



APSPays For Magento 2

Installation & User Guide
Version 1.0

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OVERVIEW

Thank you for choosing APS Payments for your integrated credit card processing needs. This guide should be followed in sequential order as it contains all the steps necessary to install, configure, and process with your APS Payments Certified Integration on the Magento 2 platform.

Once configured, payments can be processed in Magento 2's checkout page. The APSPays Gateway provides numerous settings and reports to further your business processing.

APS VAULT

The APSPays Gateway uses the APSPays Vault to ensure that customer credit card information is never stored in the software solution. The APSPays Customer Vault exceeds the PCI Council's requirements and is a fully PA-DSS compliant service.

DISCLAIMER

The APSPays plugin, its software, and all content found on it are provided on an "as is" and "as available" basis. APS Payments does not give any warranties, whether expressed or implied, as to the suitability or usability of the plugin, its software or any of its content. APS Payments does not certify compatibility with other third-party products or other software solution non-native to a standard ERP implementation. APS Payments will not be liable for any loss, whether such loss is direct, indirect, special or consequential, suffered by any party as a result of their use of this APSPays plugin, its software or content. Any downloading or uploading of material to your website, accounting software, or other software solutions is done at the user's own risk and the user will be solely responsible for any damage to any computer system or loss of data that results from such activities. Should you encounter any bugs, glitches, lack of functionality or other problems with the plugin, please let us know immediately so we can rectify these accordingly. Your help in this regard is greatly appreciated.

CHAPTER 1: INSTALLATION

SYSTEM REQUIREMENTS

APSPays Magento 2 plugin requires Magento 2 to be properly installed. For Magento 2 Installation, please consult Magento's online development resources at the following URL:

<https://devdocs.magento.com/guides/v2.3/install-gde/bk-install-guide.html>

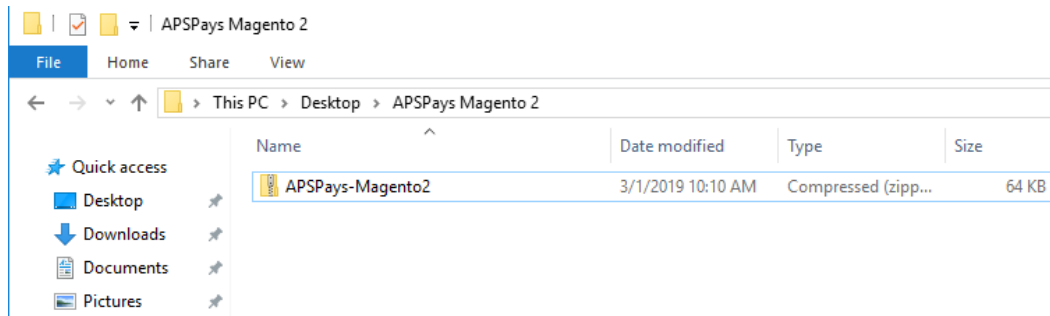
In addition to this manual, you will receive a zip file containing APSPays' Magento 2 module. After downloading, the file must be extracted and formatted as the guide indicates.

In this example, we will use WinSCP to transfer files and PuTTY to complete commands via SSH. This guide will not go into detail on configuring WinSCP or OpenSSH. Configuration of these services and corresponding firewall settings is outside of APS Payment's scope.

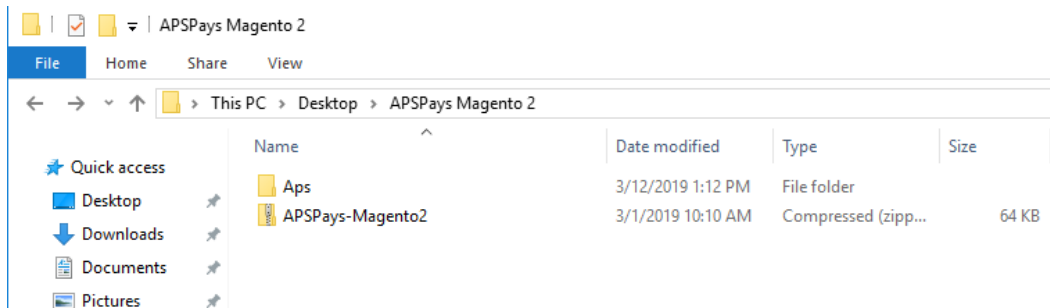
INSTALLATION OF THE APSPAYS MAGENTO 2 PLUGIN

In addition to this manual, a zip file necessary to the set up the APSPays payment method plugin has been included.

