Online Commerce Suite™
1stMILE™ MiddleWare Guide

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Merchant Partners
8383 158th Ave NE
Suite 100
Redmond, WA 98052

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Overview

Online Commerce Suite™ is a Web-based payment gateway that allows you to securely process credit card and electronic check payments for goods and services over the Internet.

1stMILE™ MiddleWare is a Windows library that provides an easy way to integrate with the Online Commerce Suite for your custom applications. 1stMILE MiddleWare is implemented as a .NET object (including support for COM interoperability) capable of running on Windows 7 (SP1) or later versions of Windows with .NET Framework 4.5.2.

What's In This Guide

The Online Commerce Suite 1stMILE MiddleWare Guide is a technical guide designed for developers familiar with programming languages such as Visual Basic, C#, or C++. This guide provides all the information necessary to integrate your custom application with the Online Commerce Suite using 1stMILE MiddleWare.

How to Comment on This Guide

Every effort has been made to produce an accurate and easy to understand reference. If you have problems with this document, or find that the instructions are incorrect, incomplete, or inadequate, please let us know.

Contact Information

Email: support@merchantpartners.com

Phone: (425) 497-9909

Documentation

Web Site URL: https://www.onlinemerchantcenter.com/mpartners/html/user_manuals.html

1stMILE™ MiddleWare Reference

1stMILE MiddleWare exposes a single object, *ATSSecurePostUI*. This object provides methods for presenting a graphical user interface that allows users to interactively process transactions. Transaction data is transferred over a secure HTTP (TLS) connection using the capabilities provided by the .NET framework. 1stMILE MiddleWare supports several card readers via plug-in modules to provide card swipe and EMV functionality. Additional plug-in modules provide check scanning and signature capture functionality.

Installation

To install 1stMILE MiddleWare for use as a COM object, copy the file ATSSecurePostUILib.dll to the location where you want the object to reside (typically the same location where your application resides, or in the Windows SYSTEM or SYSTEM32 directory). Register ATSSecurePostUILib.dll with the following command:

```
RegAsm /codebase ATSSecurePostUILib.dll
```

RegAsm.exe may not be in your command path. It is a .NET Framework tool located in the .NET Framework installation directory (e.g., C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegAsm.exe).

Uninstallation

To uninstall 1stMILE MiddleWare, unregister ATSSecurePostUILib.dll with the following command:

```
RegAsm /u ATSSecurePostUILib.dll
```

Delete the file ATSSecurePostUILib.dll from the location you installed it.

Methods

The *ATSSecurePostUI* object provides the following methods:

string CheckForUpdate(void)
> This non-interactive method compares the installed version of 1stMILE MiddleWare against the latest available version.

string CheckForUpdates(bool)
> This method compares the installed version of 1stMILE MiddleWare and all hardware add-ons against the latest available versions and optionally launches the installation process.

void ShowConfigDialog(void)
string ShowConfigDialog(string)
> This interactive method allows the user to configure 1stMILE MiddleWare settings.

string ShowCreditCardForm(string)
> This interactive method allows the user to process a credit card or debit card transaction.

string ShowCheckForm(string)
> This interactive method allows the user to process a check (ACH/ExtACH/Check21/CheckGuarantee) transaction.

`string ShowSignatureCaptureDialog(string, string, short, short)`
`string ShowSignatureCaptureDialog(string)`
> This interactive method allows the user to capture a signature image from a signature pad.

`string ShowCFNACreditApplication()`
`string ShowCFNACreditApplication(string)`
> This interactive method allows the user to submit a CFNA credit application.

`string ShowCreditApplication(string)`
> This interactive method allows the user to submit a credit application.

`string ShowGoodyearApplication(void)`
`string ShowGoodyearApplication(string)`
> This method has been superseded by `ShowCreditApplication`.

`string ShowServiceCentralCreditApplication(void)`
`string ShowServiceCentralCreditApplication(string)`
> This method has been superseded by `ShowCreditApplication`.

`string ShowAccountLookupDialog(string)`
> This interactive method allows the user to perform a Synchrony Car Care, Goodyear, or Big O Tires account lookup (via SSN & Zip Code) or a Balance Inquiry (via Card Number).

`string ShowTokenLookupDialog(string)`
> This interactive method allows the user to perform a Tokenized account lookup (via Token & Last 4 Digits of payment account number).

`string ShowGiftCardDialog(string)`
> This interactive method allows the user to perform a gift card action (e.g., Issue, Add Value, Balance Inquiry, Deactivate).

`string ShowTransactionSearchDialog(string)`
> This interactive method allows the user to perform a transaction search.

`string ShowTextToPay(string)`
> This interactive method allows the user to send a pay link to the consumer.

`string ShowTextToAuthorize(string)`
> This interactive method allows the user to send a work order authorization to the consumer.

`string ShowLoyalty(string)`
> This interactive method allows the user to present a 1stMILE loyalty program to the consumer.

`string ProcessCashOtherSale(string)`
> This non-interactive method allows the user to record a cash or any other non-Credit Card/Check transaction.

Please note that not all development environments support overloaded methods. If you encounter difficulties calling the second version of the overloaded methods listed above, you may need to append "_2" to the method name.

Example:

First method:
```
uiLib.ShowConfigDialog();
```

Second method:
```
string strParams = "/AcctID:TEST0/MerchantPIN:123-aBc-789";
string strResult = uiLib.ShowConfigDialog_2(strParams);
```

string CheckForUpdate(void)

This method checks the Merchant Partners servers for an updated version of 1stMILE MiddleWare.

Returns:

string Result

>   The result of this method call is a multi-line string containing information about the latest available version of 1stMILE MiddleWare.

>   [*UPDATE|CURRENT|ERROR*]
>> Identifies the result of the call:

Value	Description
UPDATE	Indicates an update is available. Examine the remaining lines of the result to determine if you want to manually download the latest release.
CURRENT	Indicates the installed version is current. The remaining lines of the result list information about the latest release.
ERROR	Indicates an error in retrieving the information from the server.

>   VERSION=*string*
>> The version number of the latest package.
>   DATE=*MM/DD/YYYY*
>> The date of the latest package.
>   NAME=*string*
>> The base filename of the package.
>   LINK=*URL*
>> The HTTP link where the latest package may downloaded.
>   SIZE=*string*
>> The size of the package archive.
>   MD5=*string*
>> The MD5 hash of the package archive.

>   Sample result:

```
CURRENT
VERSION=1.2.24.0
DATE=08/14/2015
NAME=ATSSecurePostUILib.zip
LINK=https://www.onlinemerchantcenter.com/docs/downloads/ATSSecurePostUILib.zip
SIZE=359 KB
MD5=489842f25227985fa5828279a947814e
```

string CheckForUpdates(bool)

This method checks the Merchant Partners servers for updated versions of 1stMILE MiddleWare and all installed hardware add-ons, and optionally installs any updates found.

Parameters:

`bool Install`

This parameter controls installation of updated components.

Value	Description
`true`	Launches the installation process if any updates are available. You must release the ATSSecurePostUI object in order to perform updates; this usually means closing your application.
`false`	Do not launch the installation process, even if updates are available, but instead return information about all available updates.

Returns:

`string Result`

The result of this method call is a multi-line string containing information about the latest available version of 1stMILE MiddleWare and hardware add-ons.

`[`*UPDATING*`|`*UPDATE*`|`*CURRENT*`|`*ERROR*`]`
Identifies the result of the call:

Value	Description
`UPDATING`	Indicates updates are available and being installed.
`UPDATE`	Indicates updates are available. Examine the remaining lines of the result to determine if you want to manually download the latest versions. If there are multiple components with updates available, each will be listed in the result following individual `UPDATE` lines.
`CURRENT`	Indicates the installed version is current.
`ERROR`	Indicates an error in retrieving the information from the server.

`VERSION=`*string*
The version number of the latest package.
`DATE=`*MM/DD/YYYY*
The date of the latest package.
`NAME=`*string*
The base filename of the package.
`LINK=`*URL*
The HTTP link where the latest package may downloaded.
`SIZE=`*string*
The size of the package archive.

void ShowConfigDialog(void)

string ShowConfigDialog(string)

This method shows a configuration dialog with the following sections:

- *Account* – allows the user to enter the *Account ID*, *Sub ID*, and *MerchantPIN* values to use for transaction processing.
- *Receipt* – allows the user to specify the Merchant information to be printed on receipts.
- *Startup* – controls launch options.
- *Transaction Options* – controls general transaction options.
- *Transaction Type* – controls specific transaction type options.
- *Credit Facility* – controls the credit facility.
- *Fraud/Risk* – controls CVV2 and AVS options.
- *Hardware* – allows the user to select a compatible card swipe device and enter any additional settings that may be required for the selected hardware.
- *Signature Pad* – allows the user to select a compatible signature capture device and enter any additional settings that may be required for the selected hardware.
- *ACH* – allows the user to specify default check processing settings.
- *Check Scanner* – allows the user to select a compatible check scanner and enter any additional settings that may be required for the selected hardware.
- *Updates* – allows the user to configure auto update settings.

The *Acct ID* and *Merchant PIN* settings are required for all transactions.

The parameterless version of this method persists all settings entered in the dialog.

The second version of this method accepts an initialization parameter and returns the user configured settings which may be used for the initialization parameter for other methods (e.g., `ShowCreditCardForm`).

Parameters:

`string InitializationParameters`

> This parameter allows you to initialize the form with a set of values. This set of values may contain zero or more named parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:). Any fields not specified will use the stored value for that field.
>
> The following named parameters allow you to hide individual sections in the dialog:
>
> `/HideGeneral:`
> > Hides the *Account*, *Startup*, *Transaction Options*, and *Transaction Type* sections when a value of `1` is given.
> `/HideAccount:`
> > Hides the *Account* section when a value of `1` is given.
> `/HideReceipt:`
> > Hides the *Receipt* section when a value of `1` is given.
> `/HideStartup:`
> > Hides the *Startup* section when a value of `1` is given.
> `/HideTransactionOptions:`
> > Hides the *Transaction Options* section when a value of `1` is given.
> `/HideTransactionTypes:`
> > Hides the *Transaction Types* section when a value of `1` is given.
> `/HidePrivateLabelCards:`
> > Hides the *Credit Facility* section when a value of `1` is given.
> > `/HideCreditApplication:` may also be used.

`/HideVerification:`
> Hides the *Verification* section when a value of `1` is given.

`/HideHardware:`
> Hides the *Hardware* section when a value of `1` is given.

`/HideSignaturePad:`
> Hides the *Signature Pad* section when a value of `1` is given.

`/HideACH:`
> Hides the *ACH* section when a value of `1` is given.

`/HideCheckScanner:`
> Hides the *Check Scanner* section when a value of `1` is given.

`/HideUpdates:`
> Hides the *Updates* section when a value of `1` is given.
>
> `/HideAutoUpdate:` may also be used.

The following named parameters apply to the *Account* section:

`/AcctID:`
> 5-character alphanumeric value that identifies the merchant.
>
> (`/ATSID:` may also be used.)

`/SubID:`
> 5-character alphanumeric value that identifies the Sub ID for the merchant.
>
> (`/ATSSubID:` may also be used.)

`/MerchantPIN:`
> The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section).

`/TripleDesKey:`
> The 3DES Key from the Online Merchant Center (under the FRISK™ Management > Configure Options > Account Number 3DES Encryption).

`/SoapReportingKey:`
> The SOAP Reporting Key value from the Online Merchant Center (under the FRISK™ Management > Configure Options > SOAP Reporting Service Account Key section).

`/MerchantIndustry:`
> This parameter identifies the merchant industry which may have built-in business rules. Valid values are

Value	Description
A	Auto Rental
D	Direct Marketing
E	E-Commerce
F	Food/Restaurant
H	Hotel/Lodging
L	Loan Repayment
O	Oil/Fueling
R	Retail

The following named parameters apply to the *Receipt* section:

`/MerchantName:`
> Specifies the Merchant name to be printed on the first line of the receipt.

`/MerchantAddress:`
> Specifies the Merchant address to be printed on the second line of the receipt.

`/MerchantCityStateZip:`
> Specifies the Merchant city, state and zip to be printed on the third line of the receipt.

`/MerchantPhone:`
> Specifies the Merchant phone number to be printed on the fourth line of the receipt.

`/ReceiptText:`

Specifies additional text to print on receipts.

`/ReceiptCopies:`

Sets the default number of copies when the user chooses to print the receipt.

`/AutoPrintReceipt:`

Controls the *Automatically Print Receipt* checkbox (0 = unchecked, 1 = checked).

`/ReceiptCopies2:`

Controls the *Print two copies per page* checkbox (0 = unchecked, 1 = checked).

The following named parameters apply to the *Startup* section:

`/PromptForPaymentMethod:`

Controls the *Prompt for Credit Card or Check on Sales* checkbox (0 = unchecked, 1 = checked).

`/WarnOnPreAuth:`

Controls the *Warn on Pre-Auth* checkbox (0 = unchecked, 1 = checked).

`/HideAddressGroup:`

Controls the *Hide Address* checkbox (0 = unchecked, 1 = checked).

`/HideIdGroup:`

Controls the *Hide Identification* checkbox (0 = unchecked, 1 = checked).

`/HideVacGroup:`

Controls the *Hide Voice Auth Capture* checkbox (0 = unchecked, 1 = checked).

`/DisableKeyedEntry:`

Controls the *Disable Keyed Entry* checkbox (0 = unchecked, 1 = checked).

`/DisableKeyedMasking:`

Controls the *Disable Keyed Card Number Masking* checkbox (0 = unchecked, 1 = checked).

The following named parameters apply to the *Transaction Options* section:

`/SwipeImmediate:`

Controls the *Immediately Swipe* checkbox (0 = unchecked, 1 = checked).

`/ProcessOnSwipe:`

Controls the *Process on Swipe* checkbox (0 = unchecked, 1 = checked).

`/TaxRequired:`

Controls the *Require Tax* checkbox (0 = unchecked, 1 = checked).

`/DisableCashback:`

Controls the *Disable Cashback* checkbox (0 = unchecked, 1 = checked).

`/EnableP3:`

Controls the *Enable Purchase Card Level III* checkbox (0 = unchecked, 1 = checked).

`/SuppressAcceptedDialog:`

Controls the *Suppress Accepted* checkbox (0 = unchecked, 1 = checked).

`/AllowTokenization:`

Controls the *Enable Account on File* checkbox (0 = unchecked, 1 = checked).

`/DefaultFCProductCode:`

For *Fleet* cards, this identifies the default product code for the transaction. The default product code is used to generate the Line Item detail when not submitted by the user. For valid values, see Appendix B.

The following named parameters apply to the *Transaction Types* section:

`/EnableGiftCardManager:`

Controls the *Enable Gift Card Manager* checkbox (0 = unchecked, 1 = checked).

`/RequireGiftCardActivationSwipe:`

Controls the *Require Swipe for Gift Card Activation & Add Value* checkbox (0 = unchecked, 1 = checked).

`/EnableEBT:`

Controls the *Enable EBT Transactions* checkbox (0 = unchecked, 1 = checked).

`/EnableFSA:`

Controls the *Enable Health Care Transactions* checkbox (0 = unchecked, 1 = checked).

`/EnableRecur:`

Controls the *Enable Recurring Transactions* checkbox (0 = unchecked, 1 = checked).

The following named parameters apply to the *Credit Facility* section:

`/UseCreditFacility:`

If enabled, all calls made to the credit facility will try to apply through all tiers if able. Otherwise, only the desired application will be applied for. The value `1` is used to enable, `0` to disable.

`/RemoveCreditSelectScreen:`

With this enabled, the credit selection screen for the credit facility will be removed. The value `1` is used to enable, `0` to disable. Disabled by default.

