

## **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

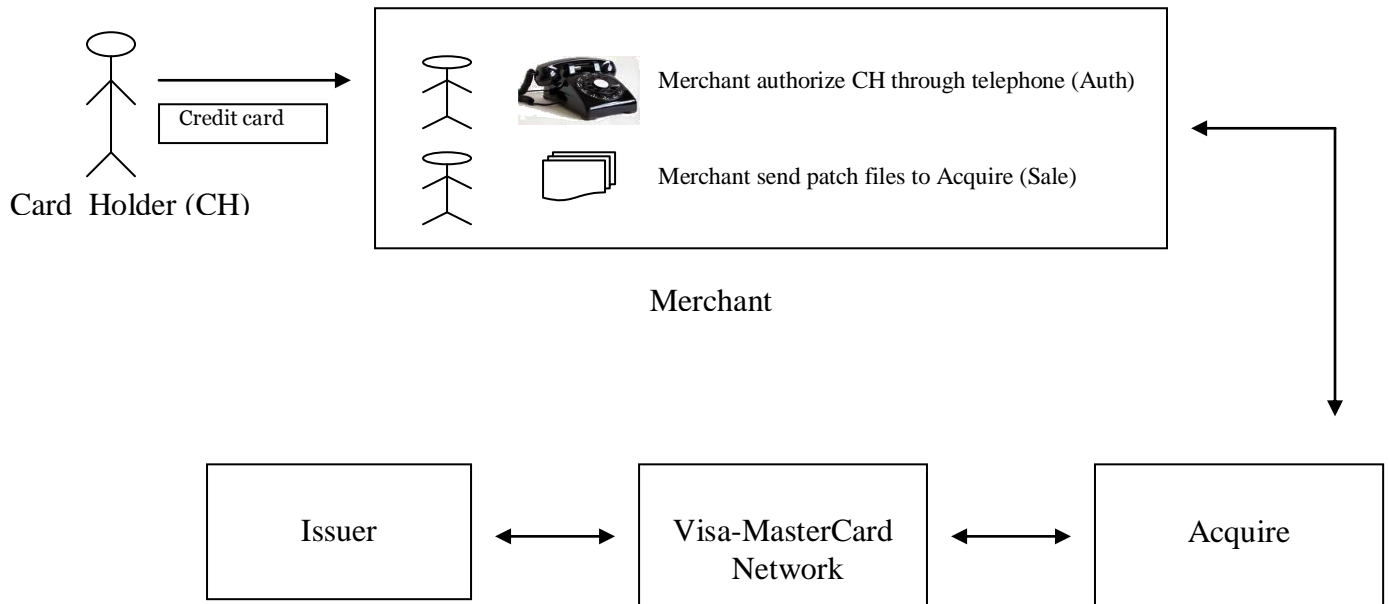
### **Location on mercury**

\\mercury\ProjectPortal\ICS-info.doc

## 1- First Payment System

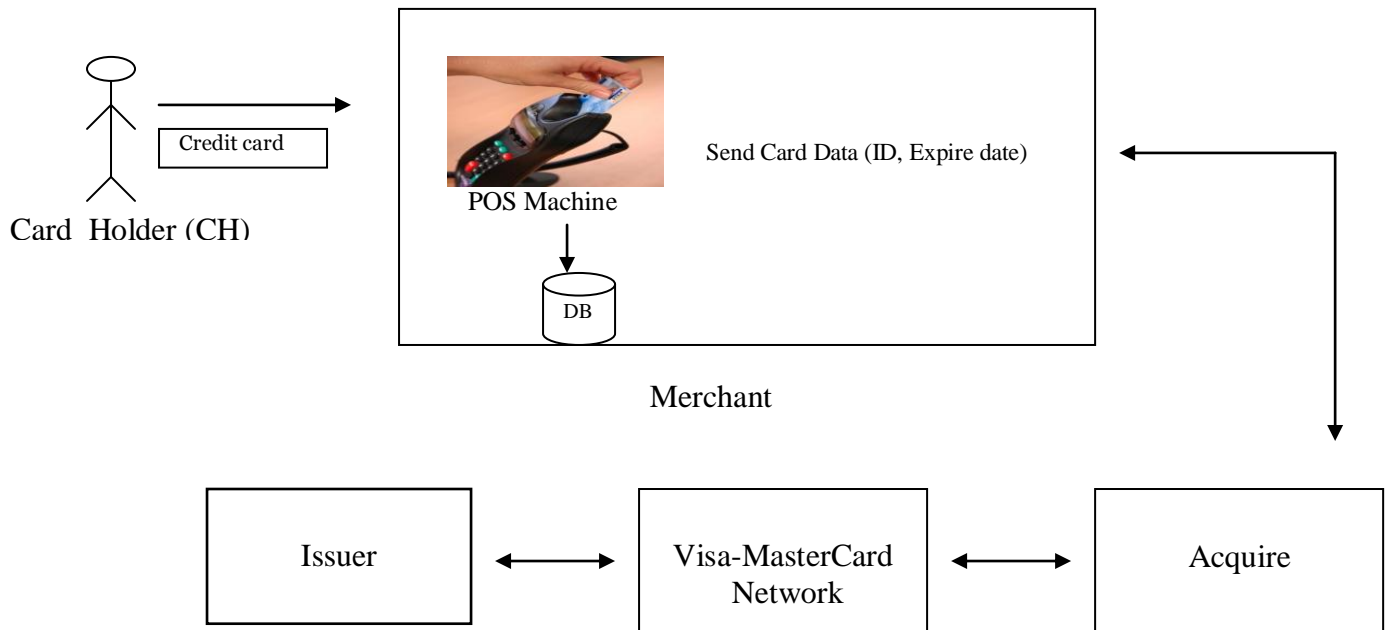
- merchant must have account in a Bank “Acquirer”
- Card holder (customer) must register in Bank “Issuer” to take credit card