1. Navigate to the download URL provided by the APS Payments Integrations team and save the zip file.



2. Extract the contents of the zip file and rename it to "Aps".



Note Linux is case sensitive, and the folders must have proper case. Aps is not the same as APS.

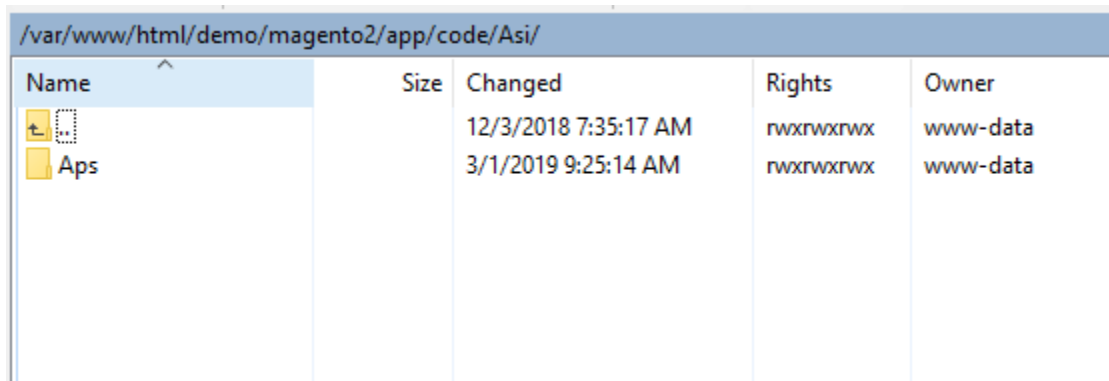
FILE DIRECTORY SETUP

It is important to understand the file structure and ensure it is correct. The structure is as follows.

- Magento 2 root folder -> app -> code -> Asi -> Aps
- /var/www/html/demo/**magento2**/app/code/Asi/Aps

Note In this example, Magento 2 is installed in a sub-directory. The root Magento 2 folder is indicated in bold and underlined.

1. Create the "code" & "Asi" directories if they are not already present.
2. Transfer the "Aps" directory to the "Asi" directory as shown below.



Name	Size	Changed	Rights	Owner
+		12/3/2018 7:35:17 AM	rwxrwxrwx	www-data
Aps		3/1/2019 9:25:14 AM	rwxrwxrwx	www-data

Figure 1 WinSCP

```
root@localhost:/var/www/html/demo/magento2/app/code/Asi/Aps# ls
Block      etc        abproject  registration.php  view
composer.json  license.txt Observer    Setup
Controller  Model     README.md  testconfig.sample.php
root@localhost:/var/www/html/demo/magento2/app/code/Asi/Aps#
```

Figure 2 PuTTY

PERMISSIONS, CACHE, AND SCRIPTS

Once the directories have been created for the APSPays plugin you need to set correct file permissions and ownership security settings. For a detailed reference on modifying and recommended settings, please see the official Magento 2 documentation below.

<https://devdocs.magento.com/guides/v2.3/install-gde/prereq/file-sys-perms-over.html>

After the setting correct file permissions continue with the installation via SSH and navigate to the Magento 2 root folder. In this example, the directory path is `/var/www/html/demo/magento2`. Using sudo permissions, run the following commands in order

1. Disable the cache:
`sudo bin/magento cache:disable`
2. Run the setup upgrade command:
`sudo bin/magento setup:upgrade`
3. Run the compile command:
`sudo bin/magento setup:di:compile`
4. Enable the cache:
`sudo bin/magento cache:enable`
5. Flush the cache:
`sudo bin/magento cache:flush`