`/Tier1CreditApp:`

Desired tier 1 credit application:

Value	Description
CFNA	CFNA
GDYR	Goodyear
SERV	Big O Tires
GEMY	Synchrony Car Care

`/Tier2CreditApp`

Desired tier 2 credit application:

Value	Description
CFSS	DigniFi

`/Tier3CreditApp`

Desired tier 3 credit application:

Value	Description
AMFF	American First Finance

`/AllowAccountLookup:`

Controls the *Enable Account Lookup* checkbox (0 = unchecked, 1 = checked).

`/DisableTerms12:`

Controls the *Disable 12 Months No Interest* checkbox (0 = unchecked, 1 = checked).

`/ConfirmTerms12:`

Controls the *Prompt 12 Months No Interest Confirmation* checkbox (0 = unchecked, 1 = checked).

`/CreditAppPopup:`

Controls the *Apply for Credit Popup* selection (0 = Off, 1 = On).

`/Tier1PopupOnly:`

Controls the *Tier 1 Only* checkbox (0 = unchecked, 1 = checked).

If enabled, only the tier 1 credit application will be attempted for financing when prompted for special financing. Otherwise, the credit facility will attempt to apply through all tiers if able.

`/CreditAppPopupProvider:`

Identifies the selected credit application provider:

Value	Description
CFNA	CFNA
GDYR	Goodyear
SERV	Big O Tires

Value	Description
GEMY	Synchrony Car Care

/CreditAppPopupAmount:
>   Specifies the minimum amount which triggers the credit application popup to be displayed.

/AlwaysUseCreditAppSelector:
>   Controls the *Always Use Credit App Select* checkbox (0 = unchecked, 1 = checked).

/CreditAppAssociateIdRequired:
>   Controls the *Require Associate ID* checkbox (0 = unchecked, 1 = checked).

/AutoQuickScreen:
>   This parameter only applies to Synchrony Car Care. It indicates whether QuickScreen should be executed for Sales and Auths.

/ShowQuickScreenDecline:
>   This parameter only applies to Synchrony Car Care. It indicates whether QuickScreen Declines should be shown when AutoQuickScreen is enabled.

The following named parameters apply to the *Fraud/Risk* section:

/EnableCvvOverride:
>   If this parameter is present with the value 1, then the *CVV2 Enable Override* defaults to *On*.

/EnableAvsOverride:
>   If this parameter is present with the value 1, then the *AVS Enable Override* defaults to *On*.

/AvsLevel:
>   This parameter identifies the selected AVS level:

Value	Description
1	Only Address Must Match
2	Only Postal Code Must Match
3	Only 9-Digit Postal Code Must Match
4	Either Address or Postal Code Must Match
5	Either Address or 9-Digit Postal Code Must Match
6	Address and 5-Digit Postal Code Must Match
7	Address and 9-Digit Postal Code Must Match

/AvsCvvOverrideMinutes:
>   This parameter identifies the AVS/CVV2 override timeout. Valid values are 1-5. The default value is 3.

/AvsCvvForceVoid:
>   If this parameter is present with the value 1, then the *Force Void on CVV2/AVS Falure* defaults to *On*.

The following named parameters apply to the *Signature Pad* section:

/RequireSignature:
>   Controls the *Always Require Signature* checkbox (0 = unchecked, 1 = checked).

The following named parameters apply to the *ACH* section:

/TerminalCity:
>   Four-character abbreviated name for the city where the POS terminal is located.

`/TerminalState:`
> Two-character state abbreviation of the state where the POS terminal is located.

`/ACHMethod:`
> Default ACH method:

Value	Description
ACH	Standard ACH
ExtACH	Extended ACH
Check21	Check21
CheckGuarantee	Check Guarantee
PaperGuarantee	Paper Guarantee

`/SECCode:`
> Default SEC code:

Value	Description
ARC	Accounts Receivable Conversion
BOC	Back Office Conversion
ICL	Image Cash Letter
POP	Point of Purchase
PPD	Prearranged Payment/Deposit
RCK	Re-Presented Check
TEL	Telephone-Initiated Entry

`/VerificationEnabled:`
> Whether check verification is enabled (`1`) or disabled (`0`).

The following named parameters apply to the *Updates* section:

`/CheckForUpdates:`
> A value of `0` indicates the library should *never check for updates*, a value of `1` indicates that updates should be queried based on the update interval.

`/CheckForUpdateInterval:`
> Specifies the number of days between checks for update.

The following named parameters are also supported:

`/CenterScreen:`
> If this parameter is present with the value `1`, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.

`/Query:`
> This parameter allows querying specific configuration information. The following table shows supported values and changes to the result:

Value	Description	Result
IsSigPadAvailable	Indicates whether a signature pad is available.	Returns YES if a signature pad is available, NO otherwise.

Example:

```
/AcctID:TEST0/MerchantPIN:123-aBc-789/HideReceipt:1
```

Returns:

```
string Result
```

The result of this method call is a string containing the user configured settings. This string may be used in the initialization parameter for other method calls (e.g., `ShowCreditCardForm`).

Example:

```
/AcctID:TEST0/MerchantPIN:123-aBc-789/EnableP3:1
```

If the `/Query:` named parameter was supplied in the method call, then the result will instead contain the information described in the Query Values table.

string ShowCreditCardForm(string)

This method shows the credit card processing form.

Parameters:

string InitializationParameters

> This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

> The following named parameters are supported:

> /AcctID:
>> 5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>> (/ATSID: may also be used.)

> /SubID:
>> 5-character alphanumeric value that identifies the SubID for the merchant.
>> (/ATSSubID: may also be used.)

> /MerchantPIN:
>> The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.

> /TransactionType:
>> Identifies the transaction type:

Value	Description
Sale	Perform a sale.
PreAuth	Perform a pre-authorization.
AuthReversal	Perform a reversal on an auth-only transaction.
PostAuth	Perform a post on a previous auth-only transaction.
VAC	Perform a sale with Voice Authorization Capture information.
Refund	Perform a refund of a previous transaction.
Void	Perform a void of a previous transaction.
Credit	Perform a stand-alone credit.
BillPayment	Perform a PINless debit sale transaction.
AccountPayment	Record an account payment (for supported card types).
AccountPaymentReversal	Reverse an account payment (for supported card types).
TerminalPrompt	Sends a prompt to the terminal for user response (see PromptText).

> /Amount:
>> Dollar amount of the transaction (e.g., *1.23*)

> /MerchantOrderNumber:
>> A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.
>> (/Receipt: may also be used.)

`/RefCode:`

RefCode captured from a pre-authorization transaction. This parameter only applies to the `PostAuth` transaction type.

`/OrderID:`

The Order ID associated with an existing transaction. This parameter only applies to the `AuthReversal`, `Refund`, and `Void` transaction types.

`/TransactionID:`

The Transaction ID of an existing transaction. This parameter only applies to the `AuthReversal`, `Refund`, and `Void` transaction types.

`/RequireTax:`

If this parameter is present with the value `1`, the user must either specify a tax amount or tax exempt status in order to process the transaction.

`/TaxAmount:`

Dollar amount of tax collected for the transaction (e.g., *1.23*)

`/TaxExempt:`

Indicates whether the transaction is tax exempt. Use `1` to indicate tax exempt; omit or use `0` to indicate a taxable purchase.

`/CashbackAmount:`

Specifies the cashaback amount (e.g., *1.23*)

`/Memo:`

Transaction memo; 256 character maximum.

(`/Clerk:` may also be used)

`/CenterScreen:`

If this parameter is present with the value `1`, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.

`/LockParameters:`

If this parameter is present with the value `1`, the following fields, if provided in the parameter set, will be locked as read-only: *Order Number, Amount, Tax Amount, Tax Exempt,* and *Cashback*.

`/SwipeImmediate:`

If this parameter is present with the value `1`, then the Swipe dialog is shown immediately upon launch of the credit card form. This only applies if the transaction type is `PreAuth`, `VAC`, or `Sale` and may also require the `Amount` parameter depending on the selected hardware.

`/ProcessOnSwipe:`

If this parameter is present with the value `1`, then the transaction is processed immediately after a successful card swipe. This only applies if the transaction type is `PreAuth`, `VAC`, or `Sale` and may also require the `Amount` parameter depending on the selected hardware.

`/ProcessImmediate:`

When this parameter is present with the value `1` and additional required parameters are given, a transaction will be executed without user interaction. This only applies if the transaction type is `AuthReversal`, `PostAuth`, `Refund`, or `Void`.

TransactionType	Required Parameters	Optional Parameters
AuthReversal	OrderID, TransactionID	
PostAuth	Amount, RefCode	
Refund	OrderID, TransactionID	Amount
Void	OrderID, TransactionID	

If any required parameter is missing or invalid, the user will be presented with the standard dialog.

`/SuppressAcceptedDialog:`

Specify `1` to suppress the *Accepted* dialog which is normally shown for accepted transactions. *Declined*, *Duplicate Transaction*, and *Partial Approval* dialogs will still be shown.

`/SuppressPartialAcceptedDialog:`

Even when the Accepted dialog is suppressed with the above parameter, a Partial Approval transaction will still show the Accepted dialog. Specify `1` to override this behavior.

/AcceptedDialogTimeout:
>This parameter causes the Accepted dialog which is normally shown for accepted transactions to be automatically dismissed after the given number of seconds.

/DisableOverridePIN:
>By default, a stand-alone credit transaction requires an Override PIN to be entered by the user. The Override PIN must be configured in the gateway account. If your software manages its own similar restriction you can disable this requirement by providing a value of 1 for this parameter.

/DisableCashback:
>Specify 1 to disable cashback for PIN debit transactions.

/EnableGiftCardManager:
>Specify 1 to display the Gift Card Manager button on the Sale dialog.

/RequireGiftCardActivationSwipe:
>Specify 1 to require a swipe for Gift Card Activation/Add Value.

/ExitOnDecline:
>If this parameter is present with the value 1, then the transaction dialog is automatically dismissed if the transaction is declined.

/ExitOnCancelledSwipe:
>If this parameter is present with the value 1, then the transaction dialog is automatically dismissed if the swipe is cancelled.

/HideAddressGroup:
>Specify 1 to hide the Address group of fields on the Sale dialog.

/HideIdGroup:
>Specify 1 to hide the Identification group of fields on the Sale dialog.

/HideVacGroup:
>Specify 1 to hide the Voice Auth Capture group of fields on the Sale dialog.

/CheckForUpdateInterval:
>The number of days between checks for updates.

/CheckForUpdates:
>Specify 0 to disable checking for updates, or 1 to enable update checking for updates.

/NameOfStation:
>Name of station associated with the transaction.

/ISVUser:
>ISV User associated with the transaction.

/ISVEMV:
>Specify 1 to receive the RECEIPTGROUP response elements. The RECEIPTGROUP response elements may include EMV information (required for printed receipts). If this parameter is not present (or set to 0), EMV response elements (if available) are included in the TERMS response element.

/ReturnAddress:
>Specify 1 to include the consumer address information in the transaction results. The address information is only available if provided with the transaction.

/CardPresentDefault:
>By default, the checkbox labeled "This is a Card Present transaction" is initially checked. Specify 0 to override this behavior and initially leave the checkbox unchecked.

/WarnOnPreAuth:
>Specify 1 to warn the user that they are performing an *Authorization* instead of a *Sale*. This only applies if TransactionType is PreAuth.

/DisableKeyedEntry:
>Specify 1 to prevent keyed entry of sensitive data if the terminal supports prompting for the data.

/DisableKeyedMasking:
>Specify 1 to disable keyed entry masking .

/WarnOnPreAuth:
>Specify 1 to warn the user that they are performing an *Authorization* instead of a *Sale*. This only applies if TransactionType is PreAuth.

/InvoiceFilename:
>Specify a local PDF filename to include the file with the transaction.

/InvoiceData:
>Similar to /InvoiceFilename, but the PDF contents are Base64-encoded and passed as the value for this parameter.
>**Note:** When using /InvoiceData, be aware that command line parameter length is limited to 32,699 characters in total, as this value can be quite large.

/LoyaltyNumber:

> Loyalty number of an existing loyalty member. Applies only to the Sale and PostAuth transaction types.

The following named parameters apply to the *Apply for Credit* popup:

/CreditAppPopup:

> Specify 0 to disable the *Apply for Credit* popup, or 1 to enable it.

/CreditAppPopupAmount:

> Specifies the minimum transaction amount that triggers the *Apply for Credit* popup.

/CreditAppPopupProvider:

> Specifies the credit application provider to use when the user accepts the *Apply for Credit* popup. Valid values are

Value	Description
CFNA	CFNA
GDYR	Goodyear
SERV	Big O Tires
GEMY	Synchrony Car Care

/IncludeCreditAppResult:

> Specify 1 to include the credit application response in the results.
> The following additional elements may be included in the transaction result:
> APPDETAIL, APPTRANSACTIONID, APPORDERID, APPCONFIRMATIONNUMBER, APPTOKEN, APPLAST4DIGITS, APPCARDNUMBER, APPCREDITLIMIT, APPBALANCE, APPFIRSTNAME, APPLASTNAME, APPADDRESS1, APPADDRESS2, APPCITY, APPSTATE, APPZIPCODE, APPPHONE, APPEMAIL.
> See the Results section of the ShowCreditApplication method for more information.

/MaskCreditAppCardNum:

> Specify 1 to mask the newly created credit card number that is returned in the APPCARDNUMBER transaction result. This value is only returned if the credit application is successful and not tokenized.

/TokenizeCreditApp:

> Specify 1 to tokenize the accepted credit application. The sale/auth will use the newly tokenized account for the payment. This parameter overrides the Tokenize parameter described below.

The following named parameters apply to tokenization:

/AllowTokenization:

> Specify 1 to enable tokenization. This overrides the "Allow Account on File" setting in the Configuration dialog.

/Tokenize:

> Specify 1 to default the '*Store this card on file?* option to '*Yes*'. Additionally, if a credit application is accepted (see above), the newly created account will be tokenized.

/Token:

> Numeric token supplied by Merchant Partners.

/Last4Digits:

> The last four digits of the credit card or bank account number.

The following named parameters specify customer information:

/CCName:

> Full name of the card holder (e.g., *John Q. Customer*)
> (/CardholderName: may also be used)

`/Address1:`
 Cardholder street address (e.g., *123 Main St*)
 (`/Address:` may also be used.)
`/Address2:`
 Cardholder street address second line (e.g., *Suite 202*)
`/City:`
 Cardholder city (e.g., *Redmond*)
`/State:`
 Cardholder state (e.g., *WA*)
`/Zip:`
 Cardholder zip code (e.g., *98052*)
`/Phone:`
 Consumer's phone number (e.g., *888-555-1212*)
`/Email:`
 Consumer's email address (e.g., *john@example.com*)
`/SSN:`
 Social Security number.
`/PhotoIDType:`
 Specifies the Photo ID type. Valid values are

Value	Description
D	Driver License (default)
G	Green Card
M	Military ID
P	Passport
S	State ID Card

`/PhotoIDNumber:`
 Specifies the identification number (which may contain characters) on the Photo ID.
`/PhotoIDExpDate:`
 Specifies the Photo ID expiration date in format MM-DD-YYYY or MM-YYYY.

