

Payment system History

Aims:

This Document aims to provide quick introduction about Payment System and show how CyberSource plays important role in this Field.

Recommendations

Members are invited to note the information provided

Date, author details

Document prepared by Egypt QA (Mohammed Besary-Hazem Goda)
12 March 2008

Version

1.1

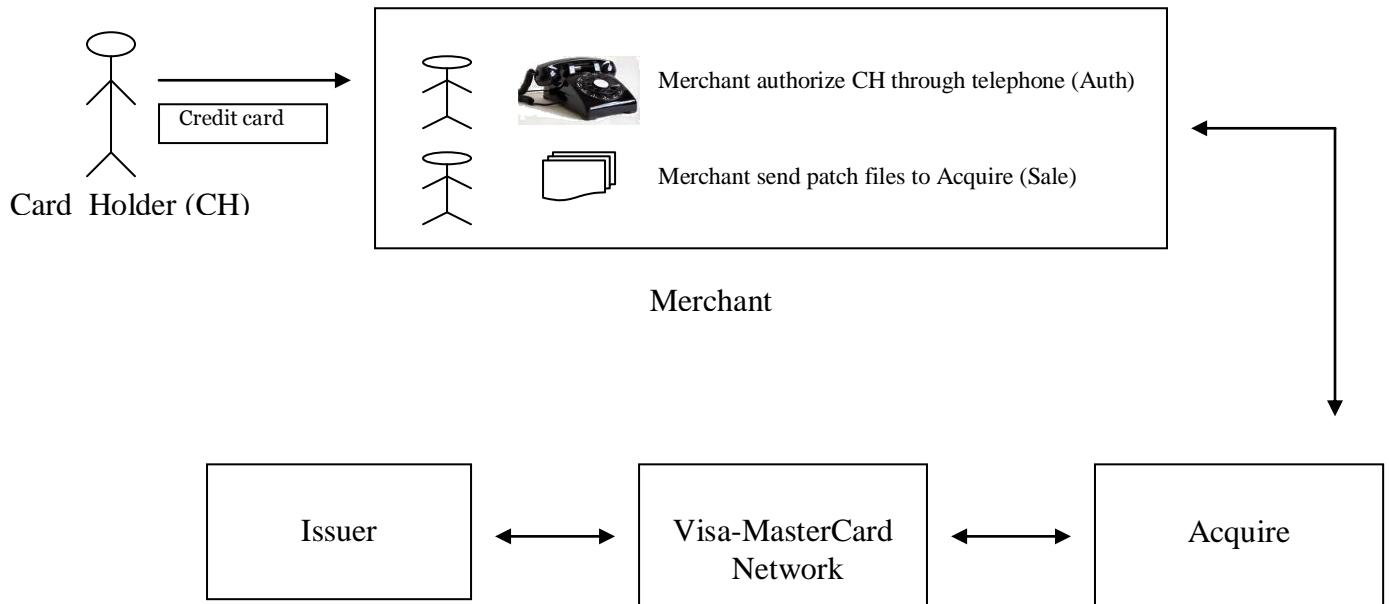
Location on mercury

\\mercury\ProjectPortal\ICS-info.doc

1- First Payment System

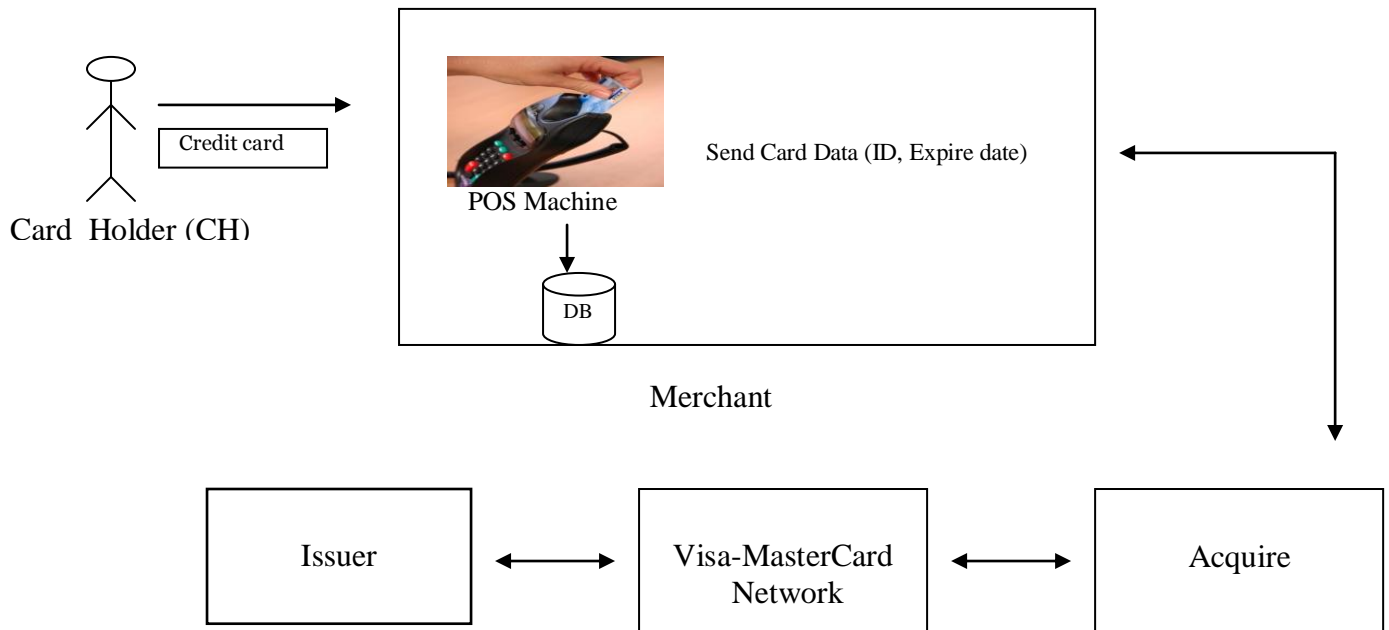
- merchant must have account in a Bank “Acquirer”
- Card holder (customer) must register in Bank “Issuer” to take credit card

