# ProtectPay® API Appendix

Version 4

## Appendix A: Response Elements

A 'ResultCode' element is returned at both the request level and at the transaction level for all requests.
The ResultCode of the request indicates the outcome of the request.
The ResultCode of the transaction element indicates WHY a certain response was returned.
For example, the RequestResult.ResultCode and ResultMessage may indicate a 201 - Invalid Argument Error has occurred, while the Transaction.ResultCode.ResultCode and ResultMessage will contain additional info such as 'Invalid ExpDate'.

## A.1 ProtectPay API Request Response Values

The following response codes are returned in the [RequestResult] object. They are generated by ProtectPay and returned as the status of the API Request. Response codes other than '00' indicate that ProtectPay was unable to submit a transaction to the merchant processor.

### ProtectPay API Request Response Values

| Code | Message |
|---|---|
| **00** | Success. |
| **300** | Authentication error. |
| **301** | Invalid argument error.<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **302** | Invalid invoice number. |
| **303** | Gateway Timeout Error |
| **304** | System of record account error |
| **305** | Invalid track data. |
| **306** | Unsupported error |
| **307** | Internal system error.<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **308** | Invalid credit card |
| **309** | Insufficient payment methods |
| **310** | Unsupported currency code |
| **311** | Invalid argument error.<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **312** | Address validation error |
| **313** | ID validation error |
| **314** | Account validation error |
| **315** | Payment Method validation error |
| **316** | Call failed for an unspecified reason |
| **317** | Duplicate Account Number Found |
| **318** | Country code not supported |
| **319** | Argument format error |
| **320** | Argument required error |
| **321** | Invalid password |
| **322** | Latest EULA not signed |
| **326** | Invalid track data |
| **330** | Authorization Error |
| **341** | Payment method does not exist |
| **345** | Unable to process your request |

| | |
|---|---|
| **346** | Not subscribed to AutoUpdater |
| **347** | Not enrolled to auto update card brand |
| **348** | Transaction successfully voided.<br>*Auto-Void Feature |
| **349** | Transaction void failed.<br>*Auto-Void Feature |
| **700** | Invalid payment method ID |

## A.2 Processor Response Values

The following response codes are returned in the [RequestResult] object. Response codes other than '00' indicate that ProtectPay was able to successfully submit a transaction to the merchant processor and the processor failed and/or refused to pass the transaction to the issuer.

### ProtectPay API Request Processor Response Values

| Code | Message |
|---|---|
| **200** | Gateway authentication error |
| **201** | Gateway invalid argument error<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **204** | Gateway account status error<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **206** | Gateway unsupported transaction request<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **207** | Gateway Internal system error<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **212** | Gateway Address validation error.<br>*Error details returned in Transaction.ResultCode.ResultMessage. |
| **214** | Gateway Invalid Destination Account |
| **223** | Gateway Duplicate transaction |
| **224** | Gateway Amount exceeds single transaction limit |
| **225** | Gateway Amount exceeds monthly volume limit |
| **226** | Gateway Invalid track 1 |
| **227** | Gateway reported decline based on user settings |
| **230** | Unauthorized service requested on Gateway |
| **236** | Capture amount exceeds allowed amount |
| **237** | MCC doesn't allow capturing for a greater amount |
| **250** | CVV code no match (transaction reversed) |
| **263** | Gateway Refund amount exceeds allowed amount |
| **264** | Gateway Transaction has already been refunded |
| **265** | Gateway reports insufficient funds to cover action in your merchant account. |

## A.3 ProPay® Processor Specific Response Values

The following response codes are returned in the [RequestResult] object. These response codes only apply if ProPay is the processor.

### ProtectPay API Request ProPay Processor Response Values

| Code | Message | Transaction Status |
|---|---|---|
| **542** | Invalid receiving email | Error |
| **544** | Invalid amount | Error |
| **551** | Invalid trans num or unable to act due to funding | Decline |
| **561** | Amount exceeds single transaction limit | Decline |
| **562** | Amount exceeds monthly volume limit | Decline |
| **567** | Unauthorized service requested | Error |
| **568** | Account not affiliated | Decline |

## A.4 Issuer Response Values

The following response codes are returned in the [Transaction.RequestResult] object. The following table details the responses from the transaction request as returned by the issuer. They indicate that the request was successfully submitted to the processor, and the code and reason are indications of the success or failure as returned by the card-issuing financial institution.

### Status Codes Returned by Payment Method Issuer

| Code | Message | Status |
|---|---|---|
| **00** | Success | Processed |
| **1** | Refer to card issuer | Decline |
| **2** | Transaction denied. Please contact the issuing bank | Decline |
| **3** | Invalid merchant | Decline |
| **4** | Capture card | Decline |
| **5** | Do not honor | Decline |
| **6** | Customer requested stop of specific recurring payments | Decline |
| **7** | Customer requested stop of all recurring payments | Decline |
| **8** | Honor with ID | Approve |
| **9** | Unpaid items, failed negative file check | Decline |
| **10** | Duplicate check number | Decline |
| **11** | MICR error | Decline |
| **12** | Invalid transaction | Decline |
| **13** | Referral | Decline |
| **14** | Invalid card number | Decline |
| **15** | Invalid issuer | Decline |
| **16** | You are trying to refund a card that has not been previously charged in this system. | Decline |
| **17** | Amount greater than limit | Decline |
| **18** | Too many checks (over merchant or bank limit) | Decline |
| **19** | Reenter transaction | Decline |
| **20** | Issuing bank unavailable | Decline |
| **21** | Too many checks (over merchant or bank limit) | Decline |
| **22** | Try again | Decline |
| **23** | Void error | Decline |
| **24** | Invalid expiration date | Decline |
| **25** | Invalid terminal | Decline |
| **26** | Credit error | Decline |
| **27** | Fraud filter declined | Decline |
| **28** | Fraud filter for review | Decline |
| **29** | Issuing bank timeout | Decline |
| **30** | Format error | Decline |
| **41** | Lost card | Decline |
| **43** | Stolen card | Decline |
| **51** | Insufficient funds/over credit limit | Decline |
| **52** | No checking account | Decline |
| **53** | Card cannot perform this kind of operation | Decline |
| **54** | Expired card | Decline |
| **55** | Invalid PIN | Decline |
| **57** | Transaction not permitted to issuer/cardholder | Decline |

| | | |
|---|---|---|
| **58** | Transaction not permitted to acquirer/terminal | Decline |
| **61** | Exceeds withdrawal limit | Decline |
| **62** | Restricted card | Decline |
| **63** | Security violation | Decline |
| **65** | Exceeds withdrawal limit count | Decline |
| **75** | Allowable number of PIN tries exceeded | Decline |
| **76** | Invalid/nonexistent "To Account" specified | Decline |
| **77** | Invalid/nonexistent "From Account" specified | Decline |
| **78** | Invalid/nonexistent account specified (general) | Decline |
| **80** | Invalid date | Decline |
| **81** | Cryptography error | Decline |
| **82** | CVV data is not correct | Decline |
| **83** | Cannot verify the PIN | Decline |
| **84** | Invalid authorization life cycle | Decline |
| **85** | Not declined | Approve |
| **86** | Gateway Timeout | Decline |
| **93** | Violation cannot complete.<br>Have the customer call the 800 number on the back of the card to determine the issue. | Decline |
| **94** | Duplicate transaction | Decline |
| **96** | System Error | Decline |
| **98** | Approval for a lesser amount | Consult merchant provider |
| **99** | Generic Decline (International Merchants) See ResponseMessage element for any additional detail | Decline |
| **100** | Generic Decline | Decline |
| **101** | Failed CVV Filter | Decline |
| **102** | Failed AVS Filter | Decline |
| **103** | Specified transaction in an invalid state for the requested operation | Decline |
| **104** | Requested UserName not available | Decline |
| **105** | AVS Address Mismatch | Decline |
| **133** | Risk Decline | Decline |
| **134** | Session Id is an invalid it should only contain upper and lowercase characters, digits, underscores and hyphens. | Decline |
| **135** | Nonexistent account configured for threat metrix on our system. | Decline |
| **141** | Inactive or blocked MCC Code. | Decline |
| **142** | Invalid MCC Code was entered that is either non numeric or does not exist in our database. | Decline |
| **199** | Misc. Decline | Decline |

## A.5 CVV Response Codes

The following response codes are returned in the [Transaction.RequestResult] object. They are returned only if a CVV2 is passed in the transaction request and a response returned from the card issuer. These codes do not indicate whether a transaction request was successful. They indicate whether or not the CVV2 submitted matches what the issuing institution has on file.

| Code | Message |
|---|---|
| **M** | CVV2 Match |
| **N** | CVV2 No Match |
| **P** | Not Processed |
| **S** | Merchant indicates CVV2 not present on card |
| **U** | Issuer is not certified and/or has not provided appropriate encryption keys |

## A.6 AVS Response Codes

The following response codes are returned in the [Transaction.RequestResult] object. They are returned by the card issuer. They do not indicate whether a transaction request was successful. They indicate the conformity of the address values passed in the request to those stored by the card issuer.

