

MTI (Message Type Identifier)

First data element of any message

Financial Authorization and Response 1100 and 1110
Authorization Advice and Ack 1120 and 1130
Reversal Advice and Ack 1420 and 1430

Authorization: Issuer 同意 cardholder 使用其账户中的资金进行特定交易请求, 并不意味着资金发生转移, 是确认卡片有效且账户中有足够可用余额完成交易

debit card balance
credit card credit

1. Tx Request Cardholder initiate tx on merchant website.
Merchant send tx request to processor via payment gateway

2. Auth Request Payment Processor forward tx request to issuer via payment network like Visa, Mastercard

Payment Network: 提供交易处理的基础设施和服务, 包括交易路由, 授权, 清算和结算

Card Scheme: 制定和管理卡片使用的规则和标准, 通常也运营 payment network

3. Auth Response: 验证卡片信息和账户状态 (如余额, 信用额度, 欺诈检测). Issuer returns auth res, indicates tx whether approved or not. Auth res goes to merchant.

Transaction: 实际的资金转移操作, 包括从 Cardholder 账户扣款, 并将资金结算到商户账户。过程包括授权, 清算和结算

Clearing: 将授权的交易信息传递到支付网络和发卡机构, 以进行资金结算准备, 清算通常批量处理, 将商户所有 tx 汇总并发送给 acquirer 和 payment network

settlement: 商户的资金转移过程交易资金从 cardholder 账户转移给到商户账户。结算完成后商户收到资金, issuer update cardholder account balance

online buying

1. Auth Request
2. Auth Response
3. Auth Advice
4. Clearing: 商户在一天结束时将 All tx 汇总并发送到 payment processor 进行清算, clearing info are passed to issuer via payment network
5. Settlement: Issuer 将交易金额从 cardholder 账户扣除, 并将资金转移到 Acq, Acq 将资金结算到商户的银行账户。

账户资金不足的原因:

1. Debit card Balance insufficient
2. Credit card Credit insufficient
3. Pre-Auth Hotel/Car rent/Flight