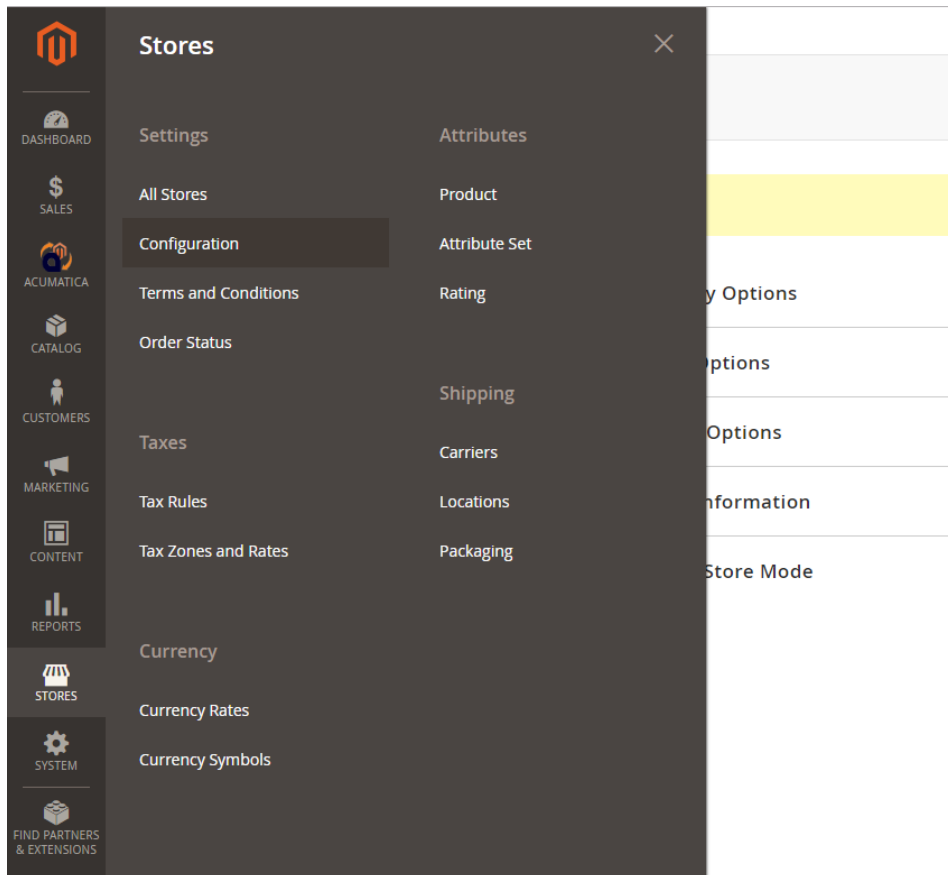
The APSPays Magento 2 installation is now complete. Navigate to the Magento 2 admin panel to configure the APSPays Payment Method.

CHAPTER 2: CONFIGURATION & SETUP

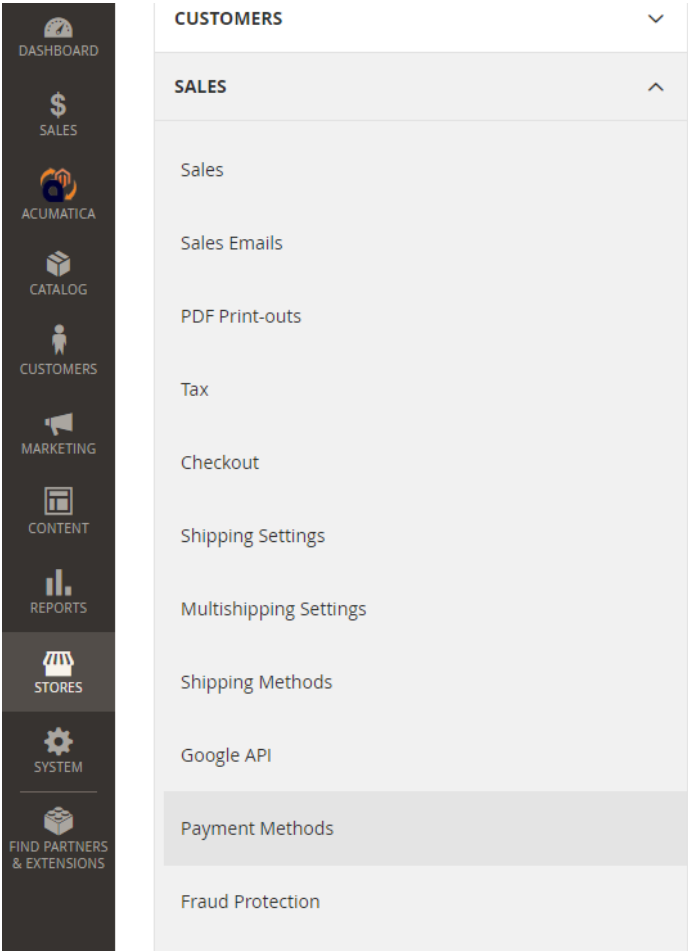
There are critical steps to properly configure the APS Payment Method in the admin panel of Magento 2. Please follow these steps exactly to ensure proper functionality.