### Domestic AVS Response Codes

| Code | Message |
|---|---|
| **A** | Street address matches<br>5-digit and 9-digit postal code do not match |
| **D** | Exact Match |
| **E** | AVS Data is invalid, AVS is not allowed for this card type |
| **N** | Zip Code and Street Do Not Match |
| **R** | Issuer system unavailable |
| **S** | Service Not supported |
| **U** | Verification Unavailable* |
| **W** | Street Address does not match, 9 digit postal code does |
| **X** | Street Address and 9 digit postal code match |
| **Y** | Street Address and 5 digit postal code match |
| **Z** | Street Address does not match, 5 digit postal code does |
| **0** | No data provided to perform AVS check |

- *Returned if the U.S. bank does not support non-U.S. AVS or if the AVS in a U.S. bank is not functioning properly.

### International AVS Response Codes

| Code | Message |
|---|---|
| **B** | Address Match, postal code not verified |
| **C** | Street address and postal code do not match |
| **G** | Non-U.S. issuing bank does not support AVS |
| **I** | Address not verified |
| **M** | Exact Match |
| **P** | Zip Match |

### American Express Only AVS Response Codes

| Code | Message |
|---|---|
| **F** | Name does not match, postal code matches |
| **H** | Name does not match, full AVS matches |
| **J** | Name does not match, full AVS does not match |
| **K** | Name matches, full AVS does not match |
| **L** | Name matches, postal code matches |
| **O** | Name match, Address Match, Postal Code no match |
| **Q** | Exact match |
| **T** | Name does not match, Street Address Match |
| **V** | Exact Match |

### Testing Environment AVS Response Codes

| Code | Message |
|---|---|
| **T** | The AVS response code will always return: **T** |

## A.7 Fraud System Response Code

The following response codes are returned in the [RequestResult] object. They are generated by ProtectPay in response to the Fraud System and returned as the status of the API Request. They are unique to each Fraud System.

### Threat Metrix

#### Status Codes Returned by Fraud Systems

| Code | Message | Transaction Status |
|---|---|---|
| **00** | Success | Processed |
| **133** | Threat Metrix Score Threshold Met | Decline |
| **353** | Session Id is an invalid it should only contain upper and lowercase characters, digits, underscores and hyphens. | Failure |
| **354** | Nonexistent account configured for threat metrix on our system. | Failure |

### Amex Enhanced Auth

#### Status Codes Returned by Fraud Systems

| Code | Message | Transaction Status |
|---|---|---|
| **00** | Success | Processed |
| **355** | Amex fraud solution invalid account configuration | Failure |

# Appendix B: MerchantProfileId Settings - Supported Gateways

The following MerchantProfileId settings are supported by ProtectPay.
It is the responsibility of the merchant to obtain the appropriate values for each ProcessorField.

## ProtectPay Supported Gateway and Credential Requirements

### ProPay

- Does not allow capture for more than initial authorization
- Specific MCC codes will allow for capture more than initial authorization

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **LegacyProPay** | certStr | |
| | termid | |
| | accountNum | |
| | forceRecurring | |

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **LegacyProPayCan** | certStr | |
| | termid | |
| | accountNum | |

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **ProPayGateway** | AccountId | |
| | IdentityId | |
| | MerchantInfoId | |

### Authorize.net

- CVV code has no effect in their test environment

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **AuthorizeNet** | API_LOGIN_ID | |
| | API_TRANSACTION_KEY | |

### Braspag

- Does not return very specific reasons for decline
- Test environment does not mimic their production very well

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Braspag** | AcquirerTranslator | |
| | MerchantID | |

## China Trust

- ProtectPay integrated the CTBC API Version of the API only.
- CTBC accepts MID only configurations, however CTBC must be configurated to accept a MID only configuration or the following error will be returned: 3DSECURE_PROCESS_ERROR - (3D authentication Failed) error.
    - When configured this way the API key is not required.
- Agreements must be signed with client and China Trust.
- Invoices do not support special characters.
- AVS response will always return 'Not Present'
- Refunds are only successful once the original transaction has settled. Clients must use the OriginalTransactionId returned from 4.5.4 Capture Transaction as the OriginalTransactionId for Refunds.

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **ChinaTrust** | MerID | |
| | Key | |

## CyberSource

- Requires billing email address for transaction processing
- Transactions Require an Invoice Number

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **CyberSource** | TransactionKey | |
| | MerchantID | |

## Digital River

- Not all values are required, depends on business needs

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **DigitalRiver** | MerchantId | |
| | MerchantId-HKD | |
| | MerchantId-MXN | |
| | MerchantId-USD | |
| | Password | |
| | POSID | |
| | TransactionChannel | |
| | Username | |

## EasyPay Korea (KICC)

- Only Supports SALE and VOID
- Only supports Korean Won transactions

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **EasyPayKorea** | TerminalId | |

## Echo

- CVV code has not effect in their test environment
- Test environment requires phone number for processing

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Echo** | echoId | |
| | echoPin | |

## Merchant E Solutions

- Test environment will not allow credit transaction
- Must wait between Authorize and Capture

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Esolutions** | ProfileID | |
| | ProfileKey | |

## Meritus

- Test environment will not settle transactions automatically
- Must pass Address1 and ZipCode

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Meritus** | MerchantID | |
| | MerchantKey | |

## Mtrex

- Test environment will not return decline

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Mtrex** | AuthenticationID | |
| | AuthenticationPassword | |
| | ConfigID | |

## Network Merchants (NMI)

ProtectPay only supports the NMI web platform

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **NetworkMerchants** | API_LOGIN_ID | |
| | API_TRANSACTION_KEY | |

## Orbital/Paymentech

- Test environment will not return decline
- Username and PW not required if IP white-listed
- If Refunding transactions not originally performed by ProtectPay, clients must submit the following piped combination of values "originaltransactionid | ordernumber" as the OriginalTransactionId

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **Orbital** | OrbitalBin | |
| | OrbitalMerchantId | |
| | OrbitalTerminalId | |
| | OrbitalUsername | |
| | OrbitalPassword | |
| | OrbitalIndustryType | |

## Pagos Online

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PagosOnline** | cuentaId | |
| | loginUsuarioAprobador | |
| | password | |
| | usuarioId | |

## PayflowPro

- Does not allow capture for more than initial authorization

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PayFlowPro** | Partner | |
| | PWD | |
| | USER | |
| | VENDOR | |

## PaymentXP

- Test environment will not return decline
- Test environment only supports JPY
- Cannot perform credit transaction, must Void or Refund
- Refunding unsettled transactions will void them
- Does not return very specific reasons for decline

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PaymentXP** | MerchantId | |
| | MerchantKey | |

## PayPoint (First Data)

- ProtectPay Credit and Capture transactions are not supported
- Transactions are auto-captured by the gateway.
- TransactionId is required for Voids or Refunds
- Currency codes are ignored, as those are configured at the gateway account level.

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PayPoint** | ApplicationID | |
| | SecretKey | |

## PayVision

- Test environment will not return decline
- Does not allow capture for more than initial authorization
- Transactions require invoice number
- Must submit amount for capture transaction
- Must pass country for credit transaction
- Submitting values between: 100-500 or 100000-500000 will result in a decline code in the test environment.

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PayVision** | MemberId | |
| | MemberGuid | |

## Planet Payments

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **PlanetPayment** | Password | |
| | User | |

## SecurePay

- All transactions must include an Invoice Number

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **SecurePay** | MerchantId | |
| | Password | |

## VeriTrans

- Test environment will allow void or refund
- Test environment only supports JPY
- Must submit amount for capture transaction
- Does not allow capture for more than initial authorization
- Does not return very specific reasons for decline

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **VeriTrans** | HashKey | |
| | SecretKey | |

## Web Collect

- Authorization Codes are only returned when configured to be returned by Ignenico ePayments

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **WebCollect** | MERCHANTID | |

## WorldPay

| Payment Processor | ProcessorField | Value |
|---|---|---|
| **WorldPay** | MerchantCode | |
| | Password | |

# Appendix C: Fraud Detection

ProtectPay offers integration opportunities to various Fraud Systems to help ProtectPay Merchants from processing fraudulent credit cards and/or known fraudulent bank accounts. A special FraudDetectors Object is used to pass along credentials and additional Fraud System specific information to the Fraud System Provider. Please note that improperly configured credentials or invalidly-formatted request objects can result in transactions not being completed at all. It is important to have properly tested the solution and confirmed your credentials or account have been enabled for a specific provider before attempting live transactions.

## FraudDetector s Compatible Methods

The following ProtectPay API Methods are compatible with the FraudDetector object

- 4.4.1 Authorize a PaymentMethodId
- 4.4.2 Authorize a PaymentMethodId (Recurring)
- 4.4.3 Authorize a PaymentMethodId with Encrypted Block Data
- 4.5.1 Process a PaymentMethodId
- 4.5.2 Process a PaymentMethodId (Recurring)
- 4.5.3 Process a PaymentMethodId with Encrypted Block Data
- 4.6.3 Process a Credit Transaction
- 4.9.1 ProPay SplitPay Transaction
- 4.9.2 ProPay SplitPay Transaction with Encrypted Block Data
- 4.10.1 Authorize External Transaction
- 4.10.2 Process External Transaction
- 4.10.3 Process External ProPay SplitPay Transaction
- 4.10.4 Process a Credit Card

## FraudDetectors Base Object:

| Request Object | Inherited Elements |
|---|---|
| **FraudDetectors** | FraudDetectorProviderName |
| | InputIpAddress |
| | ShippingPhoneNumber |
| | ShippingAddress1 |
| | ShippingAddress2 |
| | ShippingCity |
| | ShippingState |
| | ShippingZip |
| | ShippingCountry |
| | * Specific Attributes for Fraud System Provider |

## Using multiple fraud detection providers

When using multiple providers, a FraudDetector array must be created with each element of the array being a FraudDetector object of the specific namespace used to reference the correct elements for the provider.

