



CyberSource Global Payment Management for Magento 2

User's Guide

Version 3.1.2

Mar 03, 2020

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Recent Changes

Version	Release	Changes
1.0.0	March 2017	Initial Release
2.0.0	August 2017	Added support for Secure Acceptance SOP, Electronic Checks, Online Bank Transfers (Bancontact, Sofort, iDEAL), Tax Calculation, and Delivery Address Verification
2.0.2	December 2017	Updated settings descriptions and screenshots to reflect recent updates to the extension.
2.0.3	January 2018	Added instructions for configuring shipping taxes
3.0.0	June 2018	Added Account updater module Added ATP module Added Klarna module Added Visa Checkout module Added ApplePay Module Secure Acceptance module reworked with payment method adapter architecture. eCheck module reworked with payment method adapter architecture.
3.1.0	October 2019	Update for module version 3.1.0 Update configuration instructions for the new EBC Update configuration instructions for Apple Pay module
3.1.1	January 2020	Added reCAPTCHA configuration instructions Added new configuration options description.
3.1.2	March 2020	Added Flex Microform configuration instructions Added REST Web Service configuration options description. Added new configuration options description.

1. Introduction

The purpose of this manual is to guide a user through the configuration settings and use of the CyberSource Global Payment Management Extension for the Magento 2.x ecommerce platform.

Where appropriate, this manual will reference documentation produced by CyberSource.

The CyberSource Global Payment Management Extension for Magento 2 includes the following CyberSource payment management capabilities:

1.1. Payment Tokenization with Secure Acceptance

The CyberSource extension for Magento uses Secure Acceptance to securely collect sensitive card data from the consumer's browser. Secure Acceptance prevents sensitive payment data from ever touching your systems to reduce your overall PCI scope, potentially allowing merchants to qualify for the SAQ A or SAQ A-EP.

The extension also incorporates CyberSource Tokenization, which replaces sensitive payment transaction data with a unique identifier that cannot be reverse-engineered. The unique identifier is called a payment token (also known as a Profile ID or Subscription ID), which is stored in Magento and takes the place of sensitive cardholder information, allowing your operations to run without sensitive card data in your environment.

1.2. Credit Card Services

The CyberSource Magento extension includes the following credit card services:

- Authorization
- Sale (Authorization + Capture)
- Authorization Reversal
- Capture
- Credit
- Void

1.3. Decision Manager

Decision Manager is a fraud management platform that prevents fraud losses and gives you the flexibility to control business practices and policies in real time. With Decision Manager, you can accurately identify and review potentially risky transactions while minimizing the rejection of valid orders.

The CyberSource Magento extension includes:

- Real-time fraud screening performed during Authorization
- Device Fingerprinting
- On-Demand Conversion Detail Report for changes in order status

1.4. Account Takeover Protection

CyberSource Account Takeover Protection defends consumers and merchants from fraudulent uses of online accounts. It helps identify high risk users at account creation and login, and monitors for suspicious account changes.

The CyberSource Magento extension includes:

- Real-time event screening account creation, login, and account changes
- Device Fingerprinting

1.5. Payer Authentication (3-D Secure)

CyberSource Payer Authentication services enable you to add support to your web store for card authentication services offered by Visa, MasterCard, and other card brands. These programs verify the cardholder's identity directly with the card issuing bank in real-time to increase payment security and reduce the risk of fraud; however, Payer Authentication is not a fraud management service, and CyberSource recommends that you implement a comprehensive fraud management program such as Decision Manager in addition to Payer Authentication services.

The CyberSource Magento extension includes the following Payer Authentication programs:

- Verified by Visa
- MasterCard Secure Code
- American Express SafeKey
- Discover ProtectBuy
- JCB
- Dinners
- Maestro International

1.6. PayPal Express Checkout

The CyberSource Extension for Magento includes the PayPal Express Checkout payment method. Processing your PayPal transactions through CyberSource allows you to consolidate all payment types under a single gateway account, simplify integration efforts, screen PayPal transactions for fraud with Decision Manager, and streamline reporting.

The CyberSource Magento extension supports the following PayPal services:

- Sessions
- Check Status
- Order
- Authorization
- Authorization Reversal
- Capture
- Sale
- Refund
- PayPal Credit
- Billing Agreements

1.7. Electronic Check (eCheck)

Electronic checks, also known as e-checks, are a form of digital payment that serves the same function as a physical check. When a merchant accepts an electronic check payment, the funds are pulled directly from the customer's checking or savings account.

The CyberSource Magento extension supports the following e-check services:

- Debit
- Credit

E-checks will process refunds when you use the credit payment service.

1.8. Online Bank Transfers

Online banking services enable customers to pay for goods by pushing money from their bank account to the merchant.

The CyberSource Magento extension supports the following payment methods and corresponding online bank transfer services:

- Bancontact
 - Sale
 - Check Status
 - Refund
 - Country: Belgium
- Sofort
 - Sale
 - Check Status
 - Refund
 - Country: many European regions
- iDEAL
 - Options
 - Sale
 - Check Status
 - Refund
 - Country: Netherlands
- EPS
 - Sale
 - Check Status
 - Refund
 - Country: Austria
- giropay
 - Sale
 - Check Status
 - Country: Germany

1.9. Tax Calculation

The tax calculation service provides real-time tax calculation at the time of checkout for orders placed worldwide with your business.

The CyberSource Magento extension supports the Tax calculation service.

1.10. Delivery Address Verification

The Delivery Address Verification service verifies typed addresses and corrects invalid city/state/ZIP combinations in real-time.

The CyberSource Magento extension supports the Delivery Address Verification service while updating shipping information if this feature is enabled in the Magento admin.

1.11. PayPal Credit

PayPal Credit is a payment method allowing merchants to accept a PayPal transaction where the customer elects to finance their purchase through PayPal.

1.12. Visa Checkout

Visa Checkout can increase sales conversion by making it easier for your customers to pay with their card online. The CyberSource extension for Magento supports the following services:

- Visa Checkout button
- Get Visa Checkout Data
- Authorization
- Sale (Authorization + Capture)
- Authorization Reversal
- Capture
- Credit
- Void

1.13. Klarna

Klarna credit provides a seamless user experience for online consumer financing to merchants of all sizes, increasing consumer choice, loyalty, and grow sales.

The goal of this is to implement Authorize, Capture and Refund functionality for this payment method.

2. CyberSource Configuration

Before configuring Magento, the CyberSource Enterprise Business Center needs to be configured.

Customer payments are managed by both Magento and the CyberSource Enterprise Business Center (EBC). This section covers the mandatory settings that must be configured in the EBC, as well as some general use cases that will be typical in the day to day management of your Magento store.

Merchants will need to contact CyberSource Customer Support for product availability and enablement.

2.1. Secure Acceptance Configuration

To start profile configuration, visit the CyberSource Business Center by following one of these URL's.

Testing URL: <https://ebctest.cybersource.com/ebc2/>

Production URL: <https://ebc.cybersource.com/ebc2/>

In the left navigation panel, choose Payment Configuration > Secure Acceptance Settings

Once on that panel, choose the button in the top right labeled *Create New Profile*.

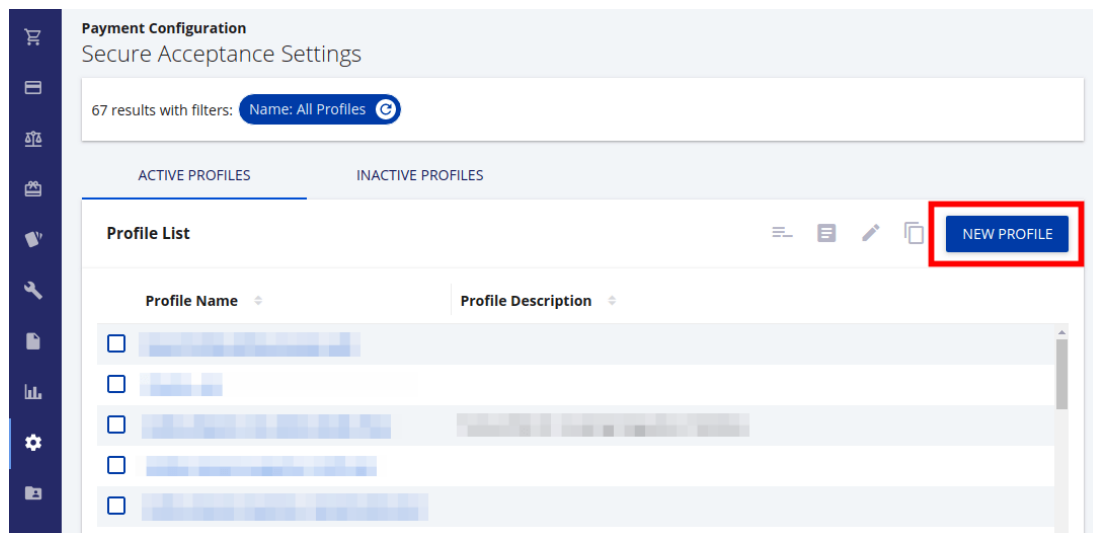


Figure 2.1: CyberSource Business Center Secure Acceptance Profiles Configuration - New Profile button

2.1.1 Create New Profile

A Magento instance can have many Secure Acceptance Profiles but you need at least one. The Profile will hold settings related to the cards you accept, the currency and other settings including the Profile ID, and Security Access Keys needed by Magento to communicate with CyberSource.

[Figure 2.2](#) below shows the profile creation screen. Secure Acceptance is offered in two different modes:

- *Hosted Checkout* (formerly Web/Mobile) is a hosted payment page, available in iframe or redirect method.
- *Checkout API* (formerly Silent Order POST (SOP)) directly posts card data from your customers' browser to CyberSource. The customer never leaves your site, and your site never receives any card data which reduces PCI DSS scope.

Ensure you select either the Hosted Checkout or Checkout API Integration Method and select all relevant checkboxes in the Added Value Services section.

Note: Payment Tokenization is required for using this extension; Decision Manager is optional.

× Create Profile? Help

Profile Information

Use this page to create Secure Acceptance profiles.

Profile Name *

Profile Description

Integration Methods *

☒ Hosted Checkout
☐ Checkout API

Company Name *

Contact Information

Name

Email Address

Phone Number

Added Value Services

☐ Payment Tokenization
☐ Decision Manager
☐ BIN Lookup

CANCELSUBMIT

Figure 2.2: CyberSource Business Center Secure Acceptance Profiles Configuration - Create New Profile

2.1.2 General Settings

The screenshot shows the 'Edit Profile' page in the CyberSource Business Center. At the top, there's a 'Secure Acceptance' header with a 'BACK TO PROFILES' button. Below this, the profile details are shown: Profile Name: Demo Profile (Editable version) and Profile ID: CC0F8557-2336-4D9E-AD26-4B38122399F2. The page has four tabs: GENERAL SETTINGS (selected), PAYMENT SETTINGS *, SECURITY *, and NOTIFICAT. The main content area is divided into sections: Profile Information, Integration Methods *, and Added Value Services. Under Profile Information, there are fields for Profile Name (Demo Profile), Profile Description (For documentation), Integration Methods (Checkout API), Company Name (Demo Company), Contact Information (Name: Test User, Email Address: test@example.org, Phone Number: 1234567980). Under Added Value Services, there are checkboxes for Payment Tokenization (checked), Decision Manager (checked), Verbose Data (unchecked), and BIN Lookup (unchecked).

Secure Acceptance
Edit Profile [BACK TO PROFILES](#)

i Profile Name : **Demo Profile** (Editable version)
Profile ID : **CC0F8557-2336-4D9E-AD26-4B38122399F2**

GENERAL SETTINGS PAYMENT SETTINGS * SECURITY * NOTIFICAT

Profile Information

Profile Name *
Demo Profile

Profile Description
For documentation

Integration Methods *

Integration Methods *
Checkout API

Company Name *
Demo Company

Contact Information

Name
Test User

Email Address
test@example.org

Phone Number
1234567980

Added Value Services

☒ Payment Tokenization

☒ Decision Manager

☐ Verbose Data

☐ BIN Lookup **i**

Figure 2.3: CyberSource Business Center Secure Acceptance Profiles Configuration - General Settings

After you have saved the profile, you can begin configuring it. The first step is General Settings. Please make note of the Profile ID. This is a key setting needed for Magento. See [Section 3.4](#) and [Section 3.9](#).

Note: Payment Tokenization is required

Note: Decision Manager and related settings are required only if you use Decision Manager

2.1.3 Payment Settings

In this section, you can specify which card types are allowed for the payment method. You can also select currency, CVN Display, CVN Required and Payer Authentication options.

Note: In order to enable PayPal Express Checkout payments just enable and configure it in Magento settings, not here. The extension implements PayPal payments natively. See [Section 3.10](#).

