203350PANWORLD_20081224203347171_____08122400000300000_____
_4444555566667777___1009_____PAYUSERID_____PAYUSERNAME
_____PAYTELNUMBER_____PAYUSEREMAIL_____
_____1_PRODUCTNAME_____000005
0000JPY00203350_____
_____
_]

```

3> Credit Card Cancellation (T002)

	NAME	DESC	TYPE	Symbol	Sending/Receiving
1	VOID_TYPE	"1" : Transaction Number "2" : Merchant Order Number	C(1)	◎	◎
2	APPROVAL_DAY	Date to Approve (YYYYMMDD)	C(8)	○	◎
3	RAPPROVAL_NO	Initial Transaction Approval Number	C(8)	○	◎
4	RPAY_NO	Initial Transaction Order Number	C(50)	○	◎
5	RTRANSACTION_ID	Initial KTT Transaction Number	C(12)	○	◎
6	CARD_NUMBER	Credit Card Number	C(20)	○	○
7	CARD_EXPIRE	Credit Card Expiration Date	C(4)	○	○
8	AMOUNT	Amount of USD Ex) \$39.09 → "0000003909" Form of Amount x 100	N(10)	○	◎
9	CUR_TYPE	Currency Type - "USD"	C(3)	○	◎
10	APPRVAL_NO	Approval Number	C(8)	○	○
11	EXTRA	Extra Space	C(76)	○	○
			C(200)		

* SPACE is declared as "_" for readability

* In case of "VOID_TYPE = 1", it needs to transmit "RTRANSACTION_ID" only. For cancellation of a day after transaction, it transmits automatically to Card Company as a purchasing withdrawal level.

* In case of "VOID_TYPE = 2", it is essential to transmit all filed values. After it is referred by PanWord-net system, it will be withdrawn. It is highly recommended to customers to bring "TRANSACTION_ID" using T003(조회) and transmit withdrawal data using "VOID_TYPE =1" when communication error

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```
REQ=[0396CFIXT002PANWORLD_____20010001_____WEB____192.168.10.1_____2008122420335
9_____PANWORLD_20081224203359140_____
120081224_____000000000
0_____]
```

-

```
RES=[0396CFIXT002PANWORLD_____20010001_____WEB____192.168.10.1_____20081224203359
20081224203401PANWORLD_20081224203359140_____08122400000400000_____
_____12008122400203401PANWORLD_20081224203359140_____081224000005_____
_____0000000000_____]
```


4> Credit Card Transaction Reference (T003)

	NAME	DESC	TYPE	Symbol	Sending/Receiving
1	RPAY_NO	Initial Order Number	C(50)	◎	◎
2	TRN_TYPE	Transcation Type - T001	C(4)	◎	◎
3	RESULT_CD	Result of Type	C(1)		○
4	RESULT_MSG	Amount of Approval	C(4)		○
5	TRANSACTION_ID	Transaction Number	C(12)		○
6	APPROVAL_NO	Approval Number	C(8)		○
7	EXTRA	Extra Space	C(121)		
			C(200)		

* SPACE is declared as " _ " for readability

REQ=[0396CFIXT003PANWORLD_____20010001_____WEB____192.168.10.1_____2008122420341
1_____PANWORLD_20081224203411312_____
PANWORLD_20081224203411312_____000000000000_____
_____]

-

RES=[0396CFIXT003PANWORLD_____20010001_____WEB____192.168.10.1_____20081224203411
20081224203414PANWORLD_20081224203411312_____08122400000600000_____
_____PANWORLD_20081224203411312_____T0010000008122400000700203414_____
_____]

5> Credit Card Authentication (T004)

	NAME	DESC	TYPE	구분	송수 신
1	AUTH_TYPE	Authentication Type A: Card number + Expire date B: Card number + Expire date + CVV C: Card number + Expire date + Pin number	C(1)	◎	◎
2	CARD_NUMBER	Credit Card Number	C(20)	◎	◎
3	CARD_EXPIRE	Credit Card Expiration Date (YYMM)	C(4)	◎	◎
4	CARD_CVV	Credit Card CVV number	C(4)	○	○
5	CARD_PASSWORD	Pin number	C(4)	○	○
6	CARD_FILLER	Extra Parameter except for Authentication	C(50)	○	○
7	PAY_NAME	Name of Merchant Membership (en quad- English)	C(50)	○	○
8	PAY_TELNO	Telephone Number	C(15)	○	○
9	MESSAGE	Authentication Message	C(152)		◎
			C(300)		

* SPACE is declared as "_" for readability

* T004 Authentication will be proceed with minimum amount(1.00 USD), and each Auth will be automatically cancelled from our system.

* For Authentication RESULT_CD of HEADER PART will be shown as

0: Auth Succeed 1: Auth Failed 2: System error

In case of 2: System error occurred, any fee will not be charged.

RESULT_CD 0 and 1 will be checked as RESULT_MSG = 0000 .

In case of RESULT_CD 1, please check our following ERROR_CODE

* Please use T002 when you need to manually cancel.

-REQ

```
=[0496CFIXT004PANWORLD_____20010001_____WEB___192.168.10.1_____20081224203347____
_____PANWORLD_20081224203347171_____1444
4555566667777___1009_____PAYNAME_____
_____PAYTELNUMBER_____
_____]
```

-RES

=

```
[0496CFIXT004PANWORLD_____20010001_____WEB___192.168.10.1_____20081224203347____
_____PANWORLD_20081224203347171_____20081224987810000_____1
4444555566667777___1009_____PAYNAME_____
_____PAYTELNUMBER__MESSAGE_____
_____]
```