The following diagram show the transaction that happen in Traditional Payment system



- When Card Holder wants to buy thing from merchant he provide his credit card's information for the merchant who provide this information for his Acquire that authorize this card's data from its Issuer through (Visa MasterCard) Network.
- The Card holder sign on paper for merchant who collect the all papers and send it to his Acquire for settlement process (Sale).

2-Point Of Sale (POS) Payment System

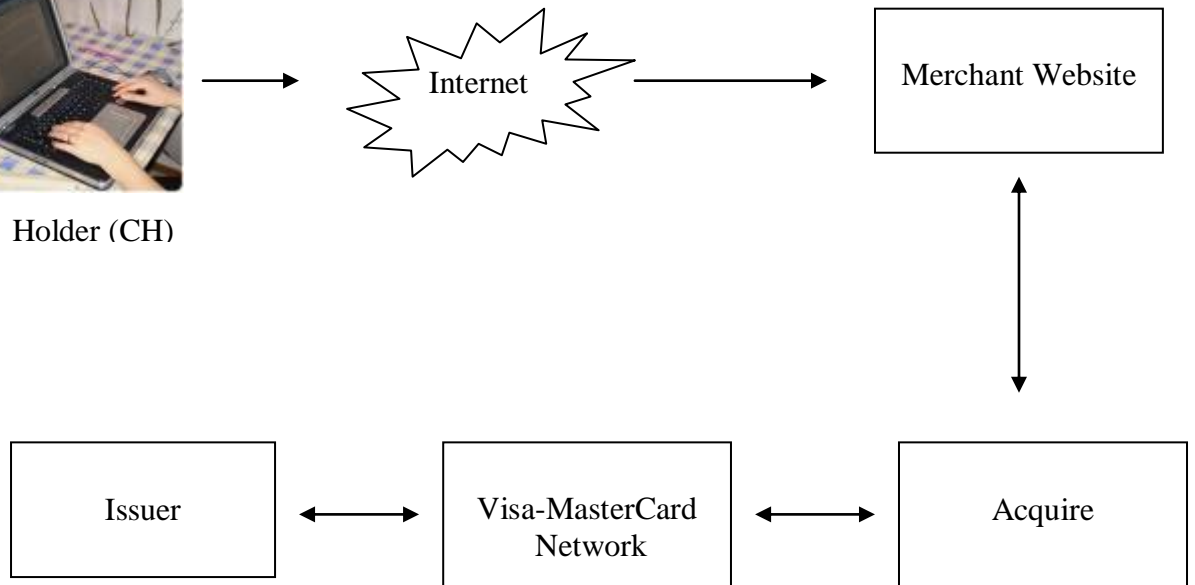


- In this system Merchant use POS machine that automatically read Credit card's data then send it to the Acquire that authorize this card's data from its Issuer through (Visa MasterCard) Network (AUTH).
- The POS machine automatically sends all data to Acquire for settlement process.

