# Oracle® Hospitality Oracle Payment Interface Specification

API Integration Specification Release 1.4.2

May 2016

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# 1 Introduction

Oracle Hospitality Oracle Payment Interface (OPI) is a payment card processing interface that integrates with the Oracle Hospitality Point-of-Sale (POS) and the Oracle Hospitality OPERA systems. It defines a standard interface that partner payment service providers can implement to provide credit card processing functionality to Oracle Hospitality POS and OPERA systems.

### 1.1 Purpose

Use the specifications in this document to create the transaction messages that integrate with the Oracle Payment Interface and process payments using credit cards and debit cards.

#### 1.2 Audience

This document is intended for third party developers and system architects who wish to integrate their payment solutions with the OPI in order to provide credit card processing functionality to Oracle Hospitality POS and OPERA systems.

#### 1.3 Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL: https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

#### 1.4 Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at http://docs.oracle.com/en/industries/hospitality/

# 1.5 Revision History

Date	Description of Change	
January 2016	Initial publication.	
February 2016	Adjustment after internal review.	
March 2016	Adjustment after internal review.	
	Added Pay@Table specification.	
April 2016	Added sample message for each transaction type.	
May 6, 2016	<ul> <li>Removed unused card type.</li> <li>Added detail description for masked PAN.</li> <li>Removed field "AcqId" for PMS transaction.</li> </ul>	
May 9, 2016	<ul> <li>Removed Balance Inquiry for PMS.</li> <li>Removed field "TransAmont" for EOD transaction.</li> <li>Removed field "EntryMode" for POS Balance Inquiry response message.</li> <li>Removed field "TransAmount" for PMS response message.</li> <li>Removed field "EntryMode" for POS Top-up Authorization request message.</li> <li>Changed field "LodgingCode" value to support "1-Normal" and "3-Deposit" only.</li> </ul>	
May 10, 2016	Added section 2.2 for a description of the OPI connection modes	

# 2 Processor Interface

This chapter lists the summary of supported transactions through the interfaces. It should be noted that for financial transactions and token exchange transactions, POS/PMS/OPI will act as the client, while for Pay@Table transactions, POS/OPI will act as the server.

# 2.1 Supported Transactions

The following table lists the supported transactions.

Normal Transaction	Transaction Description			
Auth	Pre-Authorization, Top-up Authorization,			
	Manual Authorization			
Sale	Sale/Purchase, Sale and Cash, Sales Completion			
Refund	Refund			
Void	Void of Payment, Void of Refund			
Reversal	Timeout Reversal			
Trans Inquiry	Transaction Inquiry			
Balance Inquiry	Balance Inquiry			
RePrint Last Receipt	Re-print receipt for last transaction			
RePrint Receipt	Re-print receipt for any of today's transaction			
Settlement	End-of-Day settlement			
Get Token	Request Token(s)			
Get PAN	Retrieve PAN(s)			

The following table lists the supported transactions for Pay@Table solution only.

Pay@Table Transaction	Transaction Description		
Login	Login to POS application(s)		
Get Check Info	Retrieve guest check information		
Post Payment	Post the payment detail to POS application(s) so as to close the guest check		
Disconnect	Logout and disconnect		

#### 2.2 Connection Method

The OPI supports two types of connection modes: PED direct connection and external system connection.

#### PED direct connection

The OPI sends all transaction messages to PED directly. The OPI handle PED mapping list, sends request from PMS/POS workstation to the specified PED.

#### **External system connection**

The OPI sends all transaction messages to an external system, which acts as a middleware layer. The external system will forward request to either PED or Host directly according to its own logic. The external system is expected to maintain the PED mapping list so that it can forward the request to the proper PED.

# 2.3 Communication Protocol and Security

To connect the OPI to the payment processor you must configure the link using only a secure HTTPS connection, and use a Transport Layer Security (TLS) protocol version 1.2 or higher.

The XML message formats described in Chapter 3 facilitate the transmission of transaction messages between OPI and the processor system.

# 3 Message Formats

#### 3.1 XML Message Formats

The XML message you create refers to a collection of type definitions and element declarations that provide the grammar for the elements within the XML message.

#### 3.1.1 Creating XML Documents

Use this format to create an XML message document:

1. In the beginning of the document, add a line containing the following XML declaration:

<?xml version="1.0" encoding="UTF-8"?>

- Add a top-level element that describes the type of transaction message. The toplevel element appears only once and encapsulates the XML elements and data in the document.
- 3. Inside the XML tag, define the grammar and add the declarations to define:
  - The constraints on the occurrence of the element.
  - Establish type constraints on the contents of the elements.
  - The supported types of child elements and the order they must appear.

#### 3.1.2 Using a Top-level Data Element for Normal Transaction

The following table lists the supported top-level data elements. These are message pairs each one must contact both parts.

Transaction	Request/Response Messages			
Transaction Request	<transactionrequest></transactionrequest>			
Transaction Response	<transactionresponse></transactionresponse>			
Token Exchange Request	<tokenrequest></tokenrequest>			
Token Exchange Response	<tokenresponse></tokenresponse>			

#### 3.1.3 Using a Top-level Data Element for Pay@Table Transaction

The following table lists the supported top-level data elements.

Transaction	Request/Response Messages		
Login Request	<loginrequest></loginrequest>		
Login Response	<loginresponse></loginresponse>		
Get Check Info Request	<getcheckinforequest></getcheckinforequest>		

Get Check Info Response	<getcheckinforesponse></getcheckinforesponse>		
Post Payment Request	<postpaymentrequest></postpaymentrequest>		
Post Payment Response	<postpaymentresponse></postpaymentresponse>		
Disconnect Request	<disconnectrequest></disconnectrequest>		
Disconnect Response	<disconnectresponse></disconnectresponse>		

# 3.1.4 Defining the Number of Occurrences

The following table lists the grammar and declarations to define the number of occurrences for an element in an array.

Please note if you choose to use an optional field it many then become conditional in other areas.

Occurs	Description
1	The element must appear exactly once.
0-1	The element is optional. Minimum occurrence is 0, maximum occurrence is 1.
0-n	The element is optional. Minimum occurrence is 0, maximum occurrence is unbound.
1-n	The element is required. Minimum occurrence is 1, maximum occurrence is unbound.

# 3.2 POS Transaction Processing Messages

This section lists the types of POS transactional messages supported by the OPI.

#### 3.2.1 Authorization Transaction

Use these elements to request an authorization transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "05".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00

CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.
PartialAuthFlag	1	String	Numeric, 1 digit	0: Partial Authorization disabled
				1: Partial Authorization enabled
SAF	1	String	Numeric, 1 digit	0: Stored and Forward disabled 1: Stored and Forward enabled
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	<ul><li>Check number for F&amp;B.</li><li>Invoice number for Retail.</li></ul>
ChargeInfo	0-1	String	String	Table number for table service restaurant.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval.

			_	
RespCode	1	String	String, 2 bytes	00: Approval 10: Partial approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.  Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
Balance	0-1	String	Numeric	Balance amount (in minor denominations), for prepaid debit and gift card.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

PrintData	0-1	String	String	Full formatted receipt data.
				Lines are terminated with
				character "#". Pages are
				terminated with "@".

# 3.2.2 Authorization Release Transaction

Use these elements to request an authorization release transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "16".
TransAmount	1	String	Numeric	Total pre-authorization amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
AuthCode	1	String	String, 2-6 bytes	Original transaction approval code.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String,	00: Approval
			2 bytes	Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

# 3.2.3 Sales Completion Transaction

Use these elements to request a sales completion transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "07".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include OtherAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Sale Completion (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
AuthCode	0-1	String	String, 2-6 bytes	Original transaction approval code.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TaxAmount	1	String	Numeric	Tax amount (in minor denominations).

TransDateTime	1	String	String,	Transaction time in ISO 8601
TransDateTime	1	Jung	20-25 bytes	format, i.e.
			20 20 27 100	YYYY-MM-DDThh:mm:ssTZD
				Example:
				2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
ChargeInfo	0-1	String	String	Table number for table service restaurant.
IndustryCode	1	String	Numeric,	2: Food & Beverage
			1 digit	3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product,
				version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).

TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM Only returned for successful transaction.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.4 Sale/Purchase Transaction

Use these elements to request a sale/purchase transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "01".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.

PartialAuthFlag	1	String	Numeric, 1 digit	O: Partial Authorization     disabled     1: Partial Authorization     enabled
SAF	1	String	Numeric, 1 digit	0: Stored and Forward disabled 1: Stored and Forward enabled
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	<ul><li>Check number for F&amp;B.</li><li>Invoice number for Retail.</li></ul>
ChargeInfo	0-1	String	String	Table number for table service restaurant.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval. Include OtherAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Sale/Purchase (in minor denominations).

			_	
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.  Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
Balance	0-1	String	Numeric	Balance amount (in minor denominations), for prepaid debit and gift card.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

PrintData	0-1	String	String	Full formatted receipt data.
			C	Lines are terminated with
				character "#". Pages are
				terminated with "@".

# 3.2.5 Sale & Cash Transaction

Use these elements to request a sale & cash transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "02".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount and OtherAmount.
OtherAmount	0-1	String	Numeric	Cash out amount for Sale & Cash (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TaxAmount	1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.
SAF	1	String	Numeric, 1 digit	0: Stored and Forward disabled 1: Stored and Forward enabled
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.

Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	- Check number for F&B Invoice number for Retail.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval. Include OtherAmount.
OtherAmount	0-1	String	Numeric	Cash out amount for Sale & Cash (in minor denominations).
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.

IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMN Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.6 Sales Adjustment Transaction

Use these elements to request a sales adjustment transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "12".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include OtherAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Sale Adjustment (in minor denominations).
OriginalTransAmo unt	1	String	Numeric	Original transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
AuthCode	0-1	String	String, 2-6 bytes	Original transaction approval code.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.

IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval. Include OtherAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Sale Adjustment (in minor denominations).
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

PrintData	0-1	String	String	Full formatted receipt data.
			C	Lines are terminated with
				character "#". Pages are
				terminated with "@".

# 3.2.7 Refund Transaction

Use these elements to request a refund transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "03".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include OtherAmount and TaxAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Refund (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	1	String	Numeric	Tax amount (in minor denominations).
OriginalRRN	0-1	String	String, 12 bytes	Original transaction RRN, use for link refund.

TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.
SAF	1	String	Numeric, 1 digit	0: Stored and Forward disabled 1: Stored and Forward enabled
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	<ul><li>Check number for F&amp;B.</li><li>Invoice number for Retail.</li></ul>
ChargeInfo	0-1	String	String	Table number for table service restaurant.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Approval amount (in minor denominations), must be present if partial approval.

RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.8 Void Transaction

Use these elements to request a void transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "08".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD  Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	- Check number for F&B Invoice number for Retail.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.9 Void of Refund Transaction

Use these elements to request a void of refund transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "39".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD  Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
Operator	1	String	String	Cashier ID.
GuestNo	1	String	String	- Check number for F&B Invoice number for Retail.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.10 Reversal Transaction

Use these elements to request a reversal transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	The original sequence number generated by OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "04".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
OriginalType	1	String	String, 2 bytes	Original transaction TransType.
OriginalTime	1	String	String, 20-25 bytes	Original transaction time in ISO 8601 format.
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String,	00: Approval
			2 bytes	Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

# 3.2.11 Transaction Inquiry

Use these elements to request a transaction inquiry.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	The original sequence number generated by OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "20".
TransAmount	1	String	Numeric	Original transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			

SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
TransAmount	0-1	String	Numeric	Original transaction amount (in minor denominations), include OtherAmount.
OtherAmount	0-1	String	Numeric	Tip amount for Sale Completion/Purchase, cash out amount for Sale & Cash (in minor denominations).
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.

AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.12 Balance Inquiry Transaction

Use these elements to request a balance inquiry transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "27".
TransAmount	1	String	Numeric	Value is "0".
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.

TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
Balance	0-1	String	Numeric	Balance amount (in minor denominations), for prepaid debit and gift card.
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.13 Re-Print Last Receipt

Use these elements to request a receipt re-printing for the last transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "18".
TransAmount	1	String	Numeric	Value is 0.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8

RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.14 Re-Print Receipt

Use these elements to request the receipt reprinting for any of today's transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "19".
TransAmount	1	String	Numeric	Value is 0.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	POS workstation number.
ProxyInfo	1	String	String	OPI information (version).
POSInfo	1	String	String	POS information (product, version).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.

			,	
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.2.15 End-Of-Day Settlement Transaction

Use these elements to request an end-of-day (EOD) settlement transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "10".
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD  Example: 2015-12-05T15:28:36-05:00
AcqId	0-1	String	Numeric, max 2 digits	Optional for multi-acquirer processing.
SiteId	1	String	String	Site ID.
WSNo	0-1	String	String	POS workstation number.
IndustryCode	1	String	Numeric, 1 digit	2: Food & Beverage 3: Retail
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	POS information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.

RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AcqId	0-1	String	String	Processor ID.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3 PMS Transaction Processing Messages

This section lists the types of PMS transactional messages supported by the OPI.

#### 3.3.1 Pre-Authorization Transaction

Use these elements to request a pre-authorization transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "05".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	0-1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00

CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
Operator	1	String	String	Operator ID.
GuestNo	1	String	String	Reservation number for lodging.
ChargeInfo	1	String	String	Room number for lodging.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
LodgingCode	0-1	String	String	1: Normal lodging transaction 3: Deposit
RoomRate	0-1	String	Numeric	Room rate for lodging
CheckInDate	0-1	String	Numeric, 8 digits	Guest check-in date or arrival date, format is YYYYMMDD.
CheckOutDate	0-1	String	Numeric, 8 digits	Guest check-out date or departure date, format is YYYYMMDD.
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.

				_
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.  Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
DCCIndicator	0-1	String	Numeric, 1 digit	1: DCC qualified & guest opt-in DCC 2: DCC qualified & guest opt-out DCC Only return when hotel turn on DCC function.
BillingAmount	0-1	String	Numeric	The total amount in cardholder billing currency (in minor denominations), only return for successful DCC transaction.
BillingCurrency	0-1	String	String, 3 bytes	The ISO currency code of cardholder billing amount, only return for successful DCC transaction.

FXRate	0-1	String	Numeric, 8 digits	This data element is in the format ABBBBBBB where:
				A: The decimal position offset from the right
				B: The actual conversion factor
				Only return for successful DCC transaction.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3.2 Manual Authorization Transaction

Use these elements to request a manual authorization transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "37".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
AuthCode	1	String	String, 2-6 bytes	Approval code get from acquirer manually.
TaxAmount	0-1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.

1	String	String	Site ID.
1	String	String	Opera workstation name.
1	String	String	Operator ID.
1	String	String	Reservation number for lodging.
1	String	String	Room number for lodging.
1	String	Numeric, 1 digit	1: Lodging
0-1	String	String	1: Normal lodging transaction 3: Deposit
0-1	String	Numeric	Room rate for lodging
0-1	String	Numeric, 8 digits	Guest check-in date or arrival date, format is YYYYMMDD.
0-1	String	Numeric, 8 digits	Guest check-out date or departure date, format is YYYYMMDD.
1	String	String	OPI information (version, and so on).
1	String	String	Opera information (product, version, and so on).
	1 1 1 1 1 0-1 0-1 0-1	1 String 1 String 1 String 1 String 1 String 1 String 0-1 String 0-1 String 0-1 String 1 String 1 String	1 String String 1 String Numeric, 1 digit 0-1 String Numeric 0-1 String Numeric, 8 digits 0-1 String Numeric, 8 digits 1 String String

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.

OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
DCCIndicator	0-1	String	Numeric, 1 digit	<ol> <li>DCC qualified &amp; guest opt-in DCC</li> <li>DCC qualified &amp; guest opt-out DCC</li> <li>Only return when hotel turn on DCC function.</li> </ol>
BillingAmount	0-1	String	Numeric	The total amount in cardholder billing currency (in minor denominations), only return for successful DCC transaction.
BillingCurrency	0-1	String	String, 3 bytes	The ISO currency code of cardholder billing amount, only return for successful DCC transaction.
FXRate	0-1	String	Numeric, 8 digits	This data element is in the format ABBBBBBB where: A: The decimal position offset from the right B: The actual conversion factor Only return for successful DCC transaction.

MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3.3 Top-up Authorization Transaction

Use these elements to request a top-up authorization transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "06".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging

ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3.4 Authorization Release Transaction

Use these elements to request an authorization release transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "16".
TransAmount	1	String	Numeric	Total pre-authorization amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
AuthCode	1	String	String, 2-6 bytes	Original transaction approval code.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

			_	
	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String,	00: Approval
		2	2 bytes	Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

# 3.3.5 Sales Completion Transaction

Use these elements to request a sales completion transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "07".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
AuthCode	1	String	String, 2-6 bytes	Original transaction approval code.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TaxAmount	0-1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00

1			
1	String	String	Site ID.
1	String	String	Opera workstation name.
1	String	String	Operator ID.
1	String	String	Reservation number for lodging.
1	String	String	Room number for lodging.
1	String	Numeric, 1 digit	1: Lodging
0-1	String	String	1: Normal lodging transaction 3: Deposit
0-1	String	Numeric	Room rate for lodging
0-1	String	Numeric, 8 digits	Guest check-in date or arrival date, format is YYYYMMDD.
0-1	String	Numeric, 8 digits	Guest check-out date or departure date, format is YYYYMMDD.
1	String	String	OPI information (version, and so on).
1	String	String	Opera information (product, version, and so on).
	1 1 1 1 1 1 0-1 0-1 0-1 1	1 String 1 String 1 String 1 String 1 String 1 String 0-1 String 0-1 String 0-1 String 1 String 1 String	1 String String 1 String Numeric, 1 digit 0-1 String String 0-1 String Numeric 0-1 String Numeric, 8 digits 1 String String String 1 String String Numeric, 8 digits 1 String String

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.

OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.  Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
DCCIndicator	0-1	String	Numeric, 1 digit	<ol> <li>DCC qualified &amp; guest opt-in DCC</li> <li>DCC qualified &amp; guest opt-out DCC</li> <li>Only return when hotel turn on DCC function.</li> </ol>
BillingAmount	0-1	String	Numeric	The total amount in cardholder billing currency (in minor denominations), only return for successful DCC transaction.
BillingCurrency	0-1	String	String, 3 bytes	The ISO currency code of cardholder billing amount, only return for successful DCC transaction.
FXRate	0-1	String	Numeric, 8 digits	This data element is in the format ABBBBBBB where: A: The decimal position offset from the right B: The actual conversion factor Only return for successful DCC transaction.

MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3.6 Sale/Purchase Transaction

Use these elements to request a sale/purchase transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "01".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	0-1	String	Numeric	Tax amount (in minor denominations).
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.

Operator	1	String	String	Operator ID.
GuestNo	1	String	String	Reservation number for lodging.
ChargeInfo	1	String	String	Room number for lodging.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
LodgingCode	0-1	String	String	1: Normal lodging transaction 3: Deposit
RoomRate	0-1	String	Numeric	Room rate for lodging
CheckInDate	0-1	String	Numeric, 8 digits	Guest check-in date or arrival date, format is YYYYMMDD.
CheckOutDate	0-1	String	Numeric, 8 digits	Guest check-out date or departure date, format is YYYYMMDD.
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).

TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
DCCIndicator	0-1	String	Numeric, 1 digit	1: DCC qualified & guest opt-in DCC  2: DCC qualified & guest opt-out DCC  Only return when hotel turn on DCC function.
BillingAmount	0-1	String	Numeric	The total amount in cardholder billing currency (in minor denominations), only return for successful DCC transaction.
BillingCurrency	0-1	String	String, 3 bytes	The ISO currency code of cardholder billing amount, only return for successful DCC transaction.
FXRate	0-1	String	Numeric, 8 digits	This data element is in the format ABBBBBBB where: A: The decimal position offset from the right B: The actual conversion factor Only return for successful DCC transaction.

MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

# 3.3.7 Refund Transaction

Use these elements to request a refund transaction.

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "03".
TransAmount	1	String	Numeric	The requested transaction amount (in minor denominations), include TaxAmount.
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
PAN	0-1	String	String	Masked PAN, include last 4 digits.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM.
TaxAmount	0-1	String	Numeric	Tax amount (in minor denominations).
OriginalRRN	0-1	String	String, 12 bytes	Original transaction RRN, use for link refund.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
CardPresent	1	String	String	Card present flag, refer to Data Element Section 4.6.

1			
1	String	String	Site ID.
1	String	String	Opera workstation name.
1	String	String	Operator ID.
1	String	String	Reservation number for lodging.
1	String	String	Room number for lodging.
1	String	Numeric, 1 digit	1: Lodging
0-1	String	String	1: Normal lodging transaction 3: Deposit
0-1	String	Numeric	Room rate for lodging
0-1	String	Numeric, 8 digits	Guest check-in date or arrival date, format is YYYYMMDD.
0-1	String	Numeric, 8 digits	Guest check-out date or departure date, format is YYYYMMDD.
1	String	String	OPI information (version, and so on).
1	String	String	Opera information (product, version, and so on).
	1 1 1 1 1 1 0-1 0-1 0-1 1	1 String 1 String 1 String 1 String 1 String 1 String 0-1 String 0-1 String 0-1 String 1 String 1 String	1 String String 1 String Numeric, 1 digit 0-1 String String 0-1 String Numeric 0-1 String Numeric, 8 digits 1 String String String 1 String String Numeric, 8 digits 1 String String

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.

OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	FransToken 0-1 S	String	String, max 30	Format supports numeric and alphabet only.
			bytes	Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.
				Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
DCCIndicator	0-1	String	Numeric, 1 digit	1: DCC qualified & guest opt-in DCC
				2: DCC qualified & guest optout DCC
				Only return when hotel turn on DCC function.
BillingAmount	0-1	String	Numeric	The total amount in cardholder billing currency (in minor denominations), only return for successful DCC transaction.
BillingCurrency	0-1	String	String, 3 bytes	The ISO currency code of cardholder billing amount, only return for successful DCC transaction.
FXRate	0-1	String	Numeric, 8 digits	This data element is in the format ABBBBBBB where:
				A: The decimal position offset from the right
				B: The actual conversion factor
				Only return for successful DCC transaction.

MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

## 3.3.8 Void Transaction

Use these elements to request a void transaction.