The following named parameters apply to receipts:

`/MerchantName:`
 Specifies the Merchant name to be printed on the first line of the receipt.
`/MerchantAddress:`
 Specifies the Merchant address to be printed on the second line of the receipt.
`/MerchantCityStateZip:`
 Specifies the Merchant city, state and zip to be printed on the third line of the receipt.
`/MerchantPhone:`
 Specifies the Merchant phone number to be printed on the fourth line of the receipt.
`/HideReceiptButton:`
 If this parameter is present with the value `1`, then the Print Receipt button normally shown on the
 successful transaction result dialog is hidden.
`/AutoPrintReceipt:`
 If this parameter is present with the value `1`, then a receipt is automatically printed upon
 successful completion of a `PreAuth`, `VAC`, `Sale`, or `Credit` transaction.
`/ReceiptCopies:`
 Sets the default number of copies when the user chooses to print the receipt.
`/ReceiptCopies2:`
 Specify `1` to attempt printing two copies of the receipt whenever the receipt is printed.
`/ReceiptText:`
 Specify additional text to print at the bottom of the receipt.

The following named parameters apply to the signature image:

`/RequireSignature:`
> Specify `1` to require a signature regardless of the transaction type. This overrides `SignatureOptional`.

`/ReturnImageEncoding:`
> Identifies the encoding in which you would like the signature image returned. Since the `ShowCreditCardForm` method returns a string value, the image must be encoded in a string representation. Valid values are

Value	Description
Base64	Radix-64 encoding; the base 64 digits in ascending order from zero are the uppercase characters 'A' to 'Z', the lowercase characters 'a' to 'z', the numerals '0' to '9', and the symbols '+' and '/'. The valueless character, '=', is used for trailing padding.
BinHex	Binary to Hexadecimal encoding; each byte is converted to a hexadecimal string representation.

> If this parameter is not specified, no image is returned.

`/ReturnImageFormat:`
> Identifies the image format in which you would like the signature image returned. Valid values are

Value	Description
Bmp	Windows bitmap
Emf	Enhanced Windows metafile
Gif	Graphics Interchange Format
Jpeg	Joint Photographic Experts Group image format
Pcl	Printer Control Language format
PclMono	Printer Control Language Monochrome format
Png	Portable Network Graphics image format
Tiff	Tag Image File Format
Wmf	Windows metafile

> Defaults to `Tiff` if not specified.

`/ReturnImageHeight:`
> Specifies the maximum image height in pixels.
> Default: 50.

`/ReturnImageWidth:`
> Specifies the maximum image width in pixels.
> Default: 250.

`/ResizeReturnImage:`
> Specify `1` to resize the signature image to the dimensions given by `/ReturnImageHeight` and `/ReturnImageWidth`.

`/SignaturePrompt:`
> Specifies the prompt to display on the hardware device (if supported) for signature capture operations.

`/SignatureOptional:`
> Specify `1` to make the signature optional for PIN Debit transactions.

`/SigAnnotation1:` - `/SigAnnotation4:`
> Up to four lines of annotations may be embedded in the signature image. Annotations appear above the signature and may affect the height of the image.
> Example: `/SigAnnotation1:`*John Customer* `/SigAnnotation2:`*15 Aug 2017 14:33:40*

The following named parameters apply to Purchase Card information:

`/EnableP3:`
Specify `1` to enable Purchase Card Level III line item detail for sales transactions.

`/POCustomerRefID:`
If P3 transactions are enabled, this parameter may be used to specify a cardholder's customer ID or reference number for the Purchase Card.

`/SupplierRefNum:`
If P3 transactions are enabled, this parameter may be used to specify a reference number that helps the merchant identify the charge in case of an inquiry by the credit card company. (AMEX Commercial Card only).

`/CardholderRefNum:`
If P3 transactions are enabled, this parameter may be used to specify a card holder reference number. (AMEX Commercial Card only).

`/ChargeDescriptor:`
If P3 transactions are enabled, this parameter may be used to describe the charge. (AMEX Commercial Card only).

The following named parameters apply to *Synchrony Car Care*, *Goodyear*, and *Big O Tires* cards:

`/AllowAccountLookup:`
If this parameter is present with the value `1`, then the *Account Lookup* button is displayed on the Sale dialog to allow account lookup/balance inquiries prior to performing the sale.

`/PromoCode:`
For the *Synchrony Car Care* card, this 3- or 4-digit value identifies the promo code for the transaction.

`/AutoQuickScreen:`
This parameter overrides the "Automatically QuickScreen Sales/Auths" setting in the Credit Facility section of the Configuration dialog when Synchrony Car Care is selected as the provider. Pass `1` to perform a background Synchrony Car Care QuickScreen when the Sale dialog is shown. A QuickScreen can only be performed if `CardholderName`, `Address1`, `City`, `State`, and `Zip` are provided. Pass `0` to bypass an automatic QuickScreen.

`/ShowQuickScreenDecline:`
This parameter overrides the "Show QuickScreen Declines" setting in the Credit Facility section of the Configuration dialog when Synchrony Car Care is selected as the provider.
If an automatic Synchrony Car Care QuickScreen is declined by the processor, sending a `1` for this parameter will show the Decline dialog. Sending a `0` for this parameter suppresses the Decline dialog.

`/Terms:`
For *Goodyear* and *Big O Tires* cards, this identifies the ticket terms for the transaction. Valid values are

Value	Description
0001	Revolve Sale
0060	6 Months No Interest
0012	12 Months No Interest

`/DisableTerms12:`
If this parameter is present with the value `1`, the *12 Months No Interest* option for the *Goodyear* and *Big O Tires* ticket terms is disabled.

`/ConfirmTerms12:`
Specify `1` to prompt for confirmation whenever *12 Months No Interest* is chosen for terms/promo code.

The following named parameters apply to Fleet cards:

`/DefaultFCProductCode:`
For *Fleet* cards, this identifies the default product code for the transaction. The default product code is used to generate the Line Item detail when not submitted by the user. For valid values, see Appendix B.
`/FleetRC:`
For *Fleet* cards, this parameter sets the *RC* field for keyed entries. The *RC* field determines the service restrictions and prompts applicable to the card.
`/DepartmentNumber:`
For *Wright Express* fleet cards, this parameter sets the *Department #* service prompt field.
`/DLNumber:`
Driver license number; required for some *Fleet* cards.
`/DriverID:`
For *Fleet* cards, this parameter sets the *Driver ID* service prompt field.
`/IDNumber:`
For *Fleet* cards, this parameter sets the *ID* service prompt field.
`/JobNumber:`
For *Wright Express* fleet cards, this parameter sets the *Job #* service prompt field.
`/LineItems:`
For *Fleet* cards, this parameter may contain the line item details for the transaction. Refer to Appendix A for more information.
`/MiscNumericData:`
For *Wright Express* fleet cards, this parameter sets the *Cust Data* service prompt field.
`/OdometerReading:`
For *Fleet* cards, this parameter sets the *Odometer* service prompt field.
`/PurchaseDevSequenceNumber:`
For *Wright Express* fleet cards, this parameter sets the *Purchase Dev. Seq. #* service prompt field.
`/VehicleID:`
For *Fleet* cards, this parameter sets the *Vehicle ID* service prompt field.

The following named parameters apply to PINless debit transactions:
Note: when `MerchantIndustry` is `Loan Repayment`, all sales are performed as PINless debit transactions.

`/BillingAccountNumber:`
Acccount number that merchant uses to identify customer in their system.
`/InvoiceNumber:`
Optional merchant invoice number.

The following named parameters apply to EBT transactions:

`/EnableEBT:`
Use `1` to enable EBT transactions. Use `0` to disable EBT transactions.
`/TransactionSubType:`
The default selection in the Transaction Type group can be controlled with the following values.

Value	Description
`EBT`	Select the *EBT* option.
`EBT_CashBenefitSale`	Select the *EBT* option and *Cash Benefits Purchase* item.
`EBT_FoodStampSale`	Select the *EBT* option and *Food Stamp Purchase* item.
`EBT_FoodStampVoucherSale`	Select the *EBT* option and *Food Stamp Voucher Sale* item.
`EBT_CashBenefitWithdrawal`	Select the *EBT* option and *Cash Benefit Withdrawal* item.
`EBT_BalanceInquiry`	Select the *EBT* option, the *Balance Inquiry* item, and select *Balance Inquiry* in the EBT Balance Inquiry group.

Value	Description
EBT_CashBenefitBalanceInquiry	Select the *EBT* option, *Balance Inquiry* item, and select *Cash Benefit Balance* in the EBT Balance Inquiry group.
EBT_FoodStampBalanceInquiry	Select the *EBT* option, *Balance Inquiry* item, and select *Food Stamp Balance* in the EBT Balance Inquiry group.
EBT_FoodStampReturn	Check the *EBT Return* checkbox and select *Food Stamp* option from the *EBT Refund* selection on the Return/Credit dialog.
EBT_CashBenefitReturn	Check the *EBT Return* checkbox and select *Cash Benefit* option from the *EBT Refund* selection on the Return/Credit dialog.

/EBTApprovalCode:
> If *Food Stamp Voucher Sale* is selected, a *Food Stamp Voucher Sale* group is displayed under the Credit Card group. The required 4-6 alphanumeric *Approval Code* field may be pre-populated with this parameter.

/VoucherSerialNumber:
> If *Food Stamp Voucher Sale* is selected, the required, up to 15 alphanumeric *Voucher Serial Number* field may be pre-populated with this parameter.

The following named parameters apply to FSA transactions:

/EnableFSA:
> Use `1` to enable FSA transactions. Use `0` to disable FSA transactions.

/TransactionSubType:
> The default selection in the Transaction Type group can be set to *Health Care* by using `/TransactionSubType:FSA`.

/ClinicAmount:
> Clinic amount.

/RXAmount:
> RX amount.

/DentalAmount:
> Dental amount.

/VisionAmount:
> Vision amount.

/TotalHealthCareAmount:
> Total amount of all health care related amounts that are part of this order. It must be greater than or equal to the sum of all other health care amounts and must be less than or equal to the total order amount.

The following named parameters apply to Recurring transactions:

/EnableRecur:
> Use `1` to enable Recurring. Use `0` to disable Recurring.

/RecurCreate:
> Use `1`, to auto-check the *Create a recurring transaction* checkbox.

/RecurBillingCycle:
> Recurring billing cycle:

Value	Description
0	No Recurring.
1	Weekly Recurring.

Value	Description
2	Monthly Recurring.
3	Quarterly Recurring.
4	Semi-Annual Recurring.
5	Annual Recurring.
6	Bi-Weekly Recurring.
7	Bi-Annual Recurring.
8	Quad Weekly (28 days) Recurring.
9	One Time Recurring.
10	Daily Recurring.
11	Bi-Monthly Recurring.

`/RecurBillMax:`
> Number of recurrences.

Value	Description
-1	Unlimited number of billings.
0	No recurring billings.
> 0	Maximum number of billings.

`/RecurStartDate:`
> Start date of recur billing in the format MM-DD-YYYY (e.g., 01-16-1975)

`/RecurAmount:`
> Recur billing amount.

The following named parameters apply to CVV2 and AVS verification:

`/EnableCvvOverride:`
> A value of 1 indicates CVV2 verification failures approved by the gateway should be voided unless an override PIN is entered.

`/EnableAvsOverride:`
> A value of 1 indicates AVS verification failures approved by the gateway should be voided unless an override PIN is entered.

`/AvsLevel:`
> This parameter identifies the selected AVS level:

Value	Description
1	Only Address Must Match
2	Only Postal Code Must Match
3	Only 9-Digit Postal Code Must Match
4	Either Address or Postal Code Must Match
5	Either Address or 9-Digit Postal Code Must Match
6	Address and 5-Digit Postal Code Must Match
7	Address and 9-Digit Postal Code Must Match

`/AvsCvvOverrideMinutes:`

This parameter identifies the AVS/CVV2 override timeout. Valid values are 1-5. The default value is 3.

/AvsCvvForceVoid:

A value of 1 forces transactions that fail CVV2 or AVS verification to be voided without prompting for an override PIN.

The following named parameters apply to the TerminalPrompt TransactionType:

/PromptText:

This parameter specifies the text to display on the terminal. The customer will be able to scroll the text and must tap 'Accept' or 'Decline' on the terminal to exit. If there is a problem displaying the prompt on the terminal, the result will be 'DECLINED' and 'DETAIL' will contain the reason for failure. The result will be 'SUCCESS' and 'APPROVALCODE' will contain '1' if the customer tapped 'Accept', or '0' otherwise.

All parameters are optional and may be omitted.

Example:

```
/TransactionType:PreAuth/Amount:1.25
```

Returns:

string Result

The result of this method call is a multi-line string containing information about the transaction that was processed. Each result element is separated by a CR/LF. Not every element will be present for all transactions. Additional elements may be added in the future.

RESULT=[*NONE|SUCCESS|DECLINED|ERROR*]

Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be NONE and the DETAIL tag will contain the value *Update in progress*.

ACCOUNT=*numeric*

The last 4 digits of the credit card that was processed.

AMOUNT=*decimal*

The amount of the transaction.

EXPIRATION=*MM/YYYY*

The expiration date of the credit card that was processed.

APPROVALCODE=*string*

The Authorization Code of the transaction.

NAME=*string*

The Account Holder name, if available.

TRANSACTIONID=*numeric*

The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*

The Online Merchant Center Order ID for the transaction.

DETAIL=*string*

> This value identifies the transaction type and any additional information about the transaction. For successful transactions, this value depends on the transaction type:

TransactionType	Detail
Sale	No additional information is provided.
PreAuth	The pre-authorization RefCode is provided.
AuthReversal	No additional information is provided.
PostAuth	The pre-authorization RefCode that was used for the post-authorization is provided.
VAC	The Voice Authorization Capture Code that was included with the transaction is provided.
Refund	No additional information is provided.
Void	No additional information is provided.

> For declined transactions, this value contains the processing gateway's decline reason.
>
> For partial approval transactions, the result will have the string –PARTIAL appended.
>
> For transactions that result in a Text To Pay link, this value contains a message relevant to the PAY link.
>
> If the user assents to the Auto Update process, this tag will contain the value *Update in progress*

ACCOUNTTYPE=*string*

> Identifies the credit card type that was processed. For valid values, see Appendix E.

DUPLICATE=*1*

> In the event of a duplicate transaction, this flag will be included in the results.

PARTIAL_APPROVAL=*1*

> In the event of a partial authorization, this flag will be included in the results. Additionally, the AMOUNT tag identifies the partial amount that was approved.

TERMID=*string*

> This optional tag may be included to identify the Terminal on which the transaction originated.

MERCHANTID=*string*

> This optional tag may be included to identify the Merchant.

BALANCE=*numeric*

> Balance remaining on card (not supported for all card types).

TERMS=*string*

> For certain card types (e.g., *Synchrony Car Care*, *Goodyear*, and *Big O Tires*), additional information may be required for printed receipts. This information is included in this tag. If the /ISVEMV:1 parameter was not provided, EMV information may be provided in this element for EMV transactions. The value may include the 2-character sequence [] to indicate where newlines would be used.

ODOMETERREADING=*string*

> For *Fleet* cards, if the *Odometer* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.

VEHICLEID=*string*

> For *Visa Fleet* and *Wright Express* fleet cards, if the *Vehicle ID* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.

PURCHASEDEVSEQUENCENUMBER=*string*

> For *Wright Express* fleet cards, if the *Purchase Dev. Seq. #* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.

TOKEN=*numeric*

> For Tokenized transactions, whether creating a new tokenized account or using an existing tokenized account to perform a transaction, the value indicates the Merchant Partners token that

is required for subsequent transactions against the tokenized account.

LAST4DIGITS=*numeric*
> For Tokenized transactions, this value indicates the last four digits of the payment account for the tokenized account.