3- Using internet



Card Holder (CH)

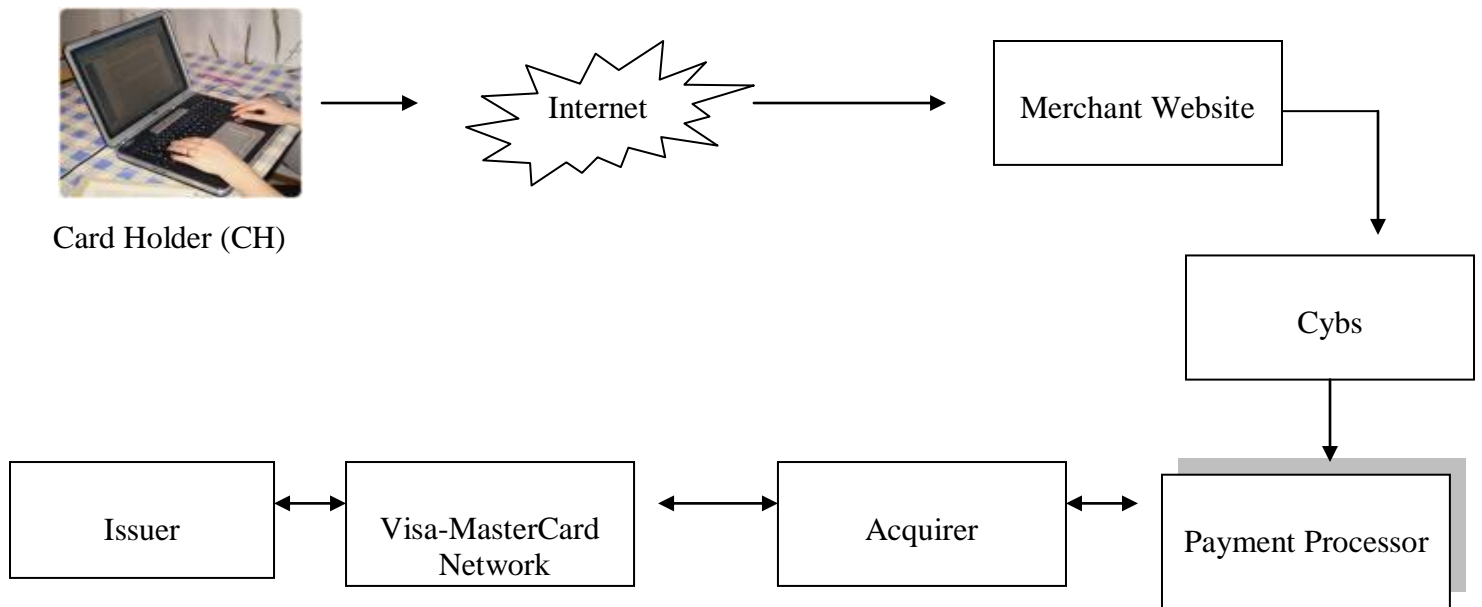


- Using the internet the Card Holder enter his card's data through internet to merchant website that sends this data to the Acquire that authorize this card's data from its Issuer through (Visa MasterCard) Network "AUTH".

Payment System with CyberSource Corp (Cybs).