## **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "08".
TransAmount	1	String	Numeric	Original transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
OriginalRRN	1	String	String, 12 bytes	Original transaction RRN.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
Operator	1	String	String	Operator ID.
GuestNo	1	String	String	Reservation number for lodging.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

## 3.3.9 Reversal Transaction

Use these elements to request a reversal transaction.

## **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	The original sequence number generated by OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "04".
TransAmount	1	String	Numeric	The request transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD  Example: 2015-12-05T15:28:36-05:00
OriginalType	1	String	String, 2 bytes	Original transaction TransType.
OriginalTime	1	String	String, 20-25 bytes	Original transaction time in ISO 8601 format.
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String,	00: Approval
			2 bytes	Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

## 3.3.10 Transaction Inquiry

Use these elements to request a transaction inquiry.

## **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	The original sequence number generated by OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "20".
TransAmount	1	String	Numeric	Original transaction amount (in minor denominations).
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD  Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.

			,	_
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
AuthCode	0-1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

## 3.3.11 End-Of-Day Settlement Transaction

Use these elements to request an end-of-day (EOD) settlement transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "10"
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e. YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	0-1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8

RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.
PrintData	0-1	String	String	Full formatted receipt data. Lines are terminated with character "#". Pages are terminated with "@".

## 3.3.12 GetToken Transaction

Use these element to request a GetToken transaction with cardholder data entry via PED.  $\label{eq:percentage}$ 

## **Request Message**

	Occurs	Type	Constraint	Comments
TransactionRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "23"
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
WSNo	1	String	String	Opera workstation name.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).

	Occurs	Type	Constraint	Comments
TransactionResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8

RespText	1	String	String, max 32 bytes	Response text.
RRN	1	String	String, 12 bytes	Retrieval reference number.
OfflineFlag	1	String	1 byte	Offline flag (values: Y/N).
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.
ExpiryDate	0-1	String	Numeric, 4 digits	Expiry date, format is YYMM. Only returned for successful transaction.
EntryMode	0-1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.
MerchantId	0-1	String	String	Processor Merchant ID, only returned for successful transaction.
TerminalId	0-1	String	String	Processor Terminal ID, only returned for successful transaction.

## 3.3.13 Token Exchange Messages – GetToken (Bulk)

Use these elements to request a batch of Tokens.

## **Request Message**

	Occurs	Type	Constraint	Comments
TokenRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "25".
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).
CardInfo	1-n	Contai ner		
Record	1	String	String	Record number.
PAN	1	String	String	Primary account number, full PAN.
ExpiryDate	1	String	String	Expiry date, format is YYMM.

	Occurs	Type	Constraint	Comments
TokenResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
CardInfo	0-n	Contai ner		
Record	1	String	String	Record number, echo back from request.
TransToken	0-1	String	String, max 30 bytes	Format supports numeric and alphabet only. Only returned for successful transaction.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Masked PAN, include last 4 digits. Only returned for successful transaction.

## 3.3.14 Token Exchange Messages – GetPAN (Bulk)

Use these elements to request a batch of PANs.

## **Request Message**

	Occurs	Type	Constraint	Comments
TokenRequest	1			
SequenceNo	1	String	Numeric, max 10 digits	Sequence number generated by the OPI to uniquely identify the transaction.
TransType	1	String	String, 2 bytes	Value is "26".
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00
SiteId	1	String	String	Site ID.
IndustryCode	1	String	Numeric, 1 digit	1: Lodging
ProxyInfo	1	String	String	OPI information (version, and so on).
POSInfo	1	String	String	Opera information (product, version, and so on).
CardInfo	1-n	Contai ner		
Record	1	String	String	Record number.
TransToken	1	String	String, max 30 bytes	Format supports numeric and alphabet only.

	Occurs	Type	Constraint	Comments
TokenResponse	1			
SequenceNo	1	String	Numeric, max 10 digits	Echo back the unique sequence number.
TransType	1	String	String, 2 bytes	Echo back the transaction type.
RespCode	1	String	String, 2 bytes	00: Approval Others: Refer to Data Element Section 4.8
RespText	1	String	String, max 32 bytes	Response text.
CardInfo	0-n	Contai ner		
Record	1	String	String	Record number, echo back from request.
IssuerId	0-1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3. Only returned for successful transaction.
PAN	0-1	String	String	Primary account number, full PAN. Only returned for successful transaction.
ExpiryDate	0-1	String	String	Expiry date, format is YYMM. Only returned for successful transaction.

# 3.4 Pay@Table Transaction Processing Messages

This section lists the types of Pay@Table transactional messages supported by the OPI.

## 3.4.1 Login

Use these elements to request a login transaction.

### **Request Message**

	Occurs	Type	Constraint	Comments
LoginRequest	1			
StoreNo	0-1	String	String	Store Number (required for hosting OPI).
UserID	1	String	String	Employee ID, either manual entry or read from ORACLE Hospitality employee card (refer to Data Element Section 4.9).
DeviceNo	1	String	String	Mobile PED serial number.

	Occurs	Type	Constraint	Comments
LoginResponse	1			
RespCode	1	String	String, 2 bytes	<ul><li>00: Approval</li><li>17: Device not registered</li><li>18: User not found</li><li>96: Systerm error</li></ul>
RespText	0-1	String	String, max 32 bytes	Response text.
SessionID	1	String	String	Session ID, only returned for successful transaction.

## 3.4.2 Get Check Info

Use these elements to request a get check info transaction.

Notes: Either the table number or the check number must be present in the request. There are several options:

- If retrieving check information via a table number, the response will include all open checks within that table.
- If retrieving check information via a check number, then only this check detail will be returned.

### **Request Message**

	Occurs	Type	Constraint	Comments
GetCheckInfoRequest	1			
TableNo	0-1	String	String	Table number.
CheckNum	0-1	String	String	Check number.
SessionID	1	String	String	Session ID.

	Occurs	Type	Constraint	Comments
GetCheckInfoResponse	1			
RespCode	1	String	String, 2 bytes	<ul> <li>00: Approval</li> <li>24: No Open Check On This Table</li> <li>26: Check Is Opened (by other workstation)</li> <li>27: User Not Login Yet</li> <li>28: Already paid</li> <li>29: No Privilege to Perform Refund</li> <li>96: System error</li> </ul>
RespText	0-1	String	String, max 32 bytes	Response text.
CheckInfo	0-n	Contai ner		
CheckNum	1	String	String	Check number.
PaymentDue	1	String	Numeric	Total payment due (in minor denominations).

PrintData	0-1	String	String	Full formatted receipt data. Line are terminated with character "#".
CheckEmp	0-1	String	String	Check employee.
OtherInfo	0-1	String	String	Reserved for future used.

## 3.4.3 Post Payment

Use these elements to request post payment.

## **Request Message**

	Occurs	Type	Constraint	Comments	
PostPaymentRequest	1				
TableNo	0-1	String	String	Table number.	
CheckNum	1	String	String	Check number.	
TransType	1	String	String, 2 bytes	01: Purchase 03: Refund	
TransAmount	1	String	Numeric	Payment total amount with tips (in minor denominations).	
OtherAmount	1	String	Numeric	Tip amount (in minor denominations).	
TransCurrency	1	String	String, 3 bytes	The ISO currency code of the transaction. Refer to Data Element Section 4.7, e.g. "840" for USD.	
RRN	1	String	String, 12 bytes	Retrieval reference number.	
TransToken	1	String	String, max 30 bytes	Format supports numeric and alphabet only.	
IssuerId	1	String	String, 2 bytes	Card type returned, refer to Data Element Section 4.3.	
PAN	1	String	String	Masked PAN, include last 4 digits.	
ExpiryDate	1	String	Numeric, 4 digits	Expiry date, format is YYMM.	
AuthCode	1	String	String, 2-6 bytes	Approval code. Only returned for successful transaction.	
EntryMode	1	String	Numeric, 2 digits	Entry mode, refer to Data Element Section 4.4.	
TransDateTime	1	String	String, 20-25 bytes	Transaction time in ISO 8601 format, i.e.  YYYY-MM-DDThh:mm:ssTZD Example: 2015-12-05T15:28:36-05:00	

MerchantId	1	String	String	Processor Merchant ID.
TerminalId	1	String	String	Processor Terminal ID.
SessionID	1	String	String	Session ID.

	Occurs	Type	Constraint	Comments	
PostPaymentResposne	1				
RespCode	1	String	String, 2 bytes	<ul><li>00: Approval</li><li>45: Posting Failure</li><li>96: System error</li></ul>	
RespText	0-1	String	String, max 32 bytes	Response text.	
PrintData	0-1	String	String	Full formatted receipt data.  Lines are terminated with character "#".	

## 3.4.4 Disconnect

Use these elements to request disconnect transaction.

## **Request Message**

	Occurs	Type	Constraint	Comments	
DisconnectRequest	1				
StoreNo	0-1	String	String	Store Number (required for hosting OPI).	
UserID	1	String	String	Employee ID, either manual entry or read from ORACLE Hospitality employee card (refer to Data Element Section 4.9).	
DeviceNo	1	String	String	Mobile PED serial number.	
SessionID	1	String	String	Session ID.	

	Occurs	Type	Constraint	Comments
DisconnectResponse	1			
RespCode	1	String	String, 2 bytes	00: Approval
RespText	0-1	String	String, 32 bytes	Response text.

## 4 Data Elements

The following table lists the supported data elements:

- Transaction type data element
- Card type data element
- Currency data element
- Response code data element

## 4.1 SequenceNo Data Element

The sequence number is generated automatically by OPI to identify a transaction. Normally it is incremented for each transaction processed. However for Reversal, the original transaction's sequence number is used. The sequence number is required in the response as it is used by OPI to validate the response.

## 4.2 TransType Data Element

The following table lists the supported transaction types.

Message Type	Transaction Type	Function Description
Authorization	05	Pre-Authorization
	37	Manual Authorization/Voice Authorization
	06	Top-up Authorization
	16	Authorization Release
Sale	01	Purchase
	02	Sale and Cash
	07	Sales Completion
	12	Sales Adjustment
Refund	03	Refund
Void	08	Void
	39	Void of Refund
Reversal	04	Reversal
Trans Inq	20	Transaction Inquiry
Balance Inq	27	Balance Inquiry
RePrint	18	Re-Print Last Receipt
Receipt	19	Re-Print Receipt
Settlement	10	End-of-Day/Settlement

GetToken	23	Get Token
GetToken Bulk	25	GetToken Bulk
GetPAN Bulk	26	GetPAN Bulk

## 4.3 Issuerld Data Element

The following list describes the IssuerId (i.e. card type) values.

IssuerId	Card Type
00	Local/Debit
01	VISA
02	MasterCard
03	American Express
04	Diners Club
05	JCB
06	China Union Pay (CUP)
07	SVC/Gift card, or private label card
08	Others
09	CUP Debit (with "09" added, "06" will be changed for CUP Credit)
10	Debit SMS ("10" doesn't require batch while "00" does)
11	Bank Card (local credit card)
12	Discover
13	PayPal
16	UKDM/Switch
17	VISA Electron
18	VISA Debit
19	Maestro
20	VPay
21	Alliance
22	EC Chip
23	GiroCard
24	MasterCard Debit

## 4.4 EntryMode Data Element

The entry mode when the card information was initially obtained. The list of values as below.

