



Project: MEGABANK SYSTEM

TECHSPEC
EC- BANKPAYMENT GATEWAY

Project code: BANKPAYMENT GATEWAY

Document: < EC-Bankpayment gateway -Techspec<2.0>.doc

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1 General

1.1 Purposes

- Describe connection from merchant to Bankpayment system.
- Describe ciphertext algorithm and data security when sending or receiving between merchant and Bankpayment gateway .
- Specify client's operations and data streams of the system when connecting.

1.2 Limitation

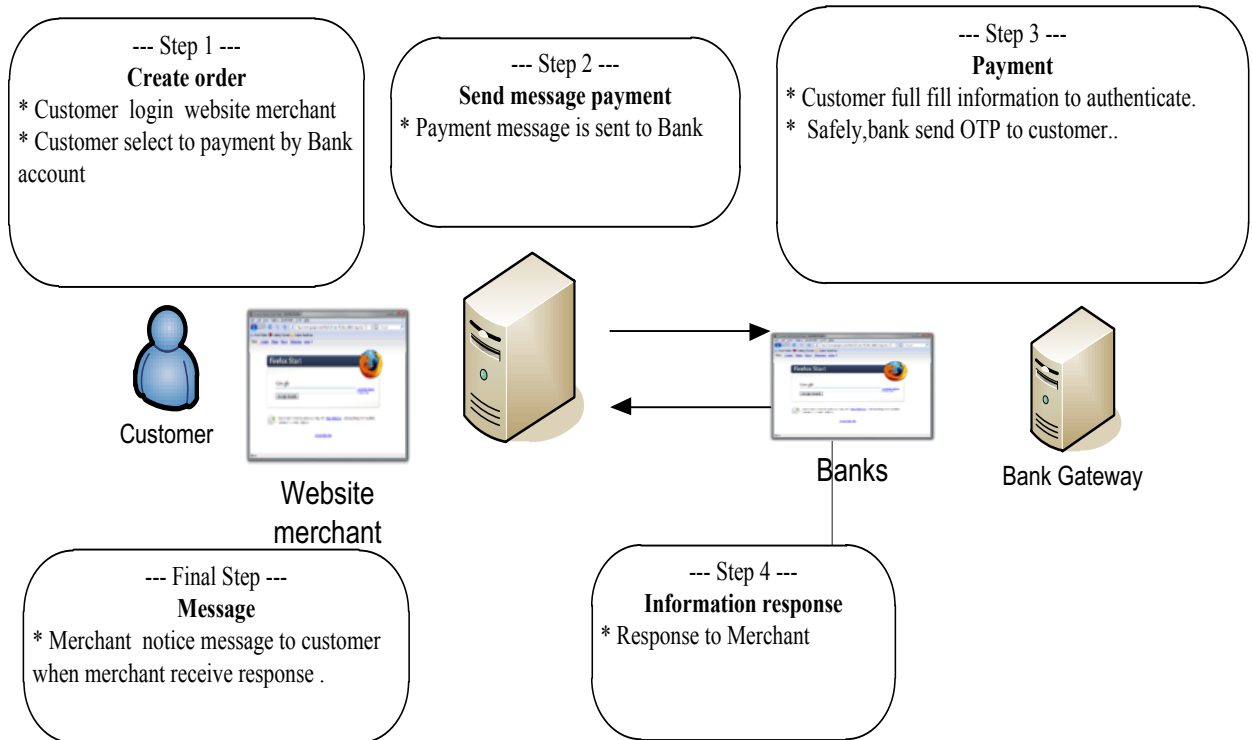
- Useful for merchant

1.3 Used object

- Customers who buy products .
- Use services in Online commercial website .
- Customers who use Online payment method.

2 Specifications

2.1 Steps



Step 1:

Customers access website A , select online payment

Step 2:

Website A is a merchant of Bankpayment gateway, Website A sends a request to Bankpayment Gateway to creating an order.

Step 3:

Bankpayment gateway authenticates customer's bank account with card number , customer's name, OTP,...

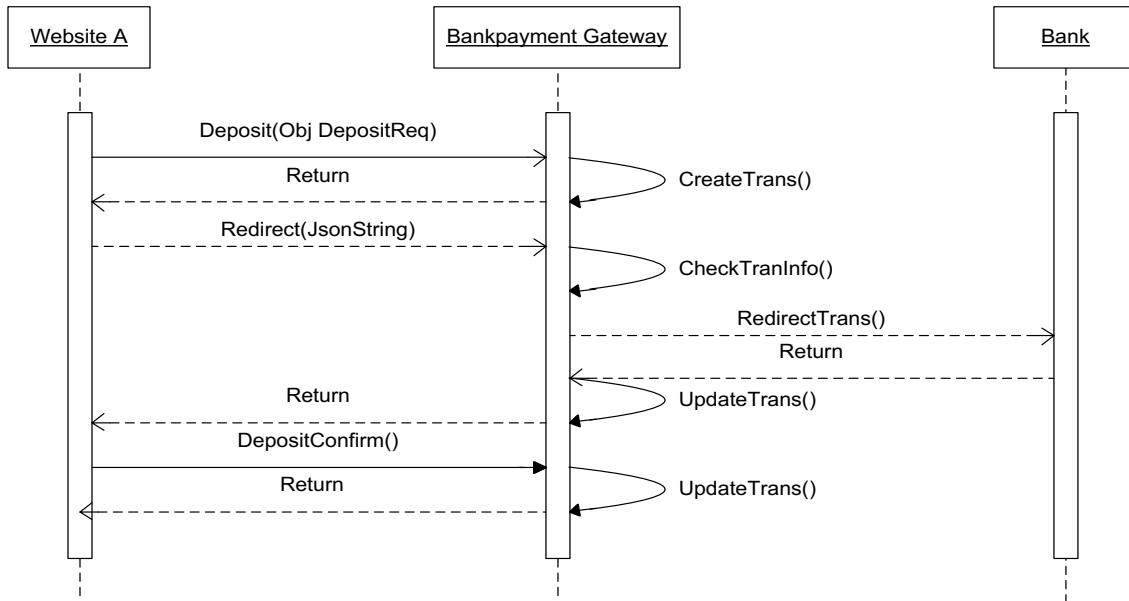
Step 4:

Bankpayment gateway replies payment result to website A

Step 5:

Customer is received message from website A

2.2 Sequences Diagram



2.3 Connections

-Website A is a merchant in Bankpayment gateway system

-Merchant is created and received the information here :

No	Name	value	Description
1	mid	TA123	Merchant Code
2	Merchant_send_key	reesatersuusrtiy12312kty	Key send
3	Merchant_recieve_key	k43423553535gsgnthkladgt	Key receive
4	Webservice	http://103.23.146.165:8015/Service.asmx?wsdl	Link webservice

Step 1. Merchant call websiervice : Deposit function

-Input Object DepositReq

{

+ merchantid (Merchant code)

+ stan :(sequence number)

+ termtxndatetime (date and time transaction: **yyyyMMddHHmmss**)

- + txnAmount (Amount transaction) :
- + fee (Fee transaction)
- + userName (User name)
- + IssuerID (Merchant name)
- + tranID (Transaction ID)
- + Bankid: (Bank id which Bankpayment gateway service merchant)
- + respUrl (response Url) : link where merchant receive Response
- +mac : conservation of data .

}

Mac = desmac (string (data),merchant send key)

- Output return object

Response

{

- + responsecode: [Response code](#)
- + tranid: partnerTransactionid which merchant send.
- + descriptionvn : description in Vietnamese
- + descriptionen : description in English
- + status : status
- + url : url where merchant call to authenticate bank account
- + mac : conservation of data

}

Mac = desmac (string (responsecode + tranid+status),merchant receive key)

Step 2. if Deposit Response code “00” merchant redirect to url in response :

Sample :http://RedirectUrl/ Inbox_redirect_page.aspx?mid=100001120000002&transid=123456789&mac=029D1DB567514138

Step 3. Bankpayment gateway redirect to bank where customer select to pay :

Customers full fill information to authentication

Step 4. Bankpayment gateway reply to respUrl here:

- transid : partnerTransactionid

- responCode: [Response Code](#)

- mac : conservation of data

mac =desmac (transid+ responCode,merchant_receiver_key)

Result url (respUrl#""") have format :

http:// respUrl ? transid=123456789& responCode=00&mac=029D1DB567514138

Step 5. Merchant call Confirm function to confirm status transaction:

- Input
 - {
 - + merchantcode: Merchant code,
 - + tranid: partnerTransactionid,
 - + txnamount: Amount transaction ,
 - + confirmCode: status comfirm : “00” success, “01” fail
 - + mackey: conservation of data
 - }
 - Mac : desmac (merchantcode + tranid + txnAmount + status,merchant_send_key)
- Output Return Response

2.4 Auto Notify:

- When merchant has the customer's transaction in which the bank account was paid ,but merchant not confirm yet , Bankpayment gateway send automatic notify to merchant.
- If merchant needs then merchant registers with Bankpayment Gateway
- To notify , merchant registers a fixed URL to receive notify
- Response data remains the same in step 4 in [2.3](#)

3 Response codes :

Code	Description vn	Description en
00	Thành công	Success
01	Thất bại	Fail
02	Chưa confirm được	Not confirmed yet
03	Đã confirm trước đó	Confirmed before
04	Giao dịch Pending	Transaction Pending
05	Sai MAC	Mac Fail
06	Không xác định mã lỗi	Exception
07	Giao dịch không tồn tại	Not exist transaction
08	Thông tin không đầy đủ	Fields not full
09	Đại lý không tồn tại	Not exist merchant
10	Sai định dạng	False format
11	Sai thông tin	False information
12	Ngân hàng tạm khóa hoặc không tồn tại	Bank not active
13	Có lỗi	Error
14	Code không hợp lệ	Not exactly code

801	Ngân hàng từ chối giao dịch	Bank declined
803	Mã đơn vị không tồn tại	Merchant not exist
804	Không đúng acces code	Invalid access code
805	Số tiền không hợp lệ	Invalid amount
806	Mã tiền tệ không tồn tại	Invalid currency code
807	Lỗi không xác định	Unspecified failure
808	Số thẻ không đúng	Invalid card number
809	Tên chủ thẻ không đúng	Invalid card name
810	Thẻ hết hạn/thẻ bị khóa	Expired card
811	Thẻ chưa đăng ký dịch vụ Internet banking	Card not register service
812	Ngày phát hành/hết hạn không đúng	Invalid card date
813	Vượt quá hạn mức thanh toán	Exist amount
821	Số tiền không đủ để thanh toán	Insufficient fund
899	Người sử dụng cancel	User cancel
901	Merchant_code không hợp lệ	Invalid Merchant code
902	Chuỗi mã hóa không hợp lệ	Invalid encryption

903	Merchant_tran_id không hợp lệ	Invalid merchant_tran_id
904	Không tìm thấy giao dịch trong hệ thống	Not exist transaction
906	Đã xác nhận trước đó	Comfirmed before
908	Lỗi timeout xảy ra do không nhận thông điệp trả về	Error timeout
911	Số tiền không hợp lệ	Invalid amount
912	Phí không hợp lệ	Invalid fee
913	Tax không hợp lệ	Invalid tax