ENTRYMETHOD=*string*
> Indicates the payment entry method:

Code	Description
E	ENCRYPTED EMV CONTACT
C	EMV CONTACT
N	ENCRYPTED FALLBACK
F	FALLBACK
R	RFID
G	ENCRYPTED TRACK 2
D	TRACK 2
I	ENCRYPTED TRACK 1
H	TRACK 1
U	ENCRYPTED KEYED
T,M,K	KEYED

FOODBALANCE=*numeric*
> Food balance amount remaining on EBT card.

CASHBALANCE=*numeric*
> Cash balance amount remaining on EBT card.

LINKCODE=*string*
> The unique identifier of the PAY link.

KEYWORD=*string*
> Keyword for the 1stMILE text notification enrollment process.

SHORTCODE=*string*
> Shortcode for the 1stMILE text notification enrollment process.

LOYALTYNUMBER=*string*
> Loyalty number of an existing loyalty member.

POINTSBALANCE=*decimal*
> Loyalty member current points balance.

PENDINGPOINTS=*decimal*
> Loyalty member pending points balance.

POINTSEARNED=*decimal*
> Loyalty member points earned.

If the /ReturnAddress:1 parameter was provided and a consumer address was submitted with the transaction, the following elements will be available:

ADDRESS1=*string*
> Street address of the consumer.

ADDRESS2=*string*
> Second line of the street address of the consumer.

CITY=*string*
> City of the consumer's address.

STATE=*string*
> State of the consumer's address.

ZIPCODE=*string*
> Zip code of the consumer's address.

PHONE=*string*
> Consumer's phone number.

EMAIL=*string*
> Consumer's email address.

If the /ISVEMV:1 parameter was provided, the response will contain the following elements that may be used for printing a receipt. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

RECEIPTGROUP1=*string*
> This group contains cardholder and transaction data.

Name	Description
TRANSACTIONTYPE	Indicates the type of transaction processed: SALE, AVSSALE, AUTH, AVSAUTH, POST, AVSPOST, VOICEPOST, VOID, CREDIT
TRANSACTIONRESULT	Indicates whether the transaction was APPROVED or DECLINED.
TIMESTAMP	Timestamp of the transaction in the format MM/DD/YYYY hh:mm:ss AMPM (e.g., 8/20/2015 4:20:05 PM).
MERCHANTORDERNUMBER	Merchant order number (if provided).
MERCHANTID	Merchant identifier, masked to the last four digits.
TERMID	Terminal identifier.
AMOUNT	Amount of the transaction.
OPTCASHDISCOUNT	Optional Cash Discount, if any, applied to the transaction.
CASHBACK	Cashback amount.
ENTRYMETHOD	Entry method. See the ENTRYMETHOD element above for valid values.
NAME	Cardholder name.
ACCOUNTTYPE	Payment type. See Appendix E for valid values.
ACCOUNT	Card number, masked to the last four digits.
ORDERID	The Online Merchant Center Order ID for the transaction.
TRANSACTIONID	The Online Merchant Center Transaction ID for the transaction.
AUTHCODE	The authorization or approval code provided by the authorizing network.
DECLINECODE	If the transaction was declined, this value contains the 10-digit decline code.
DECLINEMESSAGE	For declined transactions, this value may contain a message indicating the reason for the decline.
BATCHNUMBER	Batch settlement number in which this transaction is included.
AVSRESULT	Result code generated by the Address Verification System.
CVV2RESULT	One character result code generated by the CVV2/CVC2 system.
ODOMETERREADING	For *Fleet* cards, if the *Odometer* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.
VEHICLEID	

Name	Description
	For *Visa Fleet* and *Wright Express* fleet cards, if the *Vehicle ID* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.
PURCHASEDEVSEQUENCENUMBER	For *Wright Express* fleet cards, if the *Purchase Dev. Seq. #* service prompt was required for the transaction, it is included in this tag which should be printed on receipts.
BALANCE	Balance remaining on card (not supported for all card types).

RECEIPTGROUP2=*string*

This group contains EMV receipt data.

Name	Description
APPLABEL	Application Name
AID	ApplicationID
TVR	Terminal Verification Results
IAD	Issuer Application Data
TSI	Transaction Status Indicator
ARQC	Application Cryptogram
ARC	Authorization Response Code
CVM	Cardholder Verification Method (P(PIN), S(SIGNATURE), N(NONE))

RECEIPTGROUP3=*string*

This group contains terms or information as demanded by the card brand.

Name	Description
TERMS	For certain credit cards (e.g., *Synchrony Car Care*, *Goodyear*, and *Big O Tires*), additional information may be required for printed receipts. This information is included in this tag.
LOYALTY	For any transaction in which loyalty was applicable, this will contain loyalty information relevant to the transaction, including: Loyalty Number, Points Balance, Pending Points, Points Earned and/or Points Redeemed.

If the ReturnImageEncoding parameter is provided and a signature image was captured, the following element will be included

SIGNATURE=*string*

This value contains the image in the format determined by the ReturnImageFormat parameter with dimensions specified by ReturnImageWidth and ReturnImageHeight (if supported by the signature capture device).

Example:

```
RESULT=SUCCESS
ACCOUNT=5454
AMOUNT=1.25
EXPIRATION=12/2015
APPROVALCODE=SALE:000111:12345678::123456789:::
NAME=DEFAULT TEST
TRANSACTIONID=123456789
ORDERID=123456999
DETAIL=Sale
```

```
ACCOUNTTYPE=MasterCard
TERMID=123789
ENTRYMETHOD=SWIPED
MERCHANTID=123456789012788
LOYALTYNUMBER=123456789012
POINTSBALANCE=2500
POINTSEARNED=500
RECEIPTGROUP1=TRANSACTIONTYPE:SALE|TRANSACTIONRESULT:APPROVED|TIMESTAMP:8/21/2015 4:20…
RECEIPTGROUP2=
RECEIPTGROUP3=LOYALTY:Loyalty Number: 123456789012[]Points Earned: 500[]Points Balance: 2500
```

Duplicate Transactions

Duplicate transaction checking is enabled for Merchant Partners Gateway accounts by default. This feature prevents transactions from accidentally processing more than once. Duplicate transaction checking can be configured in the Merchant Partners Gateway. The default behavior checks the following data within the designated timeframe:

- Amount
- Card Number and Expiration
- Merchant Order Number
- (Optional) Consumer Name

A duplicate transaction is indicated in the result via `DUPLICATE=1` and is returned as an accepted transaction with details from the original transaction.

Partial Approvals

A partial approval can occur if the customer does not have the funds to cover the entire transaction amount with their payment method. You will need to issue a sale for the remainder of the transaction amount in another form of payment.

A partial approval is indicated in the result via `PARTIAL_APPROVAL=1`.

string ShowCheckForm(string)

This method shows the check processing form.

Parameters:

```
string InitializationParameters
```

This parameter allows you to initialize the form with a set of values. This set of values may contain zero or more named parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

The following named parameters are supported:

```
/AcctID:
```
5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the `ShowConfigDialog` method has never been called, then this method will automatically call the `ShowConfigDialog` method to collect this required information.
(/`ATSID:` may also be used.)
```
/SubID:
```
5-character alphanumeric value that identifies the SubID for the merchant.
(/`ATSSubID:` may also be used.)
```
/MerchantPIN:
```
The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the `ShowConfigDialog` method has never been called, then this method will automatically call the `ShowConfigDialog` method to collect this required information.
```
/TransactionType:
```
Sets the transaction type selection. The following values are supported:

Value	Description
Sale	Perform a Sale.
Refund	Perform a refund of a previous transaction.
Void	Perform a void of a previous transaction.

```
/ACHMethod:
```
Override the default ACH method:

Value	Description
ACH	Standard ACH
ExtACH	Extended ACH
Check21	Check21
CheckGuarantee	Check Guarantee

```
/Amount:
```
Dollar amount of the transaction (e.g., *1.23*)
```
/MerchantOrderNumber:
```
A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.

/SECCode:

Allows overriding the default SEC code:

Value	Description
ARC	Accounts Receivable Conversion
BOC	Back Office Conversion
ICL	Image Cash Letter
POP	Point of Purchase
PPD	Prearranged Payment/Deposit
RCK	Re-Presented Check
TEL	Telephone-Initiated Entry

/TerminalCity:

Four-character abbreviated name for the city where the POS terminal is located.

/TerminalState:

Two-character state abbreviation of the state where the POS terminal is located.

/Verification:

If this parameter is present with the value 1, check verification is enabled.

/OrderID:

The Order ID associated with an existing transaction. This parameter only applies to the Refund and Void transaction types.

/TransactionID:

The Transaction ID of an existing transaction. This parameter only applies to the Refund and Void transaction types.

/Memo:

Transaction memo; 256 character maximum.

/CenterScreen:

If this parameter is present with the value 1, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.

/LockParameters:

If this parameter is present with the value 1, then the *Order Number* and *Amount* fields, if provided in the parameter set will be locked in the *Sale* dialog.

/ScanImmediate:

If this parameter is present with the value 1, then the Check Scan dialog is shown immediately upon launch of the form. This only applies if the transaction type is Sale.

/ProcessImmediate:

When this parameter is present with the value 1 and additional required parameters are given, a transaction will be executed without user interaction. This only applies if the transaction type is Refund or Void.

TransactionType	Required Parameters	Optional Parameters
Refund	OrderID, TransactionID	Amount
Void	OrderID, TransactionID	

If any required parameter is missing or invalid, the user will be presented with the standard dialog.

/SuppressAcceptedDialog:

If this parameter is present with the value 1, then the Accepted dialog which is normally shown for accepted transactions will be suppressed. Decline and Duplicate Transaction dialogs will still be shown.

/AcceptedDialogTimeout:

This parameter causes the Accepted dialog which is normally shown for accepted transactions to be automatically dismissed after the given number of seconds.

/LoyaltyNumber:

Loyalty number of an existing loyalty member. Applies only to the Sale transaction type.

The following named parameters specify account information:

/AccountName:

Name of the account owner (e.g., *John Q. Customer*)

/CompanyName:

Company Name (applicable when CheckingAccountType is Business).

/SignatoryFirstName:

First name of the signatory.

/SignatoryLastName:

Last name of the signatory.

/CheckingAccountType:

Identifies the checking account type:

Value	Description
Personal	Standard ACH
Business	Check Guarantee

/RoutingNumber:

Nine-digit numeric value for checking account routing or ABA number.

/AccountNumber:

Variable length numeric value for checking account number.

/CheckNumber:

Check Number.

The following named parameters apply to tokenization:

/AllowTokenization:

Specify 1 to enable tokenization. This overrides the "Allow Account on File" setting in the Configuration dialog.

/Tokenize:

Specify 1 to default the '*Store this card on file?*' option to '*Yes*'.

/Token:

Numeric token supplied by Merchant Partners.

/Last4Digits:

The last four digits of the bank account number.

The following named parameters specify customer information:

/Address1:

Account owner street address (e.g., *123 Main St*).

/HouseNumber:

Account owner house number (e.g., *123*).

/Street:

Account owner street (e.g., *Main St.*).

/Address2:

Account owner street address second line (e.g., *Suite 202*)

/City:

Account owner city (e.g., *Redmond*)

/State:

Account owner state (e.g., *WA*)

/Zip:

Account owner zip code (e.g., *98052*)

`/Phone:`
> Account owner phone number (e.g., *888-555-1212*)

`/Email:`
> Account owner email address (e.g., *john@example.com*)

`/DLNumber:`
> Driver license number.

`/SSN:`
> Social Security number.

The following named parameters apply to receipts:

`/MerchantName:`
> Specifies the Merchant name to be printed on the first line of the receipt.

`/MerchantAddress:`
> Specifies the Merchant address to be printed on the second line of the receipt.

`/MerchantCityStateZip:`
> Specifies the Merchant city, state and zip to be printed on the third line of the receipt.

`/MerchantPhone:`
> Specifies the Merchant phone number to be printed on the fourth line of the receipt.

`/HideReceiptButton:`
> If this parameter is present with the value `1`, then the Print Receipt button normally shown on the successful transaction result dialog is hidden.

`/AutoPrintReceipt:`
> If this parameter is present with the value `1`, then a receipt is automatically printed upon successful completion of a `Sale` transaction.

`/ReceiptCopies:`
> Sets the default number of copies when the user chooses to print the receipt.

`/ReceiptCopies2:`
> Specify `1` to attempt printing two copies of the receipt whenever the receipt is printed.

`/ReceiptText:`
> Specify additional text to print at the bottom of the receipt.

The following named parameters apply to Synchrony Car Care QuickScreen:

`/AutoQuickScreen:`
> This parameter overrides the "Automatically QuickScreen Sales/Auths" setting in the Private Label Card section of the Configuration dialog when Synchrony Car Care is selected as the provider.
> Pass `1` to perform a background Synchrony Car Care QuickScreen when the Sale dialog is launched. A QuickScreen can only be performed if `CardholderName`, `Address1`, `City`, `State`, and `Zip` are provided. Pass `0` to bypass an automatic QuickScreen.

`/ShowQuickScreenDecline:`
> This parameter overrides the "Show QuickScreen Declines" setting in the Private Label Card section of the Configuration dialog when Synchrony Car Care is selected as the provider.
> If an automatic Synchrony Car Care QuickScreen is declined by the processor, sending a `1` for this parameter will show the Decline dialog. Sending a `0` for this parameter suppresses the Decline dialog.

The following named parameters apply to Recurring transactions:

`/EnableRecur:`
> Use `1` to enable Recurring. Use `0` to disable Recurring.

`/RecurCreate:`
> Use `1`, to auto-check the *Create a recurring transaction* checkbox.

/RecurBillingCycle:
Recurring billing cycle:

Value	Description
0	No Recurring.
1	Weekly Recurring.
2	Monthly Recurring.
3	Quarterly Recurring.
4	Semi-Annual Recurring.
5	Annual Recurring.
6	Bi-Weekly Recurring.
7	Bi-Annual Recurring.
8	Quad Weekly (28 days) Recurring.
9	One Time Recurring.
10	Daily Recurring.
11	Bi-Monthly Recurring.

/RecurBillMax:
Number of recurrences.

Value	Description
-1	Unlimited number of billings.
0	No recurring billings.
> 0	Maximum number of billings.

/RecurStartDate:
Start date of recur billing in the format MM-DD-YYYY (e.g., 01-16-1975)

/RecurAmount:
Recur billing amount.

All parameters are optional and may be omitted.
Example:

```
/SECCode:TEL/Amount:10.25/Phone:888-555-1212
```

Returns:

string Result

The result of this method call is a multi-line string containing information about the transaction that was processed. Each result element is separated by a CR/LF. Not every element will be present for all transactions. Additional elements may be added in the future.

RESULT=[*NONE*|*SUCCESS*|*DECLINED*|*ERROR*]
Indicates the result of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.

Value	Description
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be NONE and the DETAIL tag will contain the value *Update in progress.*

ACCOUNT=*numeric*
The last 4 digits of the bank account number that was processed.

AMOUNT=*decimal*
The amount of the transaction.

APPROVALCODE=*string*
The Authorization Code of the transaction.

NAME=*string*
The Account Holder name, if available.

TRANSACTIONID=*numeric*
The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*
The Online Merchant Center Order ID for the transaction.

DETAIL=*string*
For declined transactions, this value contains the processing gateway's decline reason.
If the user assents to the Auto Update process, this tag will contain the value *Update in progress*

ACCOUNTTYPE=*string*
Account type, if available (e.g., *Checking* or *Savings*).

CHECKNUMBER=*string*
Check number, if available.

TOKEN=*numeric*
For Tokenized transactions, whether creating a new tokenized account or using an existing tokenized account to perform a transaction, the value indicates the Merchant Partners token that is required for subsequent transactions against the tokenized account.

LAST4DIGITS=*numeric*
For Tokenized transactions, this value indicates the last four digits of the payment account for the tokenized account.