APSPAYS CONFIGURATION

1. Navigate to the Configuration screen by selecting Stores -> Configuration



2. Under the Sales dropdown menu select Payment Methods



3. Under Other Payment Methods select the APS Payment Method.

⊖ APS Payment Method

[Click here to sign up for APS account](#)

Enabled <small>[website]</small>	<input type="text" value="Yes"/>
Title <small>[store view]</small>	<input type="text" value="APS"/>

CONFIGURATION FIELDS

Please reference the integration email sent by the APS Payments Integration Team and configure the following fields.

Note Fields starting with an asterisk (*) are required to connect to the APSPays Gateway.

1. ***Enable:** This enables or disables the APSPays Payment Method from the checkout page.
2. ***Title:** This sets the name of the payment method on the Magento 2 checkout page as shown below. A common name is "Credit Card".



Payment Method:

Cash On Delivery

APS

3. ***Max Line Items:** This is the number of products sent to the APSPays Gateway. It *must* be less than 25 line items.
4. ***API Key:** This is the API Key for the APSPays Gateway. This is provided by our Integrations Team and can be found in the integration email.
5. **Always generate vault ID:** Selecting "Yes" will always tokenize credit card data and store it within the APSPays Vault. Selecting "No" will allow each customer the choice to decide if their credit card data is stored.
6. **Debug:** This will enable extra logging for troubleshooting assistance. Select "No" unless needed.
7. **Payment Type:** This will ***ALWAYS*** be set to Authorize Only. The actual payment type in APS is configured by setting the Action field below.
8. **Payment from Applicable Countries:** This is a standard Magento 2 feature to restrict payment from certain countries if desired.
9. **Minimum Order Total:** This will ensure that an order meets a specific amount before allowing payment. Set to 0.00 or as desired.
10. **Summary Commodity Code:** This is your MCC code. The Integration Team will provide this value and is included in the integration email.
11. **Auto Create Invoices:** If set to "Yes", Magento 2 will automatically create a Magento 2 Invoice. The invoices will be left in a "pending status" unless the Auto Complete Invoices is set to "Yes".
12. **Ship From Postal:** This is required to qualify for level 3 interchange rates. This information is provided by the Integrations Team and is your DBA zip/postal code.

13. **Tax Exempt:** Allows you to declare all transactions as exempt if desired.

Note Certain credit cards do not qualify for Tax Exempt status and may cause rate changes.

14. **VISA Order Provision:** This value sets a default sales tax.
15. **Action:** This is the transaction type that will be completed.
 - a. **Authorization:** Typing "auth" will create an authorization only transaction type and will not be a standard sale. The transaction will not be funded until a capture is completed.
 - b. **Sale:** Typing "sale" will complete a standard sale transaction with immediate merchant funding.
16. **APS Endpoint:** This value is the POST URL for APSPays and will not change. Do not modify this value and ensure it is exactly:

<https://secure.apspaymentgateway.com/api/v2/three-step>

17. **Item Commodity Code:** This is your ICC code. The Integration Team will provide this value and is included in the integration email.
18. **Maximum Order Total:** This will ensure that an order does not exceed a specific amount before allowing payment. Leave empty to disable limit.
19. **Include Processor ID:** Setting to "Yes" enables multi-currency functionality. Unless otherwise directed by the APS Integrations Team, always set to yes.
20. **Sort Order:** This controls how the payment methods appear to a customer.
21. **Auto Complete Invoices:** Automatically sets the status of a Magento 2 Invoice to "paid".
22. **EasyPayJs Theme:** This is the Theme ID that is provided by the APS Integrations Team that allows you to customize the look and feel of the hosted form for sensitive credit card data.