EntryMode	Description
00	EMV Fallback
01	Swiping without PIN
02	Manual enter card number
03	Swiping with PIN
04	EMV without PIN
05	EMV with offline PIN
06	EMV with online PIN
07	Proximity via Magnetic Stripe
08	Proximity via ICC
09	Others

## 4.5 OfflineFlag Data Element

It means if this is an online transaction or on offline transaction.

OfflineFlag	Description
Υ	Offline transaction
N	Online transaction

## 4.6 CardPresent Data Element

This is to indicate if it is a card present transaction or not. The list of value as below. This field is optional. If no present in request, it means a card present transaction.

CardPresent	Description
1	Card Present
2	МОТО
3	Recurring MOTO
4	Installment MOTO

## 4.7 Currency Code Data Element

The following table lists some of the currency codes and the minor units you can use for processing currency.

Currency	Code		Minor Unit
	Alphabet	Numeric	
Australian Dollar	AUD	036	2
Chinese Yuan	CNY	156	2
Canadian Dollar	CAD	124	2
Deutsche Mark	DEM	276	2
Euro	EUR	978	2
French Franc	FRF	250	2
Hong Kong Dollar	HKD	344	2
Japanese Yen	JPY	392	0
Korea Won	KRW	410	0
Macau Pataca	MOP	446	2
New Taiwan Dollar	TWD	901	2
New Zealand Dollar	NZD	554	2
Philippine Peso	PHP	608	2
Singapore Dollar	SGD	702	2
Thailand Baht	THB	764	2
UK Pound Sterling	GBP	826	2
US Dollar	USD	840	2
Mexican Peso	MXN	484	2

## 4.8 Response Code Data Elements

The OPI returns a response code to indicate the status of a transaction. The following table lists the response codes that can be sent to the OPI in an XML response to a request message.

Response Code	Response Code Description	
00	Transaction Approved	Approve
01	Refer to Issuer	Decline
02	Refer to Issuer, Special	Decline

03	No Merchant	Decline
04	Pick Up Card	Decline
05	Do Not Honor	Decline
06	Error	Decline
07	Pick Up Card, Special	Decline
08	Honor with Identification	Approve
09	Request in Progress	Decline
10	Approved for Partial Amount	Approve
11	Approved, VIP	Approve
12	Invalid Transaction	Decline
13	Invalid Amount	Decline
14	Invalid Card Number	Decline
15	No Issuer	Decline
16	Approved, Update Track 3	Approve
17	Device Not Registered	Decline
18	User Not Found	Decline
19	Re-enter Last Transaction	Decline
21	No Action Taken	Decline
22	Suspected Malfunction	Decline
23	Unacceptable Transaction Fee	Decline
24	No Open Check On This Table	Decline
25	Unable to Locate Record On File	Decline
26	Check Is Opened (by other workstation)	Decline
27	User Not Login Yet	Decline
28	Already Paid	Decline
29	No Privilege to Perform Refund	Decline
30	Format Error	Decline
31	Bank Not Supported By Switch	Decline
33	Expired Card, Capture	Decline
34	Suspected Fraud, Retain Card	Decline
35	Card Acceptor, Contact Acquirer, Retain Card	Decline
36	Restricted Card, Retain Card	Decline

27	Contact Acquirer Sequrity Department Detain Cond	Dodina
37	Contact Acquirer Security Department, Retain Card	Decline
38	PIN Tries Exceeded, Capture	Decline
39	No Credit Account	Decline
40	Function Not Supported	Decline
41	Lost Card	Decline
42	No Universal Account	Decline
43	Stolen Card	Decline
44	No Investment Account	Decline
45	Posting Failure	Decline
51	Insufficient Funds	Decline
52	No Check Account	Decline
53	No Savings Account	Decline
54	Expired Card	Decline
55	Incorrect PIN	Decline
56	No Card Record	Decline
57	Function Not Permitted to Cardholder	Decline
58	Function Not Permitted to Terminal	Decline
59	Suspected Fraud	Decline
60	Acceptor Contact Acquirer	Decline
61	Exceeds Withdrawal Limit	Decline
62	Restricted Card	Decline
63	Security Violation	Decline
64	Original Amount Incorrect	Decline
66	Acceptor Contact Acquirer, Security	Decline
67	Capture Card	Decline
75	PIN Tries Exceeded	Decline
82	CVV Validation Error	Decline
90	Cutoff In Progress	Decline
91	Host or Switch Unavailable	Decline
91	Card Issuer Signed Off	Decline
91	Card Issuer Timed Out	Decline
91	Card Issuer Unavailable	Decline

92	Unable to Route Transaction	Decline
93	Cannot Complete, Violation of the LAW	Decline
94	Duplicate Transaction	Decline
96	System Error	Decline
P2	Read Card Error	Decline
P3	User Cancel	Decline
PT	The PT response code is reserved for terminal proprietary response code. All terminal proprietary responses share this code, but with different response text. Upon the PT response, the OPI/OPDH sends the response text to PMS or the POS.	Decline

## 4.9 Oracle Hospitality Employee Card

The following table lists how the employee card data is arranged on track2.

## Track2

SS	A C E	Employee #	ES	LRC	ı
----	-------	------------	----	-----	---

Field	Description
SS	Start sentinel, HEX B (;)
A	HEX A
С	HEX C
Е	HEX E
Employee #	10 digit employee number
ES	End sentinel, HEX F (?)
LRC	Longitudinal redundancy check character

# 5 Scenarios & Sample Messages

## 5.1 Fast Food Restaurant & Retail Scenarios

Normally below transaction types are involved in a fast food restaurant and retail environment.

Transaction Type	Function Description
01	Sale/Purchase
02	Sale & Cash
03	Refund
08	Void
39	Void of Refund
04	Reversal
20	Transaction Inquiry
27	Balance Inquiry
18	Re-Print Last Receipt
19	Re-Print Receipt
10	Settlement (EOD)

### 5.1.1 Sale/Purchase

#### Sample Request Message

\$50 purchase

```
<ProxyInfo>OPIV6.1</proxyInfo>
<POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

MasterCard chip approved & receipts returned

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>01</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>05</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>200054</AuthCode>
  <RRN>000000000355
  <OfflineFlag>N</OfflineFlag>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000002#RRN
                             : 00000000355#Auth Code
  : 200054##App Label : Personal Account#AID
  A00000025010801#AC : 52A80ACE8E0D9CA4##AMOUNT :
  USD50.00##Approved with PIN##I agree to the terms of
  Restaurant#888 Test Ave., Columbia, MD## Customer
  Copy##Merchant ID : 123456789012345#Terminal ID :
  12345678#Card No. : XXXXXXXXXXX5454(C)#Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 AM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054##App Label : Personal
  Account#AID : A00000025010801#AC
  52A8OACE8EOD9CA4##AMOUNT : USD50.00##Approved with PIN##I
  agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

#### Sample Request Message

\$50 purchase, SAF enabled

```
<TaxAmount>495</TaxAmount>
<TransDateTime>2014-10-06T03:49:36-05:00</TransDateTime>
<PartialAuthFlag>0</PartialAuthFlag>
<SAF>1</SAF>
<CardPresent>1</CardPresent>
<SiteId>3721</SiteId>
<WSNo>99</WSNo>
<Operator>101</Operator>
<GuestNo>123</GuestNo>
<IndustryCode>2</IndustryCode>
<ProxyInfo>OPIV6.1</ProxyInfo>
<POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

Offline approved (PED unable to reach the host)

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>01</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>200053</AuthCode>
  <RRN>000000000354
  <OfflineFlag>Y</OfflineFlag>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000002#RRN
                                  : 000000000355#Auth Code
  : 200053###AMOUNT : USD50.00##Offline Approved###Signature :
  ###I agree to the terms of my#credit
agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Customer Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200053###Offline Approved with Signature##I agree to the
  terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

#### Sample Response Message

#### Declined without receipt in return

#### Sample Response Message

#### Declined with receipt in return

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>01</TransType>
  <RespCode>05</RespCode>
  <RespText>DO NOT HONOR</RespText>
  <RRN>000000000358
  <OfflineFlag>N</OfflineFlag>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData>
                Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000005#RRN : 00000000358##AMOUNT :
  USD50.00##TRANSACTION DECLINED ##I agree to the terms of
  my#credit agreement.@ Demo Res#MICROS Demo
  Restaurant#888 Test Ave., Columbia, MD##
  Copy##Merchant ID: 123456789012345#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(S)#Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
```

```
10/06/2014 3:49 AM#Trace No. : 000005#RRN : 000000000358##AMOUNT : USD50.00## TRANSACTION DECLINED ##I agree to the terms of my#credit agreement.</PrintData> </TransactionResponse>
```

### Sample Request Messaeg

```
$50 purchase with partial authorization enabled
```

```
<TransactionRequest>
  <SequenceNo>000279</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>5000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>495</TaxAmount>
  <TransDateTime>2014-10-06T03:49:36-05:00/TransDateTime>
  <PartialAuthFlag>1</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>123</GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

#### Partial approval (\$40)

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>4000</TransAmount>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>10</RespCode>
  <RespText>PARTIAL APPROVAL</RespText>
  <AuthCode>200053</AuthCode>
  <RRN>000000000354
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
```

```
<PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200054##AMOUNT : USD40.00#Approved##I agree to the terms
  of my#credit agreement.@ Demo Res#MICROS Demo
  Restaurant#888 Test Ave., Columbia, MD## Customer
  Copy##Merchant ID: 123456789012345#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(S) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 AM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054##AMOUNT :
  USD40.00#Approved##I agree to the terms of my#credit
  agreement.</PrintData>
</TransactionResponse>
```

#### Sample Request Message

\$30 purchase MOTO (i.e. force manually entry on PED)

```
<TransactionRequest>
  <SequenceNo>000289</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>495</TaxAmount>
  <TransDateTime>2014-10-06T13:49:36-05:00</TransDateTime>
  <PartialAuthFlag>1</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>2</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>123</GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Request Message

\$30 purchase with routing to acquirer #5 (working in a multi-PED or multi-acquirer environment)

```
<TransactionRequest>
  <SequenceNo>000289</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>3000</TransAmount>
```

```
<TransCurrency>840</TransCurrency>
<TaxAmount>295</TaxAmount>
<TransDateTime>2014-10-06T14:49:36-05:00</TransDateTime>
<PartialAuthFlag>0</PartialAuthFlag>
<SAFFlag>0</SAFFlag>
<CardPresent>1</CardPresent>
<AcqId>5</AcqId>
<SiteId>3721</SiteId>
<WSNo>99</WSNo>
<Operator>101</Operator>
<GuestNo>124</GuestNo>
<IndustryCode>2</IndustryCode>
<ProxyInfo>OPIV6.1</ProxyInfo>
<POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Request Message

\$30 purchase via existing token

```
<TransactionRequest>
  <SequenceNo>000290</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>295</TaxAmount>
  <TransDateTime>2014-10-06T15:49:36-05:00
  <TransToken>4123456789014242
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>125/GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### 5.1.2 Sale & Cash

## Sample Request Message

\$50 purchase with additional cashback

```
<TransactionRequest>
  <SequenceNo>000284</SequenceNo>
  <TransType>02</TransType>
  <TransAmount>5000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>0</TaxAmount>
  <TransDateTime>2014-10-07T15:49:36-05:00
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>111/GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>9700</POSInfo>
</TransactionRequest>
```