- If submitting multiple Fraud Providers the order of precedence is
    1. Threat Metrix
    2. Amex Enhanced Auth

## Interface: REST

The FraudDetectors object is passed in the parent object for REST methods.

```
"FraudDetectors":[
        {
                "ThreatMetrixFraudDetection":{
                        "FraudDetectorProviderName":"ThreatMetrix",
                        /* Specific Elements for Fraud System Provider */
                },
                "AmexEnhancedAuth":{
                        "FraudDetectorProviderName":"AmexEnhancedAuth",
                        /* Specific Elements for Fraud System Provider */
                }
        }
],
```

## Interface: SOAP

The FraudDetectors Object itself is added to the following:

- For PaymentMethodId methods it is added to the Transaction object:

```
<con:Transaction>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
            <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con:Transaction>
```

- For EncryptedBlockData methods it is added to the AuthorizeAndCapture object:

```
<con: AuthorizeAndCapture>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: AuthorizeAndCapture >
```

- For Create HostedTransactionIdentifier method it is added to the HostedTransaction object.

```
<con:hostedTransaction>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: hostedTransaction >
```

- For ProPay SplitPay Transaction method it is added to the request object :

```
<con: request>
```

```
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: request>
```

- For ProPay SplitPay Transaction with Encrypted Block Data method it is added to the ProcessSplitPayTransactionWithEncryptedTrackData object :

```
<con: ProcessSplitPayTransactionWithEncryptedTrackData>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: ProcessSplitPayTransactionWithEncryptedTrackData>
```

- For External Transaction methods it is added to the ExternalPaymentMethodTransaction object :

```
<con: externalPaymentMethodTransaction>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: externalPaymentMethodTransaction>
```

- For External SplitPay Transaction method it is added to the ExternalPaymentMethodSplitPayTransaction object :

```
<con: externalPaymentMethodSplitPayTransaction>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
```

```
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: externalPaymentMethodSplitPayTransaction>
```

- For Process a Credit Card method it is added to the ProcessCard object :

```
<con: ProcessCard>
    <typ:FraudDetectors
xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
            <fraud:FraudDetector
    xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="threatmetrix:ThreatMetrixFraudDetection">
                    <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
            <fraud:FraudDetector
    xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
    i:type="amex:AmexEnhancedAuth">
                    <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                    <!-- Specific Attributes for Fraud System Provider -->
            </fraud:FraudDetector>
    </typ:FraudDetectors>
</con: ProcessCard>
```

## Interface: WSDL

In order to properly use the FraudDetectors object by extrapolating the WSDL the specific Fraud System Provider Object must be created and set to the value of the FraudDetector.

This can be done in the following manner:

| Request Element: | Object | Attributes |
|---|---|---|
| FraudDetectors | Specific Fraud Detector Provider Obje | FraudDetectorProviderName |
| | | Attribute1 |
| | | Attribute2 |
| | | Attribute3 |
| | | … |

- See supported FraudDetector Providers for specific examples

## Using multiple fraud detection providers

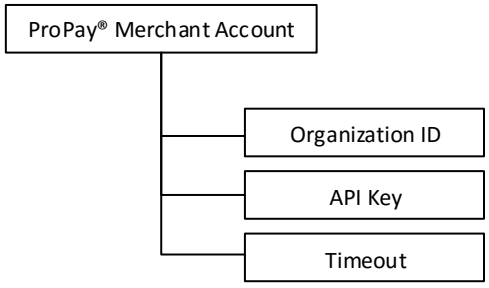
When using multiple Fraud Detectors such as ThreatMetrix and AmexEnhancedAuth a FraudDetector array must be created with each element of the array being a FraudDetector object of a specific provider and set to the value of FraudDetectors in the specified request element.

# Threat Metrix

## Threat Metrix Account Setup

ProPay must set up a ProPay merchant account to use Threat Metrix. This cannot be done through the Application Programming Interface. The Threat Metrix credentials are tied directly to the ProtectPay BillerId and are available only to the specified ProtectPay BillerId. Please refer requests to obtain Threat Metrix account information to: riskescalation@propay.com

If a client has access to multiple ProtectPay BillerId's they will have multiple Threat Metrix Credentials




The Organization ID is the value assigned by Threat Metrix to represent the client's ProtectPay BillerId. It must be used to create a Threat Metrix Session ID.

The API Key is the clients Threat Metrix API credentials that ProtectPay will use when consuming the Threat Metrix.

The Timeout value is a value in milliseconds the ProtectPay system will wait for a response from Threat Metrix before automatically passing the transaction along to the processor. This value is set by ProPay at 2000ms and can be adjusted by the client with a request to ProPay. If the timeout period elapses the transaction is passed to the processor which can create a case where a transaction was actually determined to be fraudulent, however the Threat Metrix API responded after the timeout period elapsed.

Please work with the ProPay risk department to mitigate such occurrences and develop an appropriate resolution.

ProPay will supply the client a Threat Metrix username and password. The client must then sign into the Threat Metrix Portal and set up their risk profiles that are used to determine whether or not a transaction will be considered fraudulent by the client. The ProPay risk department can assist a client in determining which attributes should be set in a risk profile however it is the responsibility of the client to determine what will be considered a fraudulent transaction and what will not.

Threat Metrix Portal URI: https://portal2.threatmetrix.com
For additional information on setting up risk profiles please see:
https://kb.threatmetrix.com/index.php?View=login&Msg=_index

## Threat Metrix SessionId Creation

Prior to sending a transaction request to the ProtectPay API the merchant must create and send to Threat Metrix a unique SessionId. Threat Metrix hosts a download of an invisible iFrame that must be placed on the merchant's website prior to the checkout page. ProPay recommends the use of an order confirmation page to accomplish this prior to navigation to the final checkout page.

The Threat Metrix iFrame requires that the appropriate organization ID be sent. The Threat Metrix iFrame gathers information from the payer's browser and associates with the SessionId that must be passed to Threat Metrix. It is important that this SessionId is persisted in the browser session to the final checkout page as it must be passed to ProPay in the API call.

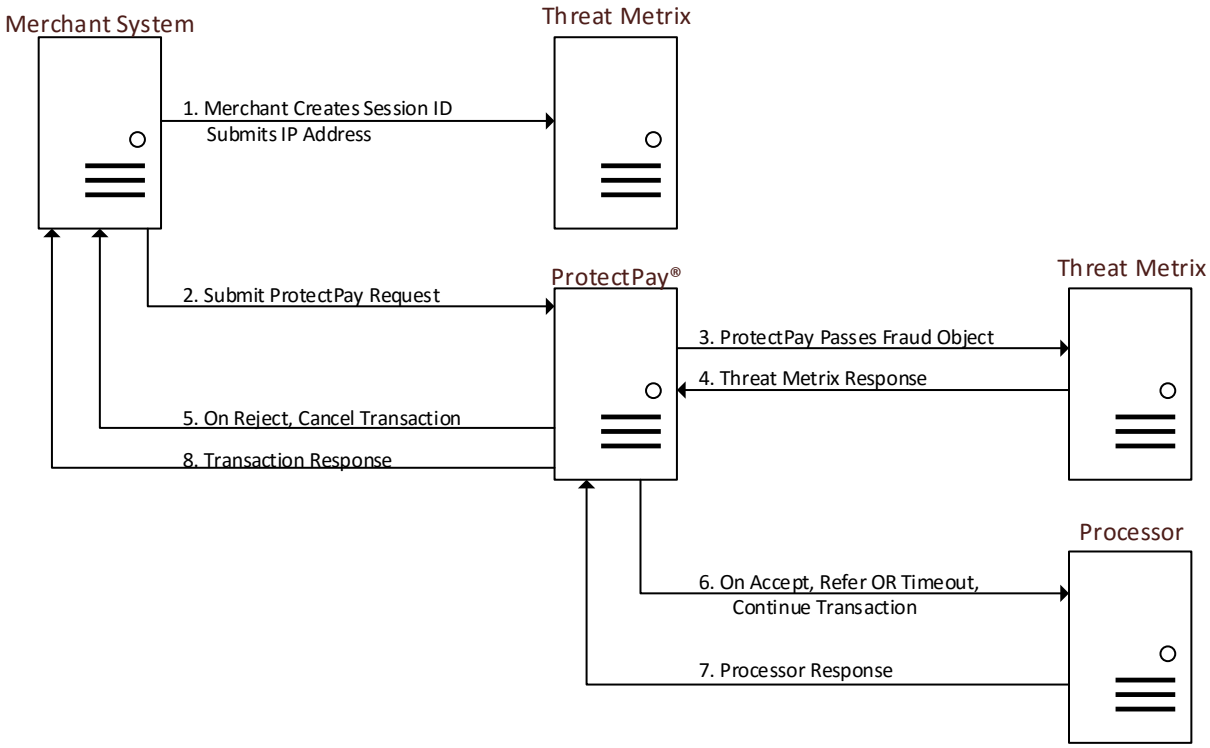
## Threat Metrix Processing flow

1. Merchant System Creates Threat Metrix Session ID and Submits Input IP Address of payers web browser.
2. Merchant System Submits ProPay API Request including Fraud Object.
    a. See Object attributes below
    b. 60 second ProtectPay timeout timer begins
3. ProPay Submits Fraud Object to Threat Metrix including Session ID, Input IP Address and Filter Requirements.
4. Threat Metrix responds with score and following messages
    a. Accept
    b. Refer
    c. Reject
    d. Error
5. On Reject or Error the transaction is cancelled and reported back to the Merchant with appropriate response code.
    a. See Appendix A.7 Fraud System Response Codes: Threat Metrix.
    b. The Actual Score is not returned. Please log into the Threat Metrix Portal to view scores.
6. On Accept, Refer or at timeout the Transaction is passed to the Processor.
    a. The Threat Metrix timeout period is part of the ProtectPay 60 second timeout and does not extend it.
    b. If Threat Metrix responds with a "Refer" and the transaction request is successful the transaction response will be 00 with a message text of "Risk Review" to indicate an Refer.
7. The Processor responds to the transaction request.
8. ProtectPay responds to the merchant with the transaction response.