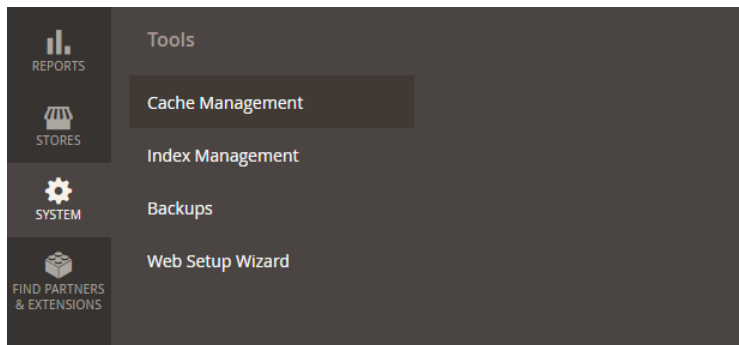
After the fields have been successfully configured you will select Save Config.

Save Config

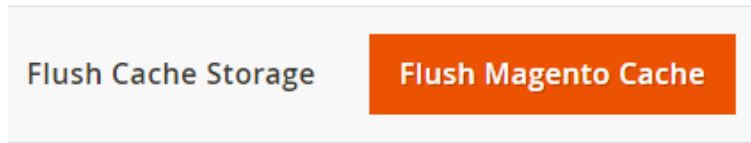
Action <small>[website]</small>	<input style="width: 90%;" type="text" value="sale"/> <small>Enter 'sale' or 'auth' to specify either a sale or just an authorization when the user checks out.</small>
APS Endpoint <small>[website]</small>	<input style="width: 90%;" type="text" value="https://secure.apspaymentgateway.com/api/v2/three-step"/> <small>Three-step redirect endpoint in APS</small>
Item Commodity Code <small>[website]</small>	<input style="width: 90%;" type="text" value="12345678"/> <small>The commodity code to use when not specified for individual items</small>
Maximum Order Total <small>[website]</small>	<input style="width: 90%;" type="text"/> <small>Leave empty to disable limit</small>
Include Processor ID <small>[website]</small>	<input style="width: 90%;" type="text" value="yes"/> <small>Type 'yes' to include the processor ID (e.g., "apsud"). Be sure this feature is set up on the gateway side for all necessary currencies.</small>
Sort Order <small>[website]</small>	<input style="width: 90%;" type="text" value="20"/>
Auto-Complete Invoices <small>[website]</small>	<input style="width: 90%;" type="text" value="yes"/> <small>Type 'yes' to automatically set invoice status to "Paid" upon order completion. Also be sure to set "Auto-Create Invoices".</small>
EasyPayJs Theme <small>[website]</small>	<input style="width: 90%;" type="text"/> <small>You can use an approved EasyPayJs theme by entering its ID here.</small>

After saving the configuration you will need to flush the cache. This is done from the System -> Cache Management screen in the admin panel of Magento 2.

1. Navigate to the Cache Management screen from the System tab.



2. Select Flush Magento Cache.



3. Configuration of the APSPays Payment Method is now complete.

CHAPTER 3: COMPLETING A PAYMENT

STANDARD CARDHOLDER WORKFLOW

The APSPays Magento 2 plugin follows standard Magento 2 procedures. Third party checkout pages may conflict and should be tested thoroughly. Multi-Store Magento setups are supported.

To simulate the checkout process and paying for a credit card follow below.

1. Select a product.
2. Navigate to the checkout.
3. Enter shipping information and select shipping method.
4. Select the payment method for accepting credit cards via the APSPays Title field given during setup. In this example, it is called "APS".

Payment Method:

Cash On Delivery

APS

My billing and shipping address are the same

Elmer Fudd
5342 N Rainbow Rd
Phoenix, Arizona 85015
United States
8881234567

Enter Payment

Credit Card Number

Expiration (MMYY)

CVV

Submit

- Click Submit and the confirmation page is displayed.

Thank you for your purchase!

Your order # is: 000000341.

We'll email you an order confirmation with details and tracking info.

[Continue Shopping](#)

You can track your order status by creating an account.