ENTRYMETHOD=*string*
The entry method of the transaction.

LOYALTYNUMBER=*string*
Loyalty number of an existing loyalty member.

POINTSBALANCE=*decimal*
Loyalty member current points balance.

PENDINGPOINTS=*decimal*
Loyalty member pending points balance.

POINTSEARNED=*decimal*
Loyalty member points earned.

To allow easy printing of receipts, the following three lines are included in the response. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

RECEIPTGROUP1=*string*
This group contains account and transaction data.

Name	Description
TRANSACTIONTYPE	Indicates the type of transaction processed.
TRANSACTIONRESULT	Indicates whether the transaction was APPROVED or DECLINED.
TIMESTAMP	Timestamp of the transaction in the format MM/DD/YYYY hh:mm:ss AMPM

Name	Description
	(e.g., 8/20/2015 4:20:05 PM).
MERCHANTORDERNUMBER	Merchant order number (if provided).
MERCHANTID	Merchant identifier, masked to the last four digits.
TERMID	Terminal identifier.
AMOUNT	Amount of the transaction.
ENTRYMETHOD	Entry method.
NAME	Account holder name.
ACCOUNTTYPE	Account type.
ACCOUNT	Card number, masked to the last four digits.
ORDERID	The Online Merchant Center Order ID for the transaction.
TRANSACTIONID	The Online Merchant Center Transaction ID for the transaction.
AUTHCODE	The authorization or approval code provided by the authorizing network.
DECLINECODE	If the transaction was declined, this value contains the 10-digit decline code.
DECLINEMESSAGE	For declined transactions, this value may contain a message indicating the reason for the decline.

`RECEIPTGROUP2=`*`string`*
  This group is unused at this time.
`RECEIPTGROUP3=`*`string`*
  This group is unused at this time.

Example:

```
RESULT=SUCCESS
ACCOUNT=9999
AMOUNT=5.00
APPROVALCODE=EXTCK21:001123:::123456789:::
NAME=Default Name
TRANSACTIONID=123456789
ORDERID=123456777
DETAIL=Sale
ACCOUNTTYPE=Check
CHECKNUMBER=1234
ENTRYMETHOD=KEYED
RECEIPTGROUP1=TRANSACTIONTYPE:EXTCK21|TRANSACTIONRESULT:APPROVED|TIMESTAMP:8/20/2015 4:20…
RECEIPTGROUP2=
RECEIPTGROUP3=
```

string ShowSignatureCaptureDialog(string, string, short, short)

string ShowSignatureCaptureDialog(string)

This method allows the user to capture a signature image from a supported signature pad. This is a local operation and does not generate a transaction. The image is returned from the method as an encoded ASCII string.

There are two versions of this method, both named ShowSignatureCaptureDialog. The first version is defined with a limited set of distinct parameters as described below. The second version accepts a single string as a parameter which may be composed of multiple named parameters as described for other methods in this guide (see ShowCreditCardForm); only the /ReturnImage*, /SignaturePrompt, and /CenterScreen parameters apply to this method.

Parameters:

string ReturnEncoding

Identifies the string representation encoding in which you would like the signature image returned. Valid values are

Value	Description
Base64	Radix-64 encoding; the base 64 digits in ascending order from zero are the uppercase characters 'A' to 'Z', the lowercase characters 'a' to 'z', the numerals '0' to '9', and the symbols '+' and '/'. The valueless character, '=', is used for trailing padding.
BinHex	Binary to Hexadecimal encoding; each byte is converted to a hexadecimal string representation.

string ImageFormat

Identifies the image format in which you would like the signature image returned. Valid values are

Value	Description
Bmp	Windows bitmap
Emf	Enhanced Windows metafile
Gif	Graphics Interchange Format
Jpeg	Joint Photographic Experts Group image format
Pcl	Printer Control Language format
PclMono	Printer Control Language Monochrome format
Png	Portable Network Graphics image format
Tiff	Tag Image File Format
Wmf	Windows metafile

short Width

Width, in pixels, for the returned image.

short Height

Height, in pixels, for the returned image.

Returns:

```
string Result
```

> String representation of the image based on the specified parameters, or empty if no signature image was captured.

string ShowCFNACreditApplication(void)

string ShowCFNACreditApplication(string)

This method has been replaced by ShowCreditApplication.

string ShowCreditApplication(string)

This method allows the user to submit a credit application for Synchrony Car Care, CFNA, Goodyear, Big O Tires, DigniFi, or American First Finance.

Parameters:

string InitializationParameters

> This parameter allows you to initialize the form with a set of values. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).
>
> The following parameters are supported:
>
> /AcctID:
> > 5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
> > (/ATSID: may also be used.)
>
> /SubID:
> > 5-character alphanumeric value that identifies the SubID for the merchant.
> > (/ATSSubID: may also be used.)
>
> /MerchantPIN:
> > The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>
> /CreditApp:
> > Indicates the type of credit application.

Value	Description
CFNA	CFNA
GEMY	Synchrony Car Care
GDYR	Goodyear
SERV	Big O Tires
CFS	DigniFi
AMFF	American First Finance
SELECT	Present the user with a choice of which credit application to launch.

> The following parameters can be used to prepopulate the credit application form. Some parameters may not apply to all credit application providers.
>
> /FirstName:
> > Applicant first name.
>
> /MiddleName:
> > Applicant middle name.
>
> /LastName:
> > Applicant last name.
>
> /DOB:
> > Applicant date of birth in the format MM-DD-YYYY (e.g., 01-16-1975).
>
> /SSN:
> > Applicant social security number (e.g., 555-55-5555).

`/DLNum:`

Applicant driver license number.

`/DLState:`

Applicant driver license state.

`/DLExp:`

Applicant driver license expiration in the format MM-YYYY (e.g., 12-2015)

`/PhotoID:`

Applicant photo ID number.

`/PhotoIDState:`

Applicant photo ID state of issuance.

`/PhotoIDExp:`

Applicant photo ID expiration in the format MM-YYYY (e.g., 12-2015)

`/HomePhone:`

Applicant home/primary phone number.

`/BusinessPhone:`

Applicant business phone number.

`/MobilePhone:`

Applicant mobile phone number.

`/Email:`

Applicant email address.

`/AnnualNetIncome:`

Applicant annual net income.

`/AnnualGrossIncome:`

Applicant annual gross income (only applies to CFNA).

`/OtherIncomeAmount:`

Applicant other annual income.

`/Address1:`

Applicant street address.

`/Address2:`

Applicant street address second line.

`/City:`

Applicant city.

`/State:`

Applicant state.

`/Zip:`

Applicant zip code.

`/RentOrOwn:`

Indicates whether applicant rents or owns his/her residence.

Value	Description
R	Rent
O	Own
X	Other

`/YearsAtAddress:`

Applicant's number of years at current address.

`/TimeAtJob:`

Applicant's time at current job in YYMM format (e.g., `0006` - six months, `0100` - one year).

`/MonthlyHousingCost:`

Monthly mortgage or rent payment.

`/Amount:`

Requested credit limit.

`/Tokenize:`

Specify `1` to tokenize the credit application. If successful, the response will contain the `TOKEN` and `LAST4DIGITS` instead of the `CARDNUMBER`.

The following parameters only apply to *Synchrony Car Care*.

`/JointAccount:`
>Specify `1` to indicate an application for a joint account.

`/CoApp*:`
>The following fields mirror those listed above but apply to the co-applicant:
>
>CoApp**FirstName**, CoApp**MiddleName**, CoApp**LastName**, CoApp**DOB**, CoApp**SSN**, CoApp**DLNum**,
>CoApp**DLState**, CoApp**DLExp**, CoApp**PhotoID**, CoApp**PhotoIDState**, CoApp**PhotoIDExp**, CoApp**HomePhone**,
>CoApp**BusinessPhone**, CoApp**MobilePhone**, CoApp**Email**, CoApp**Income**, CoApp**Address1**,
>CoApp**Address2**, CoApp**City**, CoApp**State**, CoApp**Zip**, CoApp**RentOrOwn**, CoApp**YearsAtAddress**,
>CoApp**TimeAtJob.**

Additionally, *Synchrony Car Care* supports the following opertaions:

`/Action:`
>Specifies the action to perform.

Value	Description
QuickScreen	Check if a customer is pre-approved for a Synchrony Car Care card.
CreditDecision	Check the status of a pending credit application.
AcceptQuickScreen	Accept a QuickScreen offer.
DeclineQuickScreen	Decline a QuickScreen offer.

>For `CreditDecision`, `AcceptQuickScreen`, and `DeclineQuickScreen` an `OrderID` and
>`TransactionID` are required. The user is prompted for this information if not provided in the
>method call.

The following parameters only apply to *DigniFi*.

`/EmployerName:`
>Applicant employer name.

`/MonthlyIncome:`
>Applicant monthly income.

`/VehicleYear:`
>Four-digit year of the vehicle.

`/VehicleMake:`
>Make of the vehicle.

`/VehicleModel:`
>Model of the vehicle.

`/VIN:`
>VIN of the vehicle.

`/OdometerReading:`
>Odometer reading of the vehicle.

Additionally, *DigniFi* supports the following operations:

`/Action:`
>Specifies the action to perform.

Value	Description
ApplicationStatus	Check the status of a pending application.
UpdateRO	Update the Repair Order for a pending application.

Value	Description
UploadRO	Upload the final Repair Order.

The following parameters only apply to *American First Finance*.

`/Married:`
Specify 1 to indicate applicant is married, or 0 to indicate not married.

`/SpouseName:`
Name of applicant's spouse.

`/LiveInSpouse:`
Specify 1 to indicate applicant's spouse lives at the same address, or 0 to indicate a different address.

`/SpouseRentOrOwn:`
Indicates whether applicant's spouse rents or owns his/her residence.

Value	Description
R	Rent
O	Own
X	Other

`/SpouseAddress1:`
Street address of applicant's spouse.

`/SpouseAddress2:`
Street address second line of applicant's spouse.

`/SpouseCity:`
City of applicant's spouse.

`/SpouseState:`
State of applicant's spouse.

`/SpouseZip:`
Zip code of applicant's spouse.

`/AccountStatus:`
Specify 1 to indicate a Checking account, or 0 to indicate a Savings account.

`/BillingZip:`
Applicant billing zip code.

Additionally, *American First Finance* supports the following operations:

`/Action:`
Specifies the action to perform.

Value	Description
ApplicationStatus	Check the status of a pending application.
UpdateRO	Update the Repair Order for a pending application.

Returns:

`string Result`

The result of this method call is a multi-line string containing information about the application submission. Each result element is separated by a CR/LF. Not all elements are present for all transactions. Additional elements may be added in the future.

RESULT=[*NONE*|*ACCEPTED*|*DECLINED*|*PENDING*|*ERROR*]

Indicates the result of the call:

Value	Description
NONE	Indicates the application submission was cancelled by the user.
ACCEPTED	Indicates the application was successfully submitted.
DECLINED	Indicates the application submission was declined.
PENDING	Indicates the application submission is pending (Synchrony Car Care only).
ERROR	Indicates there was an error with the application submission.

DETAIL=*string*

Provides additional detail about the RESULT.

TRANSACTIONID=*numeric*

The Online Merchant Center Transaction ID for the application submission.

ORDERID=*numeric*

The Online Merchant Center Order ID for the transaction.

CONFIRMATIONNUMBER=*string*

The confirmation number provided by the credit application provider to reference the application.

TOKEN=*numeric*

If the application is approved and the /Token:1 parameter was provided, the account is tokenized and may be referenced with this value in addition to LAST4DIGITS.

LAST4DIGITS=*numeric*

If the application is approved and tokenized, the account may be referenced with this value in addition to TOKEN.

CARDNUMBER=*numeric*

If the application is approved and the account is not tokenized, the card number for the application.

CREDITLIMIT=*numeric*

If the application is approved, the credit limit for the card.

FIRSTNAME=*string*

First name of the applicant.

LASTNAME=*string*

Last name of the applicant.

ADDRESS1=*string*

Street address of the applicant.

ADDRESS2=*string*

Second line of the street address of the applicant.

CITY=*string*

City of the applicant's address.

STATE=*string*

State of the applicant's address.

ZIPCODE=*string*

Zip code of the applicant's address.

PHONE=*string*

Applicant's phone number.

EMAIL=*string*

Applicant's email address.

PREAPPROVALEXPDATE=*YYYYMMDD*

An approved Synchrony Car Care QuickScreen can be accepted until the expiration given expiration date.

string ShowAccountLookupDialog(string)

This method shows the account lookup/balance inquiry dialog.

Parameters:

string InitializationParameters

>   This parameter allows you to initialize the form with a set of values and control its behavior. This set of
>   values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the
>   name of the parameter must be separated from the value by a colon (:).
>
>   The following parameters are supported:
>
>   /AcctID:
>   >   5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the
>   >   ShowConfigDialog method has never been called, then this method will automatically call the
>   >   ShowConfigDialog method to collect this required information.
>   >   (/ATSID: may also be used.)
>   /SubID:
>   >   5-character alphanumeric value that identifies the SubID for the merchant.
>   >   (/ATSSubID: may also be used.)
>   /MerchantPIN:
>   >   The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management >
>   >   Configure Options > API Controls section). If omitted and the ShowConfigDialog method has
>   >   never been called, then this method will automatically call the ShowConfigDialog method to collect
>   >   this required information.
>   /SSN:
>   >   Social Security number. Required for account lookup.
>   /Zip:
>   >   Cardholder zip code (e.g., *98052*). Required for account lookup.
>   /CCNumber:
>   >   Card number. Required for balance inquiry.
>   /PhotoIDType:
>   >   Specifies the Photo ID type. Photo ID is only required if performing an account lookup and the
>   >   user chooses to perform a sale on the account. Valid values are
>
> | Value | Description |
> |---|---|
> | D | Driver License (default) |
> | G | Green Card |
> | M | Military ID |
> | P | Passport |
> | S | State ID Card |
>
>   /PhotoIDNumber:
>   >   Specifies the identification number (which may contain characters) on the Photo ID.
>   /PhotoIDExpDate:
>   >   Specifies the Photo ID expiration date in format MM-DD-YYYY or MM-YYYY.
>   /CenterScreen:
>   >   If this parameter is present with the value 1, the dialog is shown centered on the screen rather
>   >   than the default position of centering the dialog on the calling window.
>   /CheckForUpdateInterval:
>   >   The number of days between checks for updates.
>   /CheckForUpdates:
>   >   Specify 0 to disable checking for updates, or 1 to enable update checking for updates.

`/SuppressAcceptedDialog:`
> Specify `1` to suppress the *Accepted* dialog which is normally shown for accepted transactions. *Declined* and *Error* dialogs will still be shown.

All parameters are optional and may be omitted.

Returns:

`string Result`

> The result of this method call is a multi-line string containing information about the action that was performed. For a balance inquiry the following fields are not returned: FIRSTNAME, LASTNAME, ADDRESS1, ADDRESS2, CITY, STATE, ZIPCODE, PHONE. Each result element is separated by a CR/LF. Not all elements are present for all transactions. Additional elements may be added in the future.

> `RESULT=[`*NONE|SUCCESS|DECLINED|ERROR*`]`
>> Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

>> Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be `NONE` and the `DETAIL` tag will contain the value *Update in progress*.

> `ACCOUNT=`*numeric*
>> The last four digits of the account number (if available).

> `APPROVALCODE=`*string*
>> The Authorization Code of the transaction.

> `TRANSACTIONID=`*numeric*
>> The Online Merchant Center Transaction ID for the transaction.

> `ORDERID=`*numeric*
>> The Online Merchant Center Order ID for the transaction.