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

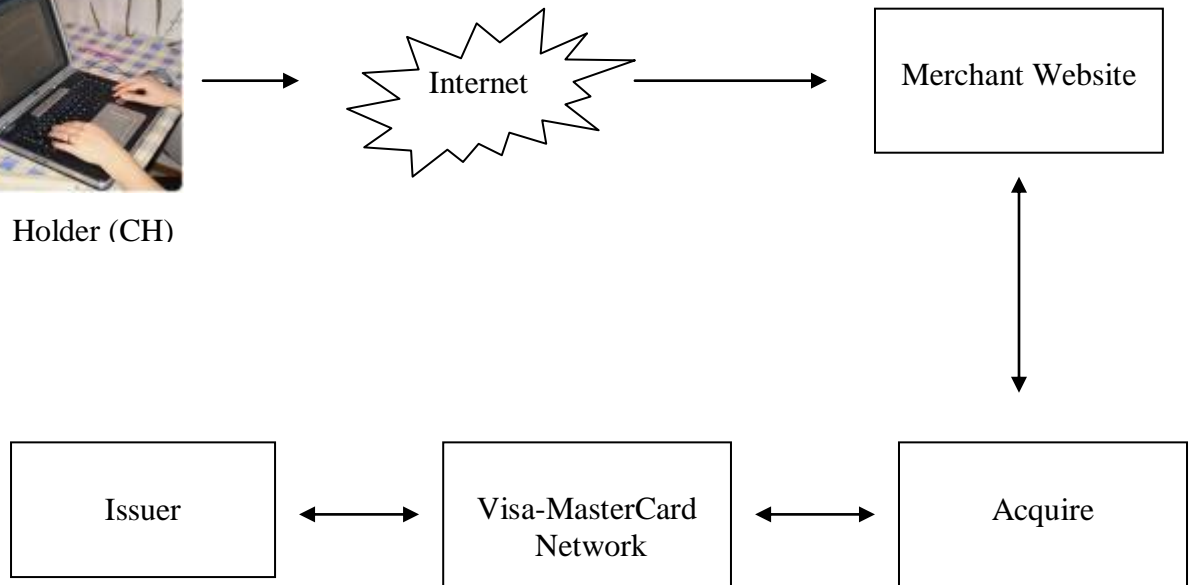


- In this system Merchant use POS machine that automatically read Credit card's data then send it to the Acquire that authorize this card's data from its Issuer through (Visa MasterCard) Network (AUTH).
- The POS machine automatically sends all data to Acquire for settlement process.

### 3- Using internet



Card Holder (CH)