Email Address: test@test2.com

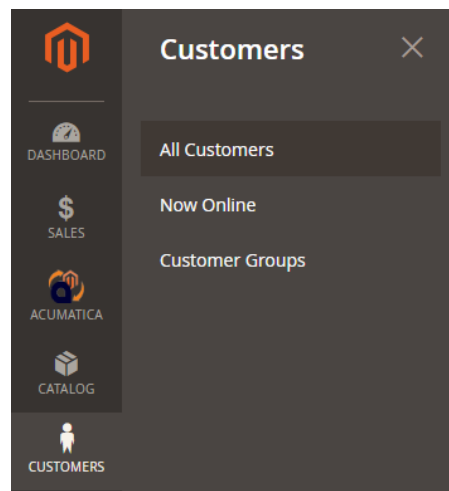
[Create an Account](#)

ACCEPTING PAYMENTS IN MAGENTO 2'S ADMINISTRATION PANEL

The APSPays Magento 2 plugin allows merchants to accept payments within the Magento 2 admin panel.

To create a new order, follow standard Magento 2 procedures.

- Navigate to Customers -> All Customers



- Locate the desired customer and select Edit in the Action column.
- Select Create Order on the overhead navigation menu.
- Add the desired items to the order.

5. Under the Payment & Shipping Information select the Payment Method setup for credit cards via APSPays.

Payment & Shipping Information

Payment Method

Cash On Delivery

APS

411111*****1111

Add New Card

6. You select an existing customer's credit card that was saved or select Add New Card. If you are adding a new card, this does not authorize funds for the order total. This will simply validate the credit card information and store the information securely in the APSPays Customer Vault for selection.
7. After selecting either a saved credit card or adding a new one, click on Submit Order to finalize the transaction and follow the desired invoicing workflow setup in the APSPays Payment Method configuration screen.

MANAGING A CUSTOMER'S APSPAYS MAGENTO 2 PROFILE

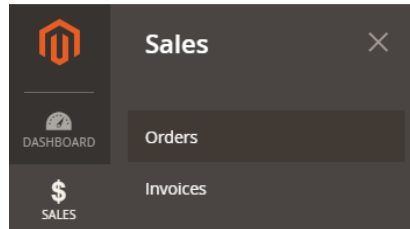
The APSPays Magento 2 plugin adds an additional tab under Customer Information in the Customer Edit screen.

Here you can view all the saved credit cards a customer has stored securely in your APSPays Customer Vault and their corresponding credit card data. You also have the option to delete any entries if desired.

CUSTOMER INFORMATION		Vault Entries				
		Alias	Vault ID	Masked CC number	Expiration	
Customer View			1028583623	411111*****1111	0320	Delete
Account Information						
Addresses						
Orders						
Billing Agreements						
Newsletter						
Product Reviews						
Wish List						
APS						

CHAPTER 4: ORDER REVIEW & REPORTING

You may review orders from Magento 2 by navigation to Orders screen under the Sales tab in the admin panel.



Selecting any order that was paid for using the APSPays Payment Method setup will display a response from the APSPays Gateway with details including the transaction ID and APS Vault ID that can be used to locate the corresponding transaction and APSPays Customer Vault record.

Order Total

Notes for this Order

Status

Processing ▼

Comment

Notify Customer by Email

Visible on Storefront

Submit Comment

Order Totals

Subtotal	\$45.00
Shipping & Handling	\$5.00
Grand Total	\$50.00
Total Paid	\$50.00
Total Refunded	\$0.00
Total Due	\$0.00

Mar 12, 2019 4:02:37 PM | Processing | Customer **Not Notified**
[APS TRANSACTION ID]: 4579593488. [APS AUTHORIZATION CODE]: 123456. [APS VAULT ID]: 354224070. [EXTRA DATA]: {"MaskedCcNumber":"601160*****6611","CcExpiration":"1025","TransactionType":"sale"}

Mar 12, 2019 4:02:37 PM | Processing | Customer **Not Notified**
Authorized amount of \$50.00.

CHAPTER 5: UNINSTALL PROCESS

Uninstalling the APSPays Magento 2 plugin is straightforward and quick. Simply navigate to the install file path. In this example, the exact install Magento 2 directory may differ.

DELETE APSPAYS ASSOCIATED DIRECTORY AND FILES

Navigate to the "Asi" directory.

- Magento 2 root folder -> app -> code -> Asi -> Aps
- /var/www/html/demo/magento2/app/code/Asi/Aps

Completely remove the "Asi" directory and everything it contains.

After deletion, you will need to run the same series of commands during setup.

1. Disable the cache:
`sudo bin/magento cache:disable`
2. Run the setup upgrade command:
`sudo bin/magento setup:upgrade`
3. Run the compile command:
`sudo bin/magento setup:di:compile`
4. Enable the cache:
`sudo bin/magento cache:enable`
5. Flush the cache:
`sudo bin/magento cache:flush`

Uninstallation of the APSPays Magento 2 plugin is complete.