- Both the SessionId and IP Address must be passed to else the Threat Metrix process is ignored

- **ProPay recommends as a Best Practice all ThreatMetrix transaction requests also contain a Unique Invoice be passed along with the transaction request**

## Threat Metrix Process flow diagram



## Threat Metrix Specific Elements

| Element | Type | Max | Required | Notes |
|---|---|---|---|---|
| **FraudDetectorProvider** | String | | Required | Set to: ThreatMetrix |
| **SessionId** | String | | Required | Created by merchant and sent to Threat Metrix prior to transactio |
| **InputIpAddress** | String | | Required | Sent by merchant to Threat Metrix prior to transaction |
| **ShippingAddress1** | String | | Optional | |
| **ShippingAddress2** | String | | Optional | |
| **ShippingCity** | String | | Optional | |
| **ShippingState** | String | | Optional | |
| **ShippingZip** | String | | Optional | |
| **ShippingCountry** | String | | Optional | |
| **CustomAttribute1** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute2** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute3** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute4** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute5** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute6** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute7** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute8** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute9** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **CustomAttribute10** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute1** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute2** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute3** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute4** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute5** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute6** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute7** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute8** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute9** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute10** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute11** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute12** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute13** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute14** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute15** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute16** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute17** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute18** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute19** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ConditionalAttribute20** | String | | Optional | Must exist as part of the Organization Id prior to being passed |
| **ACHAccountHash** | String | | Optional | SHA1 Hash of Value |
| **CreditCardNumberHash** | String | | Optional | SHA1 Hash of Value |

| | | | | |
|---|---|---|---|---|
| **DriversLicenseHash** | String | | Optional | SHA1 Hash of Value |
| **SocialSecurityNumberHash** | String | | Optional | SHA1 Hash of Value |

```
"FraudDetectors":[
        {
                "ThreatMetrixFraudDetection":{
                        "FraudDetectorProviderName":"ThreatMetrix",
                        "SessionId":"08a3958c-f2f5-43ad-b171-9de35633ff68",
                        "InputIpAddress":"8.8.8.8",
                        "ShippingAddress1":"",
                        "ShippingAddress2":"",
                        "ShippingCity":"",
                        "ShippingState":"",
                        "ShippingZip":"",
                        "ShippingCountry":"",
                        "ShippingPhoneNumber":"",
                        "ConditionalAttribute1":"",
                        "ConditionalAttribute2":"",
                        "ConditionalAttribute3":"",
                        "ConditionalAttribute4":"",
                        "ConditionalAttribute5":"",
                        "ConditionalAttribute6":"",
                        "ConditionalAttribute7":"",
                        "ConditionalAttribute8":"",
                        "ConditionalAttribute9":"",
                        "ConditionalAttribute10":"",
                        "ConditionalAttribute11":"",
                        "ConditionalAttribute12":"",
                        "ConditionalAttribute13":"",
                        "ConditionalAttribute14":"",
                        "ConditionalAttribute15":"",
                        "ConditionalAttribute16":"",
                        "ConditionalAttribute17":"",
                        "ConditionalAttribute18":"",
                        "ConditionalAttribute19":"",
                        "ConditionalAttribute20":"",
                        "CustomAttribute1":"",
                        "CustomAttribute2":"",
                        "CustomAttribute3":"",
                        "CustomAttribute4":"",
                        "CustomAttribute5":"",
                        "CustomAttribute6":"",
                        "CustomAttribute7":"",
                        "CustomAttribute8":"",
                        "CustomAttribute9":"",
                        "CustomAttribute10":"",
                        "ACHAccountHash":"",
                        "CreditCardNumberHash":"",
                        "DriversLicenseHash":"",
                        "SocialSecurityNumberHash":""
                }
        }
]
```

## Interface: SOAP

```
<typ:FraudDetectors xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
        <fraud:FraudDetector
xmlns:threatmetrix="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
i:type="threatmetrix:ThreatMetrixFraudDetection">
                <fraud:FraudDetectorProviderName>ThreatMetrix</fraud:FraudDetectorProviderName>
                <fraud:InputIpAddress>8.8.8.8</fraud:InputIpAddress>
                <fraud:ShippingAddress1></fraud:ShippingAddress1>
                <fraud:ShippingAddress2 />
                <fraud:ShippingCity></fraud:ShippingCity>
                <fraud:ShippingCountry></fraud:ShippingCountry>
                <fraud:ShippingFirstName i:nil="true" />
                <fraud:ShippingLastName i:nil="true" />
                <fraud:ShippingPhoneNumber i:nil="true" />
                <fraud:ShippingState></fraud:ShippingState>
                <fraud:ShippingZip></fraud:ShippingZip>
                <threatmetrix:ACHAccountHash i:nil="true" />
                <threatmetrix:ConditionalAttribute1 i:nil="true" />
                <threatmetrix:ConditionalAttribute10 i:nil="true" />
                <threatmetrix:ConditionalAttribute11 i:nil="true" />
                <threatmetrix:ConditionalAttribute12 i:nil="true" />
                <threatmetrix:ConditionalAttribute13 i:nil="true" />
                <threatmetrix:ConditionalAttribute14 i:nil="true" />
                <threatmetrix:ConditionalAttribute15 i:nil="true" />
                <threatmetrix:ConditionalAttribute16 i:nil="true" />
                <threatmetrix:ConditionalAttribute17 i:nil="true" />
                <threatmetrix:ConditionalAttribute18 i:nil="true" />
                <threatmetrix:ConditionalAttribute19 i:nil="true" />
                <threatmetrix:ConditionalAttribute2 i:nil="true" />
                <threatmetrix:ConditionalAttribute20 i:nil="true" />
                <threatmetrix:ConditionalAttribute3 i:nil="true" />
                <threatmetrix:ConditionalAttribute4 i:nil="true" />
                <threatmetrix:ConditionalAttribute5 i:nil="true" />
                <threatmetrix:ConditionalAttribute6 i:nil="true" />
                <threatmetrix:ConditionalAttribute7 i:nil="true" />
                <threatmetrix:ConditionalAttribute8 i:nil="true" />
                <threatmetrix:ConditionalAttribute9 i:nil="true" />
                <threatmetrix:CreditCardNumberHash i:nil="true" />
                <threatmetrix:CustomAttribute1 i:nil="true" />
                <threatmetrix:CustomAttribute10 i:nil="true" />
                <threatmetrix:CustomAttribute2 i:nil="true" />
                <threatmetrix:CustomAttribute3 i:nil="true" />
                <threatmetrix:CustomAttribute4 i:nil="true" />
                <threatmetrix:CustomAttribute5 i:nil="true" />
                <threatmetrix:CustomAttribute6 i:nil="true" />
                <threatmetrix:CustomAttribute7 i:nil="true" />
                <threatmetrix:CustomAttribute8 i:nil="true" />
                <threatmetrix:CustomAttribute9 i:nil="true" />
                <threatmetrix:DriversLicenseHash i:nil="true" />
                <threatmetrix:SessionId>08a3958c-f2f5-43ad-b171-9de35633ff68</threatmetrix:SessionId>
                <threatmetrix:SocialSecurityNumberHash i:nil="true" />
        </fraud:FraudDetector>
</typ:FraudDetectors>
```

