Online Commerce S
SOAP Integration G

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Overview

The Online Commerce Suite SOAP Integration Guide is written for developers who want to enable their applications to access the Merchant Solutions International, Inc SOAP payment gateway web services.

What's In This Guide

Two key features of SOAP are:

- To expose web services via the WSDL.
- Provide web services support for various programming languages. This document discusses basic usage, XML parsing, and examples in Java and C#.

How This Guide is Organized

The remainder of this guide is organized into the following sections:

1. Understanding SOAP
2. Web Services Support discusses the SOAP-based web services support
3. The Client API explains the APIs that access the Transaction Web Services.
4. Examples offer short programs that illustrate the use of the Client APIs languages such as Java and C#.

How to Comment on This Guide

Every effort has been made to produce an accurate and easy to understand the SOAP Integration Guide.

Contact Information

For more information about Online Commerce Suite, refer to the following:

Customer Service

If you have problems with this document, or find that the instructions are incorrect, incomplete, or inadequate, please let us know.

Send your comments to info@merchantsolution.com

Phone: 800-485-2630

Documentation

Web Site URL: https://gateway.merchantsolution.com/docs/

Certified Networks

Web Site URL: https://gateway.merchantsolution.com/docs/networks.taf

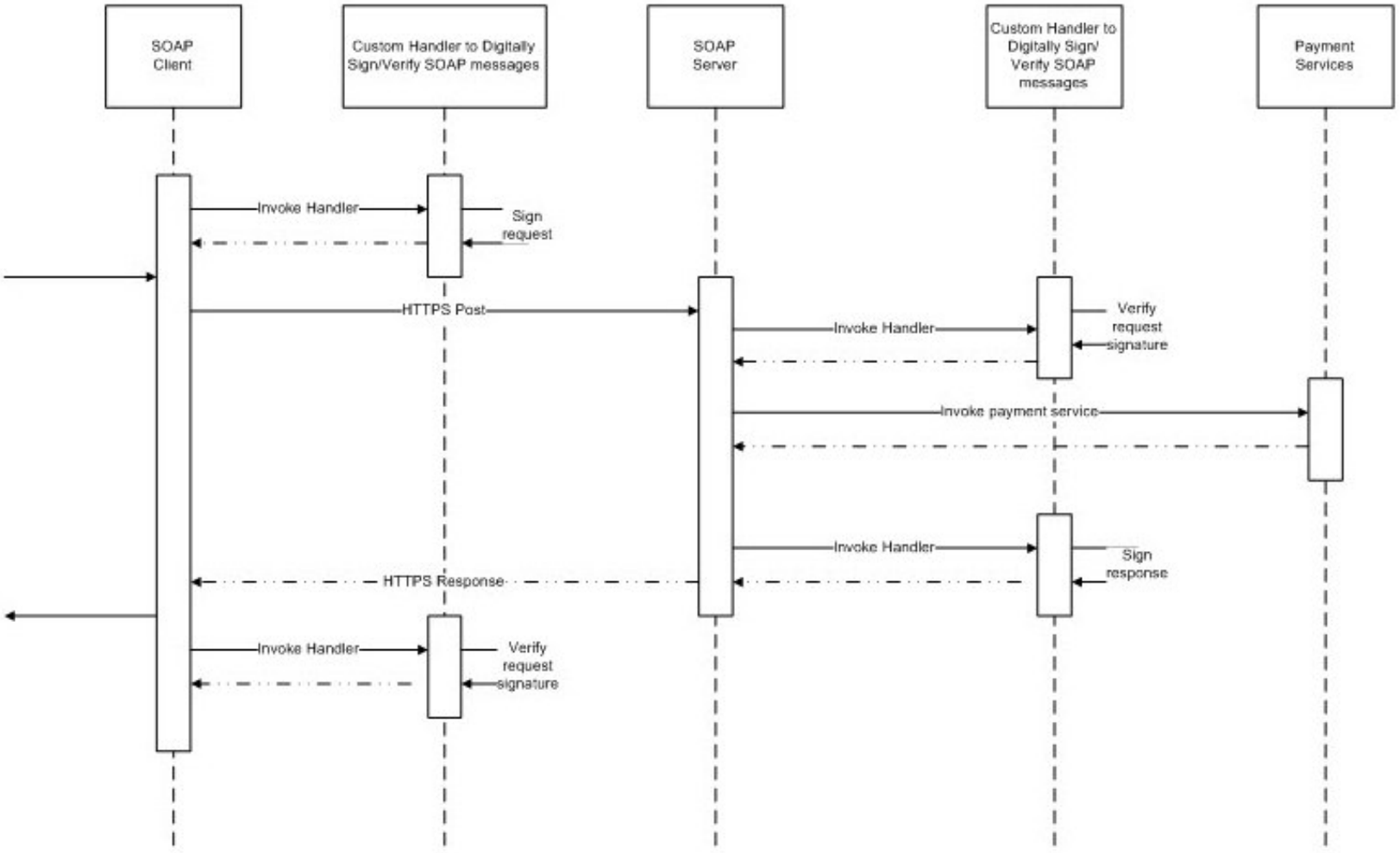
Hardware Compatible List

Web Site URL: https://gateway.merchantsolution.com/docs/equipment.taf

Understanding SOAP

Cryptography
All Soap Request Messages are required to be sent using HTTPS.

Authentication
Merchant Account ID and MerchantPIN will provide transaction level security..



The SOAP Process

1. Merchant downloads the WSDL.
2. Merchant requests an Account ID through the Online Commerce Suit UI. If needed, contact support for Test Account ID and credentials.
3. Merchant creates the SOAP messages with the required fields from the WSDL and sends it via HTTS for processing.
4. The Server's web service receives the SOAP message. The Merchant's Account ID and MerchantPIN (if enabled) is Validated.
5. If valid, it processes transaction and builds a valid SOAP response.
6. The merchant's client response handler receives the SOAP message and processes the response.

Transaction Operation

The following sections explain the transaction operations that are supported.

WSDL Service URL

The WSDL specifications for all of these methods are publicly available at the following URL.

Transaction Processing Services
WSDL URL: https://trans.merchantsolution.com/Web/services/TransactionService?wsdl
Web Service URL: https://trans.merchantsolution.com/Web/services/TransactionService

Transaction Types (SOAP Actions)

Credit Card	**Description**
processCCSale	Process a Credit Card Sale
processCCAuth	Perform a Credit Card Authorization.
~~processCCVoid~~	Deprecated (use processVoid).
processVoid	Void an Auth or a Sale (previous transaction required).
processCredit	Issue Credit for the CC or ACH Sale (previous transaction required).
processCCCredit	Process a Standalone Credit Card Credit.
processCCPost	Process a POST/Capture of a Previous Credit Card Auth.
processAccountLookup	Performs an Account Lookup of the customer.
Debit Card	**Description**
processDebitAuth	Process PIN-Debit Auth Transaction.
processDebitSale	Process PIN-Debit Sale Transaction.
processDebitReturn	Issue PIN-Debit Return.
processDebitVoid	Issue PIN-Debit Void.
processDebitPost	Issue PIN-Debit Post.
processDebitPinless	Process Pinless Debit.
ACH	**Description**
processACHSale	Process a ACH sale.
processVoid	Void a CheckAuth (previous transaction required).
processCredit	Issue Credit for the ACH Sale (previous transaction required).
processACHCredit	Process a Standalone ACH Credit.
processACHVerfication	Process a ACH Verification (verification only).
Check 21	**Description**
~~processC21ICLSale~~	Deprecated. Use processC21Sale.

processC21Sale	Process a Check 21 ICL/RCC Sale.
~~processC21ICLVoid~~	Deprecated. Use processC21Void.
processC21Void	Process a Check 21 ICL/RCC Void (previous transaction required).
~~processC21ICLCredit~~	Deprecated. Use processC21Credit.
processC21ICLCredit	Process a Check 21 ICL/RCC Credit (previous transaction required).
3rd Party Check Processing Service Providers	**Description**
~~processC21RCCSale~~	Deprecated. Use processC21Sale.
processExtACHConsumerDisbursement	Process a Standalone Extended ACH Consumer Disbursement.
~~processC21RCCCredit~~	Deprecated. Use processC21Credit.
~~processC21RCCVoid~~	Deprecated. Use processC21Void.
Stored Profile	**Description**
processCCProfileAdd	Store Credit Card using the Stored Profile.
processCKProfileAdd	Store ACH using the Stored Profile.
processExtACHProfileAdd	Store ExtACH using the Stored Profile.
processProfileSale	Issue CC or ACH Sale or ExtACH using the Stored Profile.
processProfileCredit	Issue Credit using the Stored Profile.
processProfileUpdate	Updates the Stored Profile (ie, card number, expiration dates, etc.).
processProfileRetrieve	Retrieves the account number, address and billing info.
Transaction Retrieve	**Description**
processTransRetrieve	Retrieves the transaction result of the last transaction.

Note: A request SOAP message with element of type INT should be defaulted to 0 if not used.

Credit Card Transactions

processCCAuth and processCCSale (Credit Card Auth / Sale)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ccnum	X	Credit Card number keyed in (when a swipe reader is unable to detect the card number)
expmon	X	Expiration month keyed in (when a swipe reader is unable to detect the card number)
expyear	X	Expiration year keyed in (when a swipe reader is unable to detect the card number)
ccname	X	Consumer name as it appears on the card.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cvv2_cid		Credit card verification value/code (CVV2/CVC2)
voiceauth		6 character approval code obtained from the cardholder's issuing bank.
track1		Track 1 card swipe data
track2		Track 2 card swipe data
swipedata		Card swipe data (must include either track1 or track2 data)
cardpresent		A value of 1 indicates that the card was present
cardreaderpresent		A value of 1 indicates that a card reader was present
companyname		Your company name
dynamicdescriptor		This field will be passed all the way to the Consumers Credit Card statement. This is only available for TSYS.
recurring		<table><tr><td>create</td><td>A value of 1 will create the recurring billing</td></tr><tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle</td></tr><tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr><tr><td>start</td><td>Number of days to start the recur</td></tr><tr><td>amount</td><td>Recurring amount</td></tr></table>

<table>
<tr><td>billaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
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<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>customizedfields</td><td></td><td><table>
<tr><td>custom1</td><td>Merchant's Custom field</td></tr>
<tr><td>custom2</td><td>Merchant's Custom field</td></tr>
<tr><td>custom3</td><td>Merchant's Custom field</td></tr>
<tr><td>custom4</td><td>Merchant's Custom field</td></tr>
<tr><td>custom5</td><td>Merchant's Custom field</td></tr>
<tr><td>custom6</td><td>Merchant's Custom field</td></tr>
</table></td></tr>
<tr><td>hotellodging</td><td></td><td><table>
<tr><td>chargetypeamx</td><td>Code indicating whether the primary charge is Lodging, Restaurant, or Gift Shop. One character value: "1" Hotel, "2" Restaurant, "3" Gift Shop</td></tr>
<tr><td>roomrateamt</td><td>Room rate dollar amount in US dollars in the form of 0.00.</td></tr>
<tr><td>checkindate</td><td>The date (yymmdd) that the guest checked in to the hotel</td></tr>
<tr><td>checkoutdate</td><td>The date (yymmdd) that the guest checked out of the hotel</td></tr>
</table></td></tr>
</table>

		purchaseid: Hotel Folio number (25 characters alphanumeric) pproperty: Prestigious property indicatory. Used by participants in Visa's Prestigious Lodging Program. A transaction amount of $1 should be entered in the amount field if the merchant wishes the transaction to participate in the program. Number value: 100, 1000, or 1100 extracharges: 6 1-digit codes, each a partial or complete explanation of why charged amount differs from receipt cardholder received at checkout. Digit values: 0: no extra, 2: Restaurant, 3: Gift Shop, 4: Mini-bar, 5: Telephone, 6: Other, 7: Laundry. Example: "240000" indicates restaurant and mini-bar charges.
autorental		rentalagreementnum: 25 alphanumeric chars. Note: Amex only uses the first 12 positions. rentalrate: Rate amount of rental. noshoworprogind: Indicates that the customer is being billed for a vehicle that was reserved but not actually rented. 1 char - Only submit when indicating no show. 1 - No show extracharges: 0 - No extra charge 1 - Gasoline 2 - Extra Mileage 3 - Late Return 4 - One Way Service Fee 5 - Parking or Moving Violation rentaldate: YY/MM/DD rentalreturndate: YY/MM/DD rentername: Name of Renter rentalreturncity: City it was returned in rentalreturnstatecountry: State/Country-ISO3 rentalreturnlocationid: 10 chars location id
autorepair		vin: Vehicle Identification Number odometer: Mileage read from the odometer workorder: Merchant's work order number unit: Truck/Vehicle unit number repaircode: Code use to identify the type of repair done.
fsa		healthcareflag: 0 is off 1 is on rxamount: Qualified Prescription amount. clinicamount: Qualified Medical Clinic amount. visionamount: Qualified Vision amount. dentalamount: Qualified Dental amount.

purchasecardlevel2		pocustmerrefid: Cardholders Customer ID or Reference Number for the Purchase Card. taxamount: Total tax charged for the transaction. taxexempt: 1 = a tax exempt purchase. 0 = a taxable purchase.
restaurant		gratuityamount: The Gratuity Amount.
purchasecardlevel3		lineitems: Refer to Appendix F:
fleetcarddata		atpump: 0 is no 1 is yes idnumber: User ID vehicleid: Vehicle ID driverid: Driver ID odometerreading: Odometer miscnumericdata: Cust Data jobnumber: Job Number purchasedevsequencenumber: Purchase Device Sequence Number departmentnumber: Department Number
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
manualrecurring		Default = 0, 1 = Recurring Transaction. To be used if the recurring transactions are handled by the Merchant's system.
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
currencycode		Three-letter ISO4217 (refer to Appendix E)
avs_override		Default = 0, 1 = Override AVS Settings
cvv2_override		Default = 0, 1 = Override CVV2 Settings
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
loadbalance_override		Default = 0, 1 = Override Subid LoadBalance Settings
ticketterms		This identifies if there is a promo rate for X amount months no interest. This is a four digit number. 0001 = Revolve Sale 0060 = 6 Months No Interest 0012 = 12 Months No Interest
accountlookupflag		Default = 0, 1 = Performs the account lookup during the Auth/Sale.

