NMI Customer Vault API
V1.1

4/20/2008

Contents

Overview

Customer Vault

Security Concerns

The Customer Vault was designed specifically for businesses of any size to address concerns about handling customer payment information. Visa and MasterCard have instituted the Payment Card Industry (PCI) Data Security Standard to protect cardholder data–wherever it resides–ensuring that members, merchants, and service providers maintain the highest information security standard.

These associations have also deemed that merchants will be held liable for any breach of cardholder data. This has become a major concern for merchants who handle credit card or electronic check payments. The Customer Vault is designed for these merchants who desire to avoid the tremendous costs and resources involved in becoming PCI compliant under these circumstances.

Customer Vault Solution

The Customer Vault allows merchants to transmit their payment information through a Secure Sockets Layer (SSL) connection for storage in our Level 1 PCI certified data facility. Once the customer record has been securely transmitted to the Customer Vault, the merchant can then initiate transactions remotely without having to access cardholder information directly. This process is accomplished without the merchant storing the customer's payment information in their local database or payment application.

Furthermore, using our 3 Step Redirect Method in conjunction with the Customer Vault allows merchants to process transactions **without transmitting any payment information** through their web application. This unique approach provides best of class application flexibility without any PCI compliancy concerns. The 3 Step Redirect API (Advanced Programmers Interface) is available by request of the project manager.