## Sample Response Message

Approved (total \$60) with \$10 cashback input on PED

```
<TransactionResponse>
  <SequenceNo>000284</SequenceNo>
  <TransType>02</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454
  <EntryMode>05</EntryMode>
  <IssuerId>02</IssuerId>
  <OtherAmount>1000</OtherAmount>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>023932</AuthCode>
  <RRN>000000000360
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData>
                  Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/07/2014 3:49
```

```
PM#Trace No. : 000002#RRN : 00000000360#Auth Code
  : 023932##App Label : Personal Account#AID :
  A000000025010801#AC : 52A80ACE8E0D9CA4##SALE AMOUNT :
  USD50.00#CASHBACK : USD10.00#TOTAL : USD60.00##Approved with
  PIN##I agree to the terms of my#credit agreement.@
  Demo Res#MICROS Demo Restaurant#888 Test Ave., Columbia, MD##
  Customer Copy##Merchant ID: 123456789012345#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(C) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/07/2014 3:49 PM#Trace No. : 000002#RRN
  00000000360#Auth Code : 023932##App Label : Personal
  Account#AID : A00000025010801#AC
  52A8OACE8EOD9CA4##SALE AMOUNT : USD50.00#CASHBACK :
  USD10.00#TOTAL: USD60.00##Approved with PIN##I agree to the
  terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

Declined, function not supported

#### Sample Request Message

\$50 purchase with additional \$10 cashback, i.e. total \$60, PED doesn't have the ability to prompt for cashback entry

- <GuestNo>111/GuestNo>
- <IndustryCode>2</IndustryCode>
- <ProxyInfo>OPIV6.1</ProxyInfo>
- <POSInfo>9700</POSInfo>
- </TransactionRequest>

## 5.1.3 Refund

## **Sample Request Message**

\$30 refund

```
<TransactionRequest>
  <SequenceNo>000283</SequenceNo>
  <TransType>03</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>0</TaxAmount>
  <TransDateTime>2014-10-06T16:49:36-05:00/TransDateTime>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>111/GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Simphony1</POSInfo>
</TransactionRequest>
```

## Sample Response Message

Refund approved with receipt in return

```
<TransactionResponse>
  <SequenceNo>000283</SequenceNo>
  <TransType>03</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>123457</AuthCode>
  <RRN>000000000363
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
                   Demo Res#MICROS Demo Restaurant#888 Test
  <PrintData>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : REFUND#Trans Time : 10/06/2014 4:49
  PM#Trace No. : 000022#RRN
                                   : 000000000363#Auth Code
```

```
: 123457##AMOUNT : USD30.00##Approved###Signature :

______###I agree to the terms of my#credit
agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
Ave., Columbia,MD## Customer Copy##Merchant ID :
123456789012345#Terminal ID : 12345678#Card No. :
XXXXXXXXXXXX5454(S)#Expiry Date: XX/XX#Card Type :
MasterCard#Trans Type : REFUND#Trans Time : 10/06/2014 4:49
PM#Trace No. : 000022#RRN : 00000000363#Auth Code
: 123457##AMOUNT : USD50.00##Approved with Signature##I
agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

Declined, user cancelled

#### Sample Request Message

\$30 linked refund

```
<TransactionRequest>
  <SequenceNo>000283</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>0</TaxAmount>
  <TransDateTime>2014-10-06T16:49:36-05:00
  <OriginalRRN>00000000360</originalRRN>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>111/GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo> Simphony1</POSInfo>
```

## \$30 refund via existing token

```
<TransactionRequest>
  <SequenceNo>000283</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>0</TaxAmount>
  <TransDateTime>2014-10-06T16:49:36-05:00</TransDateTime>
  <pan>xxxxxxxxxxxxx4242</pan>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <IssuerId>01</IssuerId>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3721</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>111/GuestNo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo> Simphony1</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

## Void approved with receipt in return

```
<TransactionResponse>
  <SequenceNo>000280</SequenceNo>
  <TransType>08</TransType>
  <RespCode>00</RespCode>
  <RespText>APPROVAL/RespText>
  <RRN>000000000372
  <OfflineFlag>N</OfflineFlag>
  <PAN>424242XXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <EntryMode>01</EntryMode>
  <IssuerId>01</IssuerId>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
 123456789012345#Terminal ID : 12345678#Card No.
 XXXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
 VISA#Trans Type : VOID#Trans Time : 10/06/2014 4:49 PM#Trace
 No. : 000023#RRN
                   : 00000000372#AMOUNT :
 USD35.00##Approved##I agree to the terms of my#credit
 agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
 Ave., Columbia, MD## Customer Copy##Merchant ID:
 123456789012345#Terminal ID : 12345678#Card No. :
 XXXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
```

Declined, original transaction not found

```
<TransactionResponse>
    <SequenceNo>000283</SequenceNo>
    <TransType>03</TransType>
    <RespCode>25</RespCode>
    <RespText>UNABLE TO LOCATE ORIGINAL TRANS</RespText>
    <RRN>00000000357</RRN>
    <OfflineFlag>N</OfflineFlag>
    <MerchantId>123456789012345</MerchantId>
    <TerminalId>12345678</TerminalId>
</TransactionResponse>
```

## 5.1.5 Void of Refund

## Sample Request Message

#### Sample Response Message

## Void approved with receipt in return

```
<TransactionResponse>
  <SequenceNo>000288</SequenceNo>
  <TransType>39</TransType>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <RRN>000000001372
  <OfflineFlag>N</OfflineFlag>
  <PAN>424242XXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <EntryMode>01</EntryMode>
  <IssuerId>01</IssuerId>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
 123456789012345#Terminal ID : 12345678#Card No.
 XXXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
 VISA#Trans Type: VOID#Trans Time: 10/06/2014 4:49 PM#Trace
                        : 00000001372#AMOUNT : USD-
 No.: 000123#RRN
 35.00##Approved##I agree to the terms of my#credit
 agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
 Ave., Columbia, MD## Customer Copy##Merchant ID:
 123456789012345#Terminal ID : 12345678#Card No. :
 XXXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
```

</TransactionResponse>

## 5.1.6 Reversal

## Sample Request Message

Reversal, original sequence number is sent

## Sample Response Message

## Reversal approved

## 5.1.7 Transaction Inquiry

## Sample Request Message

Original sequence number is sent

#### Sample Response Message

Result returned, prior transaction was approved

```
<TransactionResponse>
  <SequenceNo>000296</SequenceNo>
  <TransType>20</TransType>
  <PAN>424242XXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <EntryMode>01</EntryMode>
  <IssuerId>01</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <RRN>000000000389
  <AuthCode>765432</AuthCode>
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
                  Demo Res#MICROS Demo Restaurant#888 Test
  <PrintData>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
  VISA#Trans Type : SALE#Trans Time : 10/06/2014 5:19 PM#Trace
  No. : 000108#RRN : 00000000389#Auth Code :
  765432##AMOUNT : USD50.00##Approved###Signature :
                   ###I agree to the terms of my#credit
  agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Customer Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXX4242(S) #Expiry Date: XX/XX#Card Type :
```

```
VISA#Trans Type : SALE#Trans Time : 10/06/2014 5:19 PM#Trace No. : 000108#RRN : 000000000389#Auth Code : 765432 ##AMOUNT : USD50.00#Approved with Signature##I agree to the terms of my#credit agreement.
```

## Result returned, prior transaction was declined

## 5.1.8 Balance Inquiry

## Sample Request Message

## Sample Response Message

#### Success with balance \$100 in return

## 5.1.9 Re-Print Last Receipt

## Sample Request Message

Re-print (TransAmount can be set as 0)

## Sample Response Message

Success with receipt data in return

```
<TransactionResponse>
  <SequenceNo>000289</SequenceNo>
  <TransType>18</TransType>
  <RespCode>00</RespCode>
  <RespText>SUCCESS</RespText>
  <RRN>100161000360
  <OfflineFlag>N</OfflineFlag>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012345#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  PM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200054##App Label : Personal Account#AID
  A00000025010801#AC : 52A80ACE8E0D9CA4##AMOUNT :
  USD50.00#Approved with PIN##I agree to the terms of
  my#credit agreement.@ Demo Res#MICROS Demo
  Restaurant#888 Test Ave., Columbia, MD##
  Copy##Merchant ID : 123456789012345#Terminal ID :
  12345678#Card No. : XXXXXXXXXXXX5454(C)#Expiry Date:
  XX/XX\#Card Type : MasterCard\#Trans Type : SALE\#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054##App Label : Personal
  Account#AID : A00000025010801#AC
  52A8OACE8EOD9CA4##AMOUNT : USD50.00#Approved with PIN##I
  agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

## 5.1.10 Re-Print Receipt

## Sample Request Message

Re-print with original RRN sent

#### Sample Response Message

Success with receipt data in return

```
<TransactionResponse>
  <SequenceNo>000292</SequenceNo>
  <TransType>19</TransType>
  <RespCode>00</RespCode>
  <RespText>SUCCESS</RespText>
  <RRN>100161000361
  <OfflineFlag>N</OfflineFlag>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
 Ave., Columbia, MD## Merchant Copy##Merchant ID:
 123456789012345#Terminal ID : 12345678#Card No.
 XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
 MasterCard#Trans Type: SALE#Trans Time: 10/06/2014 3:49
 PM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200054##App Label : Personal Account#AID :
 A000000025010801#AC : 52A80ACE8E0D9CA4##AMOUNT :
 USD50.00#Approved with PIN##I agree to the terms of
 Restaurant#888 Test Ave., Columbia, MD## Customer
 Copy##Merchant ID : 123456789012345#Terminal ID :
 12345678#Card No. : XXXXXXXXXXX5454(C) #Expiry Date:
 XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054##App Label : Personal
 Account#AID : A00000025010801#AC
  52A80ACE8E0D9CA4##AMOUNT : USD50.00#Approved with PIN##I
  agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

## 5.1.11 Settlement (EOD)

## Sample Requust Message

Merchant based settlement with only SiteId being sent

## Sample Response Message

Settlement message received

## Sample Request Message

Terminal based settlement with both SiteId and WSNo being sent

## Setlmenet message received, terminal based

```
<TransactionResponse>
  <SequenceNo>001287</SequenceNo>
  <TransType>10</TransType>
  <RespCode>00</RespCode>
  <RespText>SETTLEMENT ACCEPTED</RespText>
  <RRN>100161001358</RRN>
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345</MerchantId>
  <TerminalId>12345678</TerminalId>
  </TransactionResponse>
```

## 5.2 Table Service Restaurant Scenarios

Normally below transaction types are involved in a table service restaurant environment.

Transaction Type	Function Description
05	Authorization
16	Authorization Release
07	Sales Completion
01	Sale/Purchase
12	Sales Adjustment
03	Refund
08	Void
39	Void of Refund
04	Reversal
20	Transaction Inquiry
27	Balance Inquiry
18	Re-Print Last Receipt
19	Re-Print Receipt
10	Settlement (EOD)

## **5.2.1 Credit Card Tipping Operations**

There are 3 options for table service restaurant (TSR) tipping operations.

#### 1. Auth Mode

This is to run "05 – Authorization" when guest present a credit card for payment, and then run "07 – Sales Completions" to finalize the payment. If there is a tip amount signed by gest on the receipt, it will be added during the completion. That's the traditional tipping operatin.

Please refer to section 5.2.2 for "05 – Authorization" and section 5.2.3 for "07 – Sales Completion".

#### 2. Sale Mode

Some acquirers/processors prefer Sale Mode whereby a "01 – Sale/Purchase" operation is performed and "12 – Sales Adjustment" operation is run later on if guest signs the credit card receipt with a tip.

In this case, TSR Sale/Purchase transaction has the same message format as QSR's (please refer to section 5.1.1). As regarding to "12 – Sales Adjustment", please refer to section 5.2.5.

#### 3. PED Mode

With Chip and PIN technology, in many countries adding a tip later on is no longer allowed so that the bese way is to have PED upon "01 – Sale/Purchase" transaction prompt for tipping prior to guest entering the PIN on the device. The tip amount is then returned to POS via OPI.

In this case, TSR Sale/Purchase transaction response message is a little different to QSR's. Please refer to section 5.2.4.

#### 5.2.2 Authorization

## Sample Request Message

\$50 authorizaton