Note: Refer to **ProcessResult** for transaction result.

processVoid (Credit Card Void)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only if transaction was submitted under a Sub ID.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
orderid	X	Order ID of the original transaction
historyid	X	History ID of the original transaction
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
merchantordernumber		Customer's unique alpha-numeric number
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field

Note: Refer to **ProcessResult** for transaction result.

processCredit (Credit Card and Check Credit/Refund)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only if transaction was submitted under a Sub ID.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
orderid	X	Order ID of the original transaction
historyid	X	History ID of the original transaction
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
merchantordernumber		Customer's unique alpha-numeric number

customizedfields	custom1 — Merchant's Custom field custom2 — Merchant's Custom field custom3 — Merchant's Custom field custom4 — Merchant's Custom field custom5 — Merchant's Custom field custom6 — Merchant's Custom field

Note: Refer to **ProcessResult** for transaction result.

processPost (Credit Card Post/Capture)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only if transaction was submitted under a Sub ID.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
orderid	X	Order ID of the original transaction
historyid	X	History ID of the original transaction
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
merchantordernumber		Customer's unique alpha-numeric number
customizedfields		custom1 — Merchant's Custom field custom2 — Merchant's Custom field custom3 — Merchant's Custom field custom4 — Merchant's Custom field custom5 — Merchant's Custom field custom6 — Merchant's Custom field
purchasecardlevel2		pocustomerrefid — Cardholders Customer ID or Reference Number for the Purchase Card. taxamount — Total tax charged for the transaction. taxempty — 1 = a tax exempt purchase. 0 = a taxable purchase.
restaurant		gratuityamount — The Gratuity Amount.

Note: Refer to **ProcessResult** for transaction result.

processCCCredit (Credit Card Standalone Credit)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ccnum	X	Credit Card number keyed in (when a swipe reader is unable to detect the card number)
expmon	X	Expiration month keyed in (when a swipe reader is unable to detect the card number)
expyear	X	Expiration year keyed in (when a swipe reader is unable to detect the card number)
ccname	X	Consumer name as it appears on the card.
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cvv2_cid		Credit card verification value cvv2/cvc2 code
track1		Track 1 card swipe data
track2		Track 2 card swipe data
swipedata		Card swipe data (must include either track1 or track2 data)
cardpresent		A value of 1 indicates that the card was present
cardreaderpresent		A value of 1 indicates that a card reader was present
companyname		Your company name
dynamicdescriptor		This field will be passed all the way to the Consumers Credit Card statement. This is only available for TSYS.
recurring		

create	A value of 1 will create the recurring
billingcycle	0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle
billingmax	Number of max re-bills (1, 2, 3, -1 = unlimited)
start	Number of days to start the recur
amount	Recurring amount

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<tr><td>custom6</td><td>Merchant's Custom field</td></tr>
</table></td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is 'Payment Receipt #xzy'.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>ipaddress</td><td></td><td>Customer's web browser IP address</td></tr>
<tr><td>dobday</td><td></td><td>Date Of Birth - Day (2 digits)</td></tr>
<tr><td>dobmonth</td><td></td><td>Date Of Birth - Month (2 digits)</td></tr>
<tr><td>dobyear</td><td></td><td>Date Of Birth - Year (4 digits)</td></tr>
</table>

currencycode		Three-letter ISO4217 (refer to Appendix E)
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
loadbalance_override		Default = 0, 1 = Override Subid LoadBalance Settings

Note: Refer to **ProcessResult** for transaction result.

Debit Card Transactions

processDebitAuth or processDebitSale (Debit Card Auth or Sale)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
swipedata	X	Card swipe data (must include either track1 or track2 data)
customerid	X	32 byte Encrypted PIN pad data. Includes 16 byte PIN data followed by 6 byte key set and 10 byte PIN pad serial number.
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cashbackamount		Cash back amount in the form of 0.00 (total amount transferred is amount + cash back amount)
track1		Track 1 card swipe data
track2		Track 2 card swipe data
companyname		Your company name
recurring		create: A value of 1 will create the recurring billingcycle: 0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle billingmax: Number of max re-bills (1, 2, 3, -1 = unlimited) start: Number of days to start the recur amount: Recurring amount
billaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country

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<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
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</table></td></tr>
<tr><td>phone</td><td></td><td>Consumer phone number</td></tr>
<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>customizedfields</td><td></td><td><table>
<tr><td>custom1</td><td>Merchant's Custom field</td></tr>
<tr><td>custom2</td><td>Merchant's Custom field</td></tr>
<tr><td>custom3</td><td>Merchant's Custom field</td></tr>
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<tr><td>custom5</td><td>Merchant's Custom field</td></tr>
<tr><td>custom6</td><td>Merchant's Custom field</td></tr>
</table></td></tr>
<tr><td>hotellodging</td><td></td><td><table>
<tr><td>chargetypeamx</td><td>Code indicating whether the primary charge is Lodging, Restaurant, or Gift Shop. One character value: "1" Hotel, "2" Restaurant, "3" Gift Shop</td></tr>
<tr><td>roomrateamt</td><td>Room rate dollar amount in US dollars in the form of 0.00.</td></tr>
<tr><td>checkindate</td><td>The date (yymmdd) that the guest checked in to the hotel</td></tr>
<tr><td>checkoutdate</td><td>The date (yymmdd) that the guest checked out of the hotel</td></tr>
<tr><td>purchaseid</td><td>Hotel Folio number (25 characters alphanumeric)</td></tr>
<tr><td>pproperty</td><td>Prestigious property indicatory. Used by participants in Visa's Prestigious Lodging Program. A transaction amount of $1 should be entered in the amount field if the merchant wishes the transaction to participate in the program. Number value: 100, 1000, or 1100</td></tr>
<tr><td>extracharges</td><td>6 1-digit codes, each a partial or complete explanation of why charged amount differs from receipt cardholder</td></tr>
</table></td></tr>
</table>

		received at checkout. Digit values: 0: no extra, 2: Restaurant, 3: Gift Shop, 4: Mini-bar, 5: Telephone, 6: Other, 7: Laundry. Example: "240000" indicates restaurant and mini-bar charges.
autorental		rentalagreementnum: 25 alphanumeric chars. Note: Amex only uses the first 12 positions. rentalrate: Rate amount of rental. noshoworprogind: Indicates that the customer is being billed for a vehicle that was reserved but not actually rented. 1 char - Only submit when indicating no show. 1 - No show extracharges: 0 - No extra charge 1 - Gasoline 2 - Extra Mileage 3 - Late Return 4 - One Way Service Fee 5 - Parking or Moving Violation rentaldate: YY/MM/DD rentalreturndate: YY/MM/DD rentername: Name of Renter rentalreturncity: City it was returned in rentalreturnstatecountry: State/Country-ISO3 rentalreturnlocationid: 10 chars location id
autorepair		vin: Vehicle Identification Number odometer: Mileage read from the odometer workorder: Merchant's work order number unit: Truck/Vehicle unit number repaircode: Code use to identify the type of repair done.
purchasecardlevel3		lineitems: Refer to Appendix F:
fleetcarddata		atpump: 0 is no 1 is yes idnumber: User ID vehicleid: Vehicle ID driverid: Driver ID odometerreading: Odometer miscnumericdata: Cust Data jobnumber: Job Number purchasedevsequencenumber: Purchase Device Sequence Number departmentnumber: Department Number
merchantordernumber		Customer's unique alpha-numeric number

ipaddress		Customer's web browser IP address
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
currencycode		Three-letter ISO4217 (refer to Appendix E)
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
loadbalance_override		Default = 0, 1 = Override Subid LoadBalance Settings

Note: Refer to **ProcessResult** for transaction result.

processDebitReturn (Debit Card Return)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
customerid	X	32 byte Encrypted PIN pad data. Includes 16 byte PIN data followed by 6 byte key set and 10 byte PIN pad serial number.
orderid	X	Order key id of the original transaction
historyid	X	History key id of the original transaction
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
purchasecardlevel3		lineitems: Refer to Appendix F:
fleetcarddata		atpump: 0 is no 1 is yes idnumber: User ID vehicleid: Vehicle ID driverid: Driver ID odometerreading: Odometer miscnumericdata: Cust Data jobnumber: Job Number purchasedevsequencenumber: Purchase Device Sequence Number departmentnumber: Department Number
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
currencycode		Three-letter ISO4217 (refer to Appendix E)
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.

Note: Refer to **ProcessResult** for transaction result.

processDebitPost (Post/Capture Previous Debit Auth)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
customerid		32 byte Encrypted PIN pad data. Includes 16 byte PIN data followed by 6 byte key set and 10 byte PIN pad serial number.
orderid	X	Order key id of the original transaction
historyid	X	History key id of the original transaction
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
purchasecardlevel3		lineitems: Refer to Appendix F:
fleetcarddata		atpump: 0 is no 1 is yes idnumber: User ID vehicleid: Vehicle ID driverid: Driver ID odometerreading: Odometer miscnumericdata: Cust Data jobnumber: Job Number purchasedevsequencenumber: Purchase Device Sequence Number departmentnumber: Department Number
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
currencycode		Three-letter ISO4217 (refer to Appendix E)
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.

Note: Refer to **ProcessResult** for transaction result.

processDebitVoid (Debit Card Void)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
customerid		32 byte Encrypted PIN pad data. Includes 16 byte PIN data followed by 6 byte key set and 10 byte PIN pad serial number.
orderid	X	Order key id of the original transaction
historyid	X	History key id of the original transaction
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
purchasecardlevel3		lineitems: Refer to Appendix F:
fleetcarddata		atpump: 0 is no 1 is yes idnumber: User ID vehicleid: Vehicle ID driverid: Driver ID odometerreading: Odometer miscnumericdata: Cust Data jobnumber: Job Number purchasedevsequencenumber: Purchase Device Sequence Number departmentnumber: Department Number
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
currencycode		Three-letter ISO4217 (refer to Appendix E)
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.