> `DETAIL=`*string*
>> For `DECLINED` and `ERROR` results, this field provides details about the failure.

> `ACCOUNTTYPE=`*string*
>> Identifies the credit card type that was processed. For valid values, see Appendix E.

> `FIRSTNAME=`*string*
>> The first name of the account holder.

> `LASTNAME=`*string*
>> The last name of the account holder.

> `ADDRESS1=`*string*
>> The mailing address of the account holder.

> `ADDRESS2=`*string*
>> The second line of the mailing address of the account holder.

> `CITY=`*string*
>> The account holder's mailing address city.

> `STATE=`*string*
>> The account holder's mailing address state.

> `ZIPCODE=`*string*
>> The account holder's mailing address zip code.

> `PHONE=`*string*
>> The account holder's phone number.

> `BALANCE=`*numeric*
>> Balance of the card.

Example:

```
RESULT=SUCCESS
ACCOUNT=5454
APPROVALCODE=ACCOUNTLOOKUP:TEST:::111111111:N::U
TRANSACTIONID=111111111
ORDERID=111111112
ACCOUNTTYPE=Goodyear
FIRSTNAME=John
LASTNAME=Rook
ADDRESS1=8383 158th Ave NE
ADDRESS2=
CITY=Redmond
STATE=WA
ZIPCODE=98052
PHONE=(425) 497-9909
BALANCE=2200
```

string ShowTokenLookupDialog(string)

This method shows the tokenized account lookup dialog. A tokenized account allows a merchant to process returning customers without the need to store sensitive and confidential customer information on the merchant's system. Storing sensitive information requires secure servers in addition to various certifications. Merchant Partners is CISP (Visa's Cardholder Information Security Program) certified. Therefore, we take all precautions to ensure the customer's data is safe and eliminating the need for the merchant to run the risk of exposing their customers' sensitive data. Tokenization makes the transaction experience safer for the merchant and easier for the customer. A tokenized account is referred to as "Account on File" in the user interface.

Parameters:

string InitializationParameters

>   This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

>   The following parameters are supported:

>   /AcctID:
>>   5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>>   (/ATSID: may also be used.)

>   /SubID:
>>   5-character alphanumeric value that identifies the SubID for the merchant.
>>   (/ATSSubID: may also be used.)

>   /MerchantPIN:
>>   The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.

>   /Token:
>>   Numeric token supplied by Merchant Partners.

>   /Last4Digits:
>>   The last four digits of the credit card or bank account number.

>   /HideSaleButton:
>>   Hides the Sale/Auth button in the Token Edit dialog.

Returns:

string Result

>   The result of this method call is a multi-line string containing information about the transaction that was processed. Each result element is separated by a CR/LF. Not all elements are present for all transactions. Additional elements may be added in the future.

>   RESULT=[*NONE|SUCCESS|DECLINED|ERROR*]
>>   Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.

Value	Description
ERROR	Indicates an error occurred.

Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be NONE and the DETAIL tag will contain the value *Update in progress*.

ACCOUNT=*numeric*

The last 4 digits of the account that was retrieved.

APPROVALCODE=*string*

The Authorization Code of the transaction.

TOKEN=*numeric*

The Token used for account retrieval.

LAST4DIGITS=*numeric*

The last 4 digits of the account that was retrieved.

ACCOUNTTYPE=*string*

Identifies the credit card type that was processed. For valid values, see Appendix E.

NAME=*string*

The Account Holder name, if available.

ADDRESS1=*string*

The mailing address of the account holder.

ADDRESS2=*string*

The second line of the mailing address of the account holder.

CITY=*string*

The account holder's mailing address city.

STATE=*string*

The account holder's mailing address state.

ZIPCODE=*string*

The account holder's mailing address zip code.

PHONE=*string*

The account holder's phone number.

EMAIL=*numeric*

The account holder's email address.

Example:

```
RESULT=SUCCESS
ACCOUNT=5454
APPROVALCODE=PROFILERETRIEVE:Success:::0:::
TOKEN=1111111
LAST4DIGITS=5454
ACCOUNTTYPE=MasterCard
NAME=James Test
ADDRESS1=8383 158th Ave NE
ADDRESS2=
CITY=Redmond
STATE=WA
ZIPCODE=98052
PHONE=(425) 497-9909
EMAIL=support@merchantpartners.com
```

string ShowGiftCardDialog(string)

This method shows the gift card dialog for a given action.

Parameters:

string InitializationParameters

> This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

> The following parameters are supported:

> /AcctID:
>> 5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>> (/ATSID: may also be used.)

> /SubID:
>> 5-character alphanumeric value that identifies the SubID for the merchant.
>> (/ATSSubID: may also be used.)

> /MerchantPIN:
>> The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.

> /GiftCardAction:
>> Identifies the gift card action to perform:

Value	Description
Issue	Issue a new gift card.
AddValue	Add value to a gift card.
BalanceInquiry	Perform a balance inquiry on a gift card.
Deactivate	Deactivate an existing gift card.

> /Amount:
>> Dollar amount of the transaction (e.g., *1.23*)

> /RequireGiftCardActivationSwipe:
>> Specify 1 to require a swipe for Gift Card Activation/Add Value.

> /CenterScreen:
>> If this parameter is present with the value 1, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.

> /LockParameters:
>> If this parameter is present with the value 1, the *Amount* field, if provided in the parameter set, will be locked as read-only for *AddValue* and *Issue* actions.

> /SwipeImmediate:
>> If this parameter is present with the value 1, then the Swipe dialog is shown immediately upon launch of the dialog.

> /ProcessOnSwipe:
>> If this parameter is present with the value 1, then the transaction is processed immediately after a successful card swipe.

> /SuppressAcceptedDialog:
>> Specify 1 to suppress the *Accepted* dialog which is normally shown for accepted transactions. *Declined* and *Duplicate Transaction* dialogs will still be shown.

> /AcceptedDialogTimeout:

This parameter causes the Accepted dialog which is normally shown for accepted transactions to be automatically dismissed after the given number of seconds (a positive integer).

Returns:

`string Result`

The result of this method call is a multi-line string containing information about the transaction that was processed. Each result element is separated by a CR/LF. Not all elements are present for all transactions. Additional elements may be added in the future.

`RESULT=[`*NONE*`|`*SUCCESS*`|`*DECLINED*`|`*ERROR*`]`
Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be `NONE` and the `DETAIL` tag will contain the value *Update in progress*.

`ACCOUNT=`*numeric*
The last 4 digits of the account that was retrieved.

`AMOUNT=`*decimal*
The amount of the transaction.

`APPROVALCODE=`*string*
The Authorization Code of the transaction.

`TRANSACTIONID=`*numeric*
The Online Merchant Center Transaction ID for the transaction.

`ORDERID=`*numeric*
The Online Merchant Center Order ID for the transaction.

`DETAIL=`*string*
This value identifies the transaction type and any additional information about the transaction.
For declined transactions, this value contains the processing gateway's decline reason.
If the user assents to the Auto Update process, this tag will contain the value *Update in progress*.

`ACCOUNTTYPE=`*string*
Identifies the card type that was processed: WP Gift Card.

`TERMID=`*string*
This optional tag may be included to identify the Terminal on which the transaction originated.

`BALANCE=`*numeric*
Balance remaining on card.

Example:

```
RESULT=SUCCESS
ACCOUNT=3048
AMOUNT=
APPROVALCODE=SVBALINQRY:G20721:52::111111111:::
TRANSACTIONID=111111111
ORDERID=211111111
DETAIL=GiftCard
ACCOUNTTYPE=WP Gift Card
TERMID=111111
BALANCE=55.50
```

string ShowTransactionSearchDialog(string)

Shows the transaction search dialog.

Parameters:

string InitializationParameters

> This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

> The following parameters are supported:

> /AcctID:
>> 5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>> (/ATSID: may also be used.)
> /SubID:
>> 5-character alphanumeric value that identifies the SubID for the merchant.
>> (/ATSSubID: may also be used.)
> /MerchantPIN:
>> The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
> /CenterScreen:
>> If this parameter is present with the value 1, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.
> /ReportDate:
>> If this parameter is present with the value mmddYYYY, the date search dialog is automatically processes the value of the date and continues to the next screen.
> /ReportActionType:
>> This parameter shows a custom report.

Value	Description
AuthReversal	Shows Pre-Auth Only transactions.
Refund	Shows Sale and Post transactions.
Void	Show approved transactions.
EodReport	Show End of Day report.
CreditAppReport	Show Credit Applicationreport.

string ShowTextToPay(string)

Shows the Text to Pay dialog.

Parameters:

string InitializationParameters

This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

The following named parameters are supported:

/AcctID:
5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
(/ATSID: may also be used.)

/SubID:
5-character alphanumeric value that identifies the SubID for the merchant.
(/ATSSubID: may also be used.)

/MerchantPIN:
The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.

/Action:
Specifies the action to perform.

Value	Description
PaidLinks	Show the Text to Pay paid links dialog.
Create	Creates a new Pay Link.
Resend	Resend the target Pay Link.
Close	Close the target Pay Link.
Delete	Delete the target Pay Link.
Status	Retrieve the status of the target Pay Link.

/Amount:
Dollar amount of the transaction (e.g., *1.23*)

/TaxAmount:
Dollar amount of tax collected for the transaction (e.g., *1.23*)

/MerchantOrderNumber:
A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.

/InvoiceFilename:
Specify a local PDF filename to include the file with the transaction.

/InvoiceData:
Similar to /InvoiceFilename, but the PDF contents are Base64-encoded and passed as the value for this parameter.
Note: When using /InvoiceData, be aware that command line parameter length is limited to 32,699 characters in total, as this value can be quite large.

/LineItems:
This parameter may be used to pass line item details for the transaction. Refer to <u>Appendix A</u> for more information.

/LinkCode:

>The link code of a specific Pay Link. Used in combination with /ProcessImmediate to trigger specific actions.

/LockParameters:

>If this parameter is present with the value 1, the following fields, if provided in the parameter set, will be locked as read-only: Order Number, SubTotal, Tax Amount, and TotalAmount.

/ProcessImmediate:

>When this parameter is present with the value 1 and additional required parameters are given, the requested action will be executed without user interaction. If no Action is provided, the default behavior is Create.

Action	Required Parameters	Optional Parameters
Create	Amount, MobilePhone, CCName, MerchantOrderNumber	TaxAmount, Email, Address1, Address2, City, State, Zip, InvoiceFilename, InvoiceData
Resend	LinkCode	
Close	LinkCode	
Delete	LinkCode	
Status	LinkCode	

>If any required parameter is missing or invalid, or the target LinkCode doesn't support the requested Action, the user will be presented with the standard dialog.

/TaxRequired:

>If this parameter is present with the value 1, the user must either specify a tax amount or tax exempt status in order to process the transaction.

/TaxExempt:

>Indicates whether the transaction is tax exempt. Use 1 to indicate tax exempt; omit or use 0 to indicate a taxable purchase.

The following named parameters specify customer information:

/MobilePhone:

>Consumer mobile phone number

/Email:

>Consumer email address (e.g., *john@example.com*)

/CCName:

>Full name of the consumer (e.g., *John Q. Customer*)

/Address1:

>Consumer street address (e.g., *123 Main St*)

>(/Address: may also be used.)

/Address2:

>Consumer street address second line (e.g., *Suite 202*)

/City:

>Consumer city (e.g., *Redmond*)

/State:

>Consumer state (e.g., *WA*)

/Zip:

>Consumer zip code (e.g., *98052*)

Returns:

string Result

>The result of this method call is a multi-line string containing information about the action that was processed. Each result element is separated by a CR/LF. Not every element will be present for all

transactions. Additional elements may be added in the future.

RESULT=[*NONE*|*SUCCESS*|*PENDING*]
>Indicates the status of the call:

Value	Description
NONE	Indicates no action was performed.
SUCCESS	Indicates the action was successful.
PENDING	Indicates further action is required (e.g. Consumer enrollment).

>Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be NONE and the DETAIL tag will contain the value *Update in progress*.

ACCOUNT=*numeric*
>The last 4 digits of the credit card that was processed.

AMOUNT=*decimal*
>The amount of the transaction.

APPROVALCODE=*string*
>The Authorization Code of the transaction.

NAME=*string*
>The Account Holder name, if available.

TRANSACTIONID=*numeric*
>The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*
>The Online Merchant Center Order ID for the transaction.

DETAIL=*string*
>This value proivdes additional information about the action performed.

>If the user assents to the Auto Update process, this tag will contain the value *Update in progress*

ACCOUNTTYPE=*string*
>Identifies the credit card type that was processed. For valid values, see Appendix E.

LINKCODE=*string*
>The unique identifier of the Pay Link.

PAYLINKSTATUS=*string*
>This value identifies the status of the Pay Link.

Status	Detail
Unpaid	The Pay Link has been sent to the consumer, but not yet viewed.
Viewed	The Pay Link has been viewed by the consumer, but not yet paid.
Paid	The Pay Link has been paid by the consumer.
Closed	The Pay Link has been closed by the service writer.
Voided	The Pay Link has been deleted/voided by the service writer.

MERCHANTORDERNUMBER=*string*
>A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.

PHONE=*string*
>Consumer mobile phone number

ADDRESS1=*string*
>Consumer street address

ADDRESS2=*string*
>Consumer street address second line

CITY=*string*
>Consumer city

STATE=*string*
>Consumer state

ZIPCODE=*string*
>Consumer zip code
EMAIL=*string*
>Consumer email address
TAXAMOUNT=*decimal*
>Tax collected on the transaction.
OPTCASHDISCOUNT=*decimal*
>Optional Cash Discount, if any, applied to the transaction.
KEYWORD=*string*
>Keyword for the 1stMILE text notification enrollment process.
SHORTCODE=*string*
>Shortcode for the 1stMILE text notification enrollment process.
SIGNATURE=*string*
>String representation of the signature image based on the specified parameters. Only applicable if the Pay Link was created from an existing Authorize Link.

If the /ISVEMV:1 parameter was provided, the response will contain the following elements that may be used for printing a receipt. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

RECEIPTGROUP1=*string*
>This group contains cardholder and transaction data.

Name	Description
TRANSACTIONTYPE	Indicates the type of transaction processed: SALE or PAYLINK
TRANSACTIONRESULT	Indicates whether the transaction was APPROVED or is PENDING.
TIMESTAMP	Timestamp of the transaction in the format MM/DD/YYYY hh:mm:ss AMPM (e.g., 8/20/2015 4:20:05 PM).
MERCHANTORDERNUMBER	Merchant order number (if provided).
AMOUNT	Amount of the transaction.
OPTCASHDISCOUNT	Optional Cash Discount, if any, applied to the transaction.
NAME	Cardholder name.
ACCOUNTTYPE	Payment type. See Appendix E for valid values.
ACCOUNT	Card number, masked to the last four digits.
ORDERID	The Online Merchant Center Order ID for the transaction.
TRANSACTIONID	The Online Merchant Center Transaction ID for the transaction.
AUTHCODE	The authorization or approval code provided by the authorizing network.
AVSRESULT	Result code generated by the Address Verification System.
CVV2RESULT	One character result code generated by the CVV2/CVC2 system.

RECEIPTGROUP2=*string*
>This group is unused at this time.
RECEIPTGROUP3=*string*
>This group is unused at this time.