```
<TransactionRequest>
  <SequenceNo>002279</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>5000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>565</TaxAmount>
  <TransDateTime>2015-12-05T15:49:36-05:00</TransDateTime>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>12</Operator>
  <GuestNo>3820</GuestNo>
  <ChargeInfo>11</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

#### MasterCard chip approved

```
<AuthCode>200054</AuthCode>
  <RRN>000000000355
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  PM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200054##App Label : Personal Account#AID
 A000000025010801#AC : 52A80ACE8E0D9CA4##BASE AMOUNT :
  USD50.00###TIP: ____
                           ###TOTAL:
                  ###Signature:
  agree to the terms of my#credit agreement.@
                                                Demo
  Res#MICROS Demo Restaurant#888 Test Ave., Columbia, MD##
  Customer Copy##Merchant ID: 123456789012346#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(C)#Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054##App Label : Personal
  Account#AID : A00000025010801#AC
  52A80ACE8E0D9CA4## BASE AMOUNT : USD50.00###TIP:
               _###TOTAL: _____###Approved with
  Signature##I agree to the terms of my#credit
  agreement.</PrintData>
</TransactionResponse>
```

#### Declined

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>05</TransType>
  <RespCode>05</RespCode>
  <RespText>DO NOT HONOR</RespText>
  <RRN>000000000358</RRN>
  <OfflineFlag>N</OfflineFlag>
  <PAN>545454XXXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454</TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <MerchantId>123456789012346</MerchantId>
  <TerminalId>12345678</TerminalId>
</TransactionResponse>
```

#### Declined with receipt in return

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>05</TransType>
  <RespCode>05</RespCode>
  <RespText>DO NOT HONOR</RespText>
  <RRN>000000000358
  <OfflineFlag>N</OfflineFlag>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData>
                  Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  PM#Trace No. : 000005#RRN : 00000000358##AMOUNT :
  USD50.00##TRANSACTION DECLINED ##I agree to the terms of
  my#credit agreement.@ Demo Res#MICROS Demo
  Restaurant#888 Test Ave., Columbia, MD## Customer
  Copy##Merchant ID : 123456789012346#Terminal ID :
  12345678#Card No. : XXXXXXXXXXX5454(S) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000005#RRN
  00000000358##AMOUNT : USD50.00## TRANSACTION DECLINED ##I
  agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

#### Sample Request Message

#### \$50 authorization with partial auth enabled

Partial approval (\$40)

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>4000</TransAmount>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>10</RespCode>
  <RespText>PARTIAL APPROVAL</RespText>
  <AuthCode>200053</AuthCode>
  <RRN>000000000354
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
                  Demo Res#MICROS Demo Restaurant#888 Test
  <PrintData>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  PM#Trace No. : 000002#RRN : 00000000355#Auth Code
  : 200054## AMOUNT : USD40.00###Please Pay Tip in
  Cash###Signature:
                                       ###I agree to the
  terms of my#credit agreement.@ Demo Res#MICROS Demo
  Restaurant#888 Test Ave., Columbia, MD##
                                             Customer
  Copy##Merchant ID : 123456789012346#Terminal ID :
  12345678#Card No. : XXXXXXXXXXX5454(S) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000002#RRN
  00000000355#Auth Code : 200054## AMOUNT : USD40.00##
  Approved with Signature##I agree to the terms of my#credit
  agreement.</printData>
</TransactionResponse>
```

```
$50 authorization, SAF enabled
```

```
<TransactionRequest>
  <SequenceNo>000279</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>5000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>495</TaxAmount>
  <TransDateTime>2014-10-06T03:49:36-05:00/TransDateTime>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>1</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>123</GuestNo>
  <ChargeInfo>13</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

## Sample Response Message

Offline approved (PED unable to reach the host)

```
<TransactionResponse>
  <SequenceNo>000279</SequenceNo>
  <TransType>05</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>200053</AuthCode>
  <RRN>000000000354
  <OfflineFlag>Y</OfflineFlag>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  AM#Trace No. : 000002#RRN
                                  : 00000000355#Auth Code
```

```
$30 authorization MOTO (i.e. force manually entry on PED)
```

```
<TransactionRequest>
  <SequenceNo>000289</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>495</TaxAmount>
  <TransDateTime>2014-10-06T13:49:36-05:00/TransDateTime>
  <PartialAuthFlag>1</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>2</CardPresent>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>123</GuestNo>
  <ChargeInfo>14</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Requust Message

## \$30 authorization via existing token

```
<TransactionRequest>
  <SequenceNo>000290</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>295</TaxAmount>
  <TransDateTime>2014-10-06T15:49:36-05:00</TransDateTime>
  <TransToken>4123456789014242</TransToken>
```

```
<PartialAuthFlag>0</PartialAuthFlag>
<SAF>0</SAF>
<CardPresent>1</CardPresent>
<SiteId>3722</SiteId>
<WSNo>99</WSNo>
<Operator>101</Operator>
<GuestNo>125/GuestNo>
<ChargeInfo>15</ChargeInfo>
<IndustryCode>2</IndustryCode>
<ProxyInfo>OPIV6.1</ProxyInfo>
<POSInfo>3700</POSInfo>
</TransactionRequest>
```

\$30 authorization with routing to acquirer #5 (working in a multi-PED or multi-acquirer environment)

```
<TransactionRequest>
  <SequenceNo>000289</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>295</TaxAmount>
  <TransDateTime>2014-10-06T14:49:36-05:00
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAFFlag>0</SAFFlag>
  <CardPresent>1</CardPresent>
  <AcqId>5</AcqId>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>124</GuestNo>
  <ChargeInfo>16</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

## 5.2.3 Authorization Release

## Sample Request Message

Authorization release with original RRN sent

## Sample Response Message

## Approved

## 5.2.4 Sales Completion

## Sample Request Message

Completion \$57.50 (\$7.50 tipping) with original RRN sent

```
<TransactionRequest>
  <SequenceNo>000280</SequenceNo>
  <TransType>07</TransType>
  <TransAmount>5750</TransAmount>
  <TransCurrency>840</TransCurrency>
  <OtherAmount>750</OtherAmount>
  <TaxAmount>495</TaxAmount>
  <OriginalRRN>00000000355<OriginalRRN>
  <TransDateTime>2014-10-06T16:49:36-05:00
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>101</Operator>
  <GuestNo>124</GuestNo>
  <ChargeInfo>11</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sampel Response Message

Approved, no receipt is required

#### 5.2.5 Sale/Purchase

TSR Sale/Purchase transaction message are same as those QSR Sale/Purchase transaction message with below exceptions.

- 1. The request message could have table number included.
- 2. The request message could have tip amount included if cardholder pre-declared the tipping.
- 3. The response message could have tip amount included if it's entered on the PED.

Please refer to section 5.1.1 for the normal Sale/Purchase request message. Below are some sample for TSR Sale/Purchase.

#### **Sample Request Message**

\$50 sale

```
<TransactionRequest>
  <SequenceNo>002279</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>5000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>565</TaxAmount>
  <TransDateTime>2015-12-05T15:49:36-05:00/TransDateTime>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>12</Operator>
  <GuestNo>3819</GuestNo>
  <ChargeInfo>11</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

MasterCard chip approved with \$7.50 tip amount in return, total \$57.50

```
<TransactionResponse>
  <SequenceNo>002279</SequenceNo>
  <TransType>01</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454</TransToken>
  <EntryMode>04</EntryMode>
```

```
<IssuerId>02</IssuerId>
  <OtherAmount>750</OtherAmount>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>200154</AuthCode>
  <RRN>000000002355
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData>
                   Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 3:49
  PM#Trace No. : 000202#RRN : 00000002355#Auth Code
  : 200154##App Label : Personal Account#AID
  A000000025010801#AC : 52A80ACE8E0D9CA4##BASE AMOUNT:
  USD50.00#TIP AMOUNT: USD7.50# TOTAL:
  USD57.50##Approved###Signature :
  agree to the terms of my#credit agreement.@
  Res#MICROS Demo Restaurant#888 Test Ave., Columbia, MD##
  Customer Copy##Merchant ID: 123456789012346#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(C) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
  10/06/2014 3:49 PM#Trace No. : 000202#RRN
  000000002355#Auth Code : 200154##App Label : Personal
  Account#AID : A00000025010801#AC
  52A80ACE8E0D9CA4## BASE AMOUNT: USD50.00#TIP AMOUNT:
  USD7.50# TOTAL: USD57.50##Approved with Signature##I agree
  to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

```
$50 sale with existing token
```

```
<GuestNo>125/GuestNo>
  <ChargeInfo>12</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

\$57.50 sale with \$7.50 tip pre-declared

```
<TransactionRequest>
  <SequenceNo>002279</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>5750</TransAmount>
  <OtherAmount>750</OtherAmount>
  <TransCurrency>840</TransCurrency>
  <TaxAmount>565</TaxAmount>
  <TransDateTime>2015-12-05T15:28:36-05:00</TransDateTime>
  <PartialAuthFlag>0</PartialAuthFlag>
  <SAF>0</SAF>
  <CardPresent>1</CardPresent>
  <SiteId>3722</SiteId>
  <WSNo>99</WSNo>
  <Operator>12</Operator>
  <GuestNo>3819</GuestNo>
  <ChargeInfo>11</ChargeInfo>
  <IndustryCode>2</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>3700</POSInfo>
</TransactionRequest>
```

## 5.2.6 Sales Adjustment

#### Sample Request Message

Final amount \$57.50 (\$7.50 tip added) with oritinal RRN sent

## Samle Response Message

#### Approval

```
<TransactionResponse>
  <SequenceNo>000280</SequenceNo>
  <TransType>12</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <RRN>000000012345
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012346/MerchantId>
  <TerminalId>12345678</TerminalId>
              Demo Res#MICROS Demo Restaurant#888 Test
  <PrintData>
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012346#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/06/2014 2:49
  PM#Trace No. : 000202#RRN : 000000002355#Auth Code
  : 200154##App Label : Personal Account#AID
                       : 52A80ACE8E0D9CA4##BASE AMOUNT:
  A000000025010801#AC
  USD50.00#TIP AMOUNT: USD7.50# TOTAL:
  USD57.50##Approved###Signature : _____
```