Note: Refer to **ProcessResult** for transaction result.

processDebitPinless (Pinless Debit)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ccnum	X	Credit Card number keyed in (when a swipe reader is unable to detect the card number)
expmon	X	Expiration month keyed in (when a swipe reader is unable to detect the card number)
expyear	X	Expiration year keyed in (when a swipe reader is unable to detect the card number)
ccname	X	Consumer name as it appears on the card.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cvv2_cid		Credit card verification value/code (CVV2/CVC2)
voiceauth		6 character approval code obtained from the cardholder's issuing bank.
track1		Track 1 card swipe data
track2		Track 2 card swipe data
swipedata		Card swipe data (must include either track1 or track2 data)
cardpresent		A value of 1 indicates that the card was present
cardreaderpresent		A value of 1 indicates that a card reader was present
companyname		Your company name
dynamicdescriptor		This field will be passed all the way to the Consumers Credit Card statement. This is only available for TSYS.
recurring		<table><tr><td>create</td><td>A value of 1 will create the recurring billing</td></tr><tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle</td></tr><tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr><tr><td>start</td><td>Number of days to start the recur</td></tr><tr><td>amount</td><td>Recurring amount</td></tr></table>

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<tr><td>state</td><td>Consumer state or province</td></tr>
<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
<tr><td>country</td><td>Consumer country</td></tr>
</table></td></tr>
<tr><td>shipaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
<tr><td>city</td><td>Consumer city</td></tr>
<tr><td>state</td><td>Consumer state or province</td></tr>
<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
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<tr><td>phone</td><td></td><td>Consumer phone number</td></tr>
<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
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</table></td></tr>
<tr><td>hotellodging</td><td></td><td><table>
<tr><td>chargetypeamx</td><td>Code indicating whether the primary charge is Lodging, Restaurant, or Gift Shop. One character value: "1" Hotel, "2" Restaurant, "3" Gift Shop</td></tr>
<tr><td>roomrateamt</td><td>Room rate dollar amount in US dollars in the form of 0.00.</td></tr>
<tr><td>checkindate</td><td>The date (yymmdd) that the guest checked in to the hotel</td></tr>
<tr><td>checkoutdate</td><td>The date (yymmdd) that the guest checked out of the hotel</td></tr>
</table></td></tr>
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		purchaseid: Hotel Folio number (25 characters alphanumeric) pproperty: Prestigious property indicatory. Used by participants in Visa's Prestigious Lodging Program. A transaction amount of $1 should be entered in the amount field if the merchant wishes the transaction to participate in the program. Number value: 100, 1000, or 1100 extracharges: 6 1-digit codes, each a partial or complete explanation of why charged amount differs from receipt cardholder received at checkout. Digit values: 0: no extra, 2: Restaurant, 3: Gift Shop, 4: Mini-bar, 5: Telephone, 6: Other, 7: Laundry. Example: "240000" indicates restaurant and mini-bar charges.
autorental		rentalagreementnum: 25 alphanumeric chars. Note: Amex only uses the first 12 positions. rentalrate: Rate amount of rental. noshoworprogind: Indicates that the customer is being billed for a vehicle that was reserved but not actually rented. 1 char - Only submit when indicating no show. 1 - No show extracharges: 0 - No extra charge 1 - Gasoline 2 - Extra Mileage 3 - Late Return 4 - One Way Service Fee 5 - Parking or Moving Violation rentaldate: YY/MM/DD rentalreturndate: YY/MM/DD rentername: Name of Renter rentalreturncity: City it was returned in rentalreturnstatecountry: State/Country-ISO3 rentalreturnlocationid: 10 chars location id
autorepair		vin: Vehicle Identification Number odometer: Mileage read from the odometer workorder: Merchant's work order number unit: Truck/Vehicle unit number repaircode: Code use to identify the type of repair done.
fsa		healthcareflag: 0 is off 1 is on rxamount: Qualified Prescription amount. clinicamount: Qualified Medical Clinic amount. visionamount: Qualified Vision amount. dentalamount: Qualified Dental amount.

<table>
<tr><td>purchasecardlevel2</td><td></td><td><table>
<tr><td>pocustmerrefid</td><td>Cardholders Customer ID or Reference Number for the Purchase Card.</td></tr>
<tr><td>taxamount</td><td>Total tax charged for the transaction.</td></tr>
<tr><td>taxexempt</td><td>1 = a tax exempt purchase. 0 = a taxable purchase.</td></tr>
</table></td></tr>
<tr><td>restaurant</td><td></td><td><table>
<tr><td>gratuityamount</td><td>The Gratuity Amount.</td></tr>
</table></td></tr>
<tr><td>purchasecardlevel3</td><td></td><td><table>
<tr><td>lineitems</td><td>Refer to Appendix F:</td></tr>
</table></td></tr>
<tr><td>fleetcarddata</td><td></td><td><table>
<tr><td>atpump</td><td>0 is no 1 is yes</td></tr>
<tr><td>idnumber</td><td>User ID</td></tr>
<tr><td>vehicleid</td><td>Vehicle ID</td></tr>
<tr><td>driverid</td><td>Driver ID</td></tr>
<tr><td>odometerreading</td><td>Odometer</td></tr>
<tr><td>miscnumericdata</td><td>Cust Data</td></tr>
<tr><td>jobnumber</td><td>Job Number</td></tr>
<tr><td>purchasedevsequencenumber</td><td>Purchase Device Sequence Number</td></tr>
<tr><td>departmentnumber</td><td>Department Number</td></tr>
</table></td></tr>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>ipaddress</td><td></td><td>Customer's web browser IP address</td></tr>
<tr><td>manualrecurring</td><td></td><td>Default = 0, 1 = Recurring Transaction. To be used if the recurring transactions are handled by the Merchant's system.</td></tr>
<tr><td>dobday</td><td></td><td>Date Of Birth - Day (2 digits)</td></tr>
<tr><td>dobmonth</td><td></td><td>Date Of Birth - Month (2 digits)</td></tr>
<tr><td>dobyear</td><td></td><td>Date Of Birth - Year (4 digits)</td></tr>
<tr><td>currencycode</td><td></td><td>Three-letter ISO4217 (refer to Appendix E)</td></tr>
<tr><td>avs_override</td><td></td><td>Default = 0, 1 = Override AVS Settings</td></tr>
<tr><td>cvv2_override</td><td></td><td>Default = 0, 1 = Override CVV2 Settings</td></tr>
<tr><td>duplicate_override</td><td></td><td>Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.</td></tr>
<tr><td>loadbalance_override</td><td></td><td>Default = 0, 1 = Override Subid LoadBalance Settings</td></tr>
</table>

Note: Refer to **ProcessResult** for transaction result.

ACH Transactions

processACHSale (ACH Sale)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ckname	X	Payer's name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno	X	Check Number
ckacct	X	Variable length numeric value without spaces for checking account number.
cktype	X	SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
verificationflag		A value of "1" is required to activate Verification (check number, SSN, driver's license, phone).
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
ckaccttype		"1" - Checking, "2" - Savings
companyname		Your company name
recurring		<table><tr><td>create</td><td>A value of 1 will create the recurring</td></tr><tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle</td></tr><tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr><tr><td>start</td><td>Number of days to start the recur</td></tr><tr><td>amount</td><td>Recurring amount</td></tr></table>
billaddress		<table><tr><td>addr1</td><td>Consumer billing address</td></tr><tr><td>addr2</td><td>Second line of the consumer billing address</td></tr><tr><td>city</td><td>Consumer city</td></tr><tr><td>state</td><td>Consumer state or province</td></tr><tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr></table>

		country	Consumer country
shipaddress		addr1	Consumer billing address
		addr2	Second line of the consumer billing address
		city	Consumer city
		state	Consumer state or province
		zip	Consumer Zip code or Postal code
		country	Consumer country
phone		Consumer phone number	
email		Consumer email address	
memo		Miscellaneous information field	
dlnum		Consumer driver's license number	
customizedemail		emailto	E-mail address to send the consumer e-mail receipt. Default is ci_email address.
		emailfrom	Return address on consumer's e-mail receipt. Default is null@atsbank.com.
		emailsubject	Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.
		emailtext	Consumer's e-mail receipt body text. Default is a generic receipt message.
customizedfields		custom1	Merchant's Custom field
		custom2	Merchant's Custom field
		custom3	Merchant's Custom field
		custom4	Merchant's Custom field
		custom5	Merchant's Custom field
		custom6	Merchant's Custom field
hotellodging		chargetypeamx	Code indicating whether the primary charge is Lodging, Restaurant, or Gift Shop. One character value: "1" Hotel, "2" Restaurant, "3" Gift Shop
		roomrateamt	Room rate dollar amount in US dollars in the form of 0.00.
		checkindate	The date (yymmdd) that the guest checked in to the hotel
		checkoutdate	The date (yymmdd) that the guest checked out of the hotel
		purchaseid	Hotel Folio number (25 characters alphanumeric)
		pproperty	Prestigious property indicatory. Used by participants in Visa's Prestigious Lodging Program. A transaction amount of $1 should be entered in the amount field if the merchant wishes the transaction to participate in the program. Number value: 100, 1000, or 1100
		extracharges	6 1-digit codes, each a partial or complete explanation of

		why charged amount differs from receipt cardholder received at checkout. Digit values: 0: no extra, 2: Restaurant, 3: Gift Shop, 4: Mini-bar, 5: Telephone, 6: Other, 7: Laundry. Example: "240000" indicates restaurant and mini-bar charges.
autorental		rentalagreementnum: 25 alphanumeric chars. Note: Amex only uses the first 12 positions. rentalrate: Rate amount of rental. noshoworprogind: Indicates that the customer is being billed for a vehicle that was reserved but not actually rented. 1 char - Only submit when indicating no show. 1 - No show extracharges: 0 - No extra charge 1 - Gasoline 2 - Extra Mileage 3 - Late Return 4 - One Way Service Fee 5 - Parking or Moving Violation rentaldate: YY/MM/DD rentalreturndate: YY/MM/DD rentername: Name of Renter rentalreturncity: City it was returned in rentalreturnstatecountry: State/Country-ISO3 rentalreturnlocationid: 10 chars location id
ssnum		Consumer Social Security Number
merchantordernumber		Customer's unique alpha-numeric number
ckmicrdata		MICR data read from the MICR line
ckterminalcity		4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions
ckterminalstate		2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions
ckimagefront		Front image of the check. Maximum of 20K.
ckimageback		Back image of the check. Maximum of 20K.
ckimagetype		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
ipaddress		Customer's web browser IP address
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.

Note: Refer to **ProcessResult** for transaction result.

processACHCredit (ACH Standalone Credit)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ckname	X	Payer's name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno	X	Check Number (serial number)
ckacct	X	Variable length numeric value without spaces for checking account number.
cktype	X	SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
ckaccttype		"1" - Checking, "2" - Savings
companyname		Your company name
recurring		

create	A value of 1 will create the recurring
billingcycle	0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle
billingmax	Number of max re-bills (1, 2, 3, -1 = unlimited)
start	Number of days to start the recur
amount	Recurring amount

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<tr><td>country</td><td>Consumer country</td></tr>
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<tr><td>shipaddress</td><td></td><td><table>
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<tr><td>custom4</td><td>Merchant's Custom field</td></tr>
<tr><td>custom5</td><td>Merchant's Custom field</td></tr>
<tr><td>custom6</td><td>Merchant's Custom field</td></tr>
</table></td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is 'null@atsbank.com'.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is 'Payment Receipt #xzy'.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>ckmicrdata</td><td></td><td>MICR data read from the MICR line</td></tr>
<tr><td>ckterminalcity</td><td></td><td>4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions</td></tr>
<tr><td>ckterminalstate</td><td></td><td>2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions</td></tr>
</table>

ckimagefront		Front image of the check. Maximum of 20K.
ckimageback		Back image of the check. Maximum of 20K.
ckimagetype		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
ipaddress		Customer's web browser IP address
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.

Note: Refer to **ProcessResult** for transaction result.

processACHVerification (ACH Verification)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ckname	X	Payer's name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckacct	X	Variable length numeric value without spaces for checking account number.
cktype	X	SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
ckaccttype	X	"1" - Checking, "2" - Savings
ckno		Check Number
ssnum		Social Security Number
dlnum		Driver License Number
phone		Phone Number
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
companyname		Your company name

<table>
<tr><td>billaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
<tr><td>city</td><td>Consumer city</td></tr>
<tr><td>state</td><td>Consumer state or province</td></tr>
<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
<tr><td>country</td><td>Consumer country</td></tr>
</table></td></tr>
<tr><td>shipaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
<tr><td>city</td><td>Consumer city</td></tr>
<tr><td>state</td><td>Consumer state or province</td></tr>
<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
<tr><td>country</td><td>Consumer country</td></tr>
</table></td></tr>
<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>customizedfields</td><td></td><td><table>
<tr><td>custom1</td><td>Merchant's Custom field</td></tr>
<tr><td>custom2</td><td>Merchant's Custom field</td></tr>
<tr><td>custom3</td><td>Merchant's Custom field</td></tr>
<tr><td>custom4</td><td>Merchant's Custom field</td></tr>
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<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>ckmicrdata</td><td></td><td>MICR data read from the MICR line</td></tr>
<tr><td>ckterminalcity</td><td></td><td>4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions</td></tr>
<tr><td>ckterminalstate</td><td></td><td>2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions</td></tr>
<tr><td>ckimagefront</td><td></td><td>Front image of the check. Maximum of 20K.</td></tr>
<tr><td>ckimageback</td><td></td><td>Back image of the check. Maximum of 20K.</td></tr>
<tr><td>ckimagetype</td><td></td><td></td></tr>
</table>

		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
ipaddress		Customer's web browser IP address
merchantpin		Merchant's security PIN.

Note: Refer to **ProcessResult** for transaction result.