## Interface: WSDL

### FraudDetectorProviderName: Threat Metrix

| Request Object | Fraud Provider Object | Attributes |
|---|---|---|
| **FraudDetectors** | **ThreatMetrixFraudDetection** | FraudDetectorProviderName |
| | | SessionId |
| | | InputIpAddress |
| | | ShippingAddress1 |
| | | ShippingAddress2 |
| | | ShippingCity |
| | | ShippingState |
| | | ShippingZip |
| | | ShippingCountry |
| | | ShippingPhoneNumber |
| | | ConditionalAttribute1 |
| | | ConditionalAttribute2 |
| | | ConditionalAttribute3 |
| | | ConditionalAttribute4 |
| | | ConditionalAttribute5 |
| | | ConditionalAttribute6 |
| | | ConditionalAttribute7 |
| | | ConditionalAttribute8 |
| | | ConditionalAttribute9 |
| | | ConditionalAttribute10 |
| | | ConditionalAttribute12 |
| | | ConditionalAttribute13 |
| | | ConditionalAttribute14 |
| | | ConditionalAttribute15 |
| | | ConditionalAttribute16 |
| | | ConditionalAttribute17 |
| | | ConditionalAttribute18 |
| | | ConditionalAttribute19 |
| | | ConditionalAttribute20 |
| | | CustomAttribute1 |
| | | CustomAttribute2 |
| | | CustomAttribute3 |
| | | CustomAttribute4 |
| | | CustomAttribute5 |
| | | CustomAttribute6 |
| | | CustomAttribute7 |
| | | CustomAttribute8 |
| | | CustomAttribute9 |
| | | CustomAttribute10 |
| | | ACHAccountHash |

| |
|---|
| CreditCardNumberHash |
| DriversLicenseHash |
| SocialSecurityNumberHash |

# Amex Enhanced Auth

## American Express Enhanced Authorization Setup

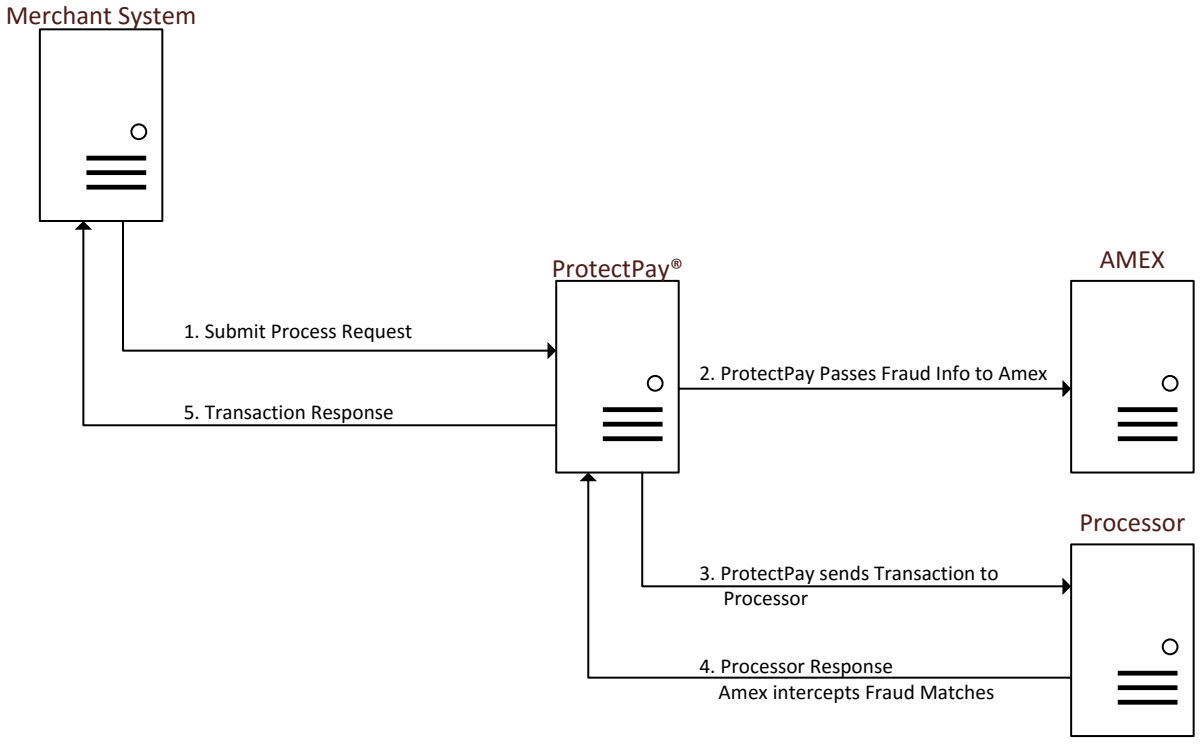
A client must provide to ProPay their Amex SE Number. ProPay will then setup the ProPay Merchant Account to use Amex Enhanced Auth. If a client does not have a relationship with Amex, it may use the ProPay Amex Aggregated SE number with approval from the ProPay Risk Department.

Please refer requests to setup a ProPay Merchant Account for Amex Enhanced Auth to: riskescalation@propay.com

## Amex Enhanced Auth Processing flow

1. Merchant System Submits ProPay API Request including Fraud Object.
    a. See Object attributes below
    b. 60 second ProtectPay timeout timer begins
2. ProtectPay Submits Fraud Object Data asynchronously to American Express and continues transaction process
3. Transaction is submitted along the American Express network and declined by American Express if submitted data matches criteria for fraud
4. On a decline from American Express or Error the transaction is completed and reported back to the Merchant with appropriate response code.
    a. See Appendix A.7 Fraud System Response Codes: Amex Enhanced Auth
    b. On an approval from American Express the transaction is completed and reported back to the Merchant with the appropriate response code and transaction response.
5. ProPay responds to the merchant with the transaction response.

## Amex Enhanced Auth Process flow diagram




## Amex Enhanced Auth Specific Attributes

| Attribute | Type | Required | Notes |
|---|---|---|---|
| FraudDetectorProviderName | String | Required | Set to: AmexEnhancedAuth |
| InputIpAddress | String | Optional | |
| ShippingMethod | String | Optional | |
| ShippingPhoneNumber | String | Optional | |
| ShippingAddress1 | String | Optional | |
| ShippingAddress2 | String | Optional | |
| ShippingCity | String | Optional | |
| ShippingState | String | Optional | |
| ShippingZip | String | Optional | |
| ShippingCountry | String | Optional | |

```
"FraudDetectors":[
        {
                "AmexEnhancedAuth":{
                        "FraudDetectorProviderName":"AmexEnhancedAuth",
                        "ShippingMethod":"1",
                        "InputIpAddress":"8.8.8.8",
                        "ShippingAddress1":"",
                        "ShippingAddress2":"",
                        "ShippingCity":"",
                        "ShippingState":"",
                        "ShippingZip":"",
                        "ShippingCountry":"",
                        "ShippingPhoneNumber":""
                }
        }
]
```

## Interface: SOAP

```
<typ:FraudDetectors xmlns:fraud="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection">
        <fraud:FraudDetector
xmlns:amex="http://schemas.datacontract.org/2004/07/Propay.Contracts.FraudDetection.Providers"
i:type="amex:AmexEnhancedAuth">
                <fraud:FraudDetectorProviderName>AmexEnhancedAuth</fraud:FraudDetectorProviderName>
                <fraud:InputIpAddress i:nil="true" />
                <fraud:ShippingAddress1 i:nil="true" />
                <fraud:ShippingAddress2 i:nil="true" />
                <fraud:ShippingCity i:nil="true" />
                <fraud:ShippingCountry i:nil="true" />
                <fraud:ShippingFirstName i:nil="true" />
                <fraud:ShippingLastName i:nil="true" />
                <fraud:ShippingPhoneNumber i:nil="true" />
                <fraud:ShippingState i:nil="true" />
                <fraud:ShippingZip i:nil="true" />
                <amex:ShippingMethod>02<amex:ShippingMethod>
        </fraud:FraudDetector>
</typ:FraudDetectors>
```

## Interface: WSDL
## FraudDetectorProviderName: AmexEnhancedAuth

| Request Object | Fraud Provider Object | Attributes |
|---|---|---|
| FraudDetectors | **AmexEnhancedAuth** | FraudDetectorProviderName |
| | | ShippingMethod |
| | | InputIpAddress |
| | | ShippingAddress1 |
| | | ShippingAddress2 |
| | | ShippingCity |
| | | ShippingState |
| | | ShippingZip |
| | | ShippingCountry |
| | | ShippingPhoneNumber |

# Appendix D: ProPay Supported Swipe Devices

ProPay approved swipe devices encrypt credit card track data at the head as the card is swiped. The encrypted data is then transmitted to the connected device as an encrypted block. Elements of the encrypted block can be submitted to various methods of the ProtectPay API.

## Supported ProPay Swipe Devices

| Make | Model | Part Number | |
|---|---|---|---|
| **Dynamag** | MagTek Dynamag | 21073075 |  |
| **FLASH Card Reader 1.0** | MagTek MagneSafe m20 | 21073034 (Rev–F) |  |
| **FLASH Card Reader 2.0** | MagTek flash | 21073081 (Rev–C) |  |
| **JAK 3.0** | Magtek aDynamo | 21073111 |  |
| **JAK 4.0** | Roam | G5X |  |

A list of compatible Phones for JAK 3.0/4.0 can be found at:
http://www.propay.com/products-services/accept-payments/jak-card-reader/androiddevices/

## D.1 Supported ProtectPay API Methods

The following ProtectPay API methods accept encrypted track data:

- 4.3.2 Create a PaymentMethodId with Encrypted Block Data
- 4.4.3 Authorize a Payment Method with Encrypted Block Data
- 4.5.3 Process a Payment Method with Encrypted Block Data
- 4.8.2 ProPay SplitPay Transaction with Encrypted Block Data

## D.2 Swipe Device Required Parameters

On supported transaction types, encrypted swipe device data may be submitted, which may vary slightly based on the device type.