GENERAL SETTINGS

PAYMENT SETTINGS *

SECURITY *

NOTIFICATION

Card Type

Visa

Mastercard

ADD CARD TYPES

Payer Authentication 3DS Version ⓘ

☒ 3DS 1

☐ 3DS 2

Automatic Authorization Reversal ⓘ

☐ Fails AVS Check

☐ Fails CVN Check

eCheck ⓘ

☐ Enable eCheck Payments

Japanese Payment Options ⓘ

☐ Enable Japanese Payment Options

PayPal Express Checkout ⓘ

☐ Enable PayPal Express Checkout

Figure 2.4: CyberSource Business Center Secure Acceptance Profiles Configuration - Payment Settings

2.1.4 Security

In the Security panel you will create an Access Key and a Secret Key needed to complete the setup of the Magento 2 Module. See [Section 3.4](#) and [Section 3.9](#).

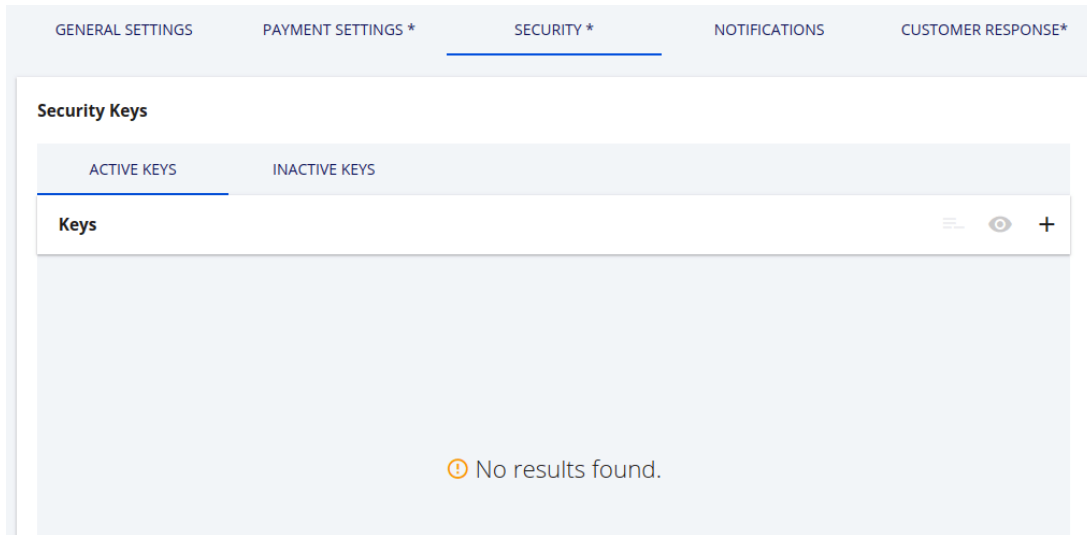


Figure 2.5: CyberSource Business Center Secure Acceptance Profiles Configuration - Security Settings

If you still don't have any keys generated click on '+' button and create a new key.

Figure 2.6: CyberSource Business Center Secure Acceptance Profiles Configuration - Key Creation

2.1.5 Payment Form

If using Secure Acceptance Hosted Checkout (Web/Mobile), when a customer is either redirected to the hosted payment page at CyberSource or if they see the modal popup window during checkout, they will see a payment form that has been configured with the settings below. These settings are not applicable for the Secure Acceptance Checkout API (Silent Order POST) configuration.

Payment Form Flow ⓘ

☒ Multi-Step Payment Form
Your customer completes the checkout process over a number of pages.

☐ Single Page Form
Your customer completes the checkout process on a single, longer page.

Purchase Information

☐ Display the total tax amount in each step of the checkout process.

Checkout Steps ⓘ

☐ Billing Information

☐ Shipping Information

☒ Payment Information

Payment Information

☐ Mask sensitive fields (such as card or bank account numbers) after they are entered.

Order Review

	Display	Edit
Billing Information	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Information	<input type="checkbox"/>	<input type="checkbox"/>
Payment Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Figure 2.7: CyberSource Business Center Secure Acceptance Profiles Configuration - Payment Form Setting

These settings have no effect on the integration with Magento and can be configured to your specific needs.

2.1.6 Notifications

On this configuration panel, you must choose the Merchant POST URL tick box and input callback URL to your store.

Merchant Notifications ⓘ

☒ Merchant POST URL

URL*

<http://www.example.com/cybersource>

☐ Merchant POST Email

Email

.....

Card Number Masking

Return card BIN (123456*****) ▼

Customer Notifications

☐ Email Receipt to Customer

Figure 2.8: CyberSource Business Center Secure Acceptance Profiles Configuration - Notifications Settings

The Merchant POST URL is: <your base url> + /cybersource/index/placeOrder

For example, if your website URL is <http://www.example.com/> then the Merchant POST URL would be <http://www.example.com/cybersource/index/placeOrder>

When you configure a Merchant POST URL you will also see additional settings for the card digits returned and stored in Magento.

2.1.7 Customer Response

Response pages are URL's that customers get directed to when a transaction is completed or has been cancelled.

Transaction Response Page ⓘ

☐ Hosted By CyberSource (A response message is displayed when the transaction is declined, canceled, or if there is an error (listed below))

☒ Hosted By You (Selecting this option enables you to manage your own response pages)

URL
<http://www.example.com/cybersource/>

Transaction Response Message

Decline Limit

Custom Cancel Response Page ⓘ

☐ Hosted By CyberSource ("Your order was canceled." is displayed when the transaction is canceled. A button will take the user to the Customer Redirect URL specified below.)

☒ Hosted By You (Selecting this option enables you to manage your own response page)

URL
<http://www.example.com/cybersource/>

Figure 2.9: CyberSource Business Center Secure Acceptance Profiles Configuration - Customer Response Configuration

Your Transaction Response page URL is your base url + /cybersource/index/placeOrder

For example, if your website URL is <http://www.example.com/> then the Transaction Response URL would be <http://www.example.com/cybersource/index/placeOrder>

Your Custom Cancel Response Page URL is your base url + /cybersource/index/cancel

For example, if your website URL is <http://www.example.com/> then the Transaction Response URL would be <http://www.example.com/cybersource/index/cancel>

2.1.8 Branding

In this section you can customize look and feel of the Hosted Checkout page. It doesn't affect Magento integration directly. These settings are not applicable for the Secure Acceptance Checkout API (Silent Order POST).

2.2. Decision Manager

For the purposes of configuring Magento to work with Decision Manager, the following sections outline some brief topics that help describe how Magento and Decision Manager will work together.

2.2.1 Orders

When enabled, Decision Manager runs in real time with the Authorization. The possible decisions are ACCEPT, REJECT, REVIEW, or ERROR. Orders set to REVIEW by Decision Manager will be marked as Pending Review in Magento.

When you change an order in Decision Manager Case Management from REVIEW to REJECT or ACCEPT, Magento will not immediately learn of this change. Magento will learn of any changes to payment transaction states periodically (by cron every 2 minutes) by contacting CyberSource and querying for changes. Section 3.6 describes how you configure Magento Cron settings that will trigger a Magento task that will look for Decision Manager changes and update Magento Orders accordingly.

If a change in state is detected, the module will update the order status in Magento from Pending Review to one of these states: Processing, Pending Payment or Closed.

Please note that if an order is Pending Review in Decision Manager, you cannot prepare an invoice in Magento until it is accepted in Decision Manager.

2.2.2 Refunds

Please note the order must be either Accepted or Rejected in Decision Manager before you are able to issue a refund. Rejecting an order in Decision Manager will automatically perform an Authorization Reversal for the order as part of the Cron process that queries CyberSource for updates in Decision Manager.

2.2.3 Custom Fields

Decision Manager supports up to 100 custom fields called Merchant Defined Data Fields. The CyberSource Module for Magento 2 will send ten of these fields, but they must be configured inside Decision Manager in order to make use of them.

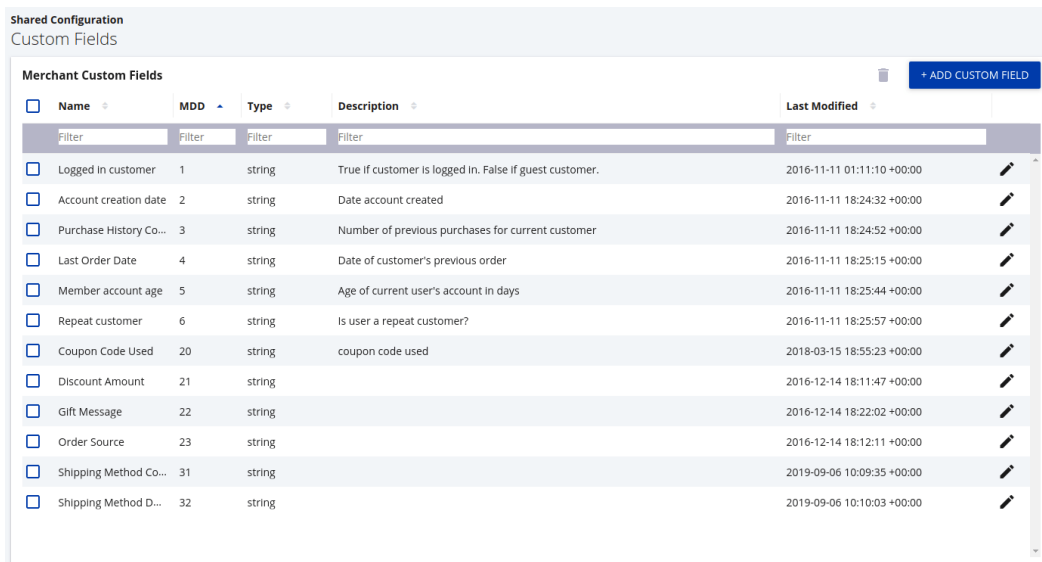


Figure 2.10: CyberSource Business Center Decision Manager Custom Fields Configuration

To add the additional custom fields provided by Magento 2, login to the Business Center and navigate to Decision Manager > Shared Configuration > Custom Fields. Use the tables below to configure the fields.

To add a field, click the Add Custom Field button, select the Order Element and input the name. Follow the table below to map the correct element and name.

Field Name	Order Element
Logged in customer	merchant_defined_data1
Account creation date	merchant_defined_data2
Purchase History Count	merchant_defined_data3
Last Order Date	merchant_defined_data4
Member account age	merchant_defined_data5
Repeat customer	merchant_defined_data6
Coupon Code Used	merchant_defined_data20
Discount Amount	merchant_defined_data21
Gift Message	merchant_defined_data22
Order Source	merchant_defined_data23
Shipping Method Code	merchant_defined_data31
Shipping Method Description	merchant_defined_data32

For complete Decision Manager configuration instructions, please refer to the CyberSource Decision Manager User Guide referenced in [Section 7](#) of this manual.

2.3. Security Credentials

In addition to the Secure Acceptance security credentials created in [Section 2.1](#), the module uses other connection methods to access CyberSource services that require their own security credentials for authentication.

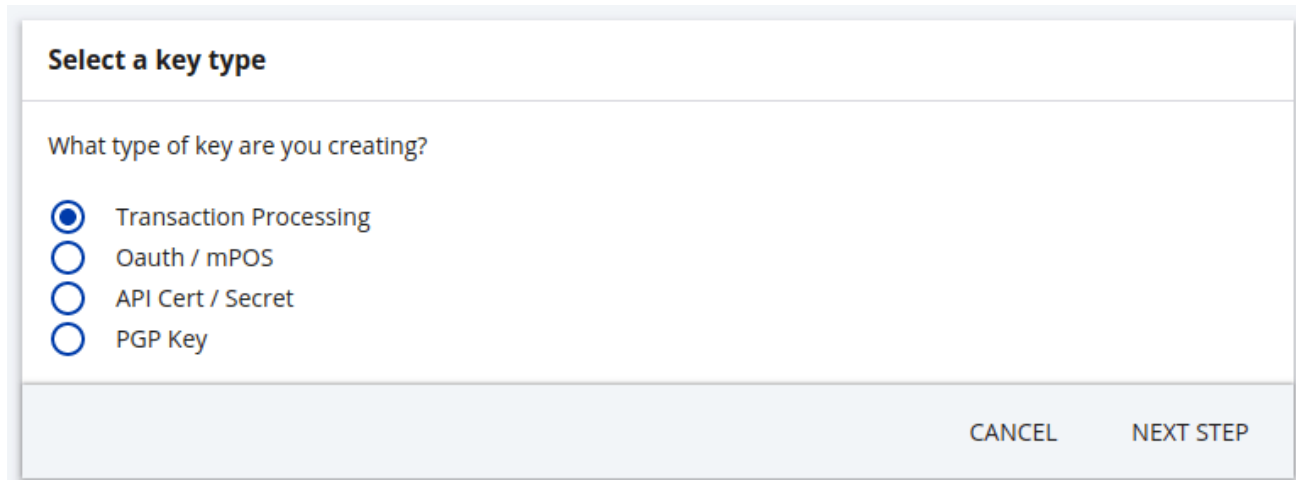
Note: Configuring of SOAP Toolkit Key is *mandatory* for this extension proper functioning.