Check 21 Transactions

processC21Sale (Check 21 Sale)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ckname	X	Payer's full name on account
firstname	X	Payer's first name
lastname	X	Payer's last name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno	X	Check Number (serial number)
ckacct	X	Variable length numeric value without spaces for checking account number.
ckaccttype	X	"P" - Personal, "B" - Business
billstreet	X	Payer's Street
housenumber	X	Payer's house number.
companyname	X	Company name if "ckaccttype = B"
phone	X	Consumer phone
email	X	Consumer email
billaddress	X	addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
currencycode		Three-letter ISO4217 currency code (USD)
zip4		Payer's zip code. USA ZIP+4 Format
Riskmodifier		Extended risk check of the check routing and account number can be modified by this field. 0 - disables risk checks 1 - forces risk checks If not specified, the contract default will be used, according to the threshold. • This feature might not be available.
authenticationmodifier		Authentication of the payer name and address can be modified by this field. 0 - disables payer authentication checks 1 - forces payer authentication checks

<table>
<tr><td></td><td></td><td>If not specified, the contract default will be used, according to the threshold.

• This feature might not be available.</td></tr>
<tr><td>insurancemodifier</td><td></td><td>Insurance that the amount will clear can be modified by this field
0 - disables insurance
1 - forces insurance
If not specified, the contract default will be used, according to the threshold.

• This feature might not be available.</td></tr>
<tr><td>recurring</td><td></td><td><table>
<tr><td>create</td><td>A value of 1 will create the recurring</td></tr>
<tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle
1 = Weekly Recurring Billing Cycle
2 = Monthly Recurring Billing Cycle
3 = Quarterly Recurring Billing Cycle
4 = Semi-Annual Recurring Billing Cycle
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8 = Quad Weekly (28 day) Recurring Billing Cycle
9 = One Time Recurring Billing Cycle
10 = Daily Recurring Billing Cycle
11 = Bi-Monthly Recurring Billing Cycle</td></tr>
<tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr>
<tr><td>start</td><td>Number of days to start the recur</td></tr>
<tr><td>amount</td><td>Recurring amount</td></tr>
</table></td></tr>
<tr><td>shipaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
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<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
<tr><td>customizedfields</td><td></td><td><table>
<tr><td>custom1</td><td>Merchant's Custom field</td></tr>
<tr><td>custom2</td><td>Merchant's Custom field</td></tr>
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</table></td></tr>
</table>

customizedemail		<table><tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr><tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is 'null@atsbank.com'.</td></tr><tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is 'Payment Receipt #xzy'.</td></tr><tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr></table>
merchantordernumber		Customer's unique alpha-numeric number
ckmicrdata		MICR data read from the MICR line
ckterminalcity		4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions
ckterminalstate		2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions
ckimagefront		Front image of the check. Maximum of 20K.
ckimageback		Back image of the check. Maximum of 20K.
ckimagetype		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
ipaddress		Customer's web browser IP address
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
merchantpin		Merchant's security PIN.
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.

Note: Refer to **ProcessResult** for transaction result.

processC21Credit (Check 21 Credit/Refund)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
orderid	X	Order key id of the original transaction
historyid	X	History key id of the original transaction
senddate		

		The time at which the refund check will be printed. Format: YYYY-MM-DD. This date must be the date this transaction is sent or later.
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
merchantpin		Merchant's security PIN.

Note: Refer to **ProcessResult** for transaction result.

processC21Void (Check 21 Void)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
orderid	X	Order key id of the original transaction
historyid	X	History key id of the original transaction
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
merchantpin		Merchant's security PIN.

Note: Refer to **ProcessResult** for transaction result.

3rd Party Check Processing Service Providers

processExtACHConsumerDisbursement (EXT Check Consumer Disbursement)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
ckname	X	Payer's name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno	X	Check Number (Required for TEL, RCK, BOC, ARC)
ckacct	X	Variable length numeric value without spaces for checking account number.
cktype	X	SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
ckaccttypedesc	X	ACH Account Type description. One of the following: Personal Checking Personal Saving Business Checking Business Saving
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
ckaccttype		"1" - Checking, "2" - Savings
companyname		Your company name
recurring		

create	A value of 1 will create the recurring
billingcycle	0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle
billingmax	Number of max re-bills (1, 2, 3, -1 = unlimited)
start	Number of days to start the recur
amount	Recurring amount

<table>
<tr><td>billaddress</td><td></td><td><table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
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<tr><td>country</td><td>Consumer country</td></tr>
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<tr><td>shipaddress</td><td></td><td><table>
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<tr><td>state</td><td>Consumer state or province</td></tr>
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<tr><td>country</td><td>Consumer country</td></tr>
</table></td></tr>
<tr><td>phone</td><td></td><td>Consumer phone number</td></tr>
<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
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</table></td></tr>
<tr><td>customizedemail</td><td></td><td><table>
<tr><td>emailto</td><td>E-mail address to send the consumer e-mail receipt. Default is ci_email address.</td></tr>
<tr><td>emailfrom</td><td>Return address on consumer's e-mail receipt. Default is null@atsbank.com.</td></tr>
<tr><td>emailsubject</td><td>Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.</td></tr>
<tr><td>emailtext</td><td>Consumer's e-mail receipt body text. Default is a generic receipt message.</td></tr>
</table></td></tr>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>ckmicrdata</td><td></td><td>MICR data read from the MICR line</td></tr>
<tr><td>ckterminalcity</td><td></td><td>4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions</td></tr>
<tr><td>ckterminalstate</td><td></td><td>2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions</td></tr>
</table>

ckimagefront		Front image of the check. Maximum of 20K.
ckimageback		Back image of the check. Maximum of 20K.
ckimagetype		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
dobday		Date Of Birth - Day (2 digits)
dobmonth		Date Of Birth - Month (2 digits)
dobyear		Date Of Birth - Year (4 digits)
ipaddress		Customer's web browser IP address
merchantpin		Merchant's security PIN
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.

Note: Refer to **ProcessResult** for transaction result.

Transaction Retrieve

processTransRetrieve (Trans Retrieve)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid	X	Required only If transaction was submitted under a sub id.
merchantordernumber	X	Customer's unique alpha-numeric number
merchantpin	X	Merchant Unique PIN. Required if enabled.
ipaddress	X	Customer's web browser IP address

Note: Refer to **ProcessResult** for transaction result.

Stored Profiles

processProfileSale (Profile Sale)

<table>
<tr><th>Field</th><th>Required</th><th>Description</th></tr>
<tr><td>acctid</td><td>X</td><td>Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.</td></tr>
<tr><td>subid</td><td></td><td>Required only If transaction was submitted under a sub id.</td></tr>
<tr><td>amount</td><td>X</td><td>Transaction dollar amount in US dollars in the form of 0.00.</td></tr>
<tr><td>userprofileid</td><td>X</td><td>User profile id of the original transaction</td></tr>
<tr><td>merchantpin</td><td rowspan="2"></td><td>Merchant Unique PIN. Required if enabled.</td></tr>
<tr><td>ipaddress</td><td>Customer's web browser IP address</td></tr>
<tr><td>last4digits</td><td>X</td><td>last4digits of the Credit card or ACH number</td></tr>
<tr><td>cvv2_cid</td><td></td><td>Credit card verification value cvv2/cvc2 code</td></tr>
<tr><td>shipaddress</td><td></td><td>
<table>
<tr><td>addr1</td><td>Consumer billing address</td></tr>
<tr><td>addr2</td><td>Second line of the consumer billing address</td></tr>
<tr><td>city</td><td>Consumer city</td></tr>
<tr><td>state</td><td>Consumer state or province</td></tr>
<tr><td>zip</td><td>Consumer Zip code or Postal code</td></tr>
<tr><td>country</td><td>Consumer country</td></tr>
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<tr><td>email</td><td></td><td>Consumer email address</td></tr>
<tr><td>memo</td><td></td><td>Miscellaneous information field</td></tr>
<tr><td>dlnum</td><td></td><td>Consumer driver's license number</td></tr>
<tr><td>ssnum</td><td></td><td>Consumer Social Security Number</td></tr>
<tr><td>dynamicdescriptor</td><td></td><td>This field will be passed all the way to the Consumers Credit Card statement. This is only available for TSYS.</td></tr>
<tr><td>recurring</td><td></td><td>
<table>
<tr><td>create</td><td>A value of 1 will create the recurring</td></tr>
<tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle
1 = Weekly Recurring Billing Cycle
2 = Monthly Recurring Billing Cycle
3 = Quarterly Recurring Billing Cycle
4 = Semi-Annual Recurring Billing Cycle
5 = Annual Recurring Billing Cycle
6 = Bi-Weekly Recurring Billing Cycle
7 = Bi-Annual Recurring Billing Cycle
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10 = Daily Recurring Billing Cycle
11 = Bi-Monthly Recurring Billing Cycle</td></tr>
<tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr>
<tr><td>start</td><td>Number of days to start the recur</td></tr>
</table>
</td></tr>
</table>

		amount	Recurring amount
customizedfields		custom1	Merchant's Custom field
		custom2	Merchant's Custom field
		custom3	Merchant's Custom field
		custom4	Merchant's Custom field
		custom5	Merchant's Custom field
		custom6	Merchant's Custom field
customizedemail		emailto	E-mail address to send the consumer e-mail receipt. Default is ci_email address.
		emailfrom	Return address on consumer's e-mail receipt. Default is null@atsbank.com.
		emailsubject	Subject line on consumer's receipt email. Default message is Payment Receipt #xzy.
		emailtext	Consumer's e-mail receipt body text. Default is a generic receipt message.
hotellodging		chargetypeamx	Code indicating whether the primary charge is Lodging, Restaurant, or Gift Shop. One character value: "1" Hotel, "2" Restaurant, "3" Gift Shop
		roomrateamt	Room rate dollar amount in US dollars in the form of 0.00.
		checkindate	The date (yymmdd) that the guest checked in to the hotel
		checkoutdate	The date (yymmdd) that the guest checked out of the hotel
		purchaseid	Hotel Folio number (25 characters alphanumeric)
		pproperty	Prestigious property indicatory. Used by participants in Visa's Prestigious Lodging Program. A transaction amount of $1 should be entered in the amount field if the merchant wishes the transaction to participate in the program. Number value: 100, 1000, or 1100
		extracharges	6 1-digit codes, each a partial or complete explanation of why charged amount differs from receipt cardholder received at checkout. Digit values: 0: no extra, 2: Restaurant, 3: Gift Shop, 4: Mini-bar, 5: Telephone, 6: Other, 7: Laundry. Example: "240000" indicates restaurant and mini-bar charges.
autorental		rentalagreementnum	25 alphanumeric chars. Note: Amex only uses the first 12 positions.
		rentalrate	Rate amount of rental.
		noshoworprogind	Indicates that the customer is being billed for a vehicle that was reserved but not actually rented. 1 char - Only submit when indicating no show. 1 - No show
		extracharges	0 - No extra charge 1 - Gasoline

		2 - Extra Mileage 3 - Late Return 4 - One Way Service Fee 5 - Parking or Moving Violation
		rentaldate: YY/MM/DD
		rentalreturndate: YY/MM/DD
		rentername: Name of Renter
		rentalreturncity: City it was returned in
		rentalreturnstatecountry: State/Country-ISO3
		rentalreturnlocationid: 10 chars location id
fsa		health care flag: 0 is off 1 is on rxamount: Qualified Prescription amount. clinicamount: Qualified Medical Clinic amount. visionamount: Qualified Vision amount. dentalamount: Qualified Dental amount.
purchasecardlevel2		pocustmerrefid: Cardholders Customer ID or Reference Number for the Purchase Card. taxamount: Total tax charged for the transaction. taxexempt: 1 = a tax exempt purchase. 0 = a taxable purchase.
merchantordernumber		Customer's unique alpha-numeric number
currencycode		Three-letter ISO4217 (refer to Appendix E)
manualrecurring		Default = 0, 1 = Recurring Transaction. To be used if the recurring transactions are handled by the Merchant's system.
ipaddress		Customer's web browser IP address
avs_override		Default = 0, 1 = Override AVS Settings
cvv2_override		Default = 0, 1 = Override CVV2 Settings
duplicate_override		Default = 0, 1 = Override Duplicate Transaction Settings resulting in a new transaction.
loadbalance_override		Default = 0, 1 = Override Subid LoadBalance Settings

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileDelete (Profile Delete)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.

subid		Required only If transaction was submitted under a sub id.
userprofileid	X	User profile id of the original transaction
merchantpin	X	Merchant Unique PIN. Required if enabled.
ipaddress	X	Customer's web browser IP address
last4digits	X	last4digits of the Credit card or ACH number

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileCredit (Profile Credit)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid	X	Required only If transaction was submitted under a sub id.
amount	X	Transaction dollar amount in US dollars in the form of 0.00.
userprofileid	X	User profile id of the original transaction
merchantpin	X	Merchant Unique PIN. Required if enabled.
last4digits	X	last4digits of the Credit card or ACH number
phone		Consumer phone number
email		Consumer email address
memo		Miscellaneous information field
dlnum		Consumer driver's license number
ssnum		Consumer Social Security Number
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
customizedemail		custom1: E-mail address to send the consumer e-mail receipt. Default is ci_email address. emailfrom: Return address on consumer's e-mail receipt. Default is null@atsbank.com. emailsubject: Subject line on consumer's receipt email. Default message is Payment Receipt #xzy. emailtext:

		Consumer's e-mail receipt body text. Default is a generic receipt message.
merchantordernumber		Customer's unique alpha-numeric number
currencycode		Three-letter ISO4217 (refer to Appendix E)
ipaddress		Customer's web browser IP address
recurring		create: A value of 1 will create the recurring billingcycle: 0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle billingmax: Number of max re-bills (1, 2, 3, -1 = unlimited) start: Number of days to start the recur amount: Recurring amount

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileAdd (Credit Card Profile Add)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
ccnum	X	Credit Card number keyed in (when a swipe reader is unable to detect the card number)
expmon	X	Expiration month keyed in (when a swipe reader is unable to detect the card number)
expyear	X	Expiration year keyed in (when a swipe reader is unable to detect the card number)
ccname	X	Consumer name as it appears on the card.
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cvv2_cid		Credit card verification value cvv2/cvc2 code
voiceauth		6 character approval codes obtained from the cardholder's issuing bank.
track1		Track 1 card swipe data

track2		Track 2 card swipe data
swipedata		Card swipe data (must include either track1 or track2 data)
cardpresent		A value of 1 indicates that the card was present
cardreaderpresent		A value of 1 indicates that a card reader was present
companyname		Your company name
billaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
shipaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
phone		Consumer phone number
email		Consumer email address
memo		Miscellaneous information field
dlnum		Consumer driver's license number
ssnum		Consumer Social Security Number
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
customizedemail		custom1: E-mail address to send the consumer e-mail receipt. Default is ci_email address. emailfrom: Return address on consumer's e-mail receipt. Default is null@atsbank.com. emailsubject: Subject line on consumer's receipt email. Default message is Payment Receipt #xzy. emailtext: Consumer's e-mail receipt body text. Default is a generic receipt message.