```
agree to the terms of my#credit agreement.@ Demo
Res#MICROS Demo Restaurant#888 Test Ave., Columbia,MD##
Customer Copy##Merchant ID : 123456789012346#Terminal ID :
12345678#Card No. : XXXXXXXXXXX5454 (C) #Expiry Date:
XX/XX#Card Type : MasterCard#Trans Type : SALE#Trans Time :
10/06/2014 2:49 PM#Trace No. : 000202#RRN :
000000002355#Auth Code : 200154##App Label : Personal
Account#AID : A000000025010801#AC :
52A80ACE8E0D9CA4## BASE AMOUNT: USD50.00#TIP AMOUNT:
USD7.50# TOTAL: USD57.50##Approved with Signature##I agree
to the terms of my#credit agreement.
```

## **5.2.7 Refund**

TSR Refund transaction messages are same as those QSR Refund transaction messages (refer to section 5.1.3) with below exceptions:

- 1. The request message could have table numer included.
- 2. The request message could have tip amount included if cardholder pre-declared the tipping.

## 5.2.8 Void

TSR Void transaction messages are same as those QSR Void transaction messages (refer to section 5.1.4) except that the TSR request message could have table number included.

#### 5.2.9 Void of Refund

TSR Void of Refund transaction messages are same as those QSR Void of Refund transaction messages (refer to section 5.1.5) except that the TSR request message could have table number included.

#### 5.2.10 Reversal

TSR Reversal transaction messages are same as those QSR Reversal transaction messages (refer to section 5.1.6).

## 5.2.11 Transaction Inquiry

TSR Transaction Inquiry messages are same as those QSR Transaction Inquiry messages (refer to section 5.1.7) except that the TSR response message could have tip amount included if it's entered on the PED.

## 5.2.12 Balance Inquiry

TSR Balance Inquiry messages are same as those QSR Balance Inquiry message (refer to section 5.1.8).

## 5.2.13 Re-Print Last Receipt

TSR Re-Print Last Receipt messages are same as those QSR Re-Print Last Receipt messages (refer to section 5.1.9).

## 5.2.14 Re-Print Receipt

TSR Re-Print Receipt messages are same as those QSR Re-Print Receipt messages (refer to section 5.1.10).

# 5.2.15 Settlement (EOD)

TSR Settlement transaction messages are same as those QSR Settlement transaction messages (refer to section 5.1.11).

## 5.3 Lodging Scenarios

Normally below transaction types are involved in a lodging environment.

Transaction Type	Function Description
05	Pre-Authorization (Check-in Authorization)
37	Manual Authorization
06	Top-up Authorization
16	Authorization Release
07	Sales Completion (Check-out)
01	Sale/Purchase (PayOnly)
03	Refund
08	Void
04	Reversal
20	Transaction Inquiry
10	Settlement (EOD)

## 5.3.1 Pre-Authorization

## Sample Request Message

\$500 pre-authorization (Chain Code ODH, Property Code FSDH)

```
<TransactionRequest>
  <SequenceNo>002279</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>50000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-06T15:49:36-05:00</TransDateTime>
  <CardPresent>1</CardPresent>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>433820</GuestNo>
  <ChargeInfo>1188</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <RoomRate>100.00</RoomRate>
  <CheckInDate>20151006</CheckInDate>
  <CheckOutDate>20151011</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

MasterCard chip approved and receipt in return

```
<TransactionResponse>
  <SequenceNo>002279</SequenceNo>
  <TransType>05</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454
  <EntryMode>04</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL/RespText>
  <AuthCode>200054</AuthCode>
  <RRN>000000002355
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012347/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData> Demo Hotel#MICROS Demo Hotel#666 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012347#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : AUTH#Trans Time : 10/06/2015 3:49
  PM#Trace No. : 000032#RRN : 00000002355#Auth Code
  : 200054##App Label : Personal Account#AID
  A000000025010801#AC
                           : 52A80ACE8E0D9CA4##AMOUNT :
  USD200.00### Signature:
                                       ###I agree to
  the terms of my#credit agreement.@ Demo Hotel#MICROS

Demo Hotel#666 Test Ave., Columbia, MD## Customer
  Copy##Merchant ID: 123456789012347#Terminal ID:
  12345678#Card No. : XXXXXXXXXXX5454(C) #Expiry Date:
  XX/XX#Card Type : MasterCard#Trans Type : AUTH#Trans Time :
  10/06/2015 3:49 PM#Trace No. : 000032#RRN
  000000002355#Auth Code : 200054##App Label : Personal
  Account#AID : A00000025010801#AC
  52A80ACE8E0D9CA4## AMOUNT : USD200.00##Approved with
  Signature##I agree to the terms of my#credit
  agreement.</PrintData>
</TransactionResponse>
```

#### Sample Response Message

Authorization approved with DCC

```
<TransactionResponse>
  <SequenceNo>002280</SequenceNo>
  <TransType>05</TransType>
  <PAN>424242XXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242</TransToken>
  <EntryMode>01</EntryMode>
```

```
<IssuerId>01</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>100052</AuthCode>
  <RRN>000000000352</RRN>
  <OfflineFlag>N</OfflineFlag>
  <DCCIndicator>1</DCCIndicator>
  <BillingAmount>43899</BillingAmount>
  <BillingCurrency>978</BillingCurrency>
  <FXRate>78779800</FXRate>
  <MerchantId>123456789012347</MerchantId>
  <TerminalId>12345678</TerminalId>
</TransactionResponse>
```

# Sample Request Message

\$500 authorization via existing token

```
<TransactionRequest>
  <SequenceNo>002281</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>50000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-06T15:49:36-05:00</TransDateTime>
  <CardPresent>2</CardPresent>
  <PAN>XXXXXXXXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <IssuerId>01</IssuerId>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD02</WSNo>
  <Operator>999</Operator>
  <GuestNo>433828</GuestNo>
  <ChargeInfo>1118</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <RoomRate>100.00</RoomRate>
  <CheckInDate>20151006</CheckInDate>
  <CheckOutDate>20151011</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

#### Sample Request Message

\$200 authorization for deposit payment

```
<TransactionRequest>
  <SequenceNo>002281</SequenceNo>
  <TransType>05</TransType>
  <TransAmount>20000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-06T15:49:36-05:00</TransDateTime>
  <CardPresent>2</CardPresent>
  <PAN>XXXXXXXXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <IssuerId>01</IssuerId>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FC03</WSNo>
  <Operator>999</Operator>
  <GuestNo>433829</GuestNo>
  <ChargeInfo>1115</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <LodgingCode>3</IndustryCode>
  <RoomRate>100.00</RoomRate>
  <CheckInDate>20151006</CheckInDate>
  <CheckOutDate>20151008</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

#### Sample Request Message

\$200 authorization MOTO (force manual entry on PED)

```
<CheckOutDate>20151011</CheckOutDate>
<ProxyInfo>OPIV6.1</ProxyInfo>
<POSInfo>Opera</POSInfo>
</TransactionRequest>
```

AMEX manual entry and transaction approved

```
<TransactionResponse>
  <SequenceNo>002282</SequenceNo>
  <TransType>05</TransType>
  <PAN>370000XXXXXX0002</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>1938547635476152450/TransToken>
  <EntryMode>02</EntryMode>
  <IssuerId>03</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>003052</AuthCode>
  <RRN>000000003353
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012347/MerchantId>
  <TerminalId>12345678</TerminalId>
</TransactionResponse>
```

#### Sample Response Message

Declined, invalid transaction (e.g. pre-authorization with debit card)

### 5.3.2 Manual Authorization

### Sample Request Message

\$100 manual authorization with existing token

```
<TransactionRequest>
  <SequenceNo>002297</SequenceNo>
  <TransType>37</TransType>
  <TransAmount>10000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-06T15:49:36-05:00/TransDateTime>
  <CardPresent>2</CardPresent>
  <AuthCode>666666</AuthCode>
  <PAN>XXXXXXXXXXXX4242</PAN>
  <ExpiryDate>1812</ExpiryDate>
  <TransToken>4123456789014242
  <IssuerId>01</IssuerId>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD02</WSNo>
  <Operator>999</Operator>
  <GuestNo>433828</GuestNo>
  <ChargeInfo>1118</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

# Sample Response Message

#### Approved

# 5.3.3 Top-up Authorization

### Sample Request Message

Additional \$100 authorization with original RRN sent

### Sample Response Message

Approval, no receipt is required

```
<TransactionResponse>
  <SequenceNo>002281</SequenceNo>
  <TransType>06</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <RRN>000000002356
  <OfflineFlag>N</OfflineFlag>
  <AuthCode>123123</AuthCode>
  <MerchantId>123456789012347/MerchantId>
  <TerminalId>12345678</TerminalId>
</TransactionResponse>
```

### 5.3.4 Authorization Release

# Sample Request Message

\$100 authorization release with original RRN sent

# Sample Response Message

## Approved

# 5.3.5 Sales Completion

### Sample Request Message

\$280 sales completion with original RRN sent

```
<TransactionRequest>
  <SequenceNo>002284</SequenceNo>
  <TransType>07</TransType>
  <TransAmount>28000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <OriginalRRN>00000002355<OriginalRRN>
  <AuthCode>200054</AuthCode>
  <TransDateTime>2015-10-07T13:50:20-05:00</TransDateTime>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>32168</GuestNo>
  <IndustryCode>1</IndustryCode>
  <ChargeInfo>1288</ChargeInfo>
  <RoomRate>200.00</RoomRate>
  <CheckInDate>20141006</CheckInDate>
  <CheckOutDate>20141007</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

# Sample Request Message

\$280 sales completion with token info sent

```
<TransactionRequest>
  <SequenceNo>000280</SequenceNo>
  <TransType>07</TransType>
  <TransAmount>28000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <CardPresent>2</CardPresent>
  <PAN>XXXXXXXXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <IssuerId>02</IssuerId>
  <AuthCode>200054</AuthCode>
  <TransDateTime>2015-10-07T13:50:20-05:00</TransDateTime>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>32168</GuestNo>
  <IndustryCode>1</IndustryCode>
```

```
<ChargeInfo>1288</ChargeInfo>
  <RoomRate>200.00</RoomRate>
  <CheckInDate>20141006</CheckInDate>
  <CheckOutDate>20141007</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

### Approval with receipt in return

```
<TransactionResponse>
  <SequenceNo>000280</SequenceNo>
  <TransType>07</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>02</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <RRN>000000002356
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012347/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData>
                  Demo Hotel#MICROS Demo Hotel#666 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012347#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(M) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type: SALE#Trans Time: 10/07/2014 11:49
  AM#Trace No. : 000232#RRN
                             : 000000002356#Auth Code
  : 200054##AMOUNT : USD280.00### Signature:
                    ###I agree to the terms of my#credit
  agreement.@ Demo Hotel#MICROS Demo Hotel#666 Test
  Ave., Columbia, MD## Customer Copy##Merchant ID:
  123456789012347#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(M) #Expiry Date: XX/XX#Card Type :
  MasterCard#Trans Type : SALE#Trans Time : 10/07/2014 11:49
                              : 000000002356#Auth Code
  AM#Trace No. : 000232#RRN
  : 200054##AMOUNT : USD280.00##Approved with Signature##I
  agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

### Sample Request Message

## \$200 deposit payment

```
<TransactionRequest>
  <SequenceNo>002285</SequenceNo>
  <TransType>07</TransType>
  <TransAmount>20000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <OriginalRRN>00000002353<OriginalRRN>
  <AuthCode>200054</AuthCode>
  <TransDateTime>2015-10-06T13:50:20-05:00</TransDateTime>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>32168</GuestNo>
  <IndustryCode>1</IndustryCode>
  <ChargeInfo>1288</ChargeInfo>
  <RoomRate>200.00</RoomRate>
  <CheckInDate>20141006</CheckInDate>
  <CheckOutDate>20141007</CheckOutDate>
  <LodgingCode>3</LodgingCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

# 5.3.6 Sale/Purchase

### Sample Request Message

\$100 sale/purchase (Chain Code ODH, Property Code FSDH)