### Swipe Device Elements

| Element | Type |
|---|---|
| **encryptingDeviceType** | Character String |
| **keySerialNumber** | Base64 Encoded Hexadecimal String |
| **encryptedTrackData** | Base64 Encoded Hexadecimal String |
| **encryptedTrack2Data** | Base64 Encoded Hexadecimal String |

- Not all devices return 2 Encrypted Tracks
- The second track should only be submitted if the device supplies it.

### Device Type Enumerative List

The following lists the enumeration list that is used when identifying a swipe device in an API method. The name of the device must be passed including the required information.

### Device Types Supported

| Device Type | Sample Type |
|---|---|
| **MagTekFlash** | Use MAGTEK Sample |
| **MagTekADynamo** | Use MAGTEK Sample |
| **MagTekDynamag** | Use MAGTEK Sample |
| **RoamData** | Use ROAM Sample |

### Submitting Encrypted Data to the API

The raw data from each swipe device is returned as a hexadecimal value. Both the Key Serial Number `<ksn>` and `<EncryptedTrackData>` and/or `<EncryptedTrack2Data>` values should be submitted as Base64 encoded hexadecimal string and not a Base64 character string.

## MAGTEK Sample

### Sample Device Data Dump

```
EncryptionStatus=0206
SDK.Version=101.21
Reader.Type=1
Track.Status=000002
KSN=9010240B154C5400059F
Track1.Masked=%B5102650005008881^TEST/INTEGRATION^19051010000000000000000000000000000000000?
Track2.Masked=;5102650005008881=19051010000000000000?
Track1.Encrypted=B3AC05A0D8B595F21C5BBCCEB382601279ED67D46A2FEB5AFBB26493C309BF5A050CA68BB30712977D8857C080A7F41
251CAC18740EB3072
Track2.Encrypted=A718FFDBE97F343F792336D15BE6934EF5D17659796FCAB87A5768509C56B6DB23C3A2905CA2FD97
MagnePrint.Encrypted=
MagnePrint.Status=
Card.IIN=510265
Card.Name=TEST/INTEGRATION
Card.Last4=8881
Card.ExpDate=1905
Card.SvcCode=101
Card.PANLength=16
Device.Serial=B846B70420002500
```

### Sample API Submission

```
<encryptingDeviceType>MagTekADynamo</encryptingDeviceType>
<keySerialNumber>kBAkCxVMVAAFnw==</keySerialNumber>
```

<encryptedTrackData>s6wFoNi1lfIcW7zOs4JgEnntZ9RqL+ta+7Jkk8MJv1oFDKaLswcSl32IV8CAp/QSUcrBh0DrMHI=</encryptedTrackData>
<encryptedTrack2Data>pxj/2+l/ND95IzbRW+aTTvXRdll5b8q4eldoUJxWttsjw6KQXKL9lw==</encryptedTrack2Data>

# ROAM Sample

## Sample Device Data Dump

cardholderName: TEST/INTEGRATION
track1Status: 0
expiryDate: 1905
track2Status: 0
formatID: 32
ksn: 77764121300128E00190
maskedPAN: 5102XXXXXXXX8881
encTrack:
0d01464640ef4a10bf7b46571e49bad81d744e49ad726e1a9f6e1ea7058057c47066166eddd92fc3aa9e390d3102d133af114de2580602cf
00000000000000000000000000000000000000000000000004c761247347ea14734aff8e34f39900b1408a0515672e00c378a7ed8ba8a6f67
d13f406051b880b7
packEncTrackData:
$32$DQFGRkDvShC/e0ZXHkm62B10Tkmtcm4an24epwWAV8RwZhZu3dkvw6qeOQ0xAtEzrxFN4lgGAs8AAAAAAAAAAAAAAAAAAAAAAAAAAAAABM
dhJHNH6hRzSv+ONPOZALFAigUVZy4Aw3in7YuopvZ9E/QGBRuIC3

## Sample API Submission

<encryptingDeviceType>RoamData</encryptingDeviceType>
<keySerialNumber>d3ZBITABKOABkA==</keySerialNumber>
<encryptedTrackData>DQFGRkDvShC/e0ZXHkm62B10Tkmtcm4an24epwWAV8RwZhZu3dkvw6qeOQ0xAtEzrxFN4lgGAs8AAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAABMdhJHNH6hRzSv+ONPOZALFAigUVZy4Aw3in7YuopvZ9E/QGBRuIC3</encryptedTrackData>

## D.3 Software Development Kit

ProPay offers a .NET Software Development Kit for the Dynamag to assist developers in incorporating a swipe device into their developed or developing software solution. Please request additional information from techincalsupport@propay.com

# Appendix E: EnsureBill for ProtectPay

EnsureBill is a service by which card numbers and expiration dates can be updated as new information is available from the issuing banks. Clients must request enrollment in EnsureBill through their relationship manager, and should specify whether they want all active cards stored in ProtectPay to be updated, or only cards that have been marked as protected (cards used for recurring billing, for example).

Once enrolled, clients will receive a report via email or sFTP indicating which cards have been updated and the related new details (new obfuscated card number or expiration date). The client system may need to be enhanced to read in the response files in order to update and reflect the most current card details.

Clients can either enroll all their stored payment methods, or just protected payment methods. Clients must appropriately mark payment methods as 'protected' *prior* to enrolling for the EnsureBill service, and also have a mechanism for new payment methods to be appropriately marked as 'protected' in order to correctly make use of the service. Payment methods can be marked as 'protected' using the various means for card entry and edit via the API and Payer Management Interfaces (Seamless Payment Interface, Hosted Payment Page).

- **American Express cards are not eligible for automatic updates**
- **Not all card issuers provide updates due to several factors such as:**
  - The card issuer may not be integrated with the card brand networks to provide updates
  - Several Credit Unions are provided special BINs and do not update card brand networks
  - Some card types have special regulatory requirements prohibiting automatic updates
- **There is currently no un-enrollment mechanism for payment card updates.**

### Response Files

If needed, the client should contact their relationship manager to request an SFTP account and access.
File naming convention: EnsureBillSubscriptionReport_[ClientName]_[YYYYMMDD] 01-11-38-95.csv

Where [ClientName] is the name of the client and [YYYYMMDD] is the year, month and day the report was produced, and contains the updates from the previous day.

Files are produced in .CSV format, as shown below

### Response File Elements Defined:

| Parameter | Type | Max | Description |
|---|---|---|---|
| **Token** | Guid | 36 | The ProtectPay PaymentMethodId that was updated |
| **PayerId** | String | 16 | The ProtectPay Payer Account ID to which the Payment Method belongs |
| **OldCardCardNumber** | String | 18 | The obfuscated value of the card number prior to the update |
| **OldCardExpDate** | String | 4 | The value of the expiration date prior to the update |
| **NewCardCardNumber** | String | 18 | The obfuscated value of the card number after the update |
| **NewCardExpDate** | String | 4 | The value of the expiration date after the update |
| **ResponseCode** | String | 2 | The numerical response code indicating what kind of update/event occurred |
| **ResponseCodeDescription** | String | | The description of the update or other response |

### Sample Response Data

Token,PayerId,OldCardCardNumber,OldCardExpDate,NewCardCardNumber,NewCardExpDate,ResponseCode,ResponseCodeDescription
31f5632d-a2d8-4d45-b610-8eed2104f4d7,2665761519918176,543440******4707,1117,543440******4707,1117,1,Success
47af9b8b-d6bd-42c0-b90b-a233b1031ff9,2952764730215633,557621******8193,0119,557621******8193,0119,1,Success

5d3350f5-4db2-405b-aa71-373c2e07e552,4757325648855887,514735******9043,0317,514735******9043,0320,2,Update
f019f8c5-aa60-4552-a675-36927edec344,8056863252653040,379723******1000,0716,379723******1000,0716,4,Success
536a839a-dcf0-44ed-bd4d-51c1b22d6e8d,6503434140230100,435237******3589,0316,511786******8818,0520,3,Update
859542cc-543f-4ecc-90db-3ffa1111d003,2394376950640732,450440******6220,1018,450440******6220,1018,5,Success

### Response Codes and Meanings

| ResponseCode | Status | Description | Billable Response |
|---|---|---|---|
| **1** | Submitted | No Update/Successful submission | No |
| **2** | Update | Updated Expiration Date | Yes |
| **3** | Update | Updated Account Number, check exp date | Yes |
| **4** | Update | Account Closed | Yes |
| **5** | Update | Contact Cardholder | Yes |
| **6** | Error | Merchant is not registered with Card Brand | No |
| **7** | Error | Expiration Date Format Error | No |
| **8** | Error | Card Format Error | No |
| **30** | Removal | Removed Successfully | No |
| **31** | Error | Card Already Removed | No |
| **32** | Error | No Record Found to Remove | No |

# Appendix F: ProtectPay Data Import

ProtectPay hosts an interface to import existing sensitive payment method information in a secure manner. A merchant can generate a formatted XML file and upload it to ProPay's sFTP server to be imported.