<table>
<tr><td>merchantordernumber</td><td></td><td>Customer's unique alpha-numeric number</td></tr>
<tr><td>currencycode</td><td></td><td>Three-letter ISO4217 (refer to Appendix E)</td></tr>
<tr><td>ipaddress</td><td></td><td>Customer's web browser IP address</td></tr>
<tr><td>recurring</td><td></td><td>
<table>
<tr><td>create</td><td>A value of 1 will create the recurring</td></tr>
<tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle
1 = Weekly Recurring Billing Cycle
2 = Monthly Recurring Billing Cycle
3 = Quarterly Recurring Billing Cycle
4 = Semi-Annual Recurring Billing Cycle
5 = Annual Recurring Billing Cycle
6 = Bi-Weekly Recurring Billing Cycle
7 = Bi-Annual Recurring Billing Cycle
8 = Quad Weekly (28 day) Recurring Billing Cycle
9 = One Time Recurring Billing Cycle
10 = Daily Recurring Billing Cycle
11 = Bi-Monthly Recurring Billing Cycle</td></tr>
<tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr>
<tr><td>start</td><td>Number of days to start the recur</td></tr>
<tr><td>amount</td><td>Recurring amount</td></tr>
</table>
</td></tr>
<tr><td>profileactiontype</td><td></td><td>0 - will validate the credit card with a $1.00 Authorization. If the Authorization is successful the card will be added to the vault. ACH and EXTACH payment types will only have basic validation performed on them before they are added to the vault.
1 - will run an Authorization of the amount requested. If the Authorization is successful the card will be added to the vault. The action is only allowed for credit cards.
2 - will run a Sale for the amount requested. If the Sale is successful the payment type will be added to the vault.
3 - will import the payment type to the vault and no other transaction will be run.
(Note) Not passing or setting this name/value will default to "0".</td></tr>
</table>

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileAdd (ACH Profile Add)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
ckname	X	Payer's name
ckaba	X	Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno	X	Check Number (serial number)
ckacct	X	Variable length numeric value without spaces for checking account number.

cktype	X	SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
subid		Merchant Sub ID. If unsure whether you have one, leave blank.
ckaccttype		"1" - Checking, "2" - Savings
companyname		Your company name
billaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
shipaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
phone		Consumer phone number
email		Consumer email address
memo		Miscellaneous information field
dlnum		Consumer driver's license number
ssnum		Consumer Social Security Number
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
customizedemail		emailto: E-mail address to send the consumer e-mail receipt. Default is ci_email address. emailfrom: Return address on consumer's e-mail receipt. Default is null@atsbank.com. emailsubject: Subject line on consumer's receipt email. Default message is Payment Receipt #xzy. emailtext: Consumer's e-mail receipt body text. Default is a generic receipt message.
merchantordernumber		Customer's unique alpha-numeric number

ckmicrdata		MICR data read from the MICR line
ckterminalcity		4 character abbreviated name for the city where the POS terminal is located. Required for POP transactions
ckterminalstate		2 character state abbreviation of the state where the POS terminal is located. Required for POP transactions
ckimagefront		Front image of the check. Maximum of 20K.
ckimageback		Back image of the check. Maximum of 20K.
ckimagetype		"TIF", "JPG", or "GIF". Only required if check image front or check image back is used.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
ipaddress		Customer's web browser IP address
recurring		<table><tr><td>create</td><td>A value of 1 will create the recurring</td></tr><tr><td>billingcycle</td><td>0 = No Recurring Billing Cycle 1 = Weekly Recurring Billing Cycle 2 = Monthly Recurring Billing Cycle 3 = Quarterly Recurring Billing Cycle 4 = Semi-Annual Recurring Billing Cycle 5 = Annual Recurring Billing Cycle 6 = Bi-Weekly Recurring Billing Cycle 7 = Bi-Annual Recurring Billing Cycle 8 = Quad Weekly (28 day) Recurring Billing Cycle 9 = One Time Recurring Billing Cycle 10 = Daily Recurring Billing Cycle 11 = Bi-Monthly Recurring Billing Cycle</td></tr><tr><td>billingmax</td><td>Number of max re-bills (1, 2, 3, -1 = unlimited)</td></tr><tr><td>start</td><td>Number of days to start the recur</td></tr><tr><td>amount</td><td>Recurring amount</td></tr></table>
profileactiontype		2 - will run a Sale for the amount requested. If the Sale is successful the payment type will be added to the vault. 3 - will import the payment type to the vault and no other transaction will be run. (Note) Values other than 2 or 3 will default to an Import Only.

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileUpdate (Profile Update)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
userprofileid	X	User profile id of the original transaction

merchantpin		Merchant Unique PIN. Required if enabled.
ipaddress		Customer's web browser IP address
last4digits	X	last4digits of the Credit card or ACH number
accttype	X	1 = CC, 2 = ACH
profilenobill	X	default is empty (PreAuth CC on Update), 1 = Do not PreAuth CC.
ccnum		Credit Card number keyed in (when a swipe reader is unable to detect the card number)
expmon		Expiration month keyed in (when a swipe reader is unable to detect the card number)
expyear		Expiration year keyed in (when a swipe reader is unable to detect the card number)
ccname		Consumer name as it appears on the card.
merchantpin		Merchant Unique PIN. If unsure whether you have one, leave blank.
cvv2_cid		Credit card verification value cvv2/cvc2 code
track1		Track 1 card swipe data
track2		Track 2 card swipe data
swipedata		Card swipe data (must include either track1 or track2 data)
cardpresent		A value of 1 indicates that the card was present
cardreaderpresent		A value of 1 indicates that a card reader was present
ckname		Account Name
ckaba		Nine-digit numeric value without spaces for checking account routing or ABA number.
ckno		Check Number (serial number)
ckacct		Variable length numeric value without spaces for checking account number.
cktype		SEC Code: "WEB" or "POP" or "ARC" or "TEL" or "PPD" or "ICL" or "RCK" or "BOC"
companyname		Your company name
billaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code country: Consumer country
shipaddress		addr1: Consumer billing address addr2: Second line of the consumer billing address city: Consumer city state: Consumer state or province zip: Consumer Zip code or Postal code

		country: Consumer country
phone		Consumer phone number
email		Consumer email address
memo		Miscellaneous information field
dlnum		Consumer driver's license number
ssnum		Consumer Social Security Number
customizedfields		custom1: Merchant's Custom field custom2: Merchant's Custom field custom3: Merchant's Custom field custom4: Merchant's Custom field custom5: Merchant's Custom field custom6: Merchant's Custom field
customizedemail		emailto: E-mail address to send the consumer e-mail receipt. Default is ci_email address. emailfrom: Return address on consumer's e-mail receipt. Default is null@atsbank.com. emailsubject: Subject line on consumer's receipt email. Default message is Payment Receipt #xzy. emailtext: Consumer's e-mail receipt body text. Default is a generic receipt message.
merchantordernumber		Customer's unique alpha-numeric number
ipaddress		Customer's web browser IP address

Note: Refer to **ProcessProfileResult** for transaction result.

processProfileRetrieve (Profile Retrieve)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
userprofileid	X	User profile id of the original transaction
merchantpin	X	Merchant Unique PIN. Required if enabled.
ipaddress		Customer's web browser IP address
last4digits	X	last4digits of the Credit card or ACH number

Note: Refer to **ProcessProfileResult** for transaction result.

processAccountLookup (AccountLookup)

Field	Required	Description
acctid	X	Use TEST0 for testing if you do not have an Account ID. Change to your Account ID for live transaction processing.
subid		Required only If transaction was submitted under a sub id.
ssnum	X	User profile id of the original transaction
billaddress	X	addr1 addr2 city state zip — Consumer Zip code or Postal code. Required for AccountLookup country
merchantpin		Merchant Unique PIN. Required if enabled.
ipaddress		Customer's web browser IP address

Note: Refer to **ProcessAccountLookupResult** for transaction result.

SOAP Response Objects

ProcessResult

Field	Description
status	Declined or Approved
result	Colon Delimited result code
total	Transaction dollar amount in US dollars in the form of 0.00.
orderid	Order key id of the original transaction.
historyid	History key id of the original transaction.
authcode	Colon Delimited result code
merchantordernumber	Customer's unique alpha-numeric number
acctid	If Subid LoadBalancing is enabled, it will return the Acctid it was processed under.
subid	If Subid LoadBalancing is enabled, it will return the Subid it was processed under.
transdate	Date and time of the transaction. The date/time is in ISO 8601 format: CCYY-MM-DDThh:mm:ss, with a suffix of "Z". The date/time is returned in coordinated universal time (UTC). For example, Neil Armstrong set foot on the moon at 1969-07-20T21:28:00-06:00 by the clock in Houston mission control which is also known as **1969-07-21T02:28:00Z**
paytype	The payment type used to process the transaction (ie, Master card, Visa, Discover, Amex, and Check).
duplicate	"0" or "1". Default of "0" will be returned. A "1" will indicate that a duplicate transaction has been detected. The result of the original transaction will be returned.
avsresult	AVS Result Code
cvv2result	CVV2 Result Code
batchnumber	Batch number the transaction was assigned to.
last4digits	Last four digits of the Credit card or ACH transaction
entrymethod	Indicates how a transaction was received.
partialapproval	Default = 0, 1 = A Partial amount was processed.
actioncode	Code identifying the partial approval amount.
balance	Balance Inquiry amount.
recurbillingamount	Recurring Amount
recurnextbillingdate	Date to Recur
recurbillingcycle	Recur Cycle
recurbillingmax	Max Number of Recurrings
recurcanceldate	Cancel Date of Recurring
recurlastattempted	Date of Last Recurring Attempted
recurbillingstatus	Status of Recurring
recurtotalaccept	Total Number of Approved recurrings processed.
achrcode	ACH Return Code

transactiontype	Type of Transaction
additionaldata	XML Document containing additional data. If exist, it will contain some if not all of the below elements within the: <datavalues> </datavalues> rcode merchant_dba_name merchant_dba_phone merchant_dba_addr merchant_dba_city merchant_dba_state terminalid product_description debit_trace_number systemauditracenumber merchantid sequence_number fuelmanmaxfuel fuelmanmaxmisc fuelmanmaxoil fuelmanmaxparts fuelmanmaxpurchase userprofileid

ProcessProfileResult

Field	Description
status	Declined or Approved
result	Colon Delimited result code
total	Transaction dollar amount in US dollars in the form of 0.00.
orderid	Order key id of the original transaction.
historyid	History key id of the original transaction.
authcode	Colon Delimited result code
merchantordernumber	Customer's unique alpha-numeric number
transdate	Date and time of the transaction. The date/time is in ISO 8601 format: CCYY-MM-DDThh:mm:ss, with a suffix of "Z". The date/time is returned in coordinated universal time (UTC). For example, Neil Armstrong set foot on the moon at 1969-07-20T21:28:00-06:00 by the clock in Houston mission control which is also known as **1969-07-21T02:28:00Z**
paytype	The payment type used to process the transaction (ie, Master card, Visa, Discover, Amex, and Check).