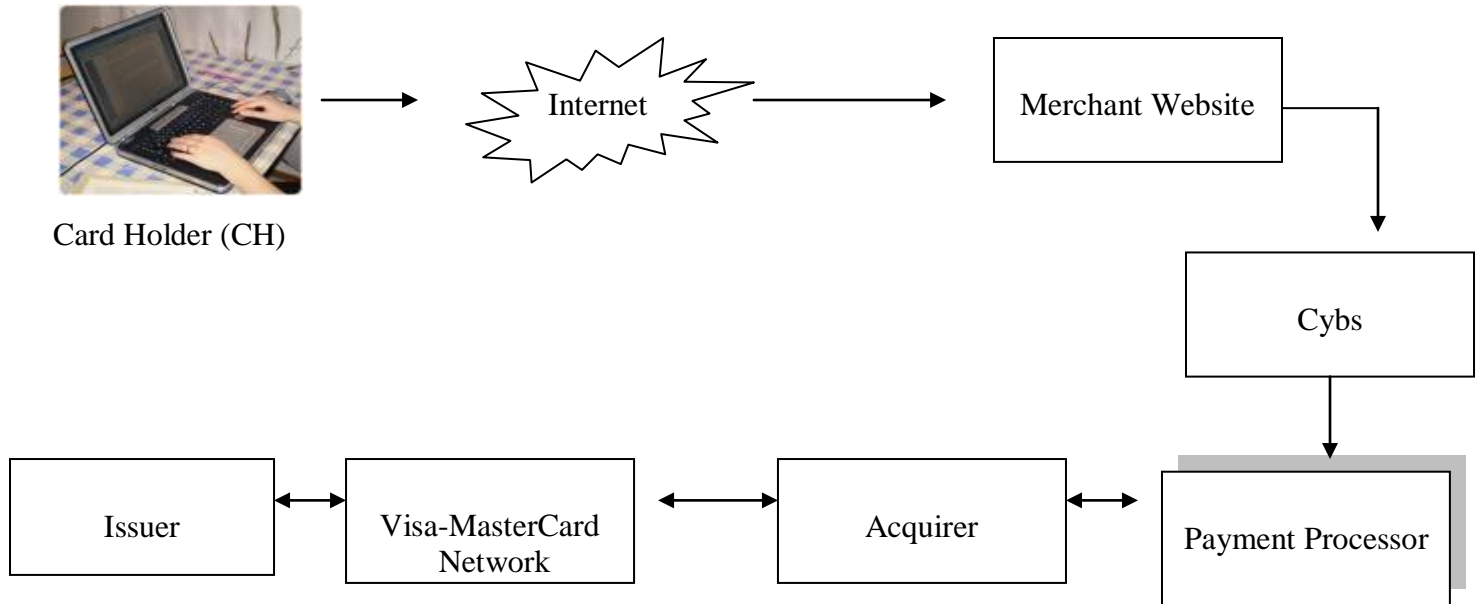


- Using the internet the Card Holder enter his card's data through internet to merchant website that sends this data to the Acquire that authorize this card's data from its Issuer through (Visa MasterCard) Network "AUTH".