2.3.1 Create a SOAP Toolkit Key

The CyberSource Module for Magento makes use of the SOAP Toolkit API to access several CyberSource services that do not include the transmission of card data.

To create a SOAP Toolkit API transaction key, navigate in the Enterprise Business Center to Payment Configuration > Key Management.

1. Click the "Generate Key" button.
2. Select the "Transaction processing" key type and click "Next Step".
3. Select the "SOAP" as key subtype and click "Submit".
4. Save the resulting key for purposes of entering in your Magento configuration.



Select a key type

What type of key are you creating?

- ☒ Transaction Processing
- ☐ Oauth / mPOS
- ☐ API Cert / Secret
- ☐ PGP Key

CANCEL NEXT STEP

Figure 2.11: Create a Transaction Security Key - Selecting Key Type

Select a key subtype

For Transaction Processing key type, type of key sub type are you creating?

☐ Simple Order

☒ SOAP

☐ SCMP

☐ Secure Acceptance

Key Configuration

The SOAP Toolkit API authenticates using a base-64-encoded transaction key represented in string format. The SOAP API generates a key you can copy to your clipboard or download as a text file.

[← PREVIOUS STEP](#)[CANCEL](#)[SUBMIT](#)

Figure 2.12: Create a Transaction Security Key - Selecting Key Subtype

Soap toolkit key

You may download this key one time from this screen.

Key

fVoUvEHRGuaFgni1Quz6ukKQ0ry6SWZ+Wv2BfMFF1L581f+3YH4iwaWU4Cnu1AAFK77sFgWtu/
gMvJP7aQPbkPYu8k/tBrEAaZAKLotggk4OtRDg==

[↓ DOWNLOAD KEY](#)

[KEY MANAGEMENT](#)[CREATE ANOTHER KEY](#)

Figure 2.13: Create a Transaction Security Key - Generated SOAP Toolkit Key

2.3.2 Create a REST API Key

As of version 3.1.5, the CyberSource Module for Magento requires REST API key creation in order to use some services, like Flex Microform or Decision Manager report.

To create a REST API key, navigate in the Enterprise Business Center to Payment Configuration > Key Management.

1. Click the "Generate Key" button.
2. Select the "API Cert / Secret" key type and click "Next Step".
3. Select the "Shared Secret" as key subtype and click "Submit".
4. Save the resulting key for purposes of entering in your Magento configuration.

The screenshot shows the 'Key Management' interface with a 'Create Key' modal. The modal has a progress bar at the top with two steps: '1 Select key' (active) and '2 Select option'. Below the progress bar is a section titled 'Select a key type' with the question 'What type of key are you creating?'. There are four radio button options: 'Transaction Processing', 'Oauth / mPOS', 'API Cert / Secret' (which is selected), and 'PGP Key'. At the bottom right of the modal are two buttons: 'CANCEL' and 'NEXT STEP'.

Figure 2.14: Create a REST API Key - Selecting Key Type

Key Management
Create Key

1 Select key ————— 2 Select option

Select a key subtype

For API Cert / Secret key type, type of key subtype are you creating?

☐ Certificate
☒ Shared Secret

Key Configuration

Shared API authenticates using a base-64-encoded transaction key represented in string format. The Shared API generates a key you can copy to your clipboard or download as a text file.

[< PREVIOUS STEP](#)
[CANCEL](#)
[SUBMIT](#)

Figure 2.15: Create a REST API Key - Selecting Key Subtype

Key Management
Create Key

Shared secret key

You may download this key one time from this screen.

Key

[↓ DOWNLOAD KEY](#)

[KEY MANAGEMENT](#)
[CREATE ANOTHER KEY](#)

Figure 2.16: Create a REST API Key - Generated Shared Key

2.3.3 Create a Report Download User

Note: Configuring of Report Download user is *not required* for this extension proper functioning as of version 3.1.5. Information below is only for pre-3.1.5 users reference.

The CyberSource Module for Magento uses a reporting API that allows Magento to query CyberSource for information about transactions. To activate this, you must create a separate CyberSource Business Center user with the role of "Report Download".

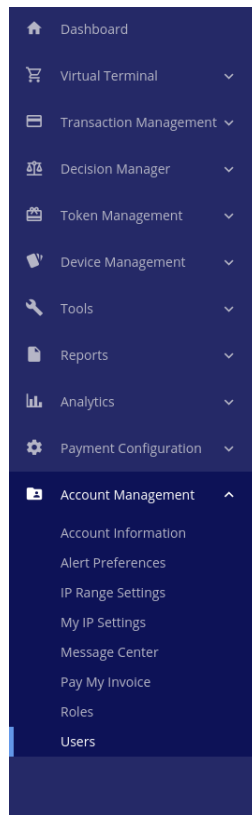


Figure 2.17: CyberSource Business Center Main Navigation - User Administration

Navigate to the Account Management > User Administration section of the main navigation. The screen will show a listing of active users. Click the "Add User" button. The next screen will look like this:

×

Add User

?

Help

Merchant ID *

First Name *

Report

Last Name *

User

User Name (Optional)

reporting

Email *

report@example.org

Role *

reportdownload

CANCEL

SAVE

Figure 2.18: Add New CyberSource Business Center User Screen

Fill out the form and select 'Report Download' User Role. Once you complete the Add User form, an email will be sent to the address used on the form. The email will contain a link and a onetime 'token' used to validate the email account. Once the token is entered, you will be asked to reset the password. This password is needed in [Section 3.1](#) for the 'Report Password'.

2.4. Backend Setup

Certain CyberSource services supported by the Module require additional backend setup on your Merchant ID. Please contact your CyberSource Account Representative to enable any of the following services:

1. Payment Tokenization: Required by the Module for Credit Card processing
2. Decision Manager
3. Payer Authentication
4. PayPal Express Checkout: New credentials are required for Alt Pay connection. Additional setup in PayPal is documented in the PayPal guide listed in [Section 7](#) of this document.
5. eChecks
6. Online Bank Transfers
7. Tax Calculation
8. Klarna
9. Account Takeover Protection
10. Account Updater
11. Visa Checkout (enabled in the EBC)
12. Apple Pay (enabled in the EBC)

3. Magento Backend Configuration Settings

Once logged into the administration section of your Magento 2 website, the configuration panel is found by navigating to the following screen:

Stores > Configuration > Sales > Payment Methods

Once on that screen you will see the settings for the CyberSource module. Inside this panel are additional sub panels:

⌵ CyberSource

The CyberSource Payment Management Platform enables merchants to accept and manage payments, mitigate fraud, and secure their payment data.

[Learn More...](#)

CyberSource®

⌵ General

⌵ SOAP WebService

⌵ E-Check

⌵ 3D Secure 2.0

⌵ Secure Acceptance Web/Mobile

⌵ Token Management Service

⌵ Secure Acceptance Silent Order Post (SOP)

⌵ Delivery Address Verification Service

⌵ PayPal Express Checkout

⌵ Device Fingerprint

⌵ Bank Transfer

⌵ Visa Checkout

⌵ ApplePay

⌵ Account Updater

Figure 3.1: Main CyberSource configuration panel with sub panels

3.1. General Settings

⌵ General

Enabled
[store view] Yes

Title
[store view] CyberSource

DM fail email sender
[store view] General Contact ☒ Use system value

DM fail email template
[store view] Cybersource DM fail email (Default) ☒ Use system value

Secure Acceptance Type
[store view] Silent Order Post (SOP) ☐ Use system value
Use SOP in order to enable Multi-shipping feature.

Credit Card Types
[website] American Express
Visa
MasterCard
Discover
JCB
Diners
Maestro International
Other
for SOP only ☐ Use system value

Payment Action for SecureAcceptance
[website] Authorize Only
both SOP and WEB/Mobile

Service URL
[website] https://secureacceptance.cybersource.com ☒ Use system value

Service URL for tests
[website] https://testsecureacceptance.cybersource.com ☒ Use system value

Payment from Applicable Countries
[website] All Allowed Countries ☒ Use system value

Payment from Specific Countries
[website] Afghanistan
Åland Islands
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua & Barbuda

Figure 3.2: General Settings

Enable DM CRON <small>[store view]</small>	Yes
Settle DM accepted orders automatically <small>[store view]</small>	Yes
Test Mode <small>[store view]</small>	Yes
Debug Mode <small>[store view]</small>	Yes
Ignore AVS <small>[store view]</small>	No
Authorize via Secure Acceptance <small>[store view]</small>	No <small>'No' - the card information is tokenized via CyberSource, authorization is requested separately via SOAP service (Recommended). 'Yes' - an authorization is performed at the moment of posting card data to CyberSource (Compatible with 3.0.x extension)</small>
Skip Decision Manager for tokenization <small>[store view]</small>	No
Ignore CVN <small>[store view]</small>	No
Sort Order <small>[store view]</small>	10
Developer ID <small>[store view]</small>	default
Report Username <small>[store view]</small>	devreport
Report Password <small>[store view]</small>
Report URL <small>[store view]</small>	https://ebctest.cybersource.com/el
Auth Indicator <small>[store view]</small>	Preauthorization <small>Flag that specifies the purpose of the authorization.</small>
Show exact rejection or error message to users <small>[global]</small>	Yes <small>If set to "No" the general error message will be displayed in all rejection and error cases.</small>

Figure 3.3: General Settings (continued)

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of Secure Acceptance payment method for credit cards. This is used for Web Mobile, Flex Microform and Silent Order Post configurations
DM fail email sender	If the order is rejected by Decision Manager, the customer will be notified. Select the admin sender contact here
DM fail email template	If the order is rejected by Decision Manager, the customer will be notified. Select the email template to be used here
Secure Acceptance Type	CyberSource Secure Acceptance Web/Mobile lets you securely accept payments made on the web or on mobile browsers, worldwide, without handling payment data (process involves a redirect to CyberSource). The Silent Order POST integration method securely passes or "posts" payment data from the customer directly to the CyberSource system (the process does not involve a redirect to CyberSource) Flex Microform includes all benefits from the Web/Mobile and Silent Order POST - potential SAQ A qualification and the customer never leaves your checkout page.
Credit Card Types	Select which card types you would like to accept. This only applies to Silent Order Post configuration. It is not used for Web/Mobile.
Payment Action for Secure Acceptance	Set to Authorize Only to reserve funds during checkout and capture during invoice creation. Set to Authorize and Capture to authorize and capture during customer checkout
Report Server URL	Test: https://ebctest.cybersource.com/ebctest/ Production: https://ebc.cybersource.com/ebc/
Service URL	https://secureacceptance.cybersource.com
Service URL for tests	https://testsecureacceptance.cybersource.com
Payment from Applicable Countries	If set to 'All Allowed', Magento 2 global settings for allowed countries is used to determine if the customers billing Country is applicable for use of this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Payment from Specific Countries	This is a multi-select box allowing the store owner to specify countries that will be allowed to use this payment method
Enable DM CRON	If Decision Manager (DM) is used by your configuration, Magento must learn of any changes to DM status. Enable this setting to ensure Magento will query CyberSource to check on the status of any transactions that were set to 'REVIEW' to see if any have been either accepted or rejected. Disable this setting if Decision Manager is not used.
Test Mode	If yes, CyberSource Test environments are used when processing transactions. If no, all transactions use production environments
Debug Mode	If Yes, diagnostic information is stored in log files on the Magento web server. If No, no information is logged

Continued on next page

Table 3.1 – continued from previous page

Setting	Notes
Ignore AVS	If set yes, the results of AVS verification are ignored. See CyberSource Secure Acceptance pdf page 74 for additional information.
Authorize via Secure Acceptance	If set to No the card information is tokenized via CyberSource, authorization is requested separately via SOAP service (Recommended). If set Yes an authorization is performed at the moment of posting card data to CyberSource (Compatible with 3.0.x extension)
Skip Decision Manager for tokenization	If set to No, the 'skip_decision_manager' field is set to 'false' for Secure Acceptance tokenization requests and set to 'true' otherwise.
Ignore CVN	If set yes, the results of CVN verification are ignored. See CyberSource Secure Acceptance
Sort Order	Change the default module sort order here
Developer ID	This is an optional field that must be no longer than 8 characters. Developer ID's are assigned by CyberSource by request. Please contact your CyberSource Alliance Manager to have one assigned to you.
Report Password	See Section 2.3.3 . Removed in 3.1.5.
Report Username	See Section 2.3.3 . Removed in 3.1.5.
Report URL	Testing: https://ebctest.cybersource.com/ebctest/ConversionDetailReportRequest.do Production: https://ebc.cybersource.com/ebc/ConversionDetailReportRequest.do Removed in 3.1.5.
Auth Indicator	See *page 126* of CyberSource Credit Card Services pdf
Show exact rejection or error message to users	If set to No the general error message will be displayed in all rejection and error cases..