duplicate	"0" or "1". Default of "0" will be returned. A "1" will indicate that a duplicate transaction has been detected. The result of the original transaction will be returned.
userprofileid	User profile id of the transaction
last4digits	Last four digits of the Credit card or ACH transaction
acctid	If Subid LoadBalancing is enabled, it will return the Acctid it was processed under.
subid	If Subid LoadBalancing is enabled, it will return the Subid it was processed under.
avsresult	AVS Result Code
cvv2result	CVV2 Result Code
batchnumber	Batch number the transaction was assigned to.
entrymethod	Indicates how a transaction was received.
partialapproval	Default = 0, 1 = A Partial amount was processed.
actioncode	Code identifying the partial approval amount.
additionaldata	XML Document containing additional data. If exist, it will contain some if not all of the below elements within the: <datavalues> </datavalues> rcode merchant_dba_name merchant_dba_phone merchant_dba_addr merchant_dba_city merchant_dba_state terminalid product_description debit_trace_number systemauditracenumber merchantid sequence_number userprofileid
ccnum_decrypt	Unencrypted Credit card or ACH number
expdate_decrypt	Unencrypted Expiration date
billaddr1	Billing Address
billaddr2	Billing Address (extended)
billcity	Billing City
billstate	Billing State

ProcessAccountLookupResult

Field	Description
status	Declined or Approved
result	Colon Delimited result code
orderid	Order key id of the original transaction.
historyid	History key id of the original transaction.
authcode	Colon Delimited result code
paytype	The payment type used to process the transaction (ie, Master card, Visa, Discover, Amex, and Check).
last4digits	Last four digits of the Credit card or ACH transaction
entrymethod	Indicates how a transaction was received.
transactiontype	Type of Transaction
firstname	Customer's First Name
lastname	Customer's Last Name
phone	Customer's phone number
addr1	Customer's address line 1
addr2	Customer's address line 2
city	Customer's City
state	Customer's State
zipcode	Customer's zipcode / postal code
country	Customer's Country
additionaldata	XML Document containing additional data. If exist, it will contain some if not all of the below elements within the: <datavalues> </datavalues> rcode merchant_dba_name merchant_dba_phone merchant_dba_addr merchant_dba_city merchant_dba_state terminalid product_description debit_trace_number systemauditracenumber merchantid sequence_number userprofileid

Security

SOAP over HTTPS (Required)

SOAP transactions typically are transmitted in clear text, meaning that anyone with access to the line can gather data about the communication. SSL encrypting of the transaction ensures that data is kept confidential and secure.

Developer tasks:

1. Download the WSDL.
2. Use the available toolkits available for your language to generate the required files fromt the WSDL. Set all the required fields and establish the HTTPS connection to the Merchant Solutions International, Inc transaction web services host.
3. Process the response and store/present the results accordling.

Merchant PIN (Recommended)

Unique merchant PIN (account password) is issued to the merchant, which is then included in all transactions submitted via SOAP methods using merchant pin element.

Sample SOAP Request/Response

Sample Client SOAP Request

```
<?xml version="1.0" encoding="UTF-8" ?>
<soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <ns1:processCCSale
        soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
        xmlns:ns1="urn:MPTransProcess">
      <ccinfohref="#id0" />
    </ns1:processCCSale>
    <multiRef id="id0" soapenc:root="0"
        soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
        xmlns:ns2="urn:MPTransProcess"
        xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
        xsi:type="ns2:CreditCardInfo">
      <acctid xsi:type="xsd:string">TEST0</acctid>
      <accountkey xsi:nil="true" xsi:type="xsd:string" />
      <subid xsi:nil="true" xsi:type="xsd:string" />
      <ccname xsi:type="xsd:string">JohnDoe Soap</ccname>
      <swipedata xsi:nil="true" xsi:type="xsd:string" />
      <cardpresent href="#id1" />
      <cardreaderpresent href="#id2" />
      <voiceauth xsi:nil="true" xsi:type="xsd:string" />
      <track1 xsi:nil="true" xsi:type="xsd:string" />
      <track2 xsi:nil="true" xsi:type="xsd:string" />
      <ccnum xsi:type="xsd:string">5454545454545454</ccnum>
      <cctype xsi:type="xsd:string">Visa</cctype>
      <expmon href="#id3" />
      <expyear href="#id4" />
      <cvv2 href="#id5" />
      <amount href="#id6" />
      <merchantordernumber xsi:nil="true" xsi:type="xsd:string" />
      <companyname xsi:nil="true" xsi:type="xsd:string" />
      <billaddress href="#id7" />
      <shipaddress href="#id7" />
      <email xsi:nil="true" xsi:type="xsd:string" />
      <dlnum xsi:nil="true" xsi:type="xsd:string" />
      <ssnum xsi:nil="true" xsi:type="xsd:string" />
      <phone xsi:nil="true" xsi:type="xsd:string" />
      <memo xsi:nil="true" xsi:type="xsd:string" />
      <customizedemail href="#id8" />
      <recurring href="#id9" />
      <ipaddress xsi:nil="true" xsi:type="xsd:string" />
    </multiRef>
    <multiRef id="id9" soapenc:root="0"
        soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
        xmlns:ns3="urn:MPTransProcess"
        xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
        xsi:type="ns3:Recur">
      <create href="#id10" />
      <billingcycle href="#id11" />
      <billingmax href="#id12" />
      <start href="#id13" />
      <amount href="#id14" />
    </multiRef>
    <multiRef id="id8" soapenc:root="0"
        soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
        xmlns:ns4="urn:MPTransProcess"
        xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
```

```
      xsi:type="ns4:customEmail">
    <emailto xsi:type="xsd:string">vpat@comcast.net</emailto>
    <emailfrom xsi:type="xsd:string">null@atsbank.com</emailfrom>
    <emailsubject xsi:type="xsd:string">Transaction Service Test</emailsubject>
    <emailtext xsi:type="xsd:string">This is just a test</emailtext>
  </multiRef>
  <multiRef id="id5" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
  <multiRef id="id3" soapenc:root="0"
    soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
    xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
    xsi:type="xsd:int">5</multiRef>
  <multiRef id="id1" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">1</multiRef>
  <multiRef id="id6" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:float">2.89</multiRef>
  <multiRef id="id7" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:ns5="urn:MPTransProcess"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="ns5:address">
    <addr1 xsi:type="xsd:string">1110 Main Ave</addr1>
    <addr2 xsi:nil="true" xsi:type="xsd:string" />
    <city xsi:type="xsd:string">Los Angeles</city>
    <state xsi:type="xsd:string">California</state>
    <zip xsi:type="xsd:string">90266</zip>
    <country xsi:type="xsd:string">US</country>
  </multiRef>
  <multiRef id="id2" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
  <multiRef id="id4" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">6</multiRef>
  <multiRef id="id10" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
  <multiRef id="id12" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
  <multiRef id="id13" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
  <multiRef id="id14" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:float">0.0</multiRef>
  <multiRef id="id11" soapenc:root="0"
      soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
      xsi:type="xsd:int">0</multiRef>
 </soapenv:Body>
</soapenv:Envelope>
```

Sample Client SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsd="http://www.w3.org/2001/XMLSc
<soapenv:Body>
<ns1:processCCSaleResponse soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" xmlns:ns1="http://MPTr
<processCCSaleReturn href="#id0"/>
</ns1:processCCSaleResponse>
<multiRef id="id0" soapenc:root="0" soapenv:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" xmlns:ns2="ur
<status xsi:type="xsd:string">Approved</status>
<result xsi:type="xsd:string">AVSSALE:TEST:::184913762:N::U</result>
<historyid xsi:type="xsd:string">184913762</historyid>
<orderid xsi:type="xsd:string">137037436</orderid>
<refcode xsi:type="xsd:string">VITL</refcode>
<authcode xsi:type="xsd:string">AVSSALE:TEST:::184913762:N::U</authcode>
<total xsi:type="xsd:float">1.01</total>
<merchantordernumber xsi:type="xsd:string"/>
<acctid xsi:type="xsd:string"/>
<subid xsi:type="xsd:string"/>
<transdate xsi:type="xsd:dateTime">2011-04-11T17:46:40.000Z</transdate>
<paytype xsi:type="xsd:string">Mastercard</paytype>
<duplicate xsi:type="xsd:int">0</duplicate>
<avsresult xsi:type="xsd:string">N</avsresult>
<cvv2result xsi:type="xsd:string">U</cvv2result>
<batchnumber xsi:type="xsd:string"/>
<last4digits xsi:type="xsd:string">5454</last4digits>
<entrymethod xsi:type="xsd:string">KEYED</entrymethod>
<partialapproval xsi:type="xsd:int">0</partialapproval>
<actioncode xsi:type="xsd:string"/>
<balance xsi:type="xsd:string"/>
<recurbillingamount xsi:type="xsd:string"/>
<recurnextbillingdate xsi:type="xsd:string"/>
<recurbillingcycle xsi:type="xsd:string"/>
<recurbillingmax xsi:type="xsd:string"/>
<recurcanceldate xsi:type="xsd:string"/>
<recurlastattempted xsi:type="xsd:string"/>
<recurbillingstatus xsi:type="xsd:string"/>
<recurtotalaccept xsi:type="xsd:string"/>
<achrcode xsi:nil="true" xsi:type="xsd:string"/>
<transactiontype xsi:nil="true" xsi:type="xsd:string"/>
<additionaldata xsi:type="xsd:string"><datavalues/></additionaldata>
</multiRef>
</soapenv:Body>
</soapenv:Envelope>
```

Sample Client Code

Example 1: Java

Use Apache Axis to generate the necessary objects. Use WSDL2Java to generate the client service bindings (a number of soap client classes):

```
set CLASSPATH=%CLASSPATH%;C:\axis-1_2RC2\lib\axis.jar;C:\axis-1_2RC2\lib\jaxrpc.jar;
          C:\axis-1_2RC2\lib\commons-logging.jar;C:\axis-1_2RC2\lib\commons-discovery.jar;
          C:\axis-1_2RC2\lib\saaj.jar;C:\axis-1_2RC2\lib\wsdl4j.jar;

java org.apache.axis.wsdl.WSDL2Java -t -s . \
    -N https://trans.merchantsolution.com/MPWeb/services/TransactionService \
    MPTransProcess https://trans.merchantsolution.com/MPWeb/services/TransactionService?wsdl
```

1. The -t option causes the emitter to generate a *Test Case.java file that hooks into the test harness. This file is operational without any additional changes. Copy the *Test Case.java file into the same directory as your wsdl file. (Ideally only the Java files that are changed need to be in your directory.) So this file is not needed, but please makes sure to modify your <wsdl2java ...> clause (described below) to emit a test case.
2. The -s option causes the emitter to generate a *SOAP BindingImpl.java file. The Java file contains empty methods for the service. You probably want to fill them in with your own logic. Copy the *SOAP BindingImpl.java file into the same directory as your wsdl file. (If no changes are needed in the Java file, you don't need to save it. But you will need to make sure that your <wsdl2java ...> clause generates a skeleton).
3. Remove all of the Java files that don't require modification. So you should have three files in your directory (wsdl file, *Test Case.java, and *SOAP BindingImpl.java).

Sample Client Servlet

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
import MPTransProcess.CreditCardInfo;
import MPTransProcess.ProcessResult;
import MPTransProcess.CustomEmail;
import MPTransProcess.Recur;
import java.net.URL;
import MPTransProcess.Address;
import java.security.Security;

public class testAxisClient extends HttpServlet {

  public testAxisClient() {
    try {
      jbInit();
    } catch (Exception ex) {
      ex.printStackTrace();
    }
  }

  private static final String CONTENT_TYPE = "text/html";

  // Initialize global variables
  public void init() throws ServletException {
  }

  // Process the HTTP Get request
  public void doGet(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    response.setContentType(CONTENT_TYPE);
    PrintWriter out = response.getWriter();
    out.println("<html>");
```

```
    out.println("<head><title>TestTransactionService</title></head>");
    out.println("<body bgcolor=\"#ffffff\">");

    MPTransProcess.TransactionSOAPBindingStub binding
    try {
      binding = (MPTransProcess.TransactionSOAPBindingStub)
        new MPTransProcess.TransactionServiceLocator().getMPTransactionService();
    }
    catch (javax.xml.rpc.ServiceException jre) {
      if (jre.getLinkedCause() != null) {
        jre.getLinkedCause().printStackTrace();
      }
      throw new junit.framework.AssertionFailedError("JAX-RPC ServiceException caught: " + jre);
    }

    // Test operation
    MPTransProcess.ProcessResult value = null;
    CreditCardInfo ci = new CreditCardInfo();
    ProcessResult pr = new ProcessResult();
    ci.setAcctid("TEST0");
    ci.setCcname("JohnDoe Soap");
    ci.setCcnum("5454545454545454");
    ci.setCctype("Visa");
    ci.setExpmon(05);
    ci.setExpyear(06);
    ci.setAmount(2.89f);
    // Optional elements
    Address addrbill = new Address();
    addrbill.setAddr1("1110 Main Ave");
    addrbill.setCity("Los Angeles");
    addrbill.setCountry("US");
    addrbill.setState("California");
    addrbill.setZip("90266");
    ci.setBilladdress(addrbill);
    ci.setShipaddress(addrbill);
    CustomEmail cmail = new CustomEmail();
    cmail.setEmailto("null@atsbank.com");
    cmail.setEmailfrom("null@atsbank.com");
    cmail.setEmailtext("This is just a test");
    cmail.setEmailsubject("Transaction Service Test");
    ci.setCustomizedemail(cmail);
    Recur rec = new Recur();
    rec.setCreate(0);
    ci.setRecurring(rec);
    value = binding.processCCSale(ci);
    out.println("Transkeyid:"+value.getHistoryid());
    out.println("<BR>");
    out.println("Orderkeyid:"+value.getOrderid());
    out.println("<BR>");
    out.println("Result:"+value.getResult());
    out.println("<BR>");
    out.println("Amount:"+value.getTotal());
    out.println("<BR>");
    out.println("Status (1=good, 0=system Error):"+value.getStatus());
    out.println("<BR>");
    out.println("</body></html>");
  }
  // Process the HTTP Post request
  public void doPost(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    doGet(request, response);
  }
  //Clean up resources
  public void destroy() {
  }
}
```

Example 2: C#

Below example was tested on Visual Studio 2005.