## Payment System with CyberSource Corp (Cybs).

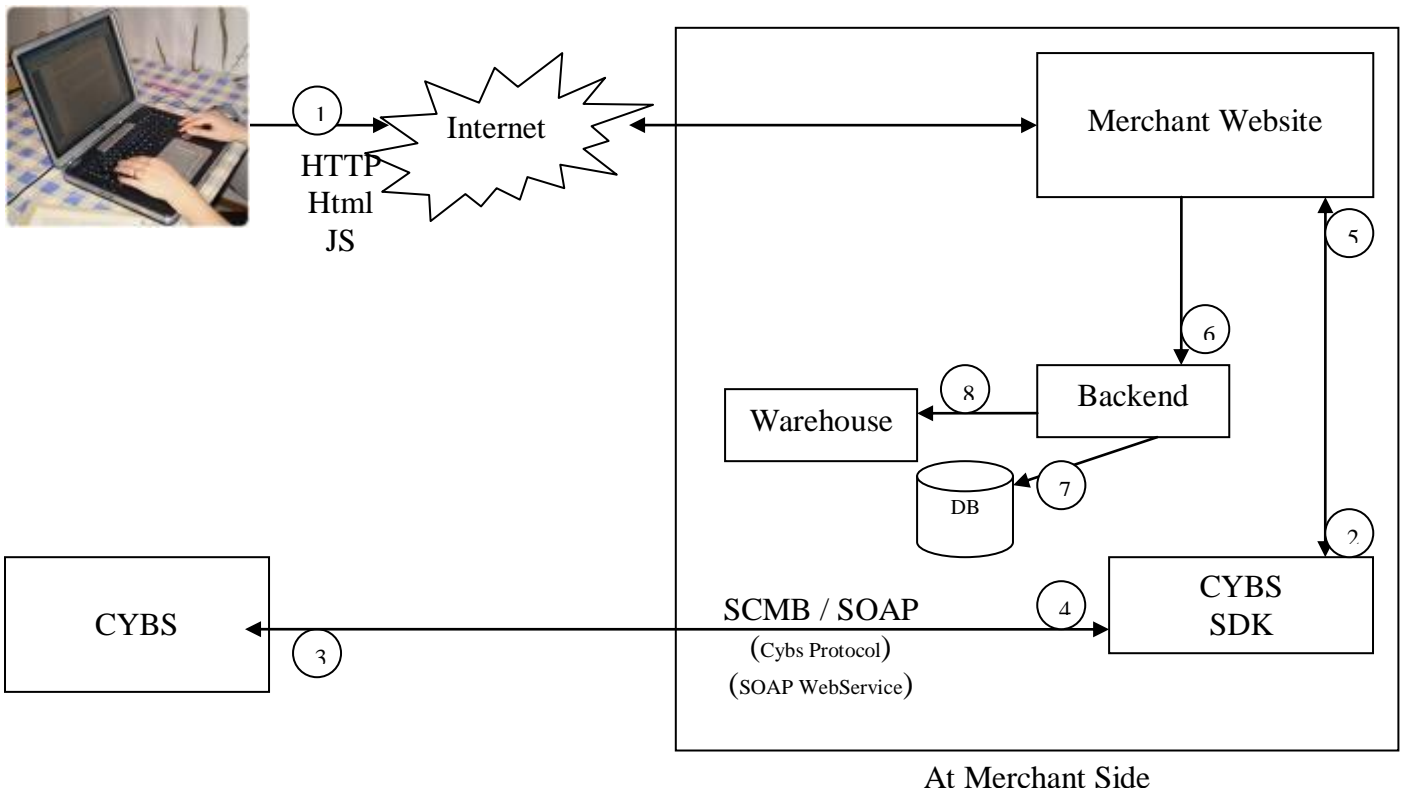
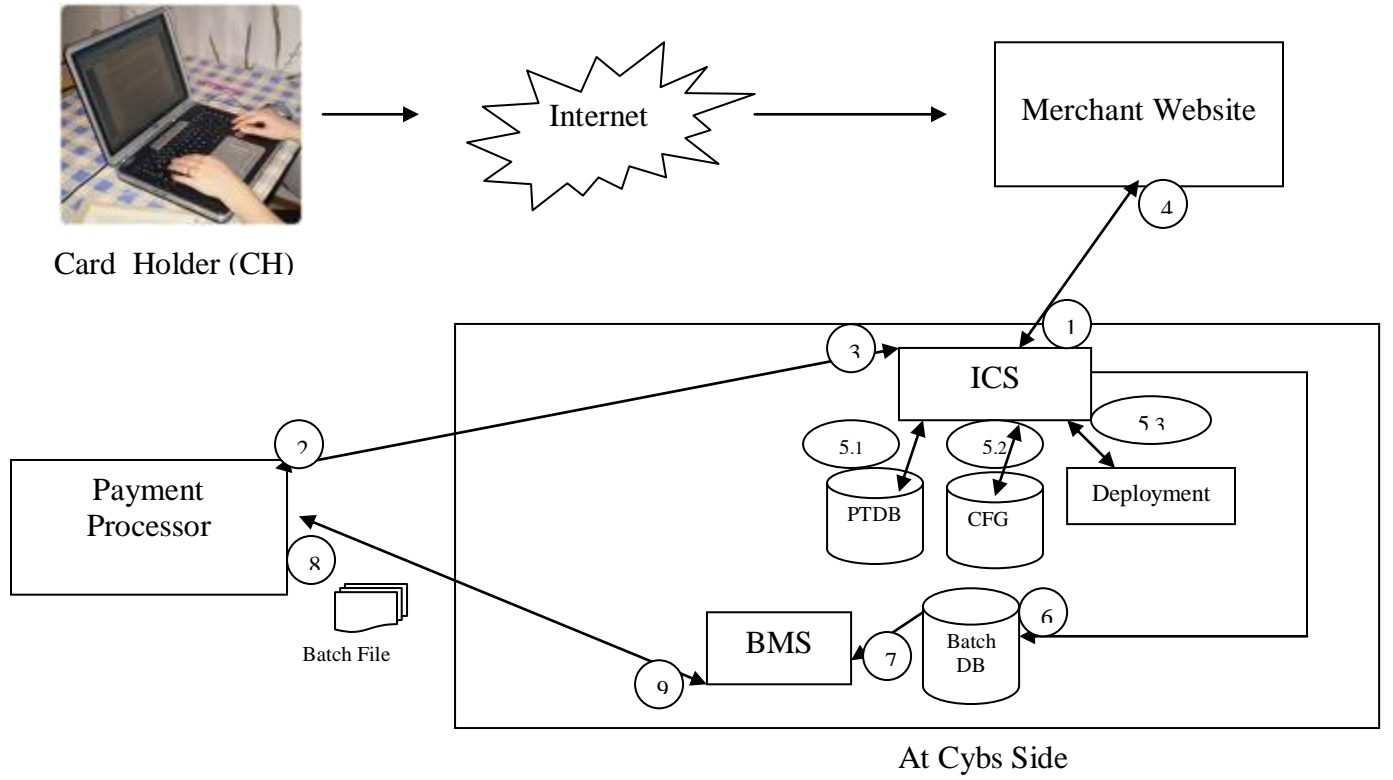
- Merchant must register in CyberSource.