3.1.1 reCAPTCHA

When using SOP, there is an option to use reCAPTCHA and protect against brute force attacks. Most of the time reCAPTCHA is invisible to normal users but will provide a visible challenge when it appears there is a bot on the site.


The module providing reCAPTCHA is an optional package. In order to install it run the following command for composer installation:

```
composer require cybersource/module-recaptcha
```

To enable this feature:

1. Go to <https://www.google.com/recaptcha/> and create a reCAPTCHA v2.0 token.
2. Select one of types of reCAPTCHA implementation:
 - "I'm not a robot" Checkbox: visible checkbox that requires manual action.
 - Invisible reCAPTCHA badge: invisible checkbox.

3. Proceed to Magento Admin panel > System Configuration > Payment Methods.
4. Navigate to CyberSource > General > reCAPTCHA area and set Enabled option to Yes.
5. Enter your reCAPTCHA keys.
6. Save the configuration.
7. Clear the cache.

 **reCaptcha**

Enabled
[store view] Yes

Website API key
[store view]

Secret API key
[store view]

reCaptcha type
[store view] Invisible reCaptcha

Badge position
[store view] Bottom Right

reCaptcha language
[store view] Auto

Figure 3.4: reCAPTCHA Settings

Setting	Notes
Enabled	Enables reCAPTCHA
Website API key	Enter your site key obtained from reCAPTCHA Admin Console.
Secret API key	Enter your secret key obtained from reCAPTCHA Admin Console.
reCAPTCHA type	Select reCAPTCHA type that you have selected for your API keys.
Badge position	Select reCAPTCHA badge position: Bottom Left/Bottom Right - reCAPTCHA badge is displayed on left/right bottom corner of the checkout page. Inline - reCAPTCHA badge is displayed below the payment information form.
reCAPTCHA language	Select a language code for reCAPTCHA or leave the 'Auto' option selected.

3.2. Web Services Settings

WebService Configuration

Merchant ID [store view]

Test Mode [website]

SOAP

Transaction Key [website]

Path to WSDL [website] ☒ Use system value

Path to test WSDL [website] ☒ Use system value

REST

Shared Key ID [global]

Shared Key Value [website]

Figure 3.5: Web Service Settings

Setting	Notes
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Test Mode	Select "Yes" if Test Business Center is used, and "No" for production use.
Path to WSDL	https://ics2wsa.ic3.com/commerce/1.x/transactionProcessor/CyberSourceTransaction_1.158.wsdl
Path to test WSDL	https://ics2wstesta.ic3.com/commerce/1.x/transactionProcessor/CyberSourceTransaction_1.158.wsdl
Shared Key ID	See Section 2.3.2
Shared Key Value	See Section 2.3.2

NOTE: SOAP Web Service section proper configuration is required for other services including Tax Calculation, Secure Acceptance, Visa Checkout, PayPal, Account Takeover Protection and Apple Pay. If you experience issues with these modules, please make sure the SOAP Web Service options are configured properly: "Merchant ID" and "Transaction Key" have correct value and "Test Mode" option matches your CyberSource Merchant account environment.

NOTE: REST Web Service section proper configuration is required for other services including Flex Microform, Decision Manager and Account updater. If you experience issues with these modules, please make sure the REST Web Service options are configured properly: "Merchant ID", "Shared Key ID" and "Shared Key Value" have correct value and "Test Mode" option matches your CyberSource Merchant account environment.

3.3. E-Check

The CyberSource E-Check module allows customers to make purchases using a Routing Number and an Account Number.

3.3.1 Payment Event Types

During checkout, an E-Check transaction request is sent to CyberSource and if successful, the transaction is sent to the Automated Clearing House (ACH). This process mirrors how physical Checks work.

Magento will Query CyberSource periodically to check on the status of each Pending E-Check transaction. In response, CyberSource will provide updated Transaction Statuses called a 'Payment Event Type'. As a result, there are many possible outcomes that can happen during ACH processing. For each Pending Transaction included in the CyberSource response, Magento must decide if a transaction should remain Pending, or if it should be considered Settled, or if the transaction was Rejected.

To manage this, the settings below allow you to configure what action Magento will take for each Payment Event Type.

If the Payment Event Type is mapped as a Pending Event Type, no change is made to the Transaction or Order status. The order should remain in Payment Pending state.

If the payment Event Type is mapped as a Reject Event Type, the order is cancelled.

If the payment Event Type is mapped as an Accept Event Type, an invoice is prepared for that order and the order status will change to Processing.

For a description of possible Payment Event Types see page 86 of this Reporting Developer Guide in Section 6.

3.3.2 Testing

Testing E-Check Payment Event Types is difficult because a sandbox environment is not available to simulate each Event Type. As a result, there are two settings in Magento that will help simulate the possible event types during processing of the requested report.

To use this system, toggle the 'Use Test Environment' setting and select a Test Payment Event Type to simulate. Once configured, the status request is made to CyberSource for each pending E-Check transaction, but Magento will ignore the returned Payment Event Type in the response and instead use the Test Event Type.

Note: Ensure this feature is disabled for production use.

E-Check

Enabled [website]	No
Title [store view]	CyberSource ECheck
Accept Event Type [store view]	<div><div>Payment</div><div>Refund</div><div>Completed</div><div>Correction</div><div>Declined</div><div>Error</div><div>Failed</div><div>Final NSF</div><div>First NSF</div><div>NSF</div></div>
Pending Event Type [store view]	<div><div>Payment</div><div>Refund</div><div>Completed</div><div>Correction</div><div>Declined</div><div>Error</div><div>Failed</div><div>Final NSF</div><div>First NSF</div><div>NSF</div></div>
Reject Event Type [store view]	<div><div>Payment</div><div>Refund</div><div>Completed</div><div>Correction</div><div>Declined</div><div>Error</div><div>Failed</div><div>Final NSF</div><div>First NSF</div><div>NSF</div></div>

Figure 3.6: CyberSource E-Check Settings

Use test environment? [store view] No ▼

Test Event Type [store view] Final NSF ▼

Test Service URL [website] https://ebctest.cybersource.com/ebctest

Service URL [website] https://ebc.cybersource.com/ebc/Query

Merchant Username [website]

Merchant password [website]

Payment From Applicable Countries [website] All Allowed Countries ▼

Payment From Specific Countries [website]

Afghanistan
Åland Islands
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua and Barbuda

Report check period, days [store view] 7

Sort Order [store view] 40

Figure 3.7: CyberSource E-Check Settings (continued)

Setting	Notes
Enabled	This setting activates or deactivates this payment method
Title	This text is displayed to customers as the name of this payment method
Pending Event Type	Select which payment statuses that you will consider 'Pending'. This would signify transactions for which no deposit has been received yet. Contact your CyberSource representative if you have any questions about appropriate statuses.

Continued on next page

Table 3.2 – continued from previous page

Setting	Notes
Reject Event Type	Transactions that were initially accepted during checkout, but after processing by the Automated Clear House, the transaction was rejected. Magento will learn of transactions that have failed
Accept Event Type	Select Event Types that signify the receipt of funds so an invoice can be prepared and the order status moved to 'Processing'
Test Event Type	When Testing, you can use this setting to simulate a Payment Event Type for all 'Pending Payment' orders that were paid for with an E-Check transaction.
Use test environment?	If enabled, Magento will replace the Payment Event Type returned by CyberSource with the Event Type configured in the 'Test Event Type' setting.
Test Service URL	https://ebctest.cybersource.com/ebctest/Query
Service URL	https://ebc.cybersource.com/ebc/Query
Merchant Username	CyberSource Business Center Username with Report Download permissions
Merchant password	Password for Report Download user
Payment from Applicable Countries	If set to 'All Allowed', Magento 2 global settings for allowed countries are used to determine if the customer's billing Country is allowed for this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Payment from Specific Countries	This is a multi select box allowing the store owner to specify countries that will be allowed to use this payment method.
Report check period, days	The report is generated daily Monday through Friday unless CyberSource does not receive a data file from the processor, receives the data file after the cut-off time, or receives an empty data file. Because the report is not generated on weekends, the report that you download on Mondays contains all your weekend transactions. Make sure your implementation can handle reports that contain transactions spanning multiple processing days.
Sort Order	Change the default module sort order here.

3.4. Secure Acceptance Web/Mobile

Secure Acceptance Web/Mobile

Profile Id [store view] C32D5AEC-61AE-45B2-ABEC-636AC1E

Access Key [store view] 48d9f3ef8fb9358d800815dc7f9fc2d7

Secret Key [store view]

Use Iframe [store view] Yes

Enable Iframe "sandbox" Attribute [store view] No
Disable this if payer authentication is enabled for current Secure Acceptance Web/Mobile profile

Use another profile for payer authentication payments [website] Yes

Profile Id [website] B0AF2798-A25A-48E8-BD9F-0DEEFB0

Access Key [website] 9da3acfc0bb382da8eb7e516225a7e



Secret Key [website]

Figure 3.8: Secure Acceptance Web / Mobile Settings


Setting	Notes
Secret Key	See Section 2.1.4
Profile ID	See Section 2.1.2
Access Key	See Section 2.1.4
Use another profile for payer authentication payments	If enabled, the additional Profile may be configured for frontend checkout use and additional group of Profile options is visible. Admin orders and stored credit card payment will still go using primary profile configured above. go using primary profile configured above.
Secret Key (additional)	For additional profile
Profile ID (additional)	For additional profile
Access Key (additional)	For additional profile

3.5. Token Management Service

Token Management Service

 **Tokenization Enabled**
[website] 

Tokenization Title
[store view]

Use CVV for Saved Credit Cards
[store view] 


Use CVV for Saved Credit Cards in Admin
[store view] 

Figure 3.9: Tokenization service settings

Setting	Notes
Tokenization Enabled	Enables the customer to save their credit card information securely for later use.
Tokenization Title	Specify the title of stored token payment method (visible in admin orders payment method list)
Use CVV for Saved Credit Cards	If set to Yes, the customer will be asked to enter Card Security Code when paying with stored cards.
Use CVV for Saved Credit Cards in Admin	If set to Yes, merchant will be asked to enter customer's Card Security Code when paying with stored cards.

3.6. 3D Secure 2.0

The 3D Secure protocol, often known by its branded names like “Verified by Visa” or “Mastercard SecureCode” aims to reduce fraud and provide added security to online payments. 3D Secure v2 adds “frictionless authentication” and improves the user experience.

⌵ 3D Secure 2.0

Enabled [store view]	Yes ▼
Test Mode [store view]	Yes ▼
Org Unit ID [store view]	57ed[redacted]25e0ef8572 Contact CyberSource Customer Support to obtain this
API ID [store view]	5cf7390[redacted]0f7cf1d9e7 Contact CyberSource Customer Support to obtain this
API Key [store view] Contact CyberSource Customer Support to obtain this

Figure 3.10: CyberSource 3D 2.0 Secure Settings

Setting	Notes
Enabled	This setting activates or deactivates the module
Test Mode	Select between Production or Sandbox modes
Org Unit ID	Please contact CyberSource to obtain this value
API ID	Please contact CyberSource to obtain this value
API Key	Please contact CyberSource to obtain this value
Card Types	Select card types to be enabled for 3D Secure 2.0 verification.

3.7. Delivery Address Verification Service

Delivery Address Verification Service

Address verification [store view]	Yes	▼
Address force normalization [store view]	Yes	▼

Figure 3.11: CyberSource Shipping Address Verification Settings

Setting	Notes
Address verification	This setting activates or deactivates the module
Address force normalization	Addresses processed by this system may return a suggested alternative address that will reduce misrouting of shipments. This setting will make suggested alternatives optional or mandatory.

3.8. Klarna

Klarna

Enabled [website]	<input type="text" value="Yes"/>	<input type="checkbox"/> Use system value
Title [store view]	<input type="text" value="CyberSource Klarna"/>	
Test Mode [store view]	<input type="text" value="Yes"/>	
New order status [store view]	<input type="text" value="Processing"/>	
Payment Action [website]	<input type="text" value="Authorize Only"/>	
Sort Order [store view]	<input type="text" value="11"/>	
Payment from Applicable Countries [website]	<input type="text" value="Specific Countries"/>	<input checked="" type="checkbox"/> Use system value
Payment from Specific Countries [website]	<div><div>Afghanistan Åland Islands Albania Algeria American Samoa Andorra Angola Anguilla Antarctica Antigua & Barbuda</div></div>	<input type="checkbox"/> Use system value

Figure 3.12: Klarna configuration

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of this payment method
Test Mode	Select between Production or Sandbox modes
New order status	This will display the status of the new order whether Processing/Suspected fraud
Payment Action	Set to Authorize Only to reserve funds during checkout and capture during invoice creation. Set to Authorize and Capture to authorize and capture during customer checkout
Sort Order	Change the default module sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries are used to determine if the customer's billing Country is allowed for this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Payment from Specific Countries	This is a multi select box allowing the store owner to specify countries that will be allowed to use this payment method.