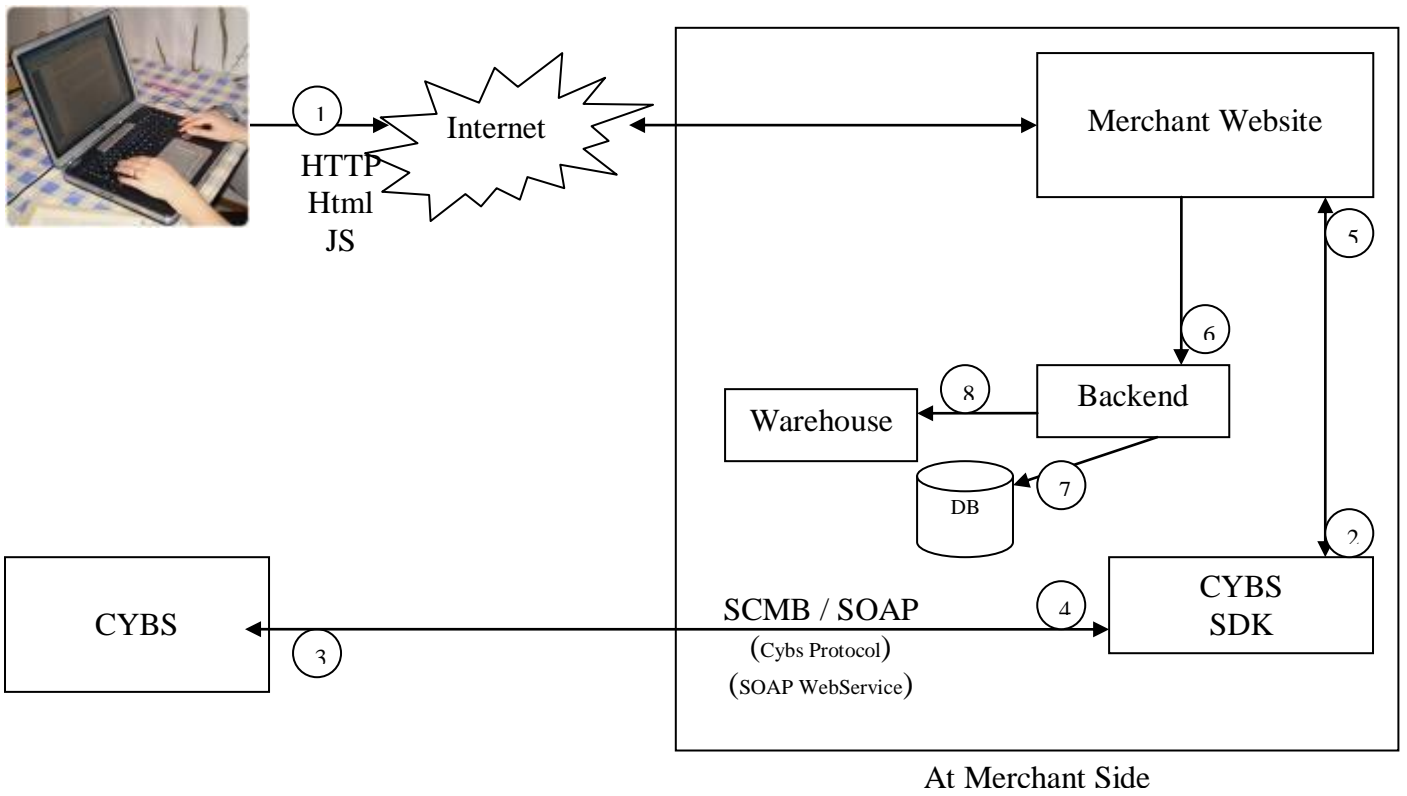
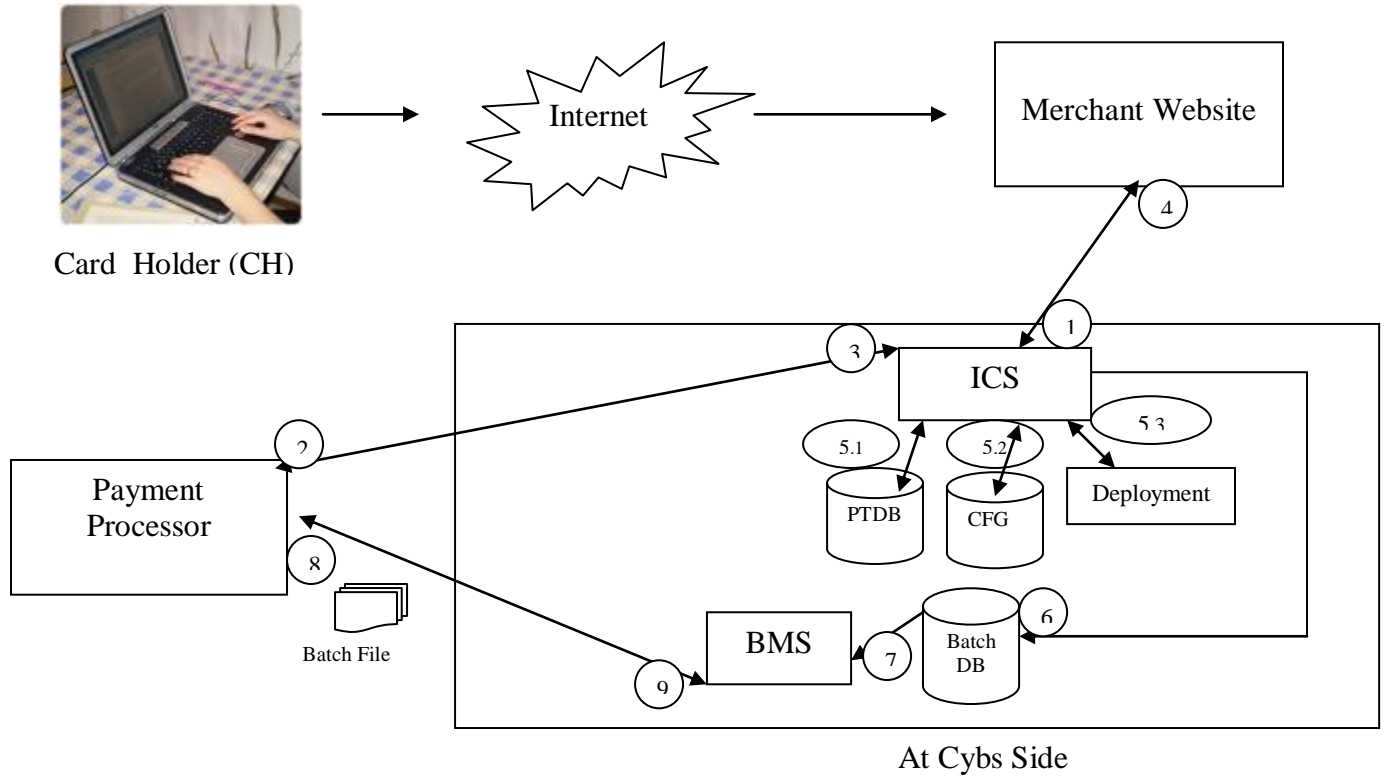
- Merchant must register in CyberSource.