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



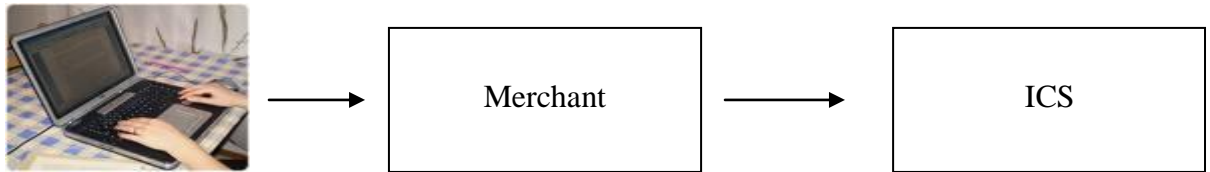
- Card Holder enter his card's data through internet to merchant website machine that sends this data to Cybs that deals with a large numbers of Payment Processors (Gateways) which complete payment system's transaction with Acquirer .

# Internal Transaction in CyberSource.

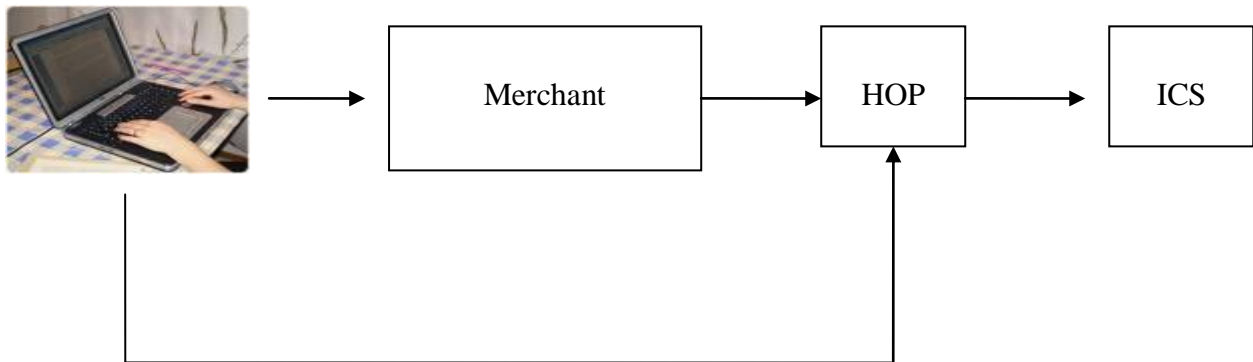


## Types Of Connection to ICS

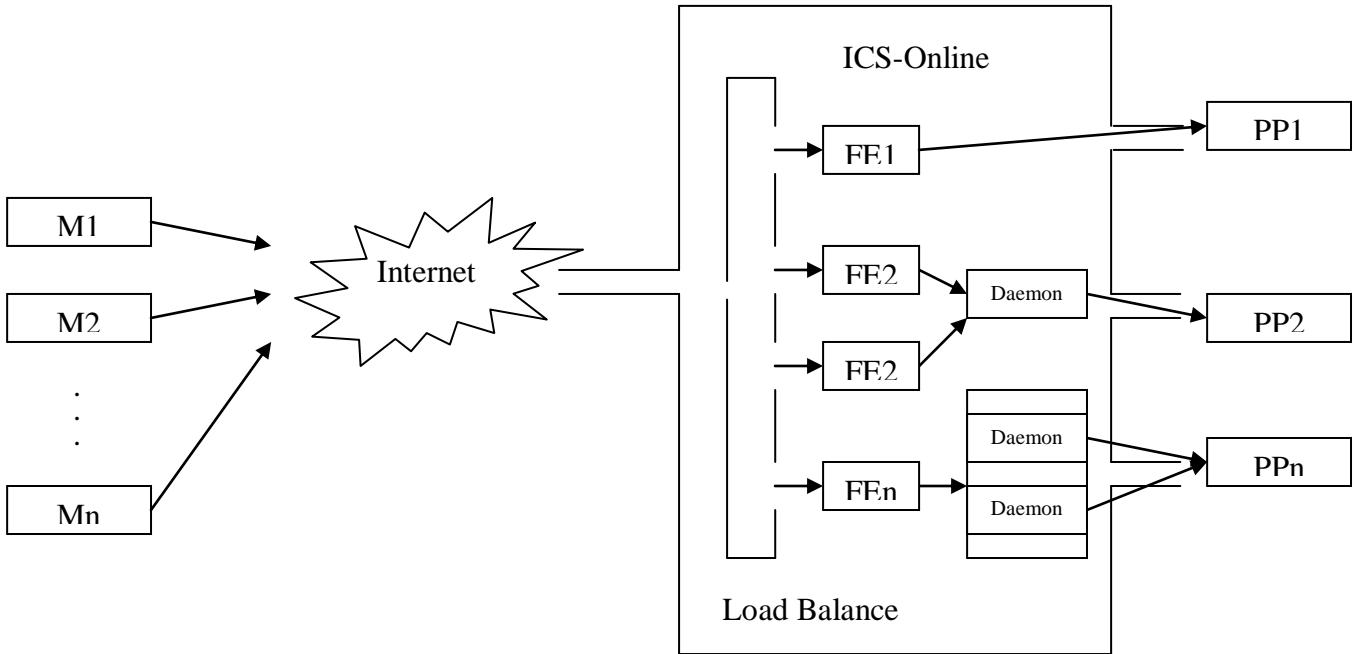
### Using SCMP / SOAP



### Using HOP (Hosted Order Page)

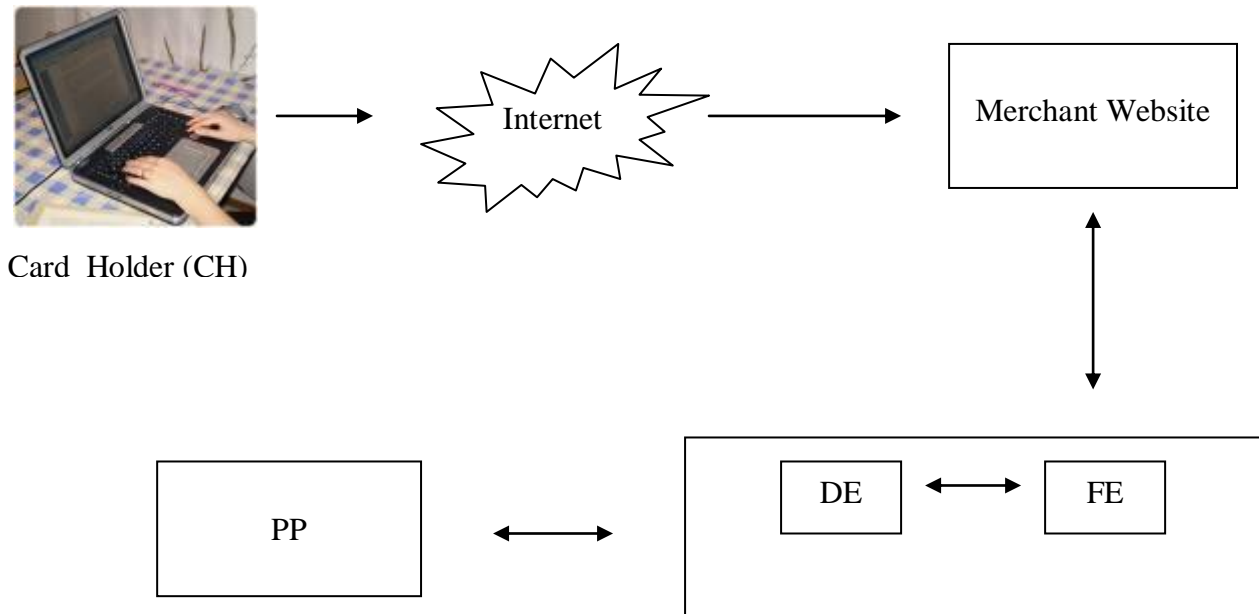