Create a new Project. Once the project has been created, you can load the WSDL by "right mouse" click on "Web References", "Add Web Reference", "Browse web services on local machine", then change the "Add Reference Name" to anything you want (below example uses "Merchant Solutions International, Inc" and click on "Add Reference".

Sample C# Client

```
using System;
using ProcessSoapTrans.MerchantPartners;

TransactionSOAPBindingImplService bindings = new TransactionSOAPBindingImplService();
CreditCardInfo ccinfo = new CreditCardInfo();
ProcessResult pResult = new ProcessResult();

ccinfo.acctid = "TEST0";
ccinfo.ccname = "Tony Test";
ccinfo.ccnum = "5454545454545454";
ccinfo.amount = 3.00f;
ccinfo.expmon = 03;
ccinfo.expyear = 2010;

Console.WriteLine("Processing...");
pResult = bindings.processCCSale(ccinfo);
Console.WriteLine("status: " + pResult.status);
Console.WriteLine("result: " + pResult.result);
```

Example 3: PHP

Below example uses NuSOAP.

Sample PHP Client

```
<?php
require_once('nusoap-0.9.5/lib/nusoap.php');

$wsdl = "TransactionServices.xml";

$client = new nusoap_client($wsdl, 'wsdl');

$param = array('acctid' => 'test0',
               'subid' => '',
               'ccname' => 'tony test',
               'ccnum' => '5454545454545454',
               'amount' => 1.01,
               'expmon' => 07,
               'expyear' => '2012');


$result = $client->call('processCCSale', array('ccinfo'=>$param));
// $err = $client->getError();

print_r($result);


?>
```

Appendix A: Transaction Service WSDL

Refer to: Transaction Service.xml

Appendix B: Transaction Authorization Specification

Credit Card Approval Response Format

The transaction approval authorization response message consists of a string of eight fields delimited by the colon ":" character.
Example:

```
AVSSALE:123456:1234567890123:9:12345678:Y:AUTHNETSPECIFIC:M:PARTIAL
```

The following table describes each of the fields returned in the approval response message.

Field	Description	Value
Transaction Type	Type of transaction submitted	SALE AVSSALE AUTH AVSAUTH POST AVSPOST VOICEPOST VOID CREDIT
Authorization Code	The six digit authorization or approval code provided by the authorizing network	Varies
Reference Number	Additional reference information provided by the authorizing network	Varies
Batch Number	Batch settlement number in which this transaction is included	Number
Transaction ID	Unique number assigned by the Online Commerce Suite to this transaction.	Number
AVS Result Code	Result code generated by the Address Verification System.	See Appendix B: AVS response codes
Auth Net Specific	Miscellaneous auth net message	
cvv2_cid/CVC2 Result Code	One character result code generated by the CVV2/CVC2 system	See Appendix C: CVV2/CVC2 Response Codes
PARTIAL AUTH	Contains the ":PARTIAL" string if it's a Partial Auth	(Auth Net Specific). The "total" will reflect the approved Partial Auth Amount.

Credit Card Decline Response Format

The transaction decline authorization response message consists of the string "DECLINED" followed by two fields delimited by the colon ":" character.
Example:

```
DECLINED:1234567890:TEXT RESPONSE
```

The following table describes each of the fields returned in the approval response message.

Field	Description	Value
Transaction Result	Result of the transaction	DECLINED
Decline Code	10 digit decline code.	First Digit: 0 Authorizing network declined the transaction 1 Gateway declined the transaction 2 Authorizing network returned an error, forcing a decline 3 Gateway returned an error, forcing a decline Digits 2-10: Internal decline number
Text Response	Text message indicating the reason for the decline.	Varies

Appendix C: AVS Response Codes

The following table defines AVS response codes returned from the Address Verification System.

Response Code	Definition
A	Street addresses matches, but the ZIP code does not. The first five numerical characters contained in the address match. However, the ZIP code does not match.
E	Ineligible transaction. The card issuing institution is not supporting AVS on the card in question.
N	Neither address nor ZIP matches. The first five numerical characters contained in the address do not match, and the ZIP code does not match.
R	Retry (system unavailable or timed out).
S	Card type not supported. The card type for this transaction is not supported by AVS. AVS can verify addresses for Visa cards, MasterCard, proprietary cards, and private label transactions.
U	Address information unavailable. The address information was not available at the issuer.
W	9 digit ZIP code match, address does not. The nine digit ZIP code matches that stored at the issuer. However, the first five numerical characters contained in the address do not match.
X	Exact match (9 digit zip and address) Both the nine digit postal ZIP code as well as the first five numerical characters contained in the address match.
Y	Address and 5 digits zip match. Both the five digit postal ZIP code as well as the first five numerical characters contained in the address match.
Z	5 digit ZIP matches, but the address does not. The five digit postal ZIP code matches that stored at the VIC or card issuer's center. However, the first five numerical characters contained in the address do not match.
Foreign Codes:	
B	Street address matches for international transaction. Postal Code not verified due to incompatible formats.
C	Street address and Postal Code not verified for international transaction due to incompatible format.
D	Street address and Postal Code match for international transaction.
P	Postal Code match for international transaction. Street address not verified due to incompatible formats.

Appendix D: CVV2/CVC2 Response Codes

The following table defines CVV2/CVC2 response codes returned from the credit card authorizing network.

Response Code	Definition
Space	CVV2 processing not requested
M	CVV2/CVC2 Match
N	CVV2/CVC2 not matched
P	Not processed
S	CVV2 should be printed on the card, but it was indicated that the value was not present
U	Issuer does not support CVV2
X	Service provider did not respond

Appendix E: Country and Currency Code

You must first verify that your credit card merchant account processor and the gateway support the currency code submitted prior to attempting any transactions other than those in **"U.S."** dollars.

The following table defines the country, currency code, and the requirement of decimals in amount fields. **"NONE"** indicates that the decimal is not required when setting the amount.

Country	Currency Code	Decimal
Argentina	ARS	
Australia	AUD	
Christmas Island	AUD	
Cocos (Keeling) Islands	AUD	
Heard and McDonald Islands	AUD	
Kiribati	AUD	
Nauru	AUD	
Norfolk Island	AUD	
Tuvalu	AUD	
Aruba	AWG	
Azerbaijan	AZN	
Bulgaria	BGN	
Bermuda	BMD	
Singapore	BND	
Bolivia	BOB	
Bolivia	BOV	
Brazil	BRL	
Bahamas	BSD	
Bhutan	BTN	
Botswana	BWP	
Belarus	BYR	NONE
Democratic Republic of Congo	CDF	
Switzerland	CHF	
Liechtenstein	CHF	
Chile	CLP	NONE
China	CNY	
Colombia	COP	
Colombia	COU	
Costa Rica	CRC	
Cuba	CUP	

Country	Currency Code	Decimal
Cape Verde	CVE	
Czech Republic	CZK	
Djibouti	DJF	NONE
Denmark	DKK	
Greenland	DKK	
Algeria	DZD	
Estonia	EEK	
Egypt	EGP	
Eritrea	ERN	
Ethiopia	ETB	
Andorra	EUR	
Kosovo	EUR	
Monaco	EUR	
Montenegro	EUR	
San Marino	EUR	
Vatican	EUR	
Belgium	EUR	
Cyprus	EUR	
Finland	EUR	
France	EUR	
Germany	EUR	
Ireland	EUR	
Italy	EUR	
Luxembourg	EUR	
Malta	EUR	
Portugal	EUR	
Slovenia	EUR	
Spain	EUR	
Fiji	FJD	
Falkland Islands	FKP	
Isle of Man	GBP	
Georgia	GEL	
Ghana	GHS	
Gibraltar	GIP	
Gambia	GMD	

Country	Currency Code	Decimal
Guinea	GNF	NONE
Guatemala	GTQ	
Guyana	GYD	
Croatia	HRK	
Haiti	HTG	
Hungary	HUF	
Indonesia	IDR	
Israel	ILS	
Bhutan	INR	
India	INR	
Iraq	IQD	
Iran	IRR	
Iceland	ISK	NONE
Jamaica	JMD	
Jordan	JOD	
Japan	JPY	NONE
Kenya	KES	
Kyrgyzstan	KGS	
Cambodia	KHR	
Comoros	KMF	NONE
North Korea	KPW	
South Korea	KRW	NONE
Kuwait	KWD	
Cayman Islands	KYD	
Kazakhstan	KZT	
Laos	LAK	
Lebanon	LBP	
Sri Lanka	LKR	
Liberia	LRD	
Libya	LYD	
Moldova	MDL	
Nicaragua	NIO	
Philippines	PHP	
Romania	RON	
Serbia	RSD	

Country	Currency Code	Decimal
Russia	RUB	
Slovakia	SKK	
Somalia	SOS	
Central African Republic	XAF	
Gabon	XAF	
Anguilla	XCD	
Antigua and Barbuda	XCD	
Dominica	XCD	
Grenada	XCD	
Montserrat	XCD	
Benin	XOF	
Burkina Faso	XOF	
Yemen	YER	
South Africa	ZAR	
Zambia	ZMK	
Zimbabwe	ZWD	
Canada	CAD	
Bosnia and Herzegovina	BAM	
Barbados	BBD	
Bangladesh	BDT	
Bahrain	BHD	
Burundi	BIF	NONE
Brunei	BND	
Faroe Islands	DKK	
British Indian Ocean Territory	GBP	
Hong Kong	HKD	
Honduras	HNL	
Lesotho	LSL	
Morocco	MAD	
Western Sahara	MAD	
Madagascar	MGA	
The former Yugoslav Republic of Macedonia	MKD	
Myanmar	MMK	
Mongolia	MNT	
Macau	MOP	

Country	Currency Code	Decimal
Mauritania	MRO	
Mauritius	MUR	
Maldives	MVR	
Malawi	MWK	
Malaysia	MYR	
Mozambique	MZN	
Namibia	NAD	
Nigeria	NGN	
Norway	NOK	
Nepal	NPR	
Cook Islands	NZD	
New Zealand	NZD	
Niue	NZD	
Pitcairn	NZD	
Tokelau	NZD	
Oman	OMR	
Panama	PAB	
Peru	PEN	
Papua New Guinea	PGK	
Pakistan	PKR	
Poland	PLN	
Paraguay	PYG	NONE
Qatar	QAR	
Rwanda	RWF	NONE
Saudi Arabia	SAR	
Solomon Islands	SBD	
Seychelles	SCR	
Sudan	SDG	
Sweden	SEK	
Singapore	SGD	
Brunei	SGD	
Saint Helena	SHP	
Sierra Leone	SLL	
Suriname	SRD	
SÃ£o TomÃ© and PrÃ–ncipe	STD	

Country	Currency Code	Decimal
Syria	SYP	
Swaziland	SZL	
Thailand	THB	
Tajikistan	TJS	
Turkmenistan	TMM	
Tunisia	TND	
Tonga	TOP	
Turkey	TRY	
Cyprus	TRY	
Trinidad and Tobago	TTD	
Taiwan	TWD	
Tanzania	TZS	
Ukraine	UAH	
Uganda	UGX	
American Samoa	USD	
British Indian Ocean Territory	USD	
Ecuador	USD	
El Salvador	USD	
Guam	USD	
Haiti	USD	
Marshall Islands	USD	
Micronesia	USD	
Northern Mariana Islands	USD	
Palau	USD	
Panama	USD	
Puerto Rico	USD	
East Timor	USD	
Turks and Caicos Islands	USD	
United States	USD	
United States Virgin Islands	USD	
Bermuda	USD	
Uruguay	UYU	
Uzbekistan	UZS	
Venezuela	VEF	
Vietnam	VND	