Example:

```
RESULT=SUCCESS
ACCOUNT=5454
AMOUNT=37.50
```

```
APPROVALCODE=SALE:TEST:::1234567890:::
NAME=Default Test
TRANSACTIONID=1234567890
ORDERID=12345678900
DETAIL=The Pay Link was successfully closed.
ACCOUNTTYPE=MasterCard
LINKCODE=3bda4aff-f224-232a-09e7-02874a95eac6
PAYLINKSTATUS=Closed
MERCHANTORDERNUMBER=0430-A
PHONE=4255551234
ADDRESS1=123 Main St.
CITY=Redmond
STATE=WA
ZIPCODE=98052
EMAIL=test@test.com
TAXAMOUNT=3.00
OPTCASHDISCOUNT=1.50
RECEIPTGROUP1=TRANSACTIONTYPE:PAYLINK|TRANSACTIONRESULT:APPROVED|TIMESTAMP:4/30/2020 2:53…
RECEIPTGROUP2=
RECEIPTGROUP3=
```

string ShowTextToAuthorize(string)

Shows the Text to Authorize dialog.

Parameters:

string InitializationParameters

This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

The following named parameters are supported:

/AcctID:
    5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
    (/ATSID: may also be used.)
/SubID:
    5-character alphanumeric value that identifies the SubID for the merchant.
    (/ATSSubID: may also be used.)
/MerchantPIN:
    The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
/Action:
    Specifies the action to perform.

Value	Description
AuthorizedLinks	Show the Text to Authorize authorized links dialog.
Create	Creates a new Authorize Link.
Resend	Resend the target Authorize Link.
Close	Close the target Authorize Link.
Delete	Delete the target Authorize Link.
Append	Append a new work order to the target Authorize Link.
CreatePayLink	Create a new Pay Link from the target Authorize Link.
Status	Retrieve the status of the target Authorize Link.

/Amount:
    Dollar amount of the transaction (e.g., *1.23*)
/TaxAmount:
    Dollar amount of tax collected for the transaction (e.g., *1.23*)
/MerchantOrderNumber:
    A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.
/InvoiceFilename:
    Specify a local PDF filename to include the file with the transaction.
/InvoiceData:
    Similar to /InvoiceFilename, but the PDF contents are Base64-encoded and passed as the value for this parameter.
    Note: When using /InvoiceData, be aware that command line parameter length is limited to 32,699 characters in total, as this value can be quite large.

/LineItems:

> This parameter may be used to pass line item details for the transaction. Refer to Appendix A for more information.

/LinkCode:

> The link code of a specific Authorize Link. Used in combination with /ProcessImmediate to trigger specific actions.

/LockParameters:

> If this parameter is present with the value 1, the following fields, if provided in the parameter set, will be locked as read-only: Order Number, Tax Amount, and Total Amount.

/ProcessImmediate:

> When this parameter is present with the value 1 and additional required parameters are given, the requested action will be executed without user interaction. If no Action is provided, the default behavior is Create.

Action	Required Parameters	Optional Parameters
Create	Amount, MobilePhone, CCName, MerchantOrderNumber	TaxAmount, Email, Address1, Address2, City, State, Zip, InvoiceFilename, InvoiceData
Resend	LinkCode	
Close	LinkCode	
Delete	LinkCode	
Append	LinkCode	Amount, TaxAmount, MerchantOrderNumber, Address1, Address2, City, State, Zip, InvoiceFilename, InvoiceData
CreatePayLink	LinkCode	InvoiceFilename, InvoiceData
Status	LinkCode	

> If any required parameter is missing or invalid, or the target LinkCode doesn't support the requested Action, the user will be presented with the standard dialog.

/TaxRequired:

> If this parameter is present with the value 1, the user must either specify a tax amount or tax exempt status in order to process the transaction.

/TaxExempt:

> Indicates whether the transaction is tax exempt. Use 1 to indicate tax exempt; omit or use 0 to indicate a taxable purchase.

The following named parameters specify customer information:

/MobilePhone:

> Consumer mobile phone number

/Email:

> Consumer email address (e.g., *john@example.com*)

/CCName:

> Full name of the consumer (e.g., *John Q. Customer*)

/Address1:

> Consumer street address (e.g., *123 Main St*)
> (/Address: may also be used.)

/Address2:

> Consumer street address second line (e.g., *Suite 202*)

/City:

> Consumer city (e.g., *Redmond*)

/State:

> Consumer state (e.g., *WA*)

/Zip:

> Consumer zip code (e.g., *98052*)

The following named parameters specify return signature information when closing an Authorize Link:

/ReturnImageEncoding:
  Identifies the encoding in which you would like the string representation of the signature image returned. Valid values are

Value	Description
Base64	Radix-64 encoding; the base 64 digits in ascending order from zero are the uppercase characters 'A' to 'Z', the lowercase characters 'a' to 'z', the numerals '0' to '9', and the symbols '+' and '/'. The valueless character, '=', is used for trailing padding.
BinHex	Binary to Hexadecimal encoding; each byte is converted to a hexadecimal string representation.

  Defaults to Base64 if not specified.

/ReturnImageFormat:
  Identifies the image format in which you would like the signature image returned. Valid values are

Value	Description
Bmp	Windows bitmap
Emf	Enhanced Windows metafile
Gif	Graphics Interchange Format
Jpeg	Joint Photographic Experts Group image format
Pcl	Printer Control Language format
PclMono	Printer Control Language Monochrome format
Png	Portable Network Graphics image format
Tiff	Tag Image File Format
Wmf	Windows metafile

  Defaults to Tiff if not specified.

/ReturnImageHeight:
  Specifies the maximum image height in pixels.
  Default: 50.

/ReturnImageWidth:
  Specifies the maximum image width in pixels.
  Default: 250.

/ResizeReturnImage:
  Specify 1 to resize the signature image to the dimensions given by /ReturnImageHeight and /ReturnImageWidth.

Returns:

string Result

  The result of this method call is a multi-line string containing information about the action that was processed. Each result element is separated by a CR/LF. Not every element will be present for all transactions. Additional elements may be added in the future.

  RESULT=[*NONE*|*SUCCESS*|*PENDING*]
    Indicates the status of the call:

Value	Description
NONE	Indicates no action was performed.
SUCCESS	Indicates the action was successful.
PENDING	Indicates further action is required (e.g. Consumer enrollment).

Note: if Auto Updates are enabled and the user assents to the Auto Update process, the value of this tag will be NONE and the DETAIL tag will contain the value *Update in progress*.

ACCOUNT=*numeric*
>   The last 4 digits of the credit card that was processed.

AMOUNT=*decimal*
>   The amount of the transaction.

APPROVALCODE=*string*
>   The Authorization Code of the transaction.

NAME=*string*
>   The Account Holder name, if available.

TRANSACTIONID=*numeric*
>   The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*
>   The Online Merchant Center Order ID for the transaction.

DETAIL=*string*
>   This value proivdes additional information about the action performed.

>   If the user assents to the Auto Update process, this tag will contain the value *Update in progress*

ACCOUNTTYPE=*string*
>   Identifies the credit card type that was processed. For valid values, see Appendix E.

LINKCODE=*string*
>   The unique identifier of the Authorize Link.

AUTHORIZELINKSTATUS=*string*
>   This value identifies the status of the Authorize Link.

Status	Detail
Sent	The Authorize Link has been sent to the consumer, but not yet viewed.
Viewed	The Authorize Link has been viewed by the consumer, but not yet authorized.
Authorized	The Authorize Link has been signed by the consumer to authorize the work order.
Closed	The Authorize Link has been closed by the service writer.
Voided	The Authorize Link has been deleted/voided by the service writer.

MERCHANTORDERNUMBER=*string*
>   A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.

PHONE=*string*
>   Consumer mobile phone number

ADDRESS1=*string*
>   Consumer street address

ADDRESS2=*string*
>   Consumer street address second line

CITY=*string*
>   Consumer city

STATE=*string*
>   Consumer state

ZIPCODE=*string*
>   Consumer zip code

EMAIL=*string*
>   Consumer email address

`TAXAMOUNT=`*`decimal`*
>Tax collected on the transaction.

`OPTCASHDISCOUNT=`*`decimal`*
>Optional Cash Discount, if any, applied to the transaction.

`KEYWORD=`*`string`*
>Keyword for the 1stMILE text notification enrollment process.

`SHORTCODE=`*`string`*
>Shortcode for the 1stMILE text notification enrollment process.

`SIGNATURE=`*`string`*
>String representation of the signature image based on the specified parameters.

If the `/ISVEMV:1` parameter was provided, the response will contain the following elements that may be used for printing a receipt. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

`RECEIPTGROUP1=`*`string`*
>This group contains cardholder and transaction data.

Name	Description
`TRANSACTIONTYPE`	Indicates the type of transaction processed: `AUTHORIZELINK`
`TRANSACTIONRESULT`	Indicates whether the transaction was `APPROVED` or is `PENDING`.
`TIMESTAMP`	Timestamp of the transaction in the format `MM/DD/YYYY hh:mm:ss AMPM` (e.g., 8/20/2015 4:20:05 PM).
`MERCHANTORDERNUMBER`	Merchant order number (if provided).
`AMOUNT`	Amount of the transaction.
`OPTCASHDISCOUNT`	Optional Cash Discount, if any, applied to the transaction.
`NAME`	Cardholder name.
`ACCOUNTTYPE`	Payment type. See Appendix E for valid values.
`ACCOUNT`	Card number, masked to the last four digits.
`ORDERID`	The Online Merchant Center Order ID for the transaction.
`TRANSACTIONID`	The Online Merchant Center Transaction ID for the transaction.
`AUTHCODE`	The authorization or approval code provided by the authorizing network.
`AVSRESULT`	Result code generated by the Address Verification System.
`CVV2RESULT`	One character result code generated by the CVV2/CVC2 system.

`RECEIPTGROUP2=`*`string`*
>This group is unused at this time.

`RECEIPTGROUP3=`*`string`*
>This group is unused at this time.

Example:

```
RESULT=SUCCESS
ACCOUNT=
AMOUNT=15.00
APPROVALCODE=AUTHORIZEWORKORDER:APPROVE:::1234567890:::
NAME=Default Test
TRANSACTIONID=1234567890
ORDERID=12345678900
DETAIL=The Authorize Link was successfully closed.
ACCOUNTTYPE=
```

```
LINKCODE=12f1212d-769f-0743-ac90-820c6c5023e4
AUTHORIZELINKSTATUS=Closed
PAYLINKSTATUS=None
MERCHANTORDERNUMBER=0612-A
PHONE=4255551234
TAXAMOUNT=1.25
RECEIPTGROUP1=TRANSACTIONTYPE:AUTHORIZELINK|TRANSACTIONRESULT:APPROVED|TIMESTAMP:6/25/2020 8:12…
RECEIPTGROUP2=
RECEIPTGROUP3=
SIGNATURE={SignatureData}
```

string ShowLoyalty(string)

This method will process a 1stMILE Loyalty request. For non-loyalty members, this allows enrollment and for existing loyalty members, it allows for redemption.

Parameters:

`string InitializationParameters`

> This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

> The following named parameters are supported:

> `/AcctID:`
>> 5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the `ShowConfigDialog` method has never been called, then this method will automatically call the `ShowConfigDialog` method to collect this required information.
>> (`/ATSID:` may also be used.)
>
> `/SubID:`
>> 5-character alphanumeric value that identifies the SubID for the merchant.
>> (`/ATSSubID:` may also be used.)
>
> `/MerchantPIN:`
>> The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the `ShowConfigDialog` method has never been called, then this method will automatically call the `ShowConfigDialog` method to collect this required information.
>
> `/CenterScreen:`
>> If this parameter is present with the value 1, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.
>
> `/ISVEMV:`
>> Specify `1` to receive the `RECEIPTGROUP` response elements. The `RECEIPTGROUP` response elements may include EMV information (required for printed receipts).
>
> `/Amount:`
>> Subtotal (pre-tax) amount of the transaction (e.g., *1.23*)
>
> `/LoyaltyNumber:`
>> Loyalty number of an existing loyalty member. 1stMILE returns this in transaction responses for future use.
>
> `/MerchantOrderNumber:`
>> A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports.
>
> `/MobilePhone:`
>> Loyalty member mobile phone number.
>
> `/FirstName:`
>> Loyalty member first name.
>
> `/LastName:`
>> Loyalty member last name.
>
> `/Email:`
>> Loyalty member email address (e.g., *john@example.com*)
>
> `/CustomerType:`
>> Customer type identifier from the external system.

Returns:

```
string Result
```

The result of this method call is a multi-line string containing information about the action that was processed. Each result element is separated by a CR/LF. Not every element will be present for all transactions. Additional elements may be added in the future.

RESULT=[*NONE|SUCCESS|DECLINED|ERROR*]
>   Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

ACCOUNT=*numeric*
>   The last 4 digits of the loyalty number.

AMOUNT=*decimal*
>   The amount of the transaction.

APPROVALCODE=*string*
>   The Authorization Code of the transaction.

NAME=*string*
>   The name of the loyalty member.

TRANSACTIONID=*numeric*
>   The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*
>   The Online Merchant Center Order ID for the transaction.

DETAIL=*string*
>   This value identifies the transaction type.
>
>   For successful transactions, this element will have a static value of Loyalty.
>
>   For declined transactions, this element will contain the gateway's decline reason.
>
>   For partial approval transactions, the result will have the string -PARTIAL appended.

ACCOUNTTYPE=*string*
>   Only loyalty transactions are processed with this transaction type. Therefore, this element will contain a static value of Loyalty.

ENTRYMETHOD=*string*
>   Indicates the payment entry method. This element will contain a static value of KEYED.

REDEMPTIONTYPE=*string*
>   Indicates the type(s) and value(s) of redemptions that were processed. Each redemption type is a type/value pair with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the type and value.
>
>   Types are represented as numeric values that correspond to the following named types:

Type	Description
1	Points
2	Coupons

LOYALTYNUMBER=*string*
>   Loyalty number for an existing loyalty member.

POINTSBALANCE=*decimal*
>Loyalty member current points balance.

PENDINGPOINTS=*decimal*
>Loyalty member pending points.

POINTSREDEEMED=*decimal*
>Loyalty member points redeemed.

If the /ISVEMV:1 parameter was provided, the response will contain the following elements that may be used for printing a receipt. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

RECEIPTGROUP1=*string*
>This group contains cardholder and transaction data.

Name	Description
TRANSACTIONTYPE	Indicates the type of transaction processed: REDEEM, ENROLL, BALANCEINQUIRY
TRANSACTIONRESULT	Indicates whether the transaction was APPROVED or DECLINED.
TIMESTAMP	Timestamp of the transaction in the format MM/DD/YYYY hh:mm:ss AMPM (e.g., 8/20/2015 4:20:05 PM).
ENTRYMETHOD	Entry method. See the ENTRYMETHOD element above for valid values.
NAME	The name of the loyalty member.
ACCOUNTTYPE	Payment type. See the ACCOUNTTYPE element above for valid values.
ORDERID	The Online Merchant Center Order ID for the transaction.
TRANSACTIONID	The Online Merchant Center Transaction ID for the transaction.

RECEIPTGROUP3=*string*
>This group contains loyalty information relevant to the transaction performed.

Name	Description
LOYALTY	Information includes: Loyalty Number, Points Balance, Pending Points, Points Earned and/or Points Redeemed.

Example:

```
RESULT=SUCCESS
ACCOUNT=9012
AMOUNT=1.25
APPROVALCODE=REDEEM:::::1610921426:::
NAME=Test Customer
TRANSACTIONID=1610921426
ORDERID=1313273218
DETAIL=Loyalty
ACCOUNTTYPE=Loyalty
ENTRYMETHOD=KEYED
LOYALTYNUMBER=123456789012
POINTSBALANCE=2000
POINTSREDEEMED=500
RECEIPTGROUP1=TRANSACTIONTYPE:REDEEM|TRANSACTIONRESULT:APPROVED|TIMESTAMP:1/4/2021 2:06…
RECEIPTGROUP2=
RECEIPTGROUP3=LOYALTY:Loyalty Number: 123456789012[]Points Redeemed: 500[]Points Balance: 2000
```

string ProcessCashOtherSale(string)

This method will record a cash or any other non-Credit Card/Check type transaction.