The following diagram show the Payment System's transaction that happens with CYBS



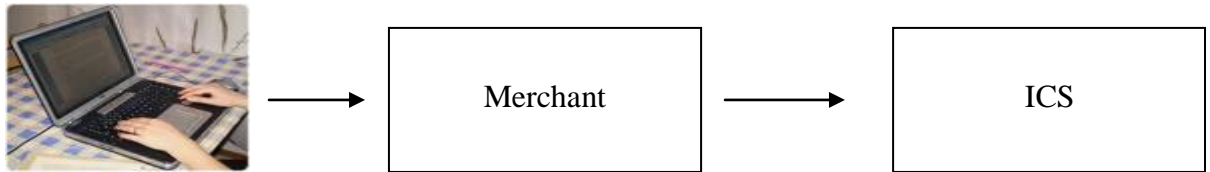
- Card Holder enter his card's data through internet to merchant website machine that sends this data to Cybs that deals with a large numbers of Payment Processors (Gateways) which complete payment system's transaction with Acquirer .

Internal Transaction in CyberSource.

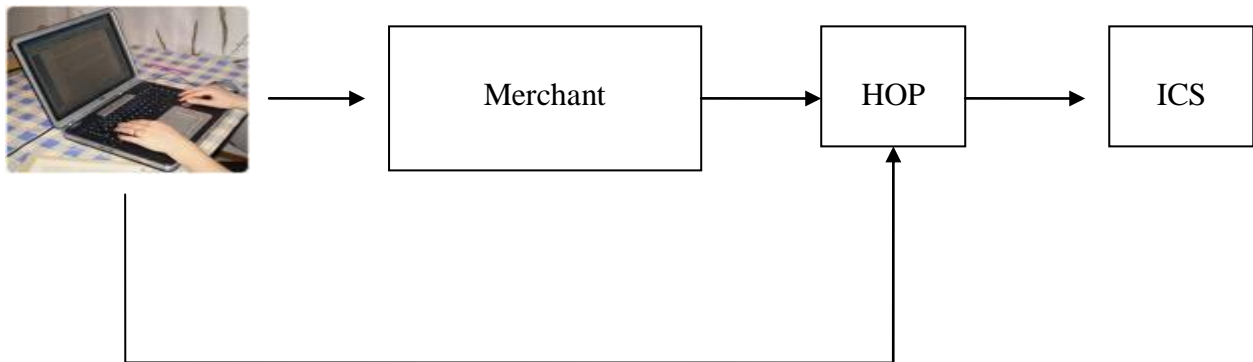


Types Of Connection to ICS

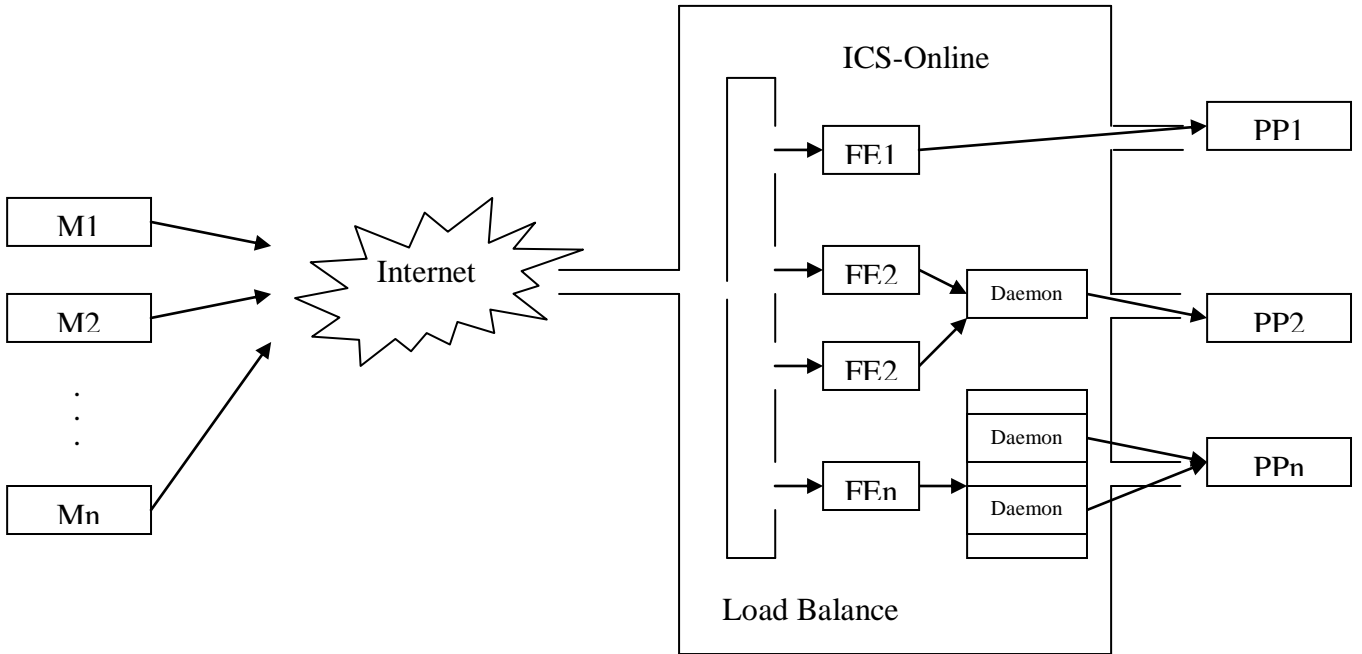
Using SCMP / SOAP



Using HOP (Hosted Order Page)