3.9. Secure Acceptance Silent Order Post (SOP)

⌵ Secure Acceptance Silent Order Post (SOP)

Profile Id <small>[store view]</small>	B0AF2798-A25A-48E8-BD9F-0DEEFB06E
Access Key <small>[store view]</small>	9da3acfb0bb382da8eb7e516225a76e
Secret Key <small>[store view]</small>
Use another profile for payer authentication payments <small>[website]</small>	Yes ▼
Profile Id <small>[store view]</small>	C32D5AEC-61AE-45B2-ABEC-636AC1E4I
Access Key <small>[store view]</small>	48d9f3ef8fb9358d800815dc7f9fc2d7
Secret Key <small>[store view]</small>

Figure 3.13: CyberSource SOP Settings

Setting	Notes
Profile ID	See Section 2.1.2
Access Key	See Section 2.1.4
Secret Key	See Section 2.1.4
Use another profile for payer authentication payments	If enabled, the additional Profile may be configured for frontend checkout use and additional group of Profile options is visible. Admin orders and stored credit card payment will still go using primary profile configured above.
Secret Key (additional)	For additional profile
Profile ID (additional)	For additional profile
Access Key (additional)	For additional profile

3.10. PayPal Express Checkout

Enabled [website]	Yes	<input type="checkbox"/> Use system value
Title [store view]	CyberSource PayPal	
MerchantID [store view]	chtest	
Test Mode [store view]	Yes	
PayPal Redirection Type [store view]	In-Context Express Checkout	
Traditional Express Checkout: Customer will be redirect to PayPal Payment Page. In-Context Express Checkout: A PayPal popup will appear to customer complete payment.		
Payment Action [website]	Authorize Only	
Payment from Applicable Countries [website]	All Allowed Countries	<input checked="" type="checkbox"/> Use system value
Payment from Specific Countries [website]	<div>Afghanistan Åland Islands Albania Algeria American Samoa Andorra Angola Anguilla Antarctica Antigua & Barbuda</div>	
Enable PayPal Credit [website]	Yes	
PayPal Express Checkout lets you give customers access to financing through PayPal Credit® - at no additional cost to you. You get paid up front, even though customers have more time to pay. A pre-integrated payment button lets customers pay quickly with PayPal Credit®. Learn More		
Paypal Credit Title [store view]	CyberSource PayPal Credit	
Enable PayPal Billing Agreements [website]	Yes	
Will appear as a payment option only for customers who have at least one active billing agreement.		
Sort Order [store view]		

Figure 3.14: PayPal Express Checkout Settings

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of this particular payment method
Merchant ID	Your CyberSource Merchant ID
Test Mode	If yes, the CyberSource Test credentials are used. If no, Production credentials are used
PayPal Redirection Type	Traditional Express Checkout: Customer will be redirect to PayPal Payment Page. In-Context Express Checkout: A PayPal popup will appear to customer complete payment.
Payment Action	Authorize Only will check the account for validity but not charge the it until the order is approved and invoiced. Authorize and Capture will charge the PayPal account at the time of the order submission.
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Payment from Specific Countries	This is a multi-select box allowing the store owner to specify countries that will be allowed to use this payment method
Enable PayPal Credit	This setting activates or deactivates the module
PayPal Credit Title	This text is displayed to customers as the title of PayPal Credit payment option.
Enable PayPal Billing Agreements	Allows the registered customers to create a billing agreement for faster purchases in future.
Sort Order	A numeric value used to arrange this payment method amongst all the other CyberSource payment methods

3.11. Device Fingerprint

⌵ Device Fingerprint

Active
[store view] Yes ▼


Org ID
[store view]

Figure 3.15: CyberSource Device Fingerprint Settings

Device Fingerprinting is used with Decision Manager for all relevant payment methods. If you are not using Decision Manager, you should disable this module.

Setting	Notes
Active	This setting activates or deactivates Device Fingerprinting
Org ID	Obtain the Org ID from CyberSource and enter it here. There is an Org ID for the Test environment and another one for Production.

3.12. Bank Transfer



The image shows a settings interface for CyberSource Bank Transfers. It features a main section titled "Bank Transfer" with a downward arrow icon. Below this, there are five sub-sections, each with a downward arrow icon and a label: "iDEAL", "Sofort", "Bancontact", "EPS", and "giropay". Each sub-section is followed by a horizontal line, indicating that there are additional settings for each payment method.

Figure 3.16: CyberSource Bank Transfer Settings

Online banking services enable customers to pay for goods using direct online bank transfers from their bank account to your merchant account

3.12.1 iDEAL

⏮ iDEAL

Enabled
[store view] Yes ▼

Title
[store view] CyberSource iDEAL Bank Transfer

Merchant ID
[store view] ch_test_ideal

Transaction Key
[store view]

Allowed Currencies
[store view]

USD
EUR

Sort Order
[store view] 20

Payment from Applicable Countries
[website] Specific Countries ▼ ☒ Use system value

Payment from Specific Countries
[website]

Afghanistan
Åland Islands
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua & Barbuda

☒ Use system value

Figure 3.17: CyberSource iDeal Settings

Setting	Notes
Enabled	This setting activates or deactivates the method
Title	This text is displayed to customers as the name of this payment method
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Allowed Currencies	Select which currencies this method should be active for
Sort Order	Change the default payment method sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Specific Countries	If 'Payment from Applicable Countries' options is set to 'Specific Countries' this allows to select them.

3.12.2 Sofort

⌂ Sofort

Enabled [store view] Yes ▼

Title [store view] CyberSource Sofort Bank Transfer

Merchant ID [store view] chtest

Transaction Key [store view]

Allowed Currencies [store view]

USD
EUR

Sort Order [store view] 21

Payment from Applicable Countries [website] Specific Countries ▼ ☒ Use system value

Payment from Specific Countries [website]

Belize
Benin
Bermuda
Bhutan
Bolivia
Bosnia & Herzegovina
Botswana
Bouvet Island
Brazil
British Indian Ocean Territory

☒ Use system value

Figure 3.18: CyberSource Sofort Settings

Setting	Notes
Enabled	This setting activates or deactivates the method
Title	This text is displayed to customers as the name of this payment method
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Allowed Currencies	Select which currencies this module should be active for
Sort Order	Change the default payment method sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Specific Countries	If 'Payment from Applicable Countries' options is set to 'Specific Countries' this allows to select them.

3.12.3 Bancontact

⌵ Bancontact

Enabled <small>[store view]</small>	Yes	
Title <small>[store view]</small>	CyberSource Bancontact Bank Transfer	
Merchant ID <small>[store view]</small>	chtest	
Transaction Key <small>[store view]</small>	
Allowed Currencies <small>[store view]</small>	<div>USD</div> <div>EUR</div>	
Sort Order <small>[store view]</small>	22	
Payment from Applicable Countries <small>[website]</small>	Specific Countries	<input checked="" type="checkbox"/> Use system value
Payment from Specific Countries <small>[website]</small>	<div>Afghanistan</div> <div>Åland Islands</div> <div>Albania</div> <div>Algeria</div> <div>American Samoa</div> <div>Andorra</div> <div>Angola</div> <div>Anguilla</div> <div>Antarctica</div> <div>Antigua & Barbuda</div>	<input checked="" type="checkbox"/> Use system value

Figure 3.19: CyberSource Bancontact settings

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of this payment method
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Allowed Currencies	Select which currencies this module should be active for.
Sort Order	Change the default module sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Specific Countries	If 'Payment from Applicable Countries' options is set to 'Specific Countries' this allows to select them.

3.12.4 EPS

⌵ EPS

Enabled <small>[store view]</small>	Yes	
Title <small>[store view]</small>	CyberSource EPS Bank Transfer	
Merchant ID <small>[store view]</small>	ctest	
Transaction Key <small>[store view]</small>		
Allowed Currencies <small>[store view]</small>	<div>USD</div> <div>EUR</div>	
Sort Order <small>[store view]</small>	22	
Payment from Applicable Countries <small>[website]</small>	Specific Countries	<input checked="" type="checkbox"/> Use system value
Payment from Specific Countries <small>[website]</small>	<div>Afghanistan</div> <div>Åland Islands</div> <div>Albania</div> <div>Algeria</div> <div>American Samoa</div> <div>Andorra</div> <div>Angola</div> <div>Anguilla</div> <div>Antarctica</div> <div>Antigua & Barbuda</div>	<input checked="" type="checkbox"/> Use system value

Figure 3.20: CyberSource EPS Settings

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of this payment method
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Allowed Currencies	Select which currencies this module should be active for.
Sort Order	Change the default module sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Specific Countries	If 'Payment from Applicable Countries' options is set to 'Specific Countries' this allows to select them.

3.12.5 giropay

⌵ giropay

Enabled
[store view] Yes ▼

Title
[store view] CyberSource giropay Bank Transfer

Merchant ID
[store view] ctest

Transaction Key
[store view]

Allowed Currencies
[store view]

USD
EUR

Sort Order
[store view] 22

Payment from Applicable Countries
[website] Specific Countries ▼ ☒ Use system value

Payment from Specific Countries
[website]

Afghanistan
Åland Islands
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua & Barbuda

☒ Use system value

Figure 3.21: CyberSource giropay configuration

Setting	Notes
Enabled	This setting activates or deactivates the method
Title	This text is displayed to customers as the name of this particular payment method
Merchant ID	Your CyberSource Merchant ID
Transaction Key	See Section 2.3.1
Allowed Currencies	Select which currencies this module should be active for.
Sort Order	Change the default payment method sort order here
Payment from Applicable Countries	If set to 'All Allowed', Magento global settings for allowed countries is used to determine if the customers billing Country is allowed to use this payment method. If set to 'Specific Countries' the next setting is used to configure allowed countries for this module
Specific Countries	If 'Payment from Applicable Countries' options is set to 'Specific Countries' this allows to select them.

3.13. Visa Checkout

Enabled
[store view] Yes

Title
[store view] CyberSource Visa Checkout

Test Mode?
[store view] No

API Key
[store view]

Payment Action
[website] Authorize Only

Sort Order
[store view] 50

Figure 3.22: Visa Checkout configuration

Setting	Notes
Enabled	This setting activates or deactivates the module
Title	This text is displayed to customers as the name of this payment method
Test Mode	If yes, the CyberSource Test credentials are used. If no, Production credentials are used
API Key	Enter your Visa Checkout API Key here. Could be obtained from CyberSource EBC in the menu Account Management > Digital Payment Solutions > Visa checkout > Settings tab > Visa Checkout API key field
Payment Action	Set to Authorize Only to reserve funds during checkout and capture during invoice creation. Set to Authorize and Capture to authorize and capture during customer checkout
Soft Order	Change the default module sort order here

3.14. Apple Pay

In order to use Apple Pay there are few assumptions and prerequisites which one should take into consideration.

- You must have an Apple Developer Account.
- All pages that incorporate Apple Pay must be served over HTTPS.
- Your website must comply with the Apple Pay guidelines. For more information, see [Apple Pay on the Web Acceptable Use Guidelines](#).
- Your website must have HTTPS mode enabled and used on checkout: https://developer.apple.com/documentation/applepayjs/setting_up_server_requirements

In order to configure Apple Pay with CyberSource Magento module, you must perform several actions.

1. Register an Apple Pay Merchant ID
2. Validate your Store domain in Apple Pay.
3. Create a Payment Processing certificate.
4. Create a Merchant Identity certificate.

3.14.1 Creating a Merchant ID

See official [Apple's article](#).

1. Go to [Certificates, Identifiers & Profiles page](#)
2. Select Identifiers from the sidebar. Click the "+" button.
3. Find and select the Merchant IDs from the list.