CHAPTER 6: RESOURCES

APSPAYS GATEWAY USER GUIDE

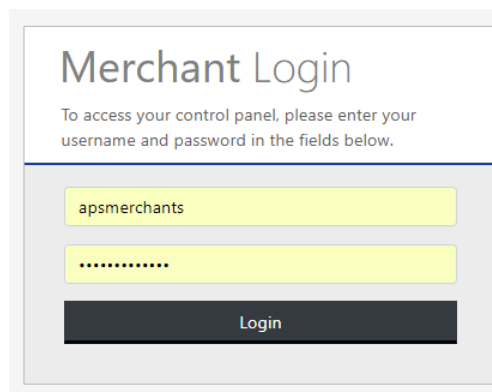
All merchants utilizing an APSPays Gateway Integration are provided direct access to the APSPays Gateway, which includes online reporting tools, security options and a virtual terminal.

The complete APSPays Gateway User Guide is available for download [here](#)

APSPAYS LOGIN

To access the APSPays Gateway, please navigate to:

<https://secure.apspaymentgateway.com/merchants/login> and provide the username and password when prompted. Google Chrome is preferred, but any modern web browser can be used.



The image shows a screenshot of the 'Merchant Login' page. At the top, the title 'Merchant Login' is displayed in a large, bold font. Below the title, a message reads: 'To access your control panel, please enter your username and password in the fields below.' There are two input fields: the first contains the text 'apsmerchants' and the second contains a series of dots representing a password. Below these fields is a dark grey button with the text 'Login' in white.

APSPays Gateway users can email gatewaysupport@apsmerchants.com to request a password reset.

APSPAYS SANDBOX

APS Payments has provided a shared sandbox environment for merchants whose complex software solutions require extended testing.

NOTE Credit card information sent to this sandbox environment cannot be transferred to a live environment. To prevent loss of cardholder data, please contact APS Payments if you have any questions or concerns.

TESTING INFORMATION

Backend Login	https://secure.apspaymentgateway.com/merchants/login.php
API Key	U4d8nrtY5TnW2Jx8R8kxF23Acg7f8733
Username	apsmulticurrency
Password	Start123
Processor ID 1	apsusd (This processor is configured for U.S. currency)
Processor ID 2	apscad (This processor is configured for Canadian currency)
VISA	4111111111111111
MasterCard	5431111111111111
Discover	6011601160116611
American Express	3411111111111111
Credit Card Expiration	10/25
Account (ACH):	123123123
Routing (ACH):	123123123
Amount	1.00 (Amounts under 1.00 generate failure).

The following information can be used to simulate a decline and or evaluate AVS & CVV responses.

- To cause a declined message, pass an amount less than 1.00.
- To trigger a fatal error message, pass an invalid card number.
- To simulate an AVS (*Address Verification System*) match, pass 888 in the address1 field (77777 for zip).
- To simulate a CVV (*Card Verification Value a.k.a 3-4 digit code*) match, pass 999 in the CVV field.

CREDIT CARD PROCESSING ESSENTIALS

CREDIT CARD PROCESSING PLAYERS

Cardholder- If you have a credit or debit card, you're already familiar with the role of the cardholder. A cardholder is someone who obtains a bankcard (credit or debit) from a card issuing bank. They then present that card to merchants as payment for goods or services.

Merchant- A merchant is a business that maintains a merchant account that enables them to accept credit or debit cards as payment from customers (cardholders) for goods or services provided.

Issuer- An issuing bank, otherwise known as the cardholder bank, is the bank that has provided the credit or debit card to the cardholder.

Card Associations- Card Associations, otherwise known as Card Brands act as a custodian and clearing house for their respective card brand. The primary responsibilities of the Card Association are to govern the members of their associations, including interchange fees and qualification guidelines, act as the arbiter between issuing and acquiring banks, maintain and improve the card network and their brand. Example: VISA, Mastercard, American Express and Discover.

Payment Gateway- A Payment Gateway facilitates the transfer of information between a payment portal and the front-end processor or acquiring bank. APS Payments has its own gateway call APSPays that interacts directly with your software solution.

