

# What is a Payment Gateway? Explain any two payment gateways.

**Definition:** To do business on the net, you would like a storefront, a cart, a merchant account, and an electronic transaction processing system to receive the payment against the purchaser's credit or debit card. Several systems called **payment gateways** can do that job. **Payment gateways** are the facilitators for payment to a merchant account against the purchaser's credit or debit card.

## Some Examples of Payment Gateway:

1. CyberCash
2. NetBill
3. First Virtual Holdings and Virtual PIN
4. Secure Electronic Transactions (SET)

### 1. CyberCash

CyberCash servers act as a gateway between the merchant on the web and therefore the bank's secure financial networks. Using dedicated lines, a typical sale transaction via the merchant's website involves the subsequent steps: The buyer puts an order on the business's website. He or she enters the payment information like credit card details and shipping information to initiate the acquisition process. CyberCash issue the digital certificate to the customer which is able to identify the customer in the future.

The customer sends a message to the merchant containing his/her digital certificate and also the transaction details. The merchant validates the order, checks for duplicates, and sends it together with a command to charge the customer's card to CyberCash. CyberCash decrypts validate and forwards the order to the merchant's bank for processing. The merchant's bank forwards it to the customer's bank who sends an approval or denial back to the merchant's bank. This approval or denial is then sent to CyberCash, which successively sends it to the merchant. The merchant then sends out the products to the customer.

### 2. Secure Electronic Transactions (SET)

A set of rules of protocols that ensure the security of monetary transactions on the internet. The system is run jointly by *Visa, Master Card, GTE, IBM, Microsoft*, and others to

confirm reliable, secure transaction processing within the electronic payment medium. It covers each portion of online business from the first registration of a car owner with a web agency through the particular information of payment. Within the services are *cardholder* and *business registration*, *buyer demand*, *payment approval*, *payment capture*, *buy notice*, *approval reversal*, and *credit reversal*. It authenticates the recognition of the parties concerned in the operation by employing a mixture of cryptography systems together with a faith hierarchy of online certificates.

***SET was developed with four important goals in mind. These are:***

1. Confidentiality of payment because it is processed electronically.
2. Truthfulness of transmitted facts. This suggests facts won't be ruined throughout communication or processing.
3. Validation that a cardholder is of course the individual approved to utilize the cardboard. It also verifies that the business managing a procurement can allow a certified card via the acquiring bank.
4. Interoperability across network providers. This means a more encompassing or comprehensive way of constructing electronic payments over the next 24 hours on a daily basis, 7 days every week, immediately.

The protocol defined by SET is thorough and sophisticated.

**For example:** Each purchase request transaction requires exchanging four messages between *customer* and *merchant*. One thing is evident about this level of complexity. It's not economical for tiny payments.

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