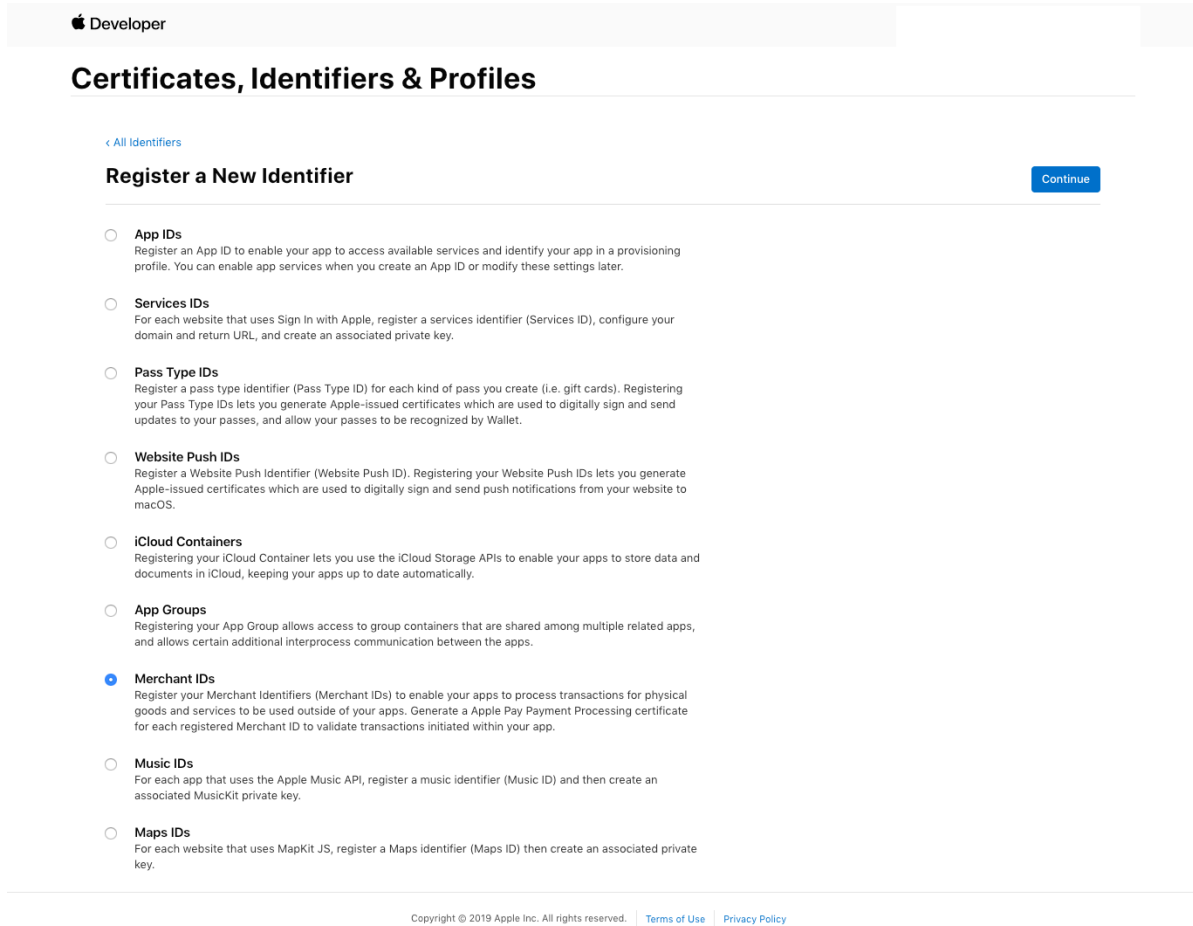


Figure 3.23: Register a New Identifier page

4. Fill in the Description and the Identifier field values. Record the value of the Identifier as it's required in the following configuration process. Click the Continue button.

Apple Developer

Certificates, Identifiers & Profiles

[← All Identifiers](#)

Register a Merchant ID

[Back](#) [Continue](#)

<p>Description</p> <input type="text" value="TestCyberSource"/> <p><small>You cannot use special characters such as @, &, *, ', "</small></p>	<p>Identifier</p> <input type="text" value="merchant.2.com.ch.cybersource"/> <p><small>We recommend using a reverse-domain name style string (i.e., com.domainname.appname).</small></p>
---	--

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Figure 3.24: Register a Merchant ID page

- Click the Register button to finish the Merchant ID creation process.

Apple Developer

Certificates, Identifiers & Profiles

[← All Identifiers](#)

Register a Merchant ID

[Back](#) [Register](#)

<p>Description</p> <p>TestCyberSource</p>	<p>Identifier</p> <p>merchant.2.com.ch.cybersource</p>
---	--

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Figure 3.25: Finishing a new Merchant ID registration

3.14.2 Creating Payment Processing certificate

A Payment Processing certificate is used to establish secure communication between Apple Pay and CyberSource.

1. Log in to your CyberSource Enterprise business center account.
2. On the left navigation panel go to "Payment Configuration" > "Digital Payment Solutions".
3. Click a "Configure" button near "Apple Pay" item.
4. Enter the value of your Apple Pay Merchant ID in the Apple Merchant ID field.

Apple Pay Registration ? Help

Step 1: Generate the Certificate Signing Request

The Certificate Signing Request (CSR) contains an Identifier and a public key. Apple requires this file to encrypt sensitive payment credentials.

To use the CSR generated on this page, download and submit it to Apple (see step 2). Your old certificate can be used until its expiration, 25 months from the date of generation or until the new CSR is submitted to Apple.

Enter the Apple Merchant ID you registered in the certificates, identifiers, and profiles area of the member center on the Apple Website.

Apple Merchant ID
merchant2.com.ch.cybersource

GENERATE NEW CERTIFICATE SIGNING REQUEST

Step 2: Submit the CSR to Apple

Submit the CSR to Apple to get the required Apple Pay Certificate. [Learn more about the submission process.](#)

Step 3: Generate Transaction Security Key

Complete this step if you use the SDK. When using the SDK, each transaction request originating from your iOS application must include a unique signature.

○ At least one CyberSource SOAP Toolkit API transaction security key exists. If you do not want to reuse an existing key, [generate a new transaction security key here.](#)

Important - To use Apple Pay, your processor must support payment network tokenization.

Figure 3.26: CyberSource EBC Apple Pay configuration page

5. Click Generate New Certificate Signing Request button. Save the generated CSR on your disk.
6. Go to [Certificates, Identifiers & Profiles](#) page on your Apple Developer portal.
7. Select Identifiers from the sidebar.
8. Select your Merchant ID from the list.
9. Under Apple Pay Payment Processing Certificate click the Create Certificate button.
10. Select the CSR file you have downloaded from CyberSource EBC previously.

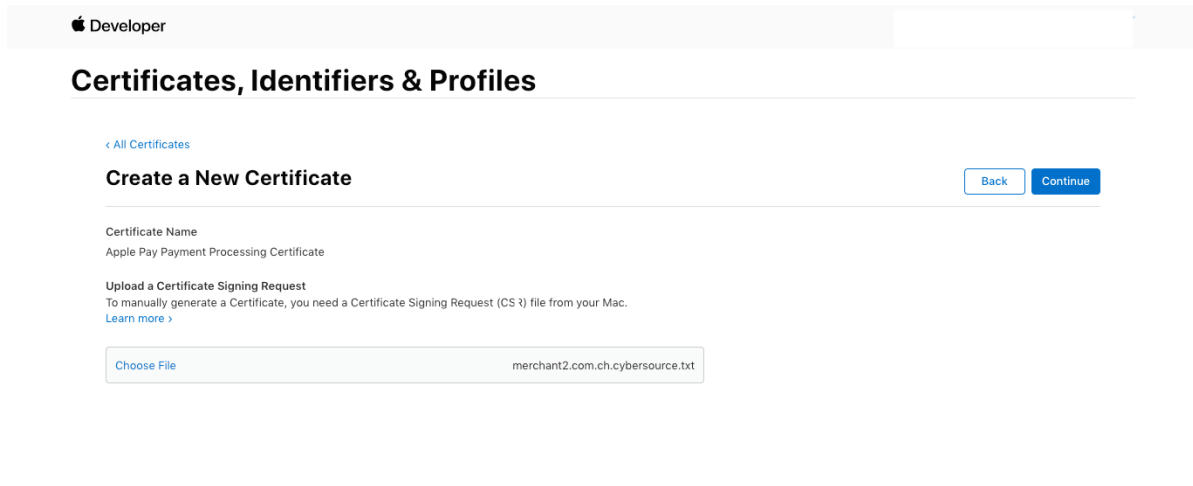


Figure 3.27: Uploading the Payment Processing Certificate Request

11. Click Continue button.
12. Click Download button.

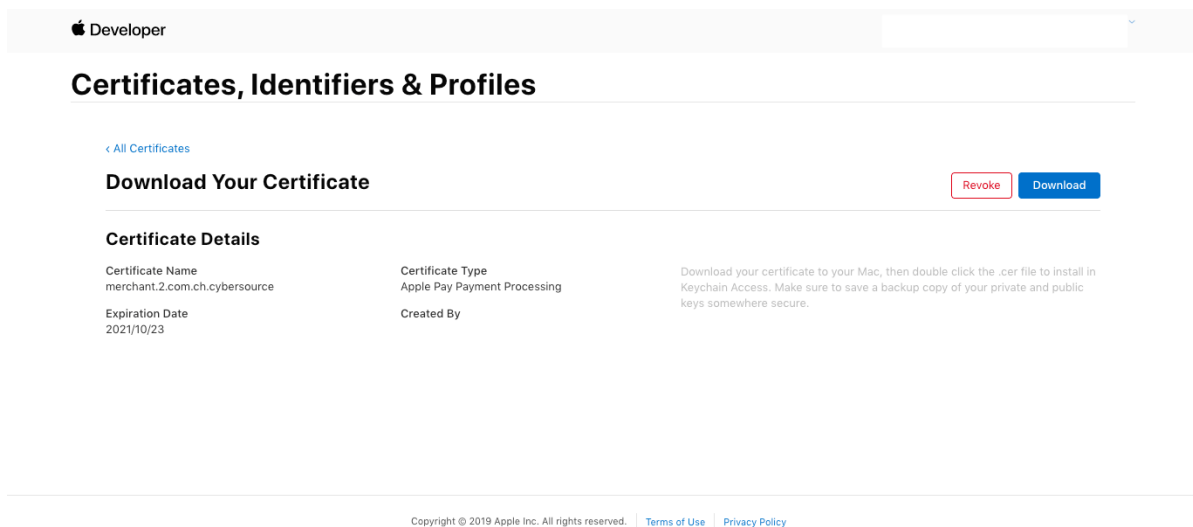


Figure 3.28: Downloading a Payment Processing Certificate

3.14.3 Domain validation

1. Go to [Certificates, Identifiers & Profiles](#) page on your Apple Developer portal.

2. Select your Merchant ID from the list.
3. Click Add Domain button under Merchant Domains.
4. Enter your Store domain name into the field. Click Continue button.

The screenshot shows the 'Certificates, Identifiers & Profiles' page in the Apple Developer portal. The 'Register' section is active, with a 'Save' button in the top right. Below the title, there is a link '< View Identifier'. A message states: 'To use Apple Pay Payment Processing on the web you must register and verify your fully qualified domain name. To begin enter your domain below.' The instruction 'Enter the domain you wish to register' is followed by a text input field containing 'https://[redacted].com'.

Figure 3.29: Entering a domain name for validation

5. Download the validation file and save on your disk.

The screenshot shows the 'Verify' section of the 'Certificates, Identifiers & Profiles' page. It features 'Download' and 'Verify' buttons in the top right. Under 'Instructions and Information', it says: 'To verify ownership of your domain download the file and place it at the location listed below. After uploading your file continue with the verification step.' Below this, it states: 'We'll look for your file at the following location:' followed by a text input field containing 'https://[redacted].com/.well-known/apple-developer-merchantid-domain-association.txt'.

Figure 3.30: Verifying a domain

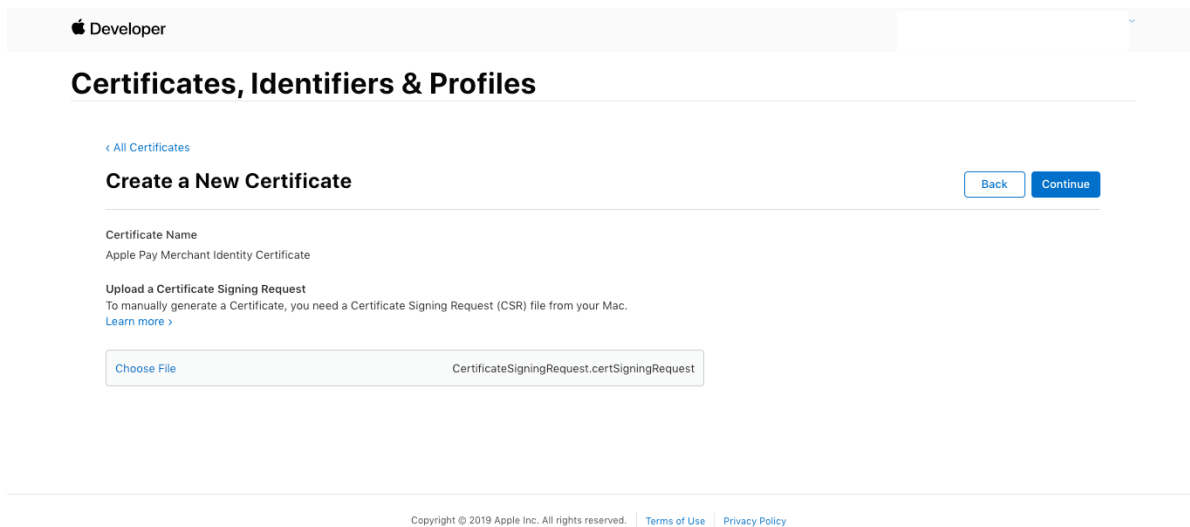
6. Upload the validation file into your Website root directory into the .well-known subdirectory.