## F.1 Supported ProtectPay API Methods

The following ProtectPay API methods are exposed for data importing:

- Create a PayerId
  - Create PaymentMethodId
- Edit a PayerId
  - Create PaymentMethodId
  - Edit PaymentMethodId
  - Delete PaymentMethodId
- Delete a Payer
  - Will also delete all PaymentMethodIds for the PayerId

## F.2 XML File Creation

In order to upload data, the client system must generate a correctly formatted XML file that is submitted to ProtectPay for importing. The data import interface does not check the validity of card data, including expiration dates when importing information. It will import what is requested to be imported. The client must check the validity of the card data prior to submitting it for import if it is intended to be used for processing.

### Multiple requests for services can be combined into one XML transmission

The API allows for multiple requests to be incorporated into a single file upload. ProtectPay replies to each nested request by returning the result code of the request. In the event that a single request fails, the additional requests will attempt to be processed.

*See section F.4 for additional information about XML file formatting per method request.
*See section A for additional information about responses returned by the interface.

## F.3 Uploading and Processing the XML File

ProtectPay uses sFTP to receive sensitive payment method data and can return responses via email or sFTP. Once a file has been prepared, a login for the ProtectPay secure transfer website, https://xfer.propay.com, can be requested from a ProPay sales representative and/or account manager.

- The client will need to supply the IP address(es) of the server and/or computer from which the file(s) will be transmitted.

ProPay will respond with the login credentials and the URL for submitting secure files.

*In order to upload the file via the web, the client Browser MUST support ActiveX.
Client will upload the file to ProPay's sFTP server and email **technicalsupport@propay.com** to notify ProPay there is a new file that needs to be processed.

### Receiving Response Files

Once the file is processed, ProtectPay will produce a response XML file. This file will be placed back on the secure transfer site where it can be downloaded and read into the client system. A sample response file is available upon request.

# F.4 Data Import Methods Defined

## Create a PayerId

This method will create a new ProtectPay PayerId and a PaymentMethodId. ProtectPay will respond to this request by mirroring the data back to the sender. If also creating a PaymentMethodId, this method does not check the validity of card data including expiration dates when importing information. A user must check the validity of the card data prior to submitting it for import.

### Request values defined

| Request Element | Notes |
|---|---|
| **BatchCommandRequest** | |
| **BatchCommandRequest{UniqueId}** | This value is set by the client and is echoed back for client system linking. |
| **BatchCommandRequest{AuthenticationToken}** | Used to access the API. |
| **System** | |
| **System{Id}** | Set to "SPS" |
| **System{BillerId}** | Used to identify the correct collection of PayerIds and PaymentMethodIds. |
| **Command** | |
| **Command{UniqueId}** | Set to "1" |
| **Command{Type}** | Set to "ADDPAYER" |
| **Payer** | |
| **Payer{Name}** | Used to identify a payer. |
| **PaymentMethods[]** | Collection of payment methods |
| **PaymentMethods[].PaymentMethod** | |
| **PaymentMethods[].PaymentMethod{Action}** | Used to indicate the action to perform on the PaymentMethodId ADD EDIT DELETE |
| **PaymentMethods[].PaymentMethod{Priority}** | Used to explicitly set an order for the ProcessPayment transaction. |
| **PaymentMethods[].PaymentMethod{Type}** | Used to tell ProtectPay what type of data is being submitted.<br>Valid values are:<br>▪ Visa<br>▪ MasterCard<br>▪ AMEX<br>▪ Discover<br>▪ DinersClub<br>▪ JCB<br>▪ ProPayToProPay<br>▪ Checking<br>▪ Savings |
| **PaymentMethods[].PaymentMethod.AccountNumber** | Used to identify a payer. |
| **PaymentMethods[].PaymentMethod.ExpirationDate** | The expiration date for a payment method.<br>For a credit card these are submitted as 4 digit numeric values MMYY.<br>Expiration dates are optional but if the system needs an expiration date in order to process, you need to either add it here or supply it as an optional payment method override when performing a transaction. |
| **PaymentMethods[].PaymentMethod.BillingAddress1** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingAddress2** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingCity** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingState** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingZipCode** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingCountry** | ISO 3166 standard 3 character country codes.<br>Current allowed values are: |

| | |
|---|---|
| | USA<br>CAN |

## Response values defined

| Response Element | Notes |
|---|---|
| **ResultValue** | The ProtectPay API Method Response Value. |
| **ResultCode** | The ProtectPay API Method Response Code. See Appendix A for possible returned values. |
| **ResultMessage** | The ProtectPay API Method Response Message. See Appendix A for possible returned messages. |
| **ExternalAccountID** | This is the ProtectPay ID for the Payer Created and belongs to the BillerID that created it.<br>*This is referenced in other methods as 'PayerAccountID' or 'PayerID'. |
| **PaymentMethodID** | This is the ProtectPay ID for the Payment Method, also called a Token.<br>The Payment Method Created Belongs to the PayerId for which it was created. |

## Example of XML file request

```
<?xml version="1.0" ?>
<BatchCommandRequest UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66" AuthenticationToken="68FA7603-05B8-4725-
89A0-689154067CA2">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="1" Type="ADDPAYER">
      <Payer Name="Flint King">
        <PaymentMethods>
          <PaymentMethod Priority="1" Type="VISA">
            <AccountName>Flint King</AccountName>
            <AccountNumber>4747474747474747</AccountNumber>
            <ExpirationDate>0110</ExpirationDate>
            <BillingAddress1>1234 Anystreet Rd.</BillingAddress1>
            <BillingAddress2 />
            <BillingCity>Sandy</BillingCity>
            <BillingState>UT</BillingState>
            <BillingZipcode>84092</BillingZipcode>
            <BillingCountry>USA</BillingCountry>
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
  </System>
</BatchCommandRequest>
```

## Example of XML data returned from ProtectPay for the 'Add Payer' function:

```
<?xml version="1.0" ?>
<BatchCommandResponse UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="1" Type="ADDPAYER">
      <Result>SUCCESS</Result>
      <ResultCode>00</ResultCode>
      <ResultMessage />
      <Payer Name="Flint King" ExternalId="2345678998765432">
        <PaymentMethods>
            <PaymentMethod Priority="1" Type="VISA" PaymentMethodId="3E6FF1BE-3620-4ee5-BFF0-876A9A429EA5">
            <Result>SUCCESS</Result>
            <ResultCode>00</ResultCode>
            <ResultMessage />
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
  </System>
</BatchCommandResponse>
```

## Edit a PayerId

This method will edit a PayerId as well as create additional PaymentMethodId, edit PaymentMethodId or delete PaymentMethodId from a specific PayerId. ProtectPay will respond to this request by mirroring the data back to the sender. This method does not check the validity of card data including expiration dates when importing information. A user must check the validity of the card data prior to submitting it for import.

### Request values defined

| Request Element | Notes |
|---|---|
| **BatchCommandRequest** | |
| **BatchCommandRequest{UniqueId}** | This value is set by the client and is echoed back for client system linking. |
| **BatchCommandRequest{AuthenticationToken}** | Used to access the API. |
| **System** | |
| **System{Id}** | Set to “SPS”. |
| **System{BillerId}** | Used to identify the correct collection of PayerId’s and PaymentMethodId’s. |
| **Command** | |
| **Command{UniqueId}** | Set to “2”. |
| **Command{Type}** | Set to “EDITPAYER”. |
| **Payer** | |
| **Payer{ExternalId}** | PayerId or ExternalAccountId |
| **PaymentMethods[]** | |
| **PaymentMethods[].PaymentMethod** | |
| **PaymentMethods[].PaymentMethod{Action}** | Used to indicate the action to perform on the PaymentMethodId.<br>ADD<br>EDIT<br>DELETE |
| **PaymentMethods[].PaymentMethod{Priority}** | Used to explicitly set an order for the ProcessPayment transaction. |
| **PaymentMethods[].PaymentMethod{Type}** | Used to tell ProtectPay what type of data is being submitted.<br>Valid values are:<br>Visa<br>MasterCard<br>AMEX<br>Discover<br>DinersClub<br>JCB<br>ProPayToProPay<br>Checking<br>Savings |
| **PaymentMethods[].PaymentMethod.AccountNumber** | Used to identify a payer. |
| **PaymentMethods[].PaymentMethod.ExpirationDate** | The expiration date for a payment method.<br>For a credit card these are submitted as 4 digit numeric values MMYY.<br>Expiration dates are optional but if the system needs an expiration date in order to process, you need to either add it here or supply it as an optional payment method override when performing a transaction. |
| **PaymentMethods[].PaymentMethod.BillingAddress1** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingAddress2** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingCity** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingState** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingZipCode** | The address on the account for a payment method. |
| **PaymentMethods[].PaymentMethod.BillingCountry** | ISO 3166 standard 3 character country codes.<br>Current allowed values are:<br>USA<br>CAN |

## Response values defined

| Response Element | Notes |
|---|---|
| **ResultValue** | The ProtectPay API Method Response Value. |
| **ResultCode** | The ProtectPay API Method Response Code. See Appendix A for possible returned values. |
| **ResultMessage** | The ProtectPay API Method Response Message. See Appendix A for possible returned messages. |
| **ExternalAccountID** | This is the ProtectPay ID for the Payer Created and belongs to the BillerID that created it.<br>*This is referenced in other methods as 'PayerAccountID' or 'PayerID'. |
| **PaymentMethodID** | This is the ProtectPay ID for the Payment Method, also called a Token.<br>The Payment Method Created Belongs to the PayerId for which it was created. |