```
<TransactionRequest>
  <SequenceNo>002285</SequenceNo>
  <TransType>01</TransType>
  <TransAmount>10000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-07T15:49:36-05:00
  <CardPresent>1</CardPresent>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>433820</GuestNo>
  <ChargeInfo>1188</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <RoomRate>100.00</RoomRate>
  <CheckInDate>20151006</CheckInDate>
  <CheckOutDate>20151007</CheckOutDate>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

#### Sample Response Message

Maestro chip approval and receipt in return

```
<TransactionResponse>
  <SequenceNo>002285</SequenceNo>
  <TransType>01</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>05</EntryMode>
  <IssuerId>19</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>200064</AuthCode>
  <RRN>000000002365
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012347/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData> Demo Hotel#MICROS Demo Hotel#666 Test
  Ave., Columbia, MD## Merchant Copy##Merchant ID:
  123456789012347#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(C) #Expiry Date: XX/XX#Card Type :
```

```
Maestro#Trans Type : SALE#Trans Time : 10/07/2015 3:49

PM#Trace No. : 000132#RRN : 000000002365#Auth Code

: 200064##App Label : Personal Account#AID :
A000000000043060#AC : 52A80ACE8E0D9CA4##AMOUNT :
USD100.00###PIN VERIFIED###I agree to the terms of my#credit
agreement.@ Demo Hotel#MICROS Demo Hotel#666 Test

Ave., Columbia,MD## Customer Copy##Merchant ID :
123456789012347#Terminal ID : 12345678#Card No. :
XXXXXXXXXXXXX5454(C)#Expiry Date: XX/XX#Card Type :
Maestro#Trans Type : SALE#Trans Time : 10/07/2015 3:49

PM#Trace No. : 000132#RRN : 000000002365#Auth Code
: 200064##App Label : Personal Account#AID :
A000000000043060#AC : 52A80ACE8E0D9CA4## AMOUNT :
USD100.00#PIN VERIFIED##I agree to the terms of my#credit
agreement.
```

</TransactionResponse>

#### 5.3.7 Refund

### **Sample Request Message**

\$30 refund via PayOnly

```
<TransactionRequest>
  <SequenceNo>002293</SequenceNo>
  <TransType>03</TransType>
  <TransAmount>3000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-07T16:49:36-05:00
  <CardPresent>1</CardPresent>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>433820</GuestNo>
  <ChargeInfo>1188</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

### Sample Response Message

# Refund approved with receipt in return

```
<TransactionResponse>
  <SequenceNo>002293</SequenceNo>
  <TransType>03</TransType>
  <PAN>545454XXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <EntryMode>01</EntryMode>
  <IssuerId>02</IssuerId>
  <RespCode>00</RespCode>
  <RespText>APPROVAL</RespText>
  <AuthCode>123458</AuthCode>
  <RRN>000000003363
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012345/MerchantId>
  <TerminalId>12345678</TerminalId>
  <PrintData> Demo Res#MICROS Demo Restaurant#888 Test
  Ave., Columbia, MD##
                        Merchant Copy##Merchant ID:
  123456789012347#Terminal ID : 12345678#Card No.
  XXXXXXXXXXX5454(S) #Expiry Date: XX/XX#Card Type
  MasterCard#Trans Type: REFUND#Trans Time: 10/07/2015 4:49
  PM#Trace No. : 000022#RRN : 00000003363#Auth Code
  : 123458##AMOUNT : USD30.00##Approved###Signature :
```

```
###I agree to the terms of my#credit
agreement.@ Demo Res#MICROS Demo Restaurant#888 Test
Ave., Columbia,MD## Customer Copy##Merchant ID:
123456789012347#Terminal ID: 12345678#Card No.:
XXXXXXXXXXX5454(S)#Expiry Date: XX/XX#Card Type:
MasterCard#Trans Type: REFUND#Trans Time: 10/07/2015 4:49
PM#Trace No.: 000022#RRN : 000000003363#Auth Code:
123458##AMOUNT: USD50.00##Approved with Signature##I
agree to the terms of my#credit agreement.</PrintData>
</TransactionResponse>
```

# Sample Request Message

\$50 refund with token info is sent

```
<TransactionRequest>
  <SequenceNo>002294</SequenceNo>
  <TransType>03</TransType>
  <TransAmount>4000</TransAmount>
  <TransCurrency>840</TransCurrency>
  <TransDateTime>2015-10-07T16:49:36-05:00</TransDateTime>
  <CardPresent>2</CardPresent>
  <PAN>XXXXXXXXXXXX5454</PAN>
  <ExpiryDate>1712</ExpiryDate>
  <TransToken>C135847653467125454/TransToken>
  <IssuerId>02</IssuerId>
  <SiteId>ODH|FSDH</SiteId>
  <WSNo>FD01</WSNo>
  <Operator>999</Operator>
  <GuestNo>433820</GuestNo>
  <ChargeInfo>1188</ChargeInfo>
  <IndustryCode>1</IndustryCode>
  <ProxyInfo>OPIV6.1</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TransactionRequest>
```

### Declined, user cancelled

```
<TransactionResponse>
  <SequenceNo>002293</SequenceNo>
  <TransType>03</TransType>
  <RespCode>P3</RespCode>
  <RespText>USER CANCELLED</RespText>
  <RRN>000000003357</RRN>
  <OfflineFlag>N</OfflineFlag>
  <MerchantId>123456789012347</MerchantId>
  <TerminalId>12345678</TerminalId>
  </TransactionResponse>
```

# 5.3.8 Void

PMS Void transaction messages are same as those QSR Void transaction message (refer to section 5.1.4) except that the PMS request message could have reservation number included.

# 5.3.9 Reversal

PMS Reversal transaction messages are same as those QSR Reversal transaction messages (refer to section 5.1.6).

# **5.3.10 Transaction Inquiry**

PMS Transaction Inquiry messages are same as those QSR Transaction Inquiry messages (refer to section 5.1.7).

# 5.3.11 Settlement (EOD)

PMS Settlement transaction messages are same as those QSR Settlement transaction messages (refer to section 5.1.11).

## 5.3.12 Get Token

### **Sample Request Message**

GetToken via PED (Chain Code ODH, Property Code FSDH, Workstation #FD01)

### Sample Response Message

Successfully gets card data from PED and converts it to token

# 5.4 Token Exchange Scenarios

### 5.4.1 GetToken Bulk

#### Sample Request Message

```
GetToken Bulk (Chain Code ODH, Property Code FSDH)
  <TokenRequest>
    <SequenceNo>11</SequenceNo>
    <TransType>25</TransType>
    <SiteID>ODH|FSDH</SiteID>
    <TransDateTime>2015-12-05T13:28:36-05:00/TransDateTime>
    <CardInfo>
       <Record>1</Record>
       <PAN>4242424242424242</PAN>
       <ExpiryDate>1412</ExpiryDate>
    </CardInfo>
    <CardInfo>
       <Record>2</Record>
       <PAN>5454545454545454</PAN>
       <ExpiryDate>1512</ExpiryDate>
    </CardInfo>
    <IndustryCode>1</IndustryCode>
    <ProxyInfo>OTPV1.0</ProxyInfo>
```

### Sample Response Message

</TokenRequest>

<POSInfo>Opera</POSInfo>

# Successfully completed

```
<IssuerID>02</IssuerID>
  </CardInfo>
</TokenResponse>
```

Partially processed, only 2nd card can get the token

### 5.4.2 GetPAN Bulk

### **Sample Request Message**

GetPAN Bulk (Chain Code ODH, Property Code FSDH)

```
<TokenRequest>
  <SequenceNo>21</SequenceNo>
  <TransType>26</TransType>
  <SiteID>ODH|FSDH</SiteID>
  <TransDateTime>2015-12-05T17:28:36-05:00
  <CardInfo>
    <Record>1</Record>
    <TransToken>4123456789014242
  </CardInfo>
  <CardInfo>
    <Record>2</Record>
    <TransToken>C135847653467125454/TransToken>
  </CardInfo>
  <IndustryCode>1</IndustryCode>
  <ProxyInfo>OTPV1.0</ProxyInfo>
  <POSInfo>Opera</POSInfo>
</TokenRequest>
```

## Sample Response Message

```
Successfully completed
<TokenResponse>
  <SequenceNo>21</SequenceNo>
  <TransType>26</TransType>
  <RespCode>00</RespCode>
  <SiteID>ODH|FSDH</SiteID>
  <CardInfo>
    <Record>1</Record>
    <PAN>4242424242424242</PAN>
    <ExpiryDate>1412</ExpiryDate>
    <IssuerID>01</IssuerID>
  </CardInfo>
  <CardInfo>
    <Record>2</Record>
    <PAN>5454545454545454</PAN>
    <ExpiryDate>1512</ExpiryDate>
    <IssuerID>02</IssuerID>
  </CardInfo>
</TokenResponse>
```

Partially processed, only 1st token can get the PAN

```
<TokenResponse>
<SequenceNo>21</SequenceNo>
<TransType>26</TransType>
<RespCode>10</RespCode>
<SiteID>0DH|FSDH</SiteID>
<CardInfo>
<Record>1</Record>
<PAN>4242424242424242</PAN>
<ExpiryDate>1412</ExpiryDate>
<IssuerID>01</IssuerID>
</CardInfo>
</CardInfo>
</TokenResponse>
```

# 5.5 Pay@Table Scenarios

# 5.5.1 Login

### Sample Request Message

```
<LoginRequest>
     <UserID>1234007832</UserID>
      <DeviceNo>30600520</DeviceNo>
</LoginRequest>
```

# Sample Response Message

# 5.5.2 Get Check Info

### Sample Requust Message

### Sample Response Message

# 5.5.3 Post Payment

### Sample Request Message

```
<PostPaymentRequest>
  <TableNo>1</TableNo>
  <CheckNum>123</CheckNum>
  <TransType>01</TransType>
  <TransAmount>1400</TransAmount>
  <OtherAmount>105</OtherAmount>
  <TransCurrency>826</TransCurrency>
  <TransToken>4123456789014242
  <IssuerId>01</IssuerId>
  <PAN>445566XXXXXXX0011</PAN>
  <ExpiryDate>1210</ExpiryDate>
  <EntryMode>05</EntryMode>
  <RRN>123456789012
  <AuthCode>123555</AuthCode>
  <TransDateTime>20101101090000
  <MerchantId>128901122334455/MerchantId>
  <TerminalId>88888888</TerminalId>
  <SessionID>000381</SessionID>
</PostPaymentRequest>
```

## Sample Response Message

### 5.5.4 Disconnect

#### Sample Request Message

```
<DisconnectRequest>
     <UserID>1234007832</UserID>
      <DeviceNo>30600520</DeviceNo>
        <SessionID>000381</SessionID>
</DisconnectRequest>
```

#### Sample Response Message

```
<DisconnectResponse>
     <RespCode>00</RespCode>
     <RespText>Approved</RespText>
</DisconnectResponse>
```