7. Make sure the file is accessible via Web.
8. Click on the Validate button on the Verify page.
9. Click the Done button to finish the Domain Validation process..

3.14.4 Creating Merchant Identity certificate

Merchant Identity certificate is used to authenticate your sessions on Apple Pay servers. The certificate and its private key files must be uploaded to your server and full paths to these files must be entered in CyberSource extension settings.

1. Go to [Certificates, Identifiers & Profiles](#) page on your Apple Developer portal.
2. Select your Merchant ID from the list.
3. Click the Create Certificate button under Apple Pay Merchant Identity Certificate section.
4. Generate your CSR following this [Apple Developer Help article](#).
5. Upload the CSR into the form and click Continue.



Apple Developer

Certificates, Identifiers & Profiles

[← All Certificates](#)

Create a New Certificate Back Continue

Certificate Name
Apple Pay Merchant Identity Certificate

Upload a Certificate Signing Request
To manually generate a Certificate, you need a Certificate Signing Request (CSR) file from your Mac.
[Learn more >](#)

Choose File CertificateSigningRequest.certSigningRequest

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Figure 3.31: Uploading the Merchant ID CSR

6. Click the Download button and save the Certificate on your disk.
7. Convert the Certificate into PEM format

```
openssl x509 -inform der -in merchant_id.cer -out merchant_id.pem
```

8. Open the Keychain tool and find the Private Key for the CSR you have created on Step 4.

9. From the context menu click Export and save the private key as merchant_id.p12

Note: Do NOT specify any password for the exported Private Key protection.

10. Convert your Private Key into PEM format.

```
openssl pkcs12 -in merchant_id.p12 -out merchant_id.key -nodes
```

11. Upload converted Private Key merchant_id.key and Certificate merchant_id.pem files in your Website var/ directory.
12. Enter full paths to the Certificate and Private key files in Magento Admin under Stores > Configuration > Payment Methods > CyberSource > Apple Pay, "Path to certificate" and "Path to key" fields respectively.

3.14.5 Extension configuration

⌵ **ApplePay**

Enabled <small>[store view]</small>	Yes	▼
Title <small>[store view]</small>	Apple Pay	
Payment Action <small>[website]</small>	Authorize Only	▼
Apple Merchant ID <small>[store view]</small>	merchant.2.com.ch.cybersource	
Apple Display Name <small>[store view]</small>	Example, Inc.	
Certified Domain <small>[store view]</small>	test.example.com	
Path to certificate <small>[store view]</small>	/var/www/var/merchant_id.pem	
Path to key <small>[store view]</small>	/var/www/var/merchant_id.key	
Sort Order <small>[store view]</small>	5	

Figure 3.32: Apple Pay configuration

Below are the settings which will help to configure the module.

Setting	Notes
Enabled	This option activates or deactivates the Apple Pay method.
Title	This text is displayed to customers as the name of this payment method on the Checkout page.
Apple Merchant ID	Enter your Apple Pay Merchant ID created in Section 3.14.1 .
Payment Action	Set to Authorize Only to reserve funds during checkout and capture during invoice creation. Set to Authorize and Capture to authorize and capture during customer checkout.
Apple Display Name	Defines business name the payer will see for the charge on a bank or credit card statement. For example, "COMPANY, INC."
Certified Domain	Validated Site Domain on which the service is meant to be used. Must NOT have https:// prefix. See Section 3.14.3
Path to Certificate	A full path to the Merchant ID Certificate file. See Section 3.14.4
Path to key	A full path to the Merchant ID Certificate Private key file. See Section 3.14.4
Sort Order	Change the default payment method sort order here

3.15. Account Updater

Account Updater notifies you of changes to stored customer credit card data. Such changes could affect expiration date, credit card number, or a brand. If you use

CyberSource Recurring Billing, Payment Tokenization, or Token Management Services (TMS), Account Updater automatically updates the stored card data on your behalf.

Account Updater obtains credit card information from both the Visa Inc.'s Account Updater Service and the MasterCard's Automatic Billing Updater Service.

- For Europe, MasterCard only will be supported

The screenshot shows the 'Account Updater' configuration page. It includes several sections: 'Enabled' (a dropdown menu set to 'Yes'), 'Merchant ID' (a text input field), 'Username' (a text input field), 'Password' (a text input field), 'Update Interval' (three dropdown menus set to 'Monthly', 'on the 1st', and 'at 12AM'), 'Manual Update' (a date picker icon and an 'Update' button), 'Test Mode' (a dropdown menu set to 'Yes'), and 'Test Report Path' (a text input field). Below the 'Manual Update' section, there is a note: 'Choose AU report date to pull. Then click Update button to process.' Below the 'Test Report Path' section, there is a note: 'Path is relative to magento var folder. Leave empty to pull report from CyberSource.'


Enabled [website] Yes ▼

Merchant ID [website]

Username [website]

Password [website]

Update Interval [website] Monthly ▼ on the 1st ▼ at 12AM ▼

Manual Update [website]  Update

Choose AU report date to pull. Then click Update button to process.

Test Mode [website] Yes ▼

Test Report Path [website]

Path is relative to magento var folder. Leave empty to pull report from CyberSource.

Figure 3.33: Account updater settings

Setting	Notes
Enabled	This setting activates or deactivates the feature
Merchant ID	Required. Your CyberSource Merchant ID
Username	Required. See Section 2.3.3
Password	Required. See Section 2.3.3
Update interval	Define Account updater cronjob run frequency. Recommended at least once per month.
Manual Update	Allows to process the report in manual mode. Select the date to start from and click the 'Update' button to start.
Test Mode	If yes, the account updater uses test endpoints for updating the stored tokens. Not for production use.
Test Report Path	Allow to specify path of test Account Updater report file. Path is relative to Magento's var directory. Not for production use.

3.16. Taxes

CyberSource offers a tax service that will calculate taxes to be charged on orders. To do this, there are several settings that must be configured to receive accurate results from CyberSource.

Please note that this service must be enabled by your CyberSource representative before use. This includes activation for sandbox use as well as production use.

Note: Prior to Tax Calculation configuration, one must configure SOAP Web Service. See [Section 3.2](#) for detailed information on how to do so.

To use the Tax Service, your site will need to have the following features configured:

- Product Tax Class codes
- CyberSource Tax Services settings
- Magento Tax Settings

3.16.1 Product Tax Classes

Each product in Magento has a setting for Tax Class. This setting helps describe what the product is and how it should be taxed. Contact your CyberSource representative for a list of available Product Tax Class ID's, and contact your tax consultant for advice on which Product Tax Class IDs you should use for the products you sell. Once you have that list, you can add them to Magento.

To do so, in the Magento Admin section of your site, navigate to Stores > Tax Classes

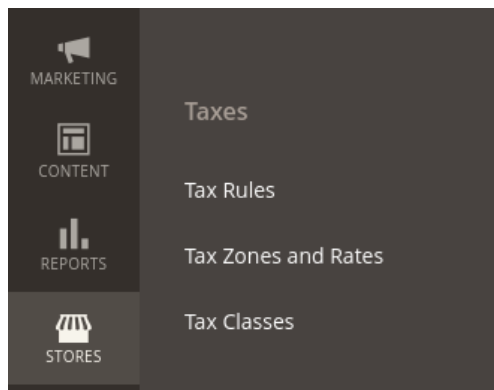


Figure 3.34: Tax Classes Settings

Create a new Tax Class entry for each Tax Class ID provided by your CyberSource representative. Enter the 'Tax Class Code' that was provided by CyberSource and select 'Product' for the Tax Class Type setting.

Tax Class

[← Back](#) [Reset](#) [Save](#)

Tax Class

Tax Class Code *

Tax Class Type * Product ▼

Figure 3.35: Creating a new Tax Class

Once you have all the Tax Classes entered that you will use for your products, you can configure your products to use them.

The Tax Class setting can be found inside each product record. Use the dropdown control to select an appropriate Tax Class and save the product record.

[SALES](#)
[CATALOG](#)
[CUSTOMERS](#)
[MARKETING](#)
[CONTENT](#)
[REPORTS](#)
[STORES](#)
[SYSTEM](#)
[FIND PARTNERS & EXTENSIONS](#)

Store View: All Store Views ▼ ? [← Back](#) [Add Attribute](#) [Save](#) ▼

Enable Product [website] ☒ Yes

Attribute Set Bag ▼

Product Name * [store view]

SKU * [global]

Price * [website]
[Advanced Pricing](#)

Tax Class [website] Taxable Goods ▼

Quantity [global]
[Advanced Inventory](#)

Figure 3.36: Updating Tax Class settings on a product

3.16.2 CyberSource Tax Services Settings

Stores > Configuration > Sales > Tax

Tax Calculation [website]	Yes	<input type="checkbox"/> Use system value
Nexus regions [website]	<div>New Hampshire New Jersey New Mexico New York North Carolina North Dakota Northern Mariana Islands Ohio Oklahoma Oregon</div>	<input type="checkbox"/> Use system value
Customer countries to calculate Tax for [website]	<div>United States Canada Afghanistan Åland Islands Albania Algeria American Samoa Andorra Angola Anguilla</div>	<input type="checkbox"/> Use system value
Ship From City [website]	New York	<input type="checkbox"/> Use system value
Ship From Postcode [website]	10010	<input type="checkbox"/> Use system value
Ship From Country [website]	United States	<input type="checkbox"/> Use system value
Ship From Region [website]	New York	<input type="checkbox"/> Use system value
Acceptance City [website]	New York	<input type="checkbox"/> Use system value
Acceptance Postcode [website]	10010	<input type="checkbox"/> Use system value
Acceptance Country [website]	United States	<input type="checkbox"/> Use system value
Acceptance Region [website]	New York	<input type="checkbox"/> Use system value
Origin City [website]	New York	<input type="checkbox"/> Use system value
Origin Postcode [website]	10010	<input type="checkbox"/> Use system value
Origin Country [website]	United States	<input type="checkbox"/> Use system value
Origin Region [website]	New York	<input type="checkbox"/> Use system value
Merchant VAT [website]	123456	<input type="checkbox"/> Use system value

Figure 3.37: Tax Service Settings

Setting	Notes
Tax Calculation	This setting activates or deactivates CyberSource Tax Services.
Nexus Regions	U.S. and Canadian merchants have nexus in states or provinces in which they have some form of physical presence.
Customer countries to calculate Tax for	Tax Services will be run for customer Shipping Addresses that are within the countries set here.
Ship From City	The City orders are shipped from
Ship From Postcode	The Postcode where orders are shipped from
Ship From Country	The Country where orders are shipped from
Ship From Region	The Region where orders are shipped from
Acceptance City	This is the place of business where you accept/approve the customer's order, thereby becoming contractually obligated to make the sale
Acceptance Postcode	This is the place of business where you accept/approve the customer's order, thereby becoming contractually obligated to make the sale
Acceptance Country	This is the place of business where you accept/approve the customer's order, thereby becoming contractually obligated to make the sale
Acceptance Region	This is the place of business where you accept/approve the customer's order, thereby becoming contractually obligated to make the sale
Origin City	Point of Origin City
Origin Postcode	Point of Origin Postcode
Origin Country	Point of Origin Country
Origin Region	Point of Origin Region
Merchant VAT	Referred to as the Merchant VAT Seller Registration Number

It is also possible to have taxes calculated for shipping rates. In many cases, if your site is offering dynamic shipping rates from a carrier, taxes may be included in the quoted shipping costs provided by carrier and presented to the customer. However, if you offer a flat rate shipping charge, you may wish to add taxes to that flat rate.

To do so you would navigate to *Stores > Configuration > Sales > Tax*

Tax Classes

Tax Class for Shipping

store view

Taxable Goods

▼

☐ Use system value

Default Tax Class for Product

store view

Taxable Goods

▼

☒ Use system value

Default Tax Class for Customer

store view

Retail Customer

▼

☒ Use system value

Calculation Settings

Tax Calculation Method Based On

website

Total

▼

☒ Use system value

Tax Calculation Based On

website

Shipping Address

▼

☒ Use system value

Catalog Prices

website

Excluding Tax

▼

☒ Use system value

This sets whether catalog prices entered from Magento Admin include tax.

Shipping Prices

website

Excluding Tax

▼

☐ Use system value

This sets whether shipping amounts entered from Magento Admin or obtained from gateways include tax.

Figure 3.38: Magento settings for charging tax on shipping rates

Setting	Notes
Tax Class for Shipping	This is a product tax code that should reference taxes applied to shipping services. To add a value to the dropdown shown, please reference Section 3.16.1 .
Shipping Prices	Excluding Tax – shipping rates offered need to have taxes added to them Including Tax – shipping rates offered have taxes included already so no taxes will be applied through the CyberSource tax service.