## Example of XML file request

```
<?xml version="1.0" ?>
<BatchCommandRequest UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66" AuthenticationToken="68FA7603-05B8-4725-
89A0-689154067CA2">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="1" Type="EDITPAYER">
      <Payer ExternalId="2345678998765432">
        <PaymentMethods>
            <PaymentMethod Action="ADD" Priority="1" Type="VISA">
            <AccountName>Flint King</AccountName>
            <AccountNumber>4747474747474747</AccountNumber>
            <ExpirationDate>0110</ExpirationDate>
            <BillingAddress1>1234 Anystreet Rd</BillingAddress1>
            <BillingAddress2 />
            <BillingCity>Sandy</BillingCity>
            <BillingState>UT</BillingState>
            <BillingZipcode>84092</BillingZipcode>
            <BillingCountry>USA</BillingCountry>
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
    <Command UniqueId="1" Type="EDITPAYER">
      <Payer ExternalId="9345677898767652">
        <PaymentMethods>
          <PaymentMethod Action="DELETE" PaymentMethodId="3dabb760-10bb-11dd-bd0b-0800200c9a67"/>
        </PaymentMethods>
      </Payer>
    </Command>
  </System>
</BatchCommandRequest>
```

## Example of XML data returned from ProtectPay for the 'Add Payer' function:

```
<?xml version="1.0" ?>
<BatchCommandResponse UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="2" Type="EDITPAYER">
      <Payer ExternalId="2345678998765432">
        <PaymentMethods>
          <PaymentMethod Action="ADD" Priority="1" Type="VISA" PaymentMethodId="2ED66911-EFD9-4f3d-8665-
A0052FB4320A">
            <Result>SUCCESS</Result>
            <ResultCode>00</ResultCode>
            <ResultMessage />
          </PaymentMethod>
          <PaymentMethod Action="EDIT" PaymentMethodId="2dabb760-10bb-11dd-bd0b-0800200c9a66">
            <Result>SUCCESS</Result>
            <ResultCode>00</ResultCode>
            <ResultMessage />
          </PaymentMethod>
          <PaymentMethod Action="DELETE" PaymentMethodId="3dabb760-10bb-11dd-bd0b-0800200c9a67">
            <Result>FAILED</Result>
            <ResultCode>22</ResultCode>
            <ResultMessage>Invalid Payment Method Id</ResultMessage>
```

```
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
  </System>
</BatchCommandResponse>
```

## Delete a PayerId

This method will delete a PayerId and all associated PaymentMethodId. A PayerId that is deleted is no longer available for use by the owning BillerId. A PaymentMethodId that is deleted is no longer available for use by the owning PayerId.

### Request values defined

| Request Element | Notes |
|---|---|
| **BatchCommandRequest** | |
| **BatchCommandRequest{UniqueId}** | This value is set by the client and is echoed back for client system linking. |
| **BatchCommandRequest{AuthenticationToken}** | Used to access the API. |
| **System** | |
| **System{Id}** | Set to “SPS”. |
| **System{BillerId}** | Used to identify the correct collection of PayerId’s and PaymentMethodId’s. |
| **Command** | |
| **Command{UniqueId}** | Set to “3”. |
| **Command{Type}** | Set to “DELETEPAYER”. |
| **Payer** | |
| **Payer{ExternalId}** | PayerId or ExternalAccountId |

### Response values defined

| Response Element | Notes |
|---|---|
| ResultValue | The ProtectPay API Method Response Value. |
| ResultCode | The ProtectPay API Method Response Code. See Appendix A for possible returned values. |
| ResultMessage | The ProtectPay API Method Response Message. See Appendix A for possible returned messages. |

### Example of XML file request

```
<?xml version="1.0" ?>
<BatchCommandRequest UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66" AuthenticationToken="68FA7603-05B8-4725-
89A0-689154067CA2">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="3" Type="DELETEPAYER">
      <Payer ExternalId="2345678998765432" />
    </Command>
  </System>
</BatchCommandRequest >
```

### Example of XML data returned from ProtectPay for “Delete Payer” function:

```
<?xml version="1.0" ?>
<BatchCommandResponse UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="3" Type="DELETEPAYER">
      <Result>SUCCESS</Result>
      <ResultCode>00</ResultCode>
      <ResultMessage />
      <Payer ExternalId="2345678998765432" />
    </Command>
  </System>
</BatchCommandResponse>
```

# Multiple request types

## Example of XML file request

```
<?xml version="1.0" ?>
<BatchCommandRequest UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66" AuthenticationToken="68FA7603-05B8-4725-
89A0-689154067CA2">
  <System Id="SPS" BillerExternalId="564738291346789">
    <Command UniqueId="1" Type="ADDPAYER">
      <Payer Name="Flint King">
        <PaymentMethods>
          <PaymentMethod Priority="1" Type="VISA">
            <AccountName>Flint King</AccountName>
            <AccountNumber>4747474747474747</AccountNumber>
            <ExpirationDate>0110</ExpirationDate>
            <BillingAddress1>1234 Anystreet Rd.</BillingAddress1>
            <BillingAddress2 />
            <BillingCity>Sandy</BillingCity>
            <BillingState>UT</BillingState>
            <BillingZipcode>84092</BillingZipcode>
            <BillingCountry>USA</BillingCountry>
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
    <Command UniqueId="2" Type="EDITPAYER">
      <Payer ExternalId="2345678998765432">
      <PaymentMethods>
        <PaymentMethod Action="ADD" Priority="1" Type="VISA">
          <AccountName>Flint King</AccountName>
          <AccountNumber>4747474747474747</AccountNumber>
          <ExpirationDate>0110</ExpirationDate>
          <BillingAddress1>1234 Anystreet Rd.</BillingAddress1>
          <BillingAddress2 />
          <BillingCity>Sandy</BillingCity>
          <BillingState>UT</BillingState>
          <BillingZipcode>84092</BillingZipcode>
          <BillingCountry>USA</BillingCountry>
          </PaymentMethod>
        <PaymentMethod Action="EDIT" PaymentMethodId="2dabb760-10bb-11dd-bd0b-0800200c9a66">
          <AccountName>Flint King</AccountName>
          <ExpirationDate>1210</ExpirationDate>
          <BillingAddress1>1234 Anystreet Rd.</BillingAddress1>
          <BillingAddress2 />
          <BillingCity>Sandy</BillingCity>
          <BillingState>UT</BillingState>
          <BillingZipcode>84092</BillingZipcode>
          <BillingCountry>USA</BillingCountry>
        </PaymentMethod>
        <PaymentMethod Action="DELETE" PaymentMethodId="3dabb760-10bb-11dd-bd0b-0800200c9a67" />
        </PaymentMethods>
      </Payer>
    </Command>
    <Command UniqueId="3" Type="DELETEPAYER">
      <Payer ExternalId="2345678998765432" />
    </Command>
  </System>
</BatchCommandRequest>
```

## Example of XML data returned from ProtectPay for multiple transactions:

```
<?xml version="1.0" ?>
<BatchCommandResponse UniqueId="9951cc70-10b6-11dd-bd0b-0800200c9a66">
  <Result>Success</Result>
  <ResultCode>00</ResultCode>
  <ResultMessage />
  <System Id="SPS" BillerExternalId="564738291346789">
    <Result>Success</Result>
    <ResultCode>00</ResultCode>
    <ResultMessage />
    <Command UniqueId="1" Type="ADDPAYER">
```

```
      <Result>SUCCESS</Result>
      <ResultCode>00</ResultCode>
      <ResultMessage />
      <Payer Name="Flint King" ExternalId="2345678998765432">
        <PaymentMethods>
          <PaymentMethod Priority="1" Type="VISA" PaymentMethodId="3E6FF1BE-3620-4ee5-BFF0-876A9A429EA5">
            <Result>SUCCESS</Result>
            <ResultCode>00</ResultCode>
            <ResultMessage />
          </PaymentMethod>
        </PaymentMethods>
      </Payer>
    </Command>
    <Command UniqueId="2" Type="EDITPAYER">
      <Payer ExternalId="2345678998765432">
      <PaymentMethods>
        <PaymentMethod Action="ADD" Priority="1" Type="VISA" PaymentMethodId="2ED66911-EFD9-4f3d-8665-
A0052FB4320A">
          <Result>SUCCESS</Result>
          <ResultCode>00</ResultCode>
          <ResultMessage />
        </PaymentMethod>
        <PaymentMethod Action="EDIT" PaymentMethodId="2dabb760-10bb-11dd-bd0b-0800200c9a66">
          <Result>SUCCESS</Result>
          <ResultCode>00</ResultCode>
          <ResultMessage />
        </PaymentMethod>
        <PaymentMethod Action="DELETE" PaymentMethodId="3dabb760-10bb-11dd-bd0b-0800200c9a67">
          <Result>FAILED</Result>
          <ResultCode>22</ResultCode>
          <ResultMessage>Invalid Payment Method Id</ResultMessage>
        </PaymentMethod>
      </PaymentMethods>
      </Payer>
    </Command>
    <Command UniqueId="3" Type="DELETEPAYER">
      <Result>SUCCESS</Result>
      <ResultCode>00</ResultCode>
      <ResultMessage />
      <Payer ExternalId="2345678998765432" />
    </Command>
  </System>
</BatchCommandResponse>
```