## Rationale for Internal Transaction at Cybs

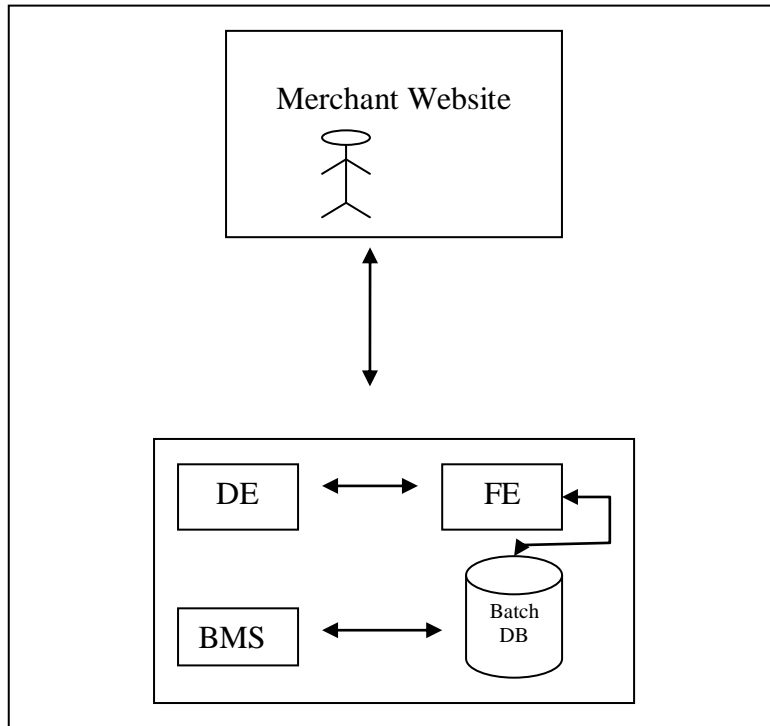


## Payment System Transaction Life Cycle:

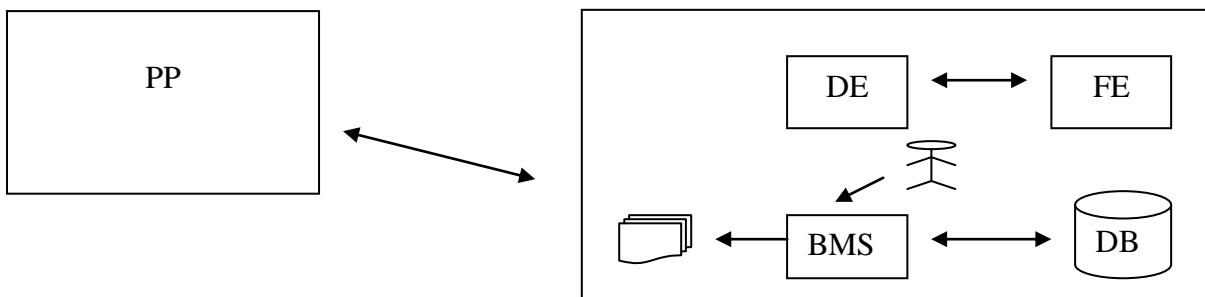
### Authorization



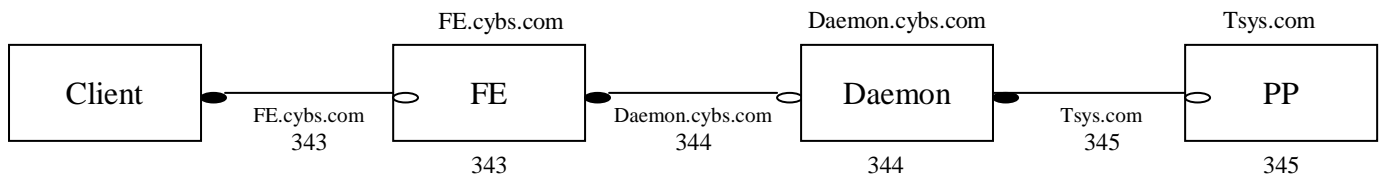
## Capture (Bill / Credit)