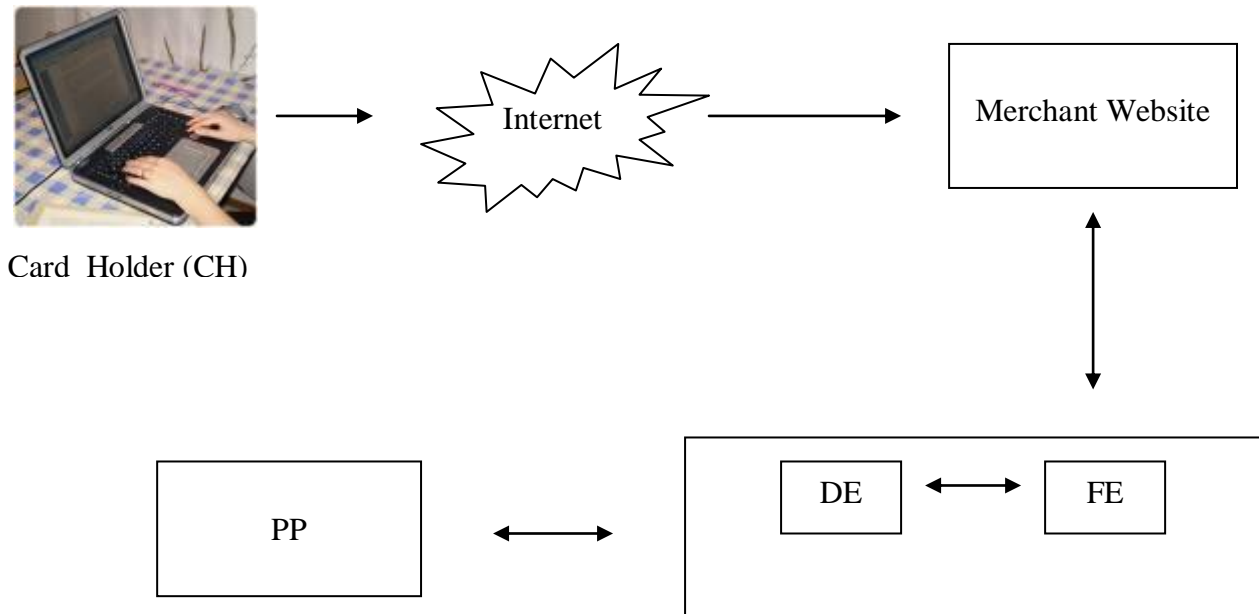


Rationale for Internal Transaction at Cybs

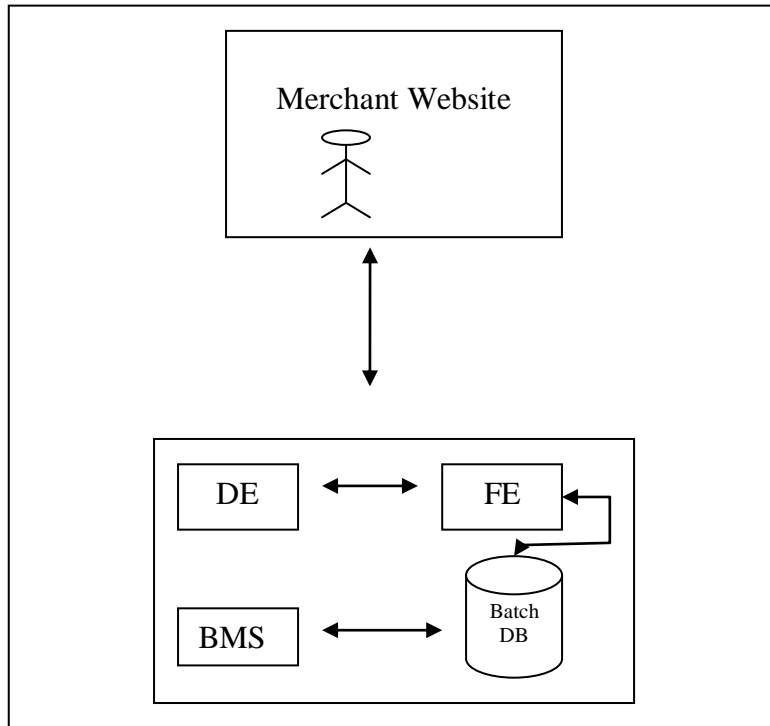


Payment System Transaction Life Cycle:

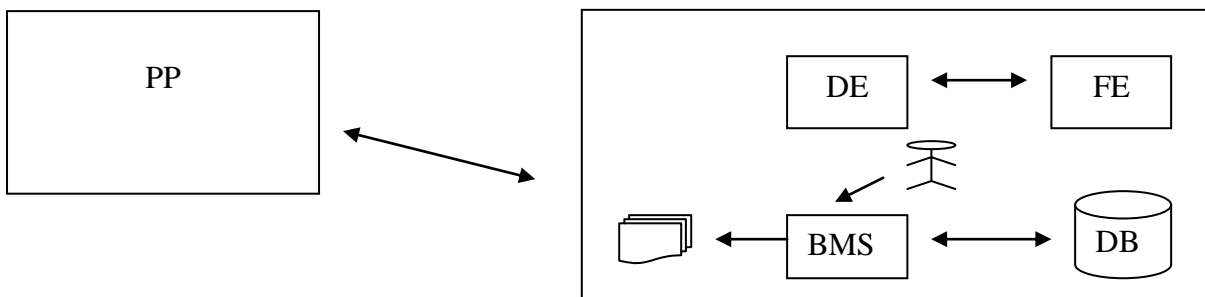
Authorization



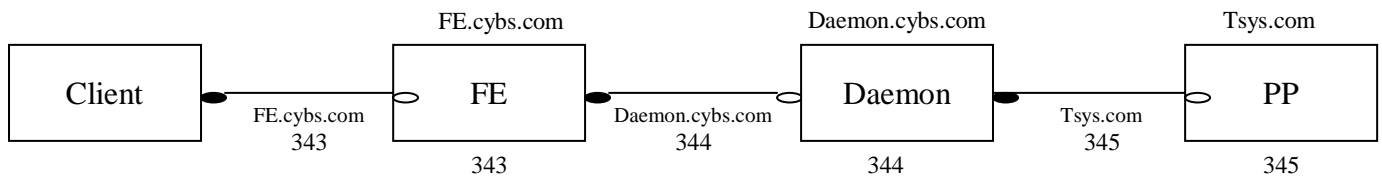
Capture (Bill / Credit)