Methodology

Process Flow
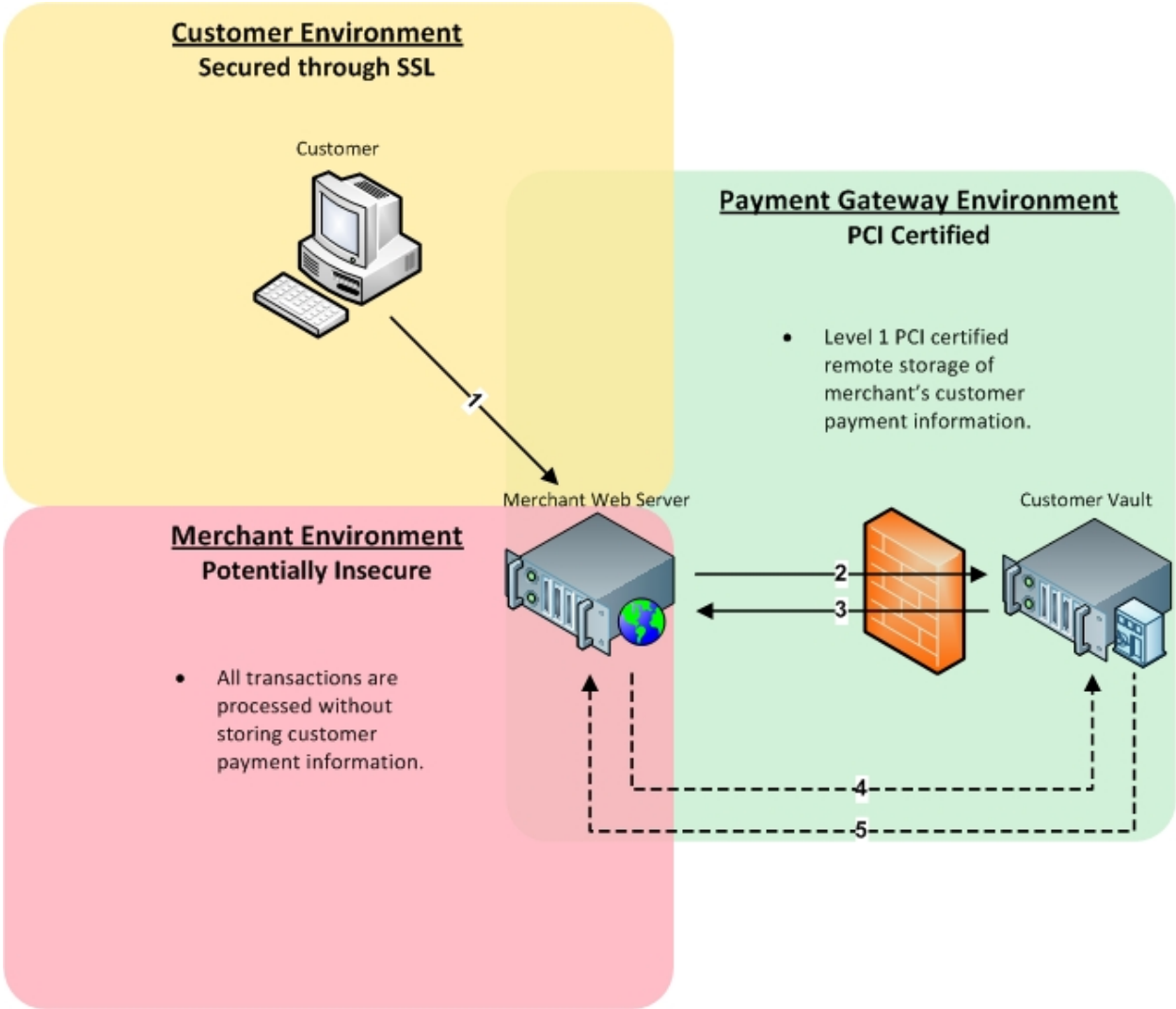
Communication

The communication protocol used to send messages to the Payment Gateway is through the HTTP protocol over an SSL connection. (HTTPS)

Transaction details should be delivered to the Payment Gateway using the POST method and query string name/value pairs delimited by ampersands

For example: variable1=value1&variable2=value2&variable3=value3

Transaction responses are returned in the body of the HTTP response in a query string name/value format delimited by ampersands.

Customer Vault (customer_vault)Types

add_customer

- If you pass add_customer as argument to the customer_vault variable, (customer_vault=add_customer) the payment gateway will create a secure customer record.

update_customer

- If you pass update_customer as argument to the customer_vault variable, (customer_vault=update_customer) the payment gateway allows an update/over-ride to any information on the customer vault record; except for the customer_vault_id.

delete_customer

- If you pass delete_customer as argument to the customer_vault variable, (customer_vault=delete_customer) the customer_vault_id is the only required field to delete a customer record.

add_customer Request

add_customer variables	Required	Format	Description
customer_vault	Required	add_customer	Adds a secure customer vault record
customer_vault_id	*Optional*		Specifies a Customer Vault ID *(If not set, the Payment Gateway will randomly generate a Customer Vault ID)*
username	Required		Username assigned to merchant account
password	Required		Password assigned to merchant account
currency	*Optional*		Set transaction currency
orderid	*Optional*		Order id
order_description	*Optional*		Order Description
merchant_defined_field_*x*	*Optional*		*(merchant_defined_field_1,merchant_defined_field_2, etc..)*
ponumber	*Level II*		Cardholder's purchase order number
tax	*Level II*	x.xx	Total tax amount
tax_exempt	*Level II*	true/false	Set whether cardholder is tax exempt
shipping	*Level II*	x.xx	Total shipping amount
method	*Optional*	creditcard/check	Set payment type to ACH or credit card
ccnumber	Required**		Credit card number
ccexp	Required**	MMYY	Credit card expiration *(ie. 0711 = 7/2011)*
account_name	Required(ACH)**		The name on the customer's ACH Account.
account	Required(ACH)**		The customer's bank account number
routing	Required(ACH)**		The customer's bank routing number
account_type	*Optional (ACH)***	checking/savings	The customer's ACH account type
account_holder_type	*Optional (ACH)***	personal/business	The customer's ACH account entity
sec_code	*Optional (ACH)***	PPD/WEB/TEL/CCD	ACH Standard Entry Class codes
first_name	Recommended		Cardholder's first name
last_name	Recommended		Cardholder's last name
address1	Recommended		Card billing address
city	Recommended		Card billing city
state	Recommended		Card billing state/province
zip	Recommended		Card billing postal code
country	Recommended		Card billing country code
phone	Recommended		Billing phone number
email	Recommended		Billing email address
company	*Optional*		Cardholder's company
address2	*Optional*		Card billing address – line 2
fax	*Optional*		Billing fax number
shipping_firstname	*Optional*		Shipping first name
shipping_lastname	*Optional*		Shipping last name
shipping_company	*Optional*		Shipping company

shipping_address1	*Optional*		Shipping address
shipping_address2	*Optional*		Shipping address – line 2
shipping_city	*Optional*		Shipping city
shipping_state	*Optional*		Shipping state/province
shipping_zip	*Optional*		Shipping postal code
shipping_country	*Optional*		Shipping country code
shipping_phone	*Optional*		Shipping phone number
shipping_fax	*Optional*		Shipping fax
shipping_email	*Optional*		Shipping email address

*If you do not pass a customer_vault_id, our system will randomly generate one. If you include both customer_id and customer_vault_id, they must match.

