

## Store and Forward

Store and Forward (SAF) is a feature for semi-integrated (primarily) and standalone (rarely) configurations of SCA that allows the payment application to conditionally approve payment transactions when the host is unavailable to do so, thereby allowing the merchant to continue to accept payment although at increased risk of not being paid (fraud, declines, etc.). The stored, conditionally approved transactions are later forwarded to the host once it is available again in order to complete the process.

### Reasons for SAF

SCA can be configured to perform SAF for various reasons

- Network Issues
  - LAN (Local Area Network)
    - Loose or damaged LAN cable
    - WiFi or LAN configuration issue (DNS, etc.)
  - WAN (Wide Area Network)
    - ISP (Internet Service Provider) issue
    - General internet issue
  - Gateway
    - Gateway down
  - Host
    - Host down
- Other reasons for SAF
  - A command from POS to trigger a SAF mode transaction
  - Gateway response (configured) to perform SAF
  - Certificate issues (cannot authenticate to gateway/host)
  - Host reachable but error responses indicate host internal/backend issues

### Supported Transactions

Supported Transactions	Supported Cards	Comments
SALE	Credit	
COMPLETION/CLOSE_TAB	Credit	
VOID	Credit	
ACTIVATE	Credit	
AUTH/OPEN_TAB	Credit	
CREDIT/REFUND	Credit	
FORCE	Credit	

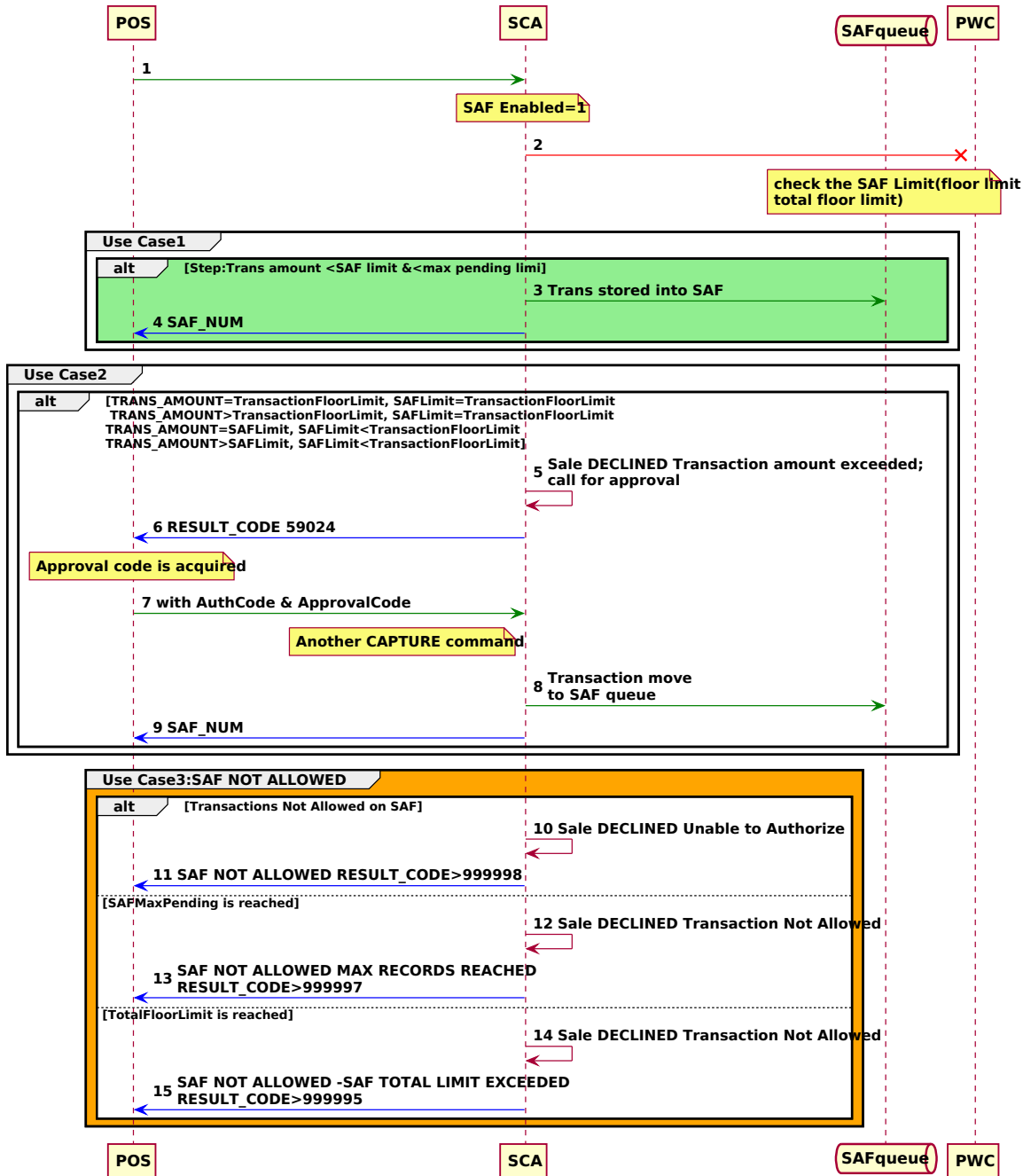
### Supported Card Types

Following are the card types supported

- Credit
- Gift

- Private Label

### SAF Flow



## Rules

- When the SAF configuration parameter is enabled and there is loss of connectivity to the server, the payment acceptance device can locally approve transactions below a set floor limit.
- SAF approvals are processed until certain duration or till MAX limit is reached.
- The stored transactions are written to a queue within the payment device
- Transactions from the SAF queue are sent to the gateway periodically when the application can connect
- When the transaction amount is greater than or equal to the floor limit, then an approval code would be required by the bank to proceed with the transaction. Once approval code is acquired, the POS would send another CAPTURE command including the approval code acquired. This transaction gets added to the SAF queue

## Configuration Parameters

Following are the configuration parameters which affect the operation

- ALLOWGIFTACTIVATETOSAF
- ALLOWREFUNDTOSAF
- ALLOWVOIDTOSAF

## Messages Commands

Refer to the below Protocol sections for the command fields description and examples.

- [SAF QUERY](#)
- [SAF EDIT](#)
- [SAF REMOVE](#)