Country	Currency Code	Decimal
Vanuatu	VUV	NONE
Samoa	WST	
Cameroon	XAF	
Congo	XAF	
Chad	XAF	
Equatorial Guinea	XAF	NONE
Saint Kitts and Nevis	XCD	
Saint Lucia	XCD	
Saint Vincent and the Grenadines	XCD	
CÃ´te d'Ivoire	XOF	
Guinea-Bissau	XOF	
Mali	XOF	
Niger	XOF	
Senegal	XOF	
Togo	XOF	
French Polynesia	XPF	NONE
New Caledonia	XPF	NONE
Wallis and Futuna	XPF	NONE
United Kingdom	GBP	
Belize	BZD	
Dominican Republic	DOP	
Austria	EUR	
Greece	EUR	
Netherlands	EUR	
United Arab Emirates	AED	
Afghanistan	AFN	
Albania	ALL	
Armenia	AMD	
Netherlands Antilles	ANG	
Angola	AOA	
Latvia	LVL	
South Georgia and the South Sandwich Islands	GBP	
Lithuania	LTL	
Mexico	MXN	

Appendix F: LineItems

The following table defines how the LineItems is formated.
Line items are delimited by a "|" (Pipe) and should look like: LineItem | LineItem | LineItem (Spaces added for readability)
Each Line item can contain multiple Item Product Codes. Item Product Codes (IPC) are delimited by ";" (Semi-Colon) and should look like:
IPC ; IPC ; IPC ; | IPC ; IPC ; IPC ; IPC (Spaces added for readability).
Each IPC has a value that is delimited by ":" (Full Colon). A full example is of two line items with multiple Item product codes per line item is as follows:

512:450;513:1.0000;518:3.00000;510:3.00|512:950;513:1.0000;518:1.00000;510:1.00

Item Product Code	Description	Fleet	Visa	MCard
501	Alternate Item Number			x
502	Debit/Credit Indicator			x
503	Discount Amount; 9(6)v99			x
504	Discount Indicator			x
505	Discount Per Line; 99v99		x	
506	Extended Item Amount; 9(6)v99			x
507	Item Commodity Code		x	
508	Item Description		x	x
510	Line Item Total Cost; 9(6)v99	x	x	
511	Net/Gross Indicator			x
512	Product Code (See Appendix F-1)	x	x	x
513	Quantity/Num Units; 9(3)v9999	x	x	x
514	Service Code/Level (See Appendix F-2)	x		
515	Alternate Tax Amount; 99v99			x
516	Tax Rate Applied; 99v99			x
517	Tax Rate Applied			x
518	Unit Cost/Price; 9(6)v9999	x	x	x
519	Unit of Measure (See Appendix F-3)	x	x	x
520	VAT/Tax Amount; 9(6)v99		x	
521	VAT/Tax Rate; 99v99		x	
522	Discount Rate; 9(6)v99			x

Appendix F-1: Product Codes

Product Code	Description
000	Not Used
001-099	Fuels
001	Unleaded Regular

002	Unleaded Plus
003	Unleaded Super
004	Unleaded 4
005	Unleaded 5
006	Unleaded Methanol (5.7%)
007	Unleaded Plus Methanol (5.7%)
008	Super Unleaded Methanol (5.7% blend)
009	Unleaded Methanol (7.7%)
010	Unleaded Plus Methanol (7.7% blend)
011	Unleaded Ethanol (5.7%)
012	Unleaded Plus Ethanol (5.7%)
013	Super Unleaded Ethanol (5.7%)
014	Unleaded Ethanol (7.7%)
015	Unleaded Plus Ethanol (7.7%)
016	Methanol / Leaded
017	Ethanol / Leaded
018	Leaded
019	Regular Diesel #2
020	Premium Diesel #2
021	Diesel #1
022	Compressed Natural Gas
023	Liquid Propane Gas
024	Liquid Natural Gas
025	M-85
026	E-85
027	Unleaded / Reformulated 1
028	Unleaded / Reformulated 2
029	Unleaded / Reformulated 3
030	Unleaded / Reformulated 4
031	Unleaded / Reformulated 5
032	Diesel Off-Road (# 1 and #2 Non-Taxable)
033	Ultra Low Sulfur Diesel Off-Road (Non-Taxable)
034	Biodiesel Blend Off-Road (Non-Taxable)
035	Ultra Low Sulfur Biodiesel Off-Road (Non-Taxable)
036	Racing Fuel
037	Super Unleaded Methanol (7.7%)

038	Unleaded Methanol (10%)
039	Unleaded Plus Methanol (10%)
040	Dyed Diesel
041	Super Unleaded Methanol (10%)
042 - 044	Undefined Fuel
045	B2 Diesel Blend 2% Biodiesel
046	B5 Diesel Blend 5% Biodiesel
047	B10 Diesel Blend 10% Biodiesel
047	B11 Diesel Blend 11% Biodiesel
049	B15 Diesel Blend 15% Biodiesel
050	B20 Diesel Blend 20% Biodiesel
051	B100 Diesel Blend 100% Biodiesel
052	Ultra Low Sulfur #1
053	Ultra Low Sulfur #2
054	Ultra Low Sulfur Premium Diesel #2
055	Ultra Low Sulfur Biodiesel Blend 2%
056	Ultra Low Sulfur Biodiesel Blend 5%
057	Ultra Low Sulfur Biodiesel Blend 10%
058	Ultra Low Sulfur Biodiesel Blend 11%
059	Ultra Low Sulfur Biodiesel Blend 15%
060	Ultra Low Sulfur Biodiesel Blend 20%
061	Ultra Low Sulfur Biodiesel Blend 100%
062 - 098	Undefined Fuel
099	Miscellaneous Fuel
100-149	Auto Products / Services
100	General Merchandise
101	Motor Oil
102	Car Wash
103	Oil Change
104	Oil Filter
105	Work Order
106	Anti-Freeze
107	Washer Fluid
108	Brake Fluid
109	Tires
110	Federal Excise Tax / Tires

111	Tire Rotation
112	Batteries
113	Lube
114	Inspection
115	Labor
116	Towing
117	Road Service
118	Auto Accessories
119	Auto Parts
120	Preventive Maintenance
121	Air Conditioning Service
122	Engine Service
123	Transmission Service
124	Brake Service
125	Exhaust Service
126	Body Work
127	Automotive Glass
128	Synthetic Oil
129	Lamps
130	Wipers
131	Hoses
132	Tire-related (Wheel Balance, Valve Stem)
133	Repairs
134	Service Package
135	Automotive Parking
136	Truck Tank Cleaning
137	Other Lubricants
138 - 148	Automotive Fuel Additives/Treatment (injected)
149	Miscellaneous Part/Services
150-199	Aviation Fuels
150	Jet Fuel
151	Aviation Fuel Regular
152	Aviation Fuel Premium
153	Aviation Fuel JP8
154	Aviation Fuel 4
155	Aviation Fuel 5

156 - 198	Undefined Aviation Fuel
199	Miscellaneous
200-249	Aviation Products / Services
200	Storage
201	Aircraft Ground Handling
202	Aircraft Ground Power Unit
203	Aircraft Labor
204	Aircraft Work Order
205	Aircraft Maintenance
206	Aircraft Service
207	Transportation
208	De-icing
209	Ramp Fees
210	Catering
211	Hangar Fee
212	Landing Fee
213	Call Out Fee
214	Aircraft Rental
215	Instruction Fee
216	Flight Plans/ Weather Brief
217	Charter Fee
218	Communication Fee
219	Aircraft Cleaning
220	Cargo Handling
221	Aircraft Accessories
222	Pilot Supplies
223	Aircraft Parking Fee
224	Aircraft Tiedown Fees
225	Aircraft Sanitation Fees
226	Aircraft Fuel Additive
227 - 248	Undefined Aviation
249	Miscellaneous Aviation
300-349	Marine Products / Services
300	Marine Services
301	Marine Labor
302	Marine Work Order

303	Launch Fee
304	Slip Rental
305 - 348	Undefined Marine Services
349	Miscellaneous Marine Service
350-449	Other Fuels
350	Kerosene - Low Sulfur
351	White Gas
352	Heating Oil
353	Bottled Propane
354	Other Fuel / Non-taxable
355	Kerosene - Ultra Low Sulfur
356	Kerosene -Low Sulfur (Non-Taxable)
357	Kerosene -Ultra Low Sulfur (Non-Taxable)
358 - 448	Undefined
449	Miscellaneous / Other Fuel
450 - 599	Merchandise
450	General Merchandise
451	Cigarettes
452	Tobacco - Other
453	Pkg Bvgs / Non-alcoholic
454	Hot Dispensed Bvgs
455	Cold Dispensed Bvgs
456	Frozen dispensed Bvgs
457	Other Beverages
458	Ice
459	Packaged Ice Cream
460	Salty Snacks
461	Alternative Snacks
462	Sweet Snacks
463	Candy
464	Fluid Milk Product
465	Other Dairy
466	Juice
467	Edible Groceries
468	Non-edible Groceries
469	Perishable Groceries

470	Publications
471	Undefined
472	Undefined
473	Healthy/Beauty Care
474	Beer (Alcoholic)
475	Beer (Non-alcoholic)
476	Wine
477	Liquor
478	Deli Sandwiches
479	Prepared Food
480	Deli Items
481	Food Service
482	Lottery (Instant)
483	Lottery (Online)
484	Lottery (Other)
485	General
486	Vendor Payment
487	Payroll Check
488	Gift Certificate
489	Refund Check
490	Official Check
491	Rebate Check
492	Dividend Check
493	Utility Check
494 - 502	Undefined
503	Store Services
504	Home Delivery
505	Prepaid Cards- Purchase
506	Prepaid Cards-Activation
507	Membership/Loyalty
508 - 599	Undefined
600 - 699	Reserved
900 - 949	Negative Transactions
900	Discount 1
901	Discount 2
902	Discount 3

903	Discount 4
904	Discount 5
905	Coupon 1
906	Coupon 2
907	Coupon 3
908	Coupon 4
909	Coupon 5
910	Lotto Payout (Instant)
911	Lotto Payout (Online)
912	Lotto Payout (Other)
913	Split Tender
914	Tax Discount/Forgiven
915 - 948	Undefined
949	Miscellaneous Negative
950 - 999	Administrative
950	Tax 1
951	Tax 2
952	Tax 3
953	Tax 4
954	Tax 5
955	Cash back
956	Cash back Fee
957	Fee 1
958	Fee 2
959	Fee 3
960	Fee 4
961	Fee 5
962	Miscellaneous Aviation Tax
963 - 999	Undefined Admin

Appendix F-3: Service Codes

Value	Description
F	Full Service
S	Self Service
N	Mini Serve
X	Maxi Serve

O	Other or Non-Fuel

Appendix F-4: Measurement Codes

Value	Description
C	Case/Carton
G	Gallons
K	Kilograms
L	Liters
P	Pounds
Q	Quarts
U	Units
Z	Ounces
X	Undefined

Appendix F-5: Default Dispenser Card Reader Pre-Auth Amounts and Cutoff Amounts

Card Brand	Pre-Auth Amount	Cut Off Amount
Visa	$1.00	$75.00
MasterCard	$1.00	$100.00
American Express	$90.00	$90.00
Discover	$75.00	$75.00
Gift Cards	$75.00	$75.00
Wright Express	$1.00	$150.00
Voyager	$75.00	$75.00
Visa Fleet	$1.00	$150.00
MasterCard Fleet	$1.00	$150.00
Debit	$50.00	$50.00
Fleet One	$250.00	$250.00
FuelMan	$50.00	Authorizer can return higher amount

Appendix F-6: Fleet Card Partial Authorization and VoicePost Support

Fleet Card	Description	Partial Approval	VoicePost
Wright Express	Pay at Pump Magnetic Read	No	No
	Inside Console Magnetic Read	No	Yes
	Inside Console Manual Entry	No	Yes

Voyager	Pay at Pump Magnetic Read	No	No
	Inside Console Magnetic Read	No	Yes
	Inside Console Manual Entry	No	Yes
MasterCard Fleet	Pay at Pump Magnetic Read	Yes	No
	Inside Console Magnetic Read	Yes	Yes
	Inside Console Manual Entry	Yes	Yes
Visa Fleet	Pay at Pump Magnetic Read	Yes	No
	Inside Console Magnetic Read	Yes	Yes
	Inside Console Manual Entry	Yes	Yes
Fleet One	Pay at Pump Magnetic Read	No	No
	Inside Console Magnetic Read	No	Yes
	Inside Console Manual Entry	No	Yes
FuelMan	Pay at Pump Magnetic Read	No	No
	Inside Console Magnetic Read	No	No
	Inside Console Manual Entry	No	No