***You can only pass Credit Card **or** Electronic Check transaction variables.*

update_customer Request

update_customer variables	Required	Format	Description
customer_vault	Required	update_customer	Adds a secure customer vault record
customer_vault_id	Required		Specifies a Customer Vault ID
username	Required		Username assigned to merchant account
password	Required		Password assigned to merchant account
currency	*Optional*	Table 1.B	Set transaction currency
orderid	*Optional*		Order id
order_description	*Optional*		Order Description
merchant_defined_field_*x*	*Optional*		*(merchant_defined_field_1,merchant_-defined_field_2, etc..)*
ponumber	*Level II*		Cardholder's purchase order number
tax	*Level II*	x.xx	Total tax amount
tax_exempt	*Level II*	true/false	Set whether cardholder is tax exempt
shipping	*Level II*	x.xx	Total shipping amount
method	*Optional*	creditcard/check	Set payment type to ACH or credit card
ccnumber	Required**		Credit card number
ccexp	Required**	MMYY	Credit card expiration *(ie. 0711 = 7/2011)*
account_name	Required(ACH)**		The name on the customer's ACH Account.
account	Required(ACH)**		The customer's bank account number
routing	Required(ACH)**		The customer's bank routing number
account_type	*Optional (ACH)***	checking/savings	The customer's ACH account type
account_holder_type	*Optional (ACH)***	personal/business	The customer's ACH account entity
sec_code	*Optional (ACH)***	PPD/WEB/TEL/CCD	ACH Standard Entry Class codes
first_name	Recommended		Cardholder's first name

last_name	Recommended		Cardholder's last name
address1	Recommended		Card billing address
city	Recommended		Card billing city
state	Recommended		Card billing state/province
zip	Recommended		Card billing postal code
country	Recommended		Card billing country code
phone	Recommended		Billing phone number
email	Recommended		Billing email address
company	*Optional*		Cardholder's company
address2	*Optional*		Card billing address – line 2
fax	*Optional*		Billing fax number
shipping_firstname	*Optional*		Shipping first name
shipping_lastname	*Optional*		Shipping last name
shipping_company	*Optional*		Shipping company
shipping_address1	*Optional*		Shipping address
shipping_address2	*Optional*		Shipping address – line 2
shipping_city	*Optional*		Shipping city
shipping_state	*Optional*		Shipping state/province
shipping_zip	*Optional*		Shipping postal code
shipping_country	*Optional*		Shipping country code
shipping_phone	*Optional*		Shipping phone number
shipping_fax	*Optional*		Shipping fax
shipping_email	*Optional*		Shipping email address

delete_customer Request

delete_customer variables	Required	Format	Description
customer_vault	Required	delete_customer	Adds a secure customer vault record
customer_vault_id	Required		Specifies a Customer Vault ID
username	Required		Username assigned to merchant account
password	Required		Password assigned to merchant account

Testing Information

Transaction testing credentials

Transactions can be tested using one of two methods. First, transactions can be submitted to any merchant account that is in test mode. Keep in mind that if an account is in test mode, all valid credit cards will be approved but **no charges will actually be processed**.

The Payment Gateway demo account can also be used for testing at any time. Please use the following username and password for testing with this account:

username	demo
password	password

Transaction POST URL

Transaction details should be POST'ed to the following URL:

POST URL	https://secure.nmi.com/api/transact.php

Test Data

Transactions can be submitted using the following information:

Visa	4111111111111111
MasterCard	5431111111111111
DiscoverCard	6011601160116611
American Express	341111111111111
Credit Card Expiration	10/10
account (ACH)	123123123
routing (ACH)	123123123

Examples

Data posted to the Payment Gateway by Merchant

Add a Customer to the Customer Vault:

- username=demo&password=password&firstname=Joe&lastname=Smith&address1=1234 Main St.&city=Chicago&state=IL&country=US&ccnumber=4111111111111111&ccexp=1010&customer_vault=add_customer&customer_vault_id=00001

Update a Customer's credit card number and expiration date:

- username=demo&password=password&ccnumber=5431111111111111&ccexp=1012&customer_vault=update_customer&customer_vault_id=00001

Process a 'sale' transaction using a Customer Vault record:

- username=demo&password=password&amount=10.00&customer_vault_id=00001