AUTHORIZATION VS CAPTURE

An Authorization is a request to an issuing bank to place a hold on funds. Generally, the authorization request is step 1 of a 2-step processes that results in funds be transferred to your depositing bank. An authorization request alone does not result in payment.

Once an issuer approves the authorization request, a capture request can be sent to solidify the transaction. At this point the transaction, which is identified by the original authorization code, can be placed in queue for settlement.

The capture request can be completed simultaneously with the authorization and is known as a sale. This is common practice in a retail or B2C environment but is less frequent with manufacturers or wholesale distributors. Merchants can hold the authorization for a short period to allow adjustment to be made to the final amount.

AUTHORIZATION EXPIRATION

An authorization does not have an indefinite shelf life and is specific to your industry classification. Per VISA core operating rules, Aggregated Transactions in a Card-Absent Environment is valid no later than 7 days from the date on which the authorization was received. However, its ultimately up to the issuer to honor the authorization, APS Payments recommends that most authorizations are sent for settlement within 3 calendar days from the original date of authorization.

SETTLEMENT

©2019 | APS PAYMENTS is a Registered MSP/ISO of Esquire Bank, Jericho, NY 11753 and a Registered MSP/ISO of the Canadian branch of U.S. Bank National Association and Elavon and a Registered MSP/ISO of Elavon, Inc. Georgia (a wholly owned subsidiary of U.S. Bancorp, Minneapolis, MN). Page | 22

Settlement is the process in which captured transactions are submitted to be funded. Your APSPays Gateway completes this process at a set time. At this point, all transaction details are final.

CHARGEBACK

A Chargeback is the return of funds to a customer who is disputing a charge. Chargebacks can be a stressor for merchants but there are a few ways to help protect yourself.

A merchant's most effective chargeback protection is to supply as much detail regarding the transaction as possible. Details such as Billing Address and CVV/CVV2 are critical factors during the chargeback process. Merchants who supply the Billing Address and CVV/CVV2 can take advantage of APSPays Gateway's Address Verification and Card Identification Controls to help manage the per-transaction risk.

AVS AND CVV/CVV2

Address Verification Services (AVS) is a service to combat fraudulent activity in a card absent environment by cross-referencing the cardholder's billing address information with the card issuer's records. AVS is widely supported by Visa, MasterCard and American Express in the USA, Canada and United Kingdom.

AVS verifies the numeric portions of a cardholder's billing address. For example, if the address is 101 Main Street, Highland, CA 92346, in the United States, AVS will check 101 and 92346.

Card Verification Value (CVV/CVV2) is an anti-fraud security feature to help verify that you are in possession of your credit card. For Visa/Mastercard, the three-digit CVV/CVV2 number is printed on the signature panel on the back of the card immediately after the card's account number. For American Express, the four-digit CVV number is printed on the front of the card above the card account number.

Why is this important?

Many banks approve transactions even if they recognize that the address information or Card Verification Value (CVV/CVV2) included with the transaction doesn't match what they have on file. APSPays Gateway offers customizable Address Verification System (AVS) and CVV/CVV2 rules that reject transactions based on response codes returned by the issuing bank. This helps ensure that only authorized users of a credit card are able to make purchases.

What happens when the address or security code don't match?

If the issuing bank's response triggers one of your AVS or CVV rules, the APSPays Gateway will reject the transaction ("GATEWAY REJECTED: AVS REJECTED") and send a void request to the issuing bank.

Keep in mind that some banks don't recognize void requests immediately.

Can I change my AVS and CVV Security Options?

APS Payments does not recommend operating your APSPays Gateway without AVS and CVV settings but recognizes certain business needs may warrant adjustments to the default settings. Instructions to do so are below:

Address Verification: <https://vimeo.com/200899769>

Card ID Verification: <https://vimeo.com/200899749>

NOTE Transactions without proper AVS and CVV security checks are at higher risk for chargebacks, which may result in financial loss.

CONTACT INFORMATION

CUSTOMER SERVICE

The APS Payments Customer Service Team is your first point of contact for general inquiries.

Phone: 888.685.1900

Email: apscsr@apspayments.com

Hours: 8am PST -5pm PST

INTEGRATIONS TEAM

The APS Payments Integration team is your first point of contact regarding Software support or APSPays Gateway questions.

Phone: 888.685.1900

Email: Integrations@apspayments.com

Hours: 8am PST -5pm PST