## Batching



# Transaction

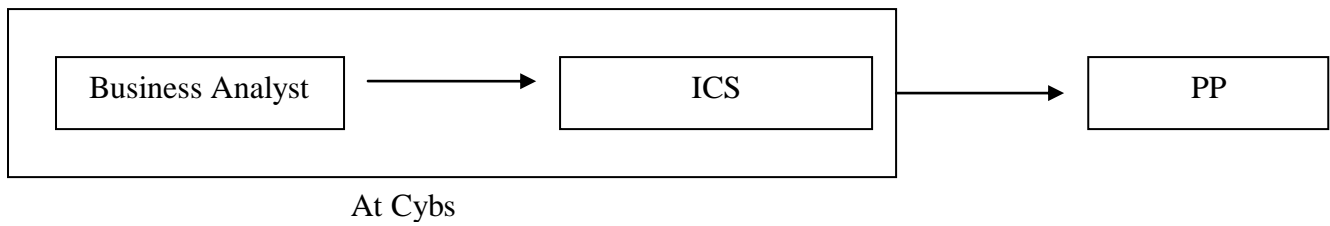


## LIVE env

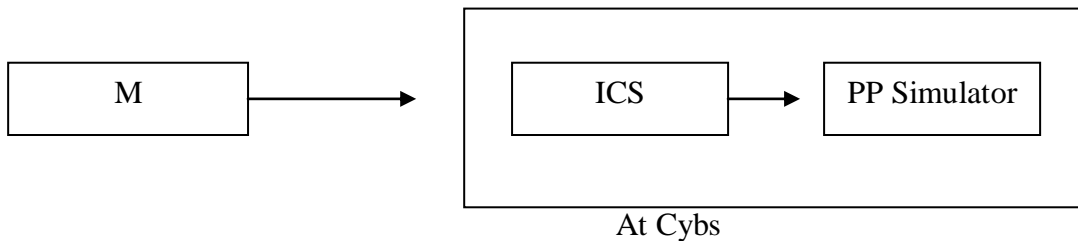


## Test Environment

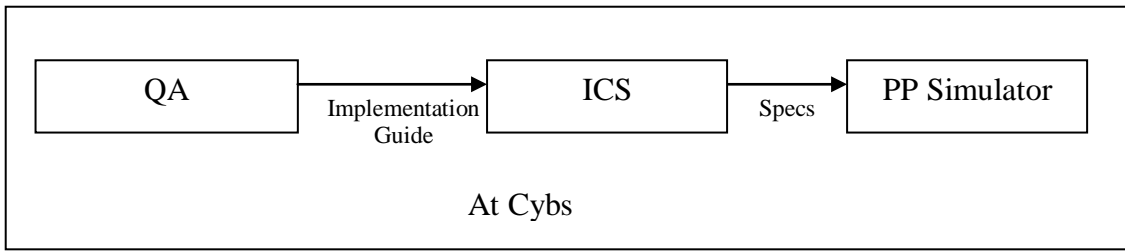
### Certification Env



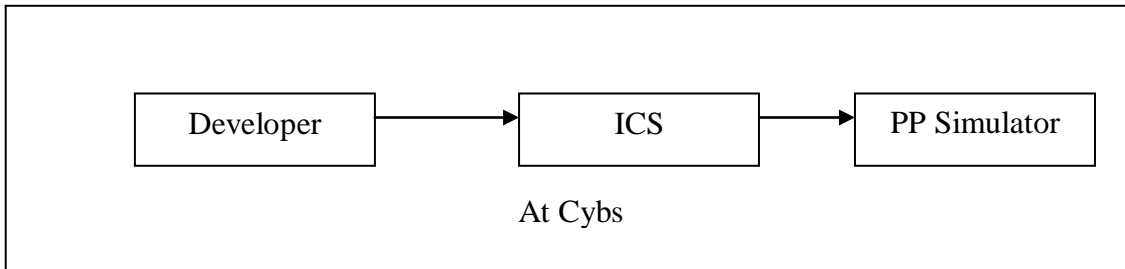
### CAS Env



## STAGE Env



## DEV Env



## Glossary

<b>Acquiring Bank</b>	The bank that enables merchants to accept credit cards.
<b>Authorization</b>	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.
<b>Capture</b>	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.
<b>ICS</b>	The CyberSource® Internet Commerce Suite.
<b>Issuer</b>	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	<a href="http://en.wikipedia.org/wiki/Point_of_sale">http://en.wikipedia.org/wiki/Point_of_sale</a>
Acquirer	<a href="http://en.wikipedia.org/wiki/Acquirer">http://en.wikipedia.org/wiki/Acquirer</a>
Credit card	<a href="http://en.wikipedia.org/wiki/Credit_card">http://en.wikipedia.org/wiki/Credit_card</a>
Internet Commerce Suite	<a href="http://contracts.onecle.com/cybersource/beyond.svc.1999.05.01.shtml">http://contracts.onecle.com/cybersource/beyond.svc.1999.05.01.shtml</a>

## Links

[http://www.cybersource.com/support\\_center/implementation/downloads/](http://www.cybersource.com/support_center/implementation/downloads/)

[http://en.wikipedia.org/wiki/Payment\\_gateway](http://en.wikipedia.org/wiki/Payment_gateway)

[http://en.wikipedia.org/wiki/Electronic\\_money](http://en.wikipedia.org/wiki/Electronic_money)

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

[http://www.cybersource.com/support\\_center/support\\_documentation/glossary/](http://www.cybersource.com/support_center/support_documentation/glossary/)