Batching



Transaction

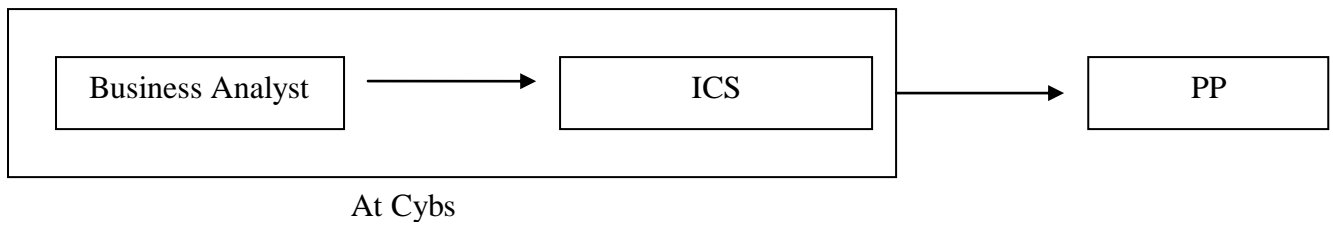


LIVE env

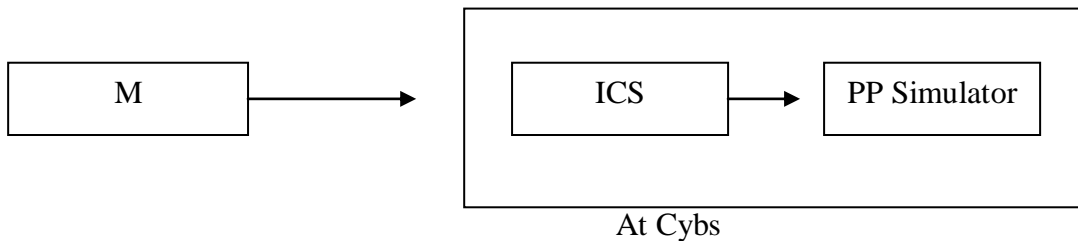


Test Environment

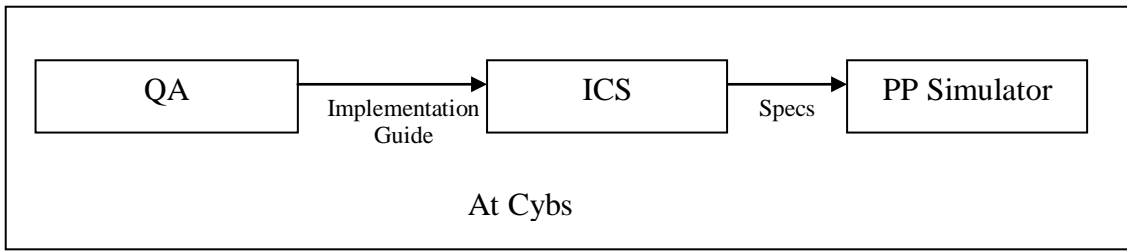
Certification Env



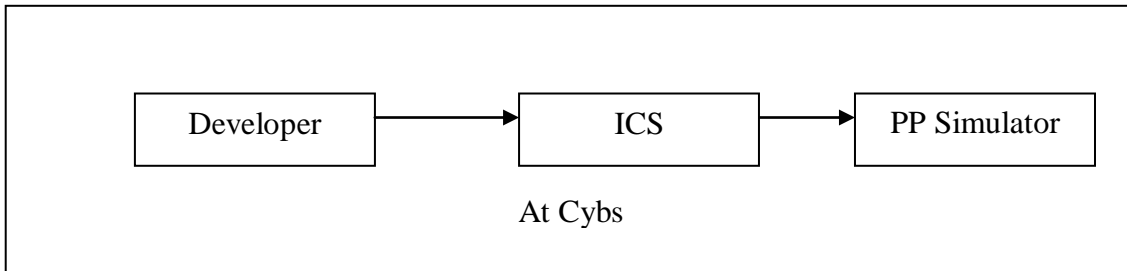
CAS Env



STAGE Env



DEV Env



Glossary

Acquiring Bank	The bank that enables merchants to accept credit cards.
Authorization	The act of insuring that the cardholder has the funds available against their line of credit. A positive authorization results in an authorization code being generated, and those funds being set aside. The cardholder's available credit limit or open to buy is reduced by the authorized amount.
Capture	Converting the authorization amount into a billable transaction record within a Batch. Transactions cannot be captured unless previously authorized, the goods or services have been shipped or transmitted to the consumer.
ICS	The CyberSource® Internet Commerce Suite.
Issuer	The bank that extends credit to customers through credit card accounts. The bank issues the credit card and receives the cardholder's payment at the end of the billing period.

Abbreviations

POS	Point of Sale
ICS	Internet Commerce Suite
HOP	Hosted Order Page
PTDB	Post Transaction DB
CFG	Configuration DB
BMS	Batch Management System
OPS	Operation
BusOps	Business operation
PP	Payment processor

More information

Point of Sale	http://en.wikipedia.org/wiki/Point_of_sale
Acquirer	http://en.wikipedia.org/wiki/Acquirer
Credit card	http://en.wikipedia.org/wiki/Credit_card
Internet Commerce Suite	http://contracts.onecle.com/cybersource/beyond.svc.1999.05.01.shtml

Links

http://www.cybersource.com/support_center/implementation/downloads/

http://en.wikipedia.org/wiki/Payment_gateway

http://en.wikipedia.org/wiki/Electronic_money

<http://en.wikipedia.org/wiki/EFTPOS>

http://www.cybersource.com/support_center/support_documentation/glossary/