Parameters:

string InitializationParameters

>This parameter allows you to initialize the form with a set of values and control its behavior. This set of values may contain zero or more parameters, each delimited by a slash (/). For each parameter, the name of the parameter must be separated from the value by a colon (:).

>The following named parameters are supported:

>/AcctID:
>>5-character alphanumeric value (*Acct ID*) that identifies the merchant. If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.
>>(/ATSID: may also be used.)

>/SubID:
>>5-character alphanumeric value that identifies the SubID for the merchant.
>>(/ATSSubID: may also be used.)

>/MerchantPIN:
>>The Merchant PIN value from the Online Merchant Center (under the FRISK™ Management > Configure Options > API Controls section). If omitted and the ShowConfigDialog method has never been called, then this method will automatically call the ShowConfigDialog method to collect this required information.

>/CenterScreen:
>>If this parameter is present with the value 1, the dialog is shown centered on the screen rather than the default position of centering the dialog on the calling window.

>/ISVEMV:
>>Specify 1 to receive the RECEIPTGROUP response elements. The RECEIPTGROUP response elements may include EMV information (required for printed receipts).

>/Amount:
>>Dollar amount of the transaction (e.g., *1.23*)

>/TaxAmount:
>>Dollar amount of tax collected for the transaction (e.g., *1.23*)

>/Memo:
>>Transaction memo; 256 character maximum. (/Clerk: may also be used.)

>/MerchantOrderNumber:
>>A value, unique to the merchant, by which the merchant can easily reference the order in the Online Merchant Center and reports. (/Receipt: may also be used.)

>/MobilePhone:
>>Customer mobile phone number.

>/LoyaltyNumber:
>>Loyalty number of an existing loyalty member.

>/NameOfStation:
>>Name of the station associated with the transaction.

>/ISVUser:
>>ISV User associated with the transaction.

>/ReturnAddress:
>>Specify 1 to include the consumer address information in the transaction results. The address information is only available if provided with the transaction.

>/AccountName:
>>Customer name. (/CCName: may also be used.)

>/Address1:
>>Customer street address (e.g., *123 Main St*)
>>(/Address: may also be used.)

/Address2:
> Customer street address second line (e.g., *Suite 202*)

/City:
> Customer city (e.g., *Redmond*)

/State:
> Customer state (e.g., *WA*)

/Zip:
> Customer zip code (e.g., *98052*)

/Phone:
> Customerâ™ s phone number (e.g., *888-555-1212*)

/Email:
> Customerâ™ s email address (e.g., *john@example.com*)

/PhotoIDType:
> Specifies the Photo ID type. Valid values are:

Value	Description
D	Driver License (default)
G	Green Card
M	Miltary ID
P	Passport
S	State ID Card

/PhotoIDNumber:
> Specifies the identification number (which may contain characters) on the Photo ID.

/PhotoIDExpDate:
> Specifies the Photo ID expiration date in format MM-DD-YYYY or MM-YYYY.

Returns:

string Result

> The result of this method call is a multi-line string containing information about the action that was processed. Each result element is separated by a CR/LF. Not every element will be present for all transactions. Additional elements may be added in the future.

RESULT=[*NONE|SUCCESS|DECLINED|ERROR*]
> Indicates the status of the call:

Value	Description
NONE	Indicates no transaction was performed.
SUCCESS	Indicates the transaction was successful.
DECLINED	Indicates the transaction was declined.
ERROR	Indicates an error occurred.

AMOUNT=*decimal*
> The amount of the transaction.

APPROVALCODE=*string*
> The Authorization Code of the transaction.

TRANSACTIONID=*numeric*
> The Online Merchant Center Transaction ID for the transaction.

ORDERID=*numeric*
> The Online Merchant Center Order ID for the transaction.

DETAIL=*string*
>   This value identifies the transaction type.
>
>   For successful transactions, this element will have a static value of `CashOtherSale`.
>
>   For declined transactions, this element will contain the gateway's decline reason.

ACCOUNTTYPE=*string*
>   Identifies the type of payment that was processed.

ENTRYMETHOD=*string*
>   Indicates the payment entry method. This element will contain a static value of `KEYED`.

LOYALTYNUMBER=*string*
>   Loyalty number for an existing loyalty member.

POINTSBALANCE=*decimal*
>   Loyalty member current points balance.

PENDINGPOINTS=*decimal*
>   Loyalty member pending points.

POINTSEARNED=*decimal*
>   Loyalty member points earned.

If the `/ISVEMV:1` parameter was provided, the response will contain the following elements that may be used for printing a receipt. Each group contains name/value pairs with a "|" (pipe) as a delimiter and a ":" (colon) as a separator between the name and value. Not all pairs will be present at all times. Additional elements may be added in the future.

RECEIPTGROUP1=*string*
>   This group contains cardholder and transaction data.

Name	Description
TRANSACTIONTYPE	Indicates the type of transaction processed: `SALE`
TRANSACTIONRESULT	Indicates whether the transaction was `APPROVED` or `DECLINED`.
TIMESTAMP	Timestamp of the transaction in the format `MM/DD/YYYY hh:mm:ss AMPM` (e.g., 8/20/2015 4:20:05 PM).
ENTRYMETHOD	Entry method. See the `ENTRYMETHOD` element above for valid values.
NAME	The name of the customer.
ACCOUNTTYPE	Payment type. See the `ACCOUNTTYPE` element above for valid values.
ORDERID	The Online Merchant Center Order ID for the transaction.
TRANSACTIONID	The Online Merchant Center Transaction ID for the transaction.

RECEIPTGROUP3=*string*
>   This group contains loyalty information relevant to the transaction performed.

Name	Description
LOYALTY	Information includes: Loyalty Number, Points Balance, Pending Points, Points Earned and/or Points Redeemed.

Example:

```
RESULT=SUCCESS
AMOUNT=1.25
APPROVALCODE=CASHOTHERSALE:000000:::1615620632:::
TRANSACTIONID=1615620632
ORDERID=1317378296
```

```
DETAIL=CashOtherSale
ACCOUNTTYPE=Cash/Other
ENTRYMETHOD=KEYED
LOYALTYNUMBER=123456789012
PENDINGPOINTS=90
POINTSEARNED=90
RECEIPTGROUP1=TRANSACTIONTYPE:CASHOTHERSALE|TRANSACTIONRESULT:APPROVED|TIMESTAMP:1/14/2021 4:20…
RECEIPTGROUP2=
RECEIPTGROUP3=LOYALTY:Loyalty Number: 123456789012[]Points Earned: 90[]Pending Points: 90
```

```
DETAIL=CashOtherSale
ACCOUNTTYPE=Cash/Other
ENTRYMETHOD=KEYED
```

Sample Code

Visual Basic

The following example shows how to use 1stMILE MiddleWare in a Visual Basic project.

1. From the *Project* menu, choose *References...*
2. Place a check mark in the ATSSecurePostUILib entry and click OK
3. In your code:

```vb
Sub ShowCCForm()
    Dim strParams As String
    Dim strResult As String
    Dim oSecurePostUI As ATSSecurePostUILib.ATSSecurePostUI
    oSecurePostUI = New ATSSecurePostUILib.ATSSecurePostUI

    ' Create your initialization parameters
    strParams = "/Amount:1.25"

    ' Show the form
    strResult = oSecurePostUI.ShowCreditCardForm(strParams)

    ' Perform actions based on result
    Debug.Print(strResult)
End Sub
```

Converting Encoded Images

The following example shows how to decode a Base64 encoded image from the IMAGE parameter of the `ShowCreditCardForm` method.

In your VB project, add a reference to Microsoft XML, v2.6 (or later)

```vb
Private Function DecodeBase64(ByVal strBase64Encoded As String) As Byte()
    Dim objXML As MSXML2.DOMDocument
    Dim objNode As MSXML2.IXMLDOMElement

    ' help from MSXML
    Set objXML = New MSXML2.DOMDocument
    Set objNode = objXML.createElement("b64")
    objNode.dataType = "bin.base64"
    objNode.Text = strBase64Encoded
    DecodeBase64 = objNode.nodeTypedValue

    Set objNode = Nothing
    Set objXML = Nothing
End Function

Dim byteData() As Byte
byteData = DecodeBase64(strHexEncoded)
```

The following example shows how to decode a BinHex encoded image from the IMAGE parameter of the
`ShowCreditCardForm` method.

```
Private Function HexStringToBytes(strHexEncoded As String) As Byte()
    HexStringToBytes = {}
    If strHexEncoded  vbNullString Then
        Dim i As Integer, j As Integer
        Dim byteArr(0 To (Len(strHexEncoded) / 2) – 1) As Byte
        For i = 1 To Len(strHexEncoded) Step 2
            byteArr(j) = CByte(Conversion.Val("&H" & Mid(strHexEncoded, i, 2)))
            j = j + 1
        Next i
        HexStringToBytes = byteArr
    End If
End Function

Dim byteData() As Byte
byteData = HexStringToBytes(strHexEncoded)
```

C#

The following example shows how to use 1stMILE MiddleWare in a C# .NET project.

1. From the *Project* menu, select *Add Reference...*
2. Click the *Browse* tab and browse to the location where you saved ATSSecurePostUILib.dll.
3. Click ATSSecurePostUILib.dll and then click the OK button.
4. In your code:

```
// create an ATSSecurePostUI object
ATSSecurePostUILib.ATSSecurePostUI oSecurePostUI = new ATSSecurePostUILib.ATSSecurePostUI();

// set your initialization parameters
string strParams = "";

// show the form
string strResult = oSecurePostUI.ShowCreditCardForm(strParams);

// perform actions based on the result
System.Diagnostics.Debug.WriteLine(strResult);
```

Converting Encoded Images

The following example shows how to decode a Base64 encoded image from the IMAGE parameter of the
`ShowCreditCardForm` method.

```
// sBase64EncodedImage is the string pulled from the IMAGE parameter of a ShowCreditCardForm result
Bitmap bmp = new Bitmap(new MemoryStream(System.Convert.FromBase64String(sBase64EncodedImage)));
```

The following example shows how to decode a BinHex encoded image from the IMAGE parameter of the
`ShowCreditCardForm` method.

```
byte[] HexStringToBytes(string strHexString)
{
    byte[] data = new byte[strHexString.Length / 2];
    for (int i = 0, j = 0; i < sHexString.Length; i += 2)
    {
        string strByte = strHexString.Substring(i, 2);
        data[j++] = Convert.ToByte(strByte, 16);
    }
    return data;
}

// sBinHexEncodedImage is the string pulled from the IMAGE parameter of a ShowCreditCardForm result
Bitmap bmp = new Bitmap(new MemoryStream(HexStringToBytes(strBinHexEncodedImage)));
```

Appendix A: Fleet Card Line Item Details

Line item details are required for fleet card transactions.

Line item details are delimited by a | (pipe). Example:

>   *LineItem*|*LineItem*|*LineItem*

Each Line item can contain multiple Item Product Codes. Item Product Codes (IPC) are delimited by ; (semi-colon). Example:

>   *IPC*;*IPC*;*IPC*

Each IPC has a value that is delimited by : (colon).

A full example of two line items with multiple item product codes per line item:

>   `512:133;513:1.0000;518:99.0000;510:99.00|512:950;513:1.0000;518:9.4000;510:9.40`

This example describes two line items, *Repairs* for $99 and *Tax* for $9.40 and can be broken down by IPC as follows:

> Line Item #1
>
> `512:133`   Product Code: *133 - Repairs*
>
> `513:1.0000`   Quantity: *1.0000*
>
> `518:99.0000` Unit Price: *99.0000*
>
> `510:99.00`   Line Item Total Cost: *99.00*
>
> Line Item #2
>
> `512:950`   Product Code: *950 - Tax 1*
>
> `513:1.0000`   Quantity: *1.0000*
>
> `518:9.4000`   Unit Price: *9.4000*
>
> `510:9.40`   Line Item Total Cost: *9.40*

Item Product Code	Description	Data Type	Length
508	Item Description	AN	Variable
510	Line Item Total Cost; 9(6)v99	N	8
512	Product Code (See Appendix B)	N	3
513	Quantity/Num Units; 9(3)v9999	N	7
514	Service Code/Level (See Appendix C)	AN	1
513	Quantity/Num Units; 9(3)v9999	N	7
518	Unit Cost/Price; 9(6)v9999	N	10
519	Unit of Measure (See Appendix D)	AN	1
522	Discount Rate; 9(6)v99	N	8

Appendix B: Product Codes

Product Code	Description
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

Product Code	Description
037	Super Unleaded Methanol (7.7%)
038	Unleaded Methanol (10%)
039	Unleaded Plus Methanol (10%)
040	Dyed Diesel
Product Code	**Description**
041	Super Unleaded Methanol (10%)
045	B2 Diesel Blend 2% Biodiesel
046	B5 Diesel Blend 5% Biodiesel
047	B10 Diesel Blend 10% Biodiesel
048	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%
099	Miscellaneous Fuel
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

Product Code	Description
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
Product Code	Description
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	Automotive Fuel Additives/Treatment (injected)
149	Miscellaneous Part/Services
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
199	Miscellaneous
Aviation Products / Services	
200	Storage
201	Aircraft Ground Handling
202	Aircraft Ground Power Unit

Product Code	Description
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
Product Code	**Description**
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
249	Miscellaneous Aviation
Marine Products / Services	
300	Marine Services
301	Marine Labor
302	Marine Work Order
303	Launch Fee
304	Slip Rental
349	Miscellaneous Marine Service
Other Fuels	
350	Kerosene - Low Sulfur
351	White Gas
352	Heating Oil
353	Bottled Propane
354	Other Fuel / Non-taxable

Product Code	Description
355	Kerosene - Ultra Low Sulfur
356	Kerosene -Low Sulfur (Non-Taxable)
357	Kerosene -Ultra Low Sulfur (Non-Taxable)
449	Miscellaneous / Other Fuel
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
Product Code	**Description**
464	Fluid Milk Product
465	Other Dairy
466	Juice
467	Edible Groceries
468	Non-edible Groceries
469	Perishable Groceries
470	Publications
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)

Product Code	Description
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
503	Store Services
504	Home Delivery
505	Prepaid Cards- Purchase
506	Prepaid Cards-Activation
507	Membership/Loyalty
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
Product Code	**Description**
909	Coupon 5
910	Lotto Payout (Instant)
911	Lotto Payout (Online)
912	Lotto Payout (Other)
913	Split Tender
914	Tax Discount/Forgiven
949	Miscellaneous Negative
Administrative	
950	Tax 1
951	Tax 2
952	Tax 3
953	Tax 4
954	Tax 5
955	Cash back

Product Code	Description
956	Cash back Fee
957	Fee 1
958	Fee 2
959	Fee 3
960	Fee 4
961	Fee 5
962	Miscellaneous Aviation Tax

Appendix C: Fleet Card Service Codes

Value	Description
F	Full Service
S	Self Service
N	Mini Serve
X	Maxi Serve
O	Other or Non-Fuel

Appendix D: Measurement Codes

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

Appendix E: Account Types

Acima	American First	AMEX	Bread Financial
CarCareONE	CFNA	Check	Debit
DigniFi	Diners Club	Discover Network	Drive Card
Fleet One	Flying J	FuelLynk	FuelMan
GE Money	Goodyear	JCB	Loyalty
MasterCard	MasterCard Fleet	Service Central	Visa
Visa Fleet	Voyager	WP Gift Card	Wright Express

Appendix F: Loyalty Workflow Diagram