3.17. Transactional Emails

In Magento Admin: Marketing > Email Templates > DM Fail Transaction

When an order is flagged for Decision Manager Review, the customer that placed the order is not informed that their transaction has not been fully accepted.

As a result, if a manual review of the transaction leads to it being rejected, the customer is informed that their order is no longer active.

This setting allows you to configure the email sent to customers in this case.

3.18. Cron Settings

Stores > Configuration > Advanced > System > Cron (Scheduled Tasks) > Cron configuration options for group: dm

⊖ Cron configuration options for group: dm

Generate Schedules Every <small>[global]</small>	<input type="text" value="1"/>	<input checked="" type="checkbox"/> Use system value
Schedule Ahead for <small>[global]</small>	<input type="text" value="4"/>	<input checked="" type="checkbox"/> Use system value
Missed if Not Run Within <small>[global]</small>	<input type="text" value="2"/>	<input checked="" type="checkbox"/> Use system value
History Cleanup Every <small>[global]</small>	<input type="text" value="10"/>	<input checked="" type="checkbox"/> Use system value
Success History Lifetime <small>[global]</small>	<input type="text" value="60"/>	<input checked="" type="checkbox"/> Use system value
Failure History Lifetime <small>[global]</small>	<input type="text" value="600"/>	<input checked="" type="checkbox"/> Use system value
Use Separate Process <small>[global]</small>	<input type="text" value="Yes"/> ▼	<input checked="" type="checkbox"/> Use system value

Figure 3.39: Magento Cron Panel

Please note all the values below are in minutes. The only option you should edit is the first option, Generate Schedules Every. This is the Cron frequency. A suitable time is every 15 minutes.

4. Payment UX

The Secure Acceptance Web/Mobile payment method can be configured in two ways. Using the Iframe mode is a way to accept payments using a hosted payment page in a way that does not require the customer to leave the checkout page. Alternatively, the module can be configured as a traditional redirect method where the customer is redirected to a hosted CyberSource webpage containing the same payment web form.

4.1. Using Iframe Mode

⌵ Secure Acceptance Web/Mobile

Secret Key <small>[store view]</small>
Profile Id <small>[store view]</small>
Access Key <small>[store view]</small>
Use Iframe <small>[store view]</small>	Yes ▼
Enable Iframe "sandbox" Attribute <small>[store view]</small>	Yes ▼

Disable this if payer authentication is enabled for current Secure Acceptance Web/Mobile profile

Figure 4.1: Secure Acceptance Web/Mobile configuration in iframe mode

When the module is configured for Iframe mode, the payment screen looks like [Figure 4.2](#). The advantage of using this mode is that the customer never leaves the merchant's website.

Payment Details 🔒

Card selected: [Change payment method](#) * Required field

Card Type *

☒ Visa ☐ Mastercard ☐ Amex

Card Number *

4111111111111111

Expiration Date *

05 2024

CVN *
This code is a three or four digit number printed on the back or front of credit cards.

123

Finish

Figure 4.2: Secure Acceptance Payment Form in Iframe Checkout Mode

4.2. Using Redirect Mode

When the module is configured for Redirect mode, the customer is redirected to a CyberSource URL to complete the payment step.

Once the customer has completed payment, they are redirected back to the merchants' website.

Secure Acceptance Web/Mobile

Secret Key <small>[store view]</small>	<input type="password" value="....."/>
Profile Id <small>[store view]</small>	<input type="password" value="....."/>
Access Key <small>[store view]</small>	<input type="password" value="....."/>
Use Iframe <small>[store view]</small>	<input type="text" value="No"/>

Figure 4.3: Secure Acceptance Web/Mobile configuration in redirect mode

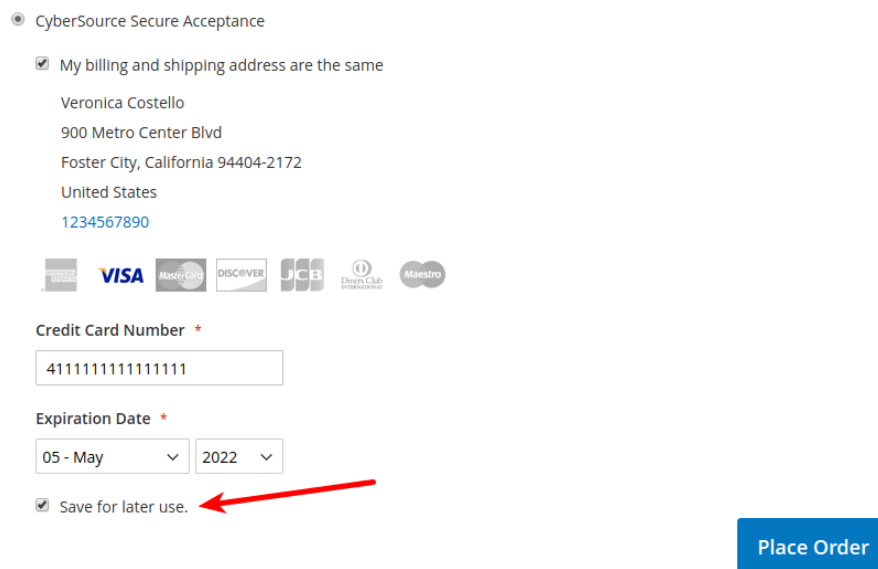
4.3. Tokens

When a logged in customer uses the checkout on your site, their card data could be stored in a secured CyberSource datacenter. Once saved, a lookup value called a Token is provided to the merchant through this module and is stored against the Customer record. When a returning customer uses your checkout, they can opt to use a previously used card and thereby avoid having to rekey their card data.

When a token is used, the customer is still redirected either through an Iframe or through a full browser redirect action to the CyberSource Hosted Payment page for payment confirmation. When a customer selects to checkout as a guest, the token system is not used.

4.3.1 Saving a card

To save the card, log in or register a new customer account and select 'Save for later use' checkbox during checkout process. Once order is placed, card information will be securely saved on CyberSource.



The screenshot displays the CyberSource Secure Acceptance checkout interface. At the top, the 'CyberSource Secure Acceptance' radio button is selected. Below it, the checkbox 'My billing and shipping address are the same' is checked. The billing address is listed as Veronica Costello, 900 Metro Center Blvd, Foster City, California 94404-2172, United States, with a phone number 1234567890. A row of credit card logos (Discover, Visa, MasterCard, Discover, JCB, Discover Club, and Maestro) is shown. The 'Credit Card Number' field is labeled with a red asterisk and contains the number 4111111111111111. The 'Expiration Date' is labeled with a red asterisk and shows '05 - May' and '2022' in dropdown menus. The 'Save for later use.' checkbox is checked, and a red arrow points to it. A blue 'Place Order' button is located at the bottom right.

Figure 4.4: Saving the card information for later use.

4.3.2 Managing tokens


Logged in customers can remove their tokens at any time. To do so, they would visit the 'My Account' section of Magento and select the 'Stored Payment Methods' menu item.

Use the Delete links beside any stored tokens to remove previously stored tokens

4.3.3 Paying with tokens

To pay the order with previously stored card just select it from the list on a top of 'Billing and review' checkout step:

Payment Method:

 CyberSource Stored Cards -  ending ****-****-****-0003 (expires: 02/2020)

Place Order

Figure 4.5: Placing order with token.

4.3.4 Migrating tokens created in version 2 to version 3

In version 2, the Module had its own implementation of token storage. Version 3 has implemented the Magento Vault token storage to follow best practices. The Module provides a simple and transparent way to migrate existing tokens from version 2 into Vault storage that will be executed automatically as a part of the usual extension upgrade process.

4.4. Apple Pay

Have a look at the step by step procedure for Apple pay checkout at front store.

Notice the Payment method while reviewing the order is Apple pay:

Mail 10:46 PM 79% cybersourcep3stagea.collinsharper.com

LUMA [Sign In](#)

Shipping Review & Payments

Payment Method:

- ☐ CyberSource PayPal Credit [See terms](#)
- ☐ Cybersource Paypal (**test) [What is PayPal?](#)
- ☐ CyberSource Secure Acceptance
- ☒ ApplePay
 - ☒ My billing and shipping address are the same
 - Alex P
100 Main St
Toronto, Ontario L1n8x7
Canada
[4167790770](#)
 -
- ☐ CyberSource ECheck
- ☐ Check / Money order
- ☐ CyberSource Visa Checkout *(test)

Order Summary

Cart Subtotal	\$59.00
Shipping	\$0.00
Free Shipping - Free	
Tax	\$7.67
Order Total Incl. Tax	\$66.67
Order Total Excl. Tax	\$59.00
1 Item in Cart	

Ship To:

Alex P
100 Main St
Toronto, Ontario L1n8x7
Canada
[4167790770](#)

Shipping Method:

Figure 4.6: Payment method selection

Apple Pay window will pop up requesting fingerprint (Touch ID) authentication). Optionally you may select one of your saved cards.

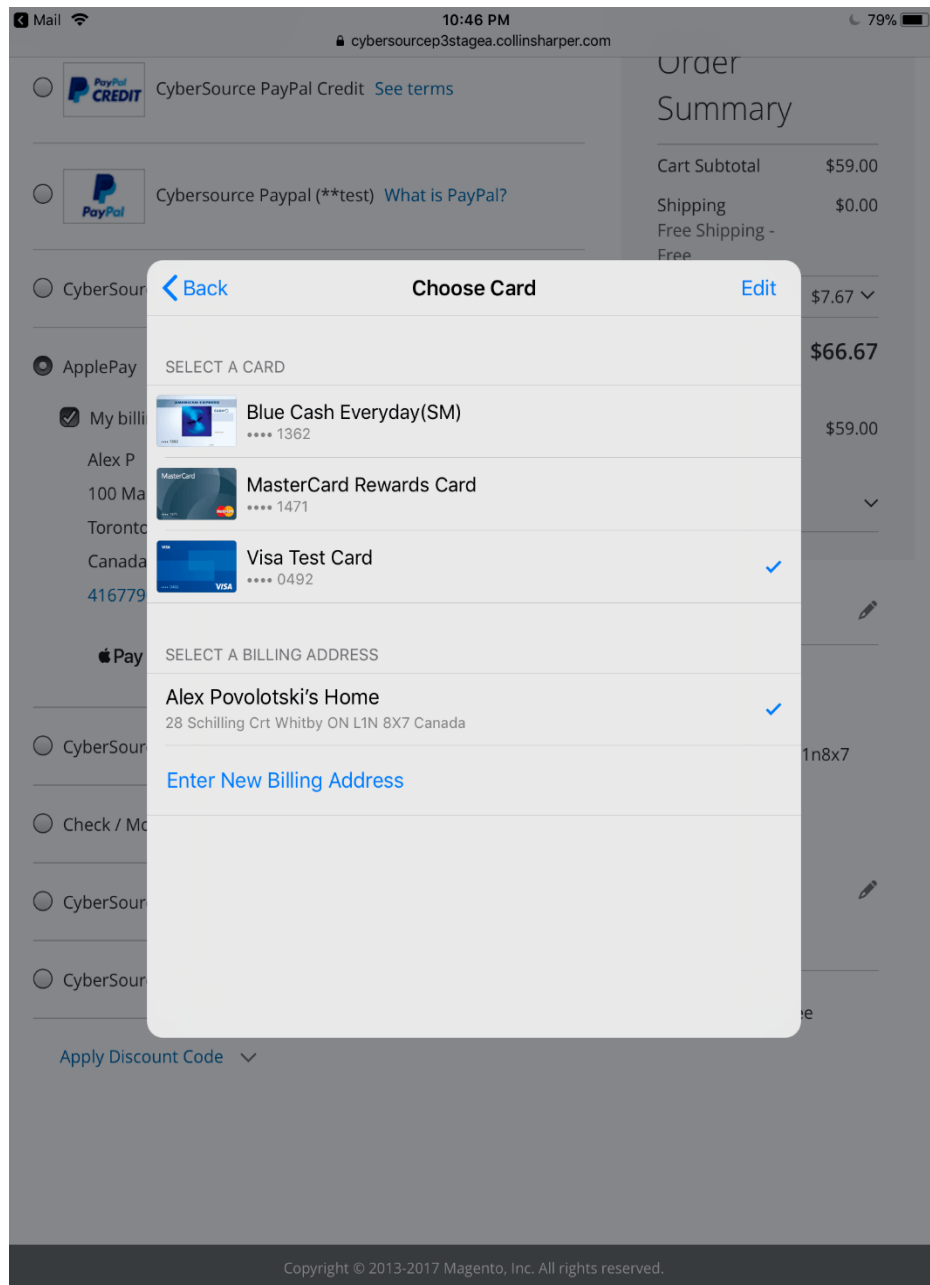


Figure 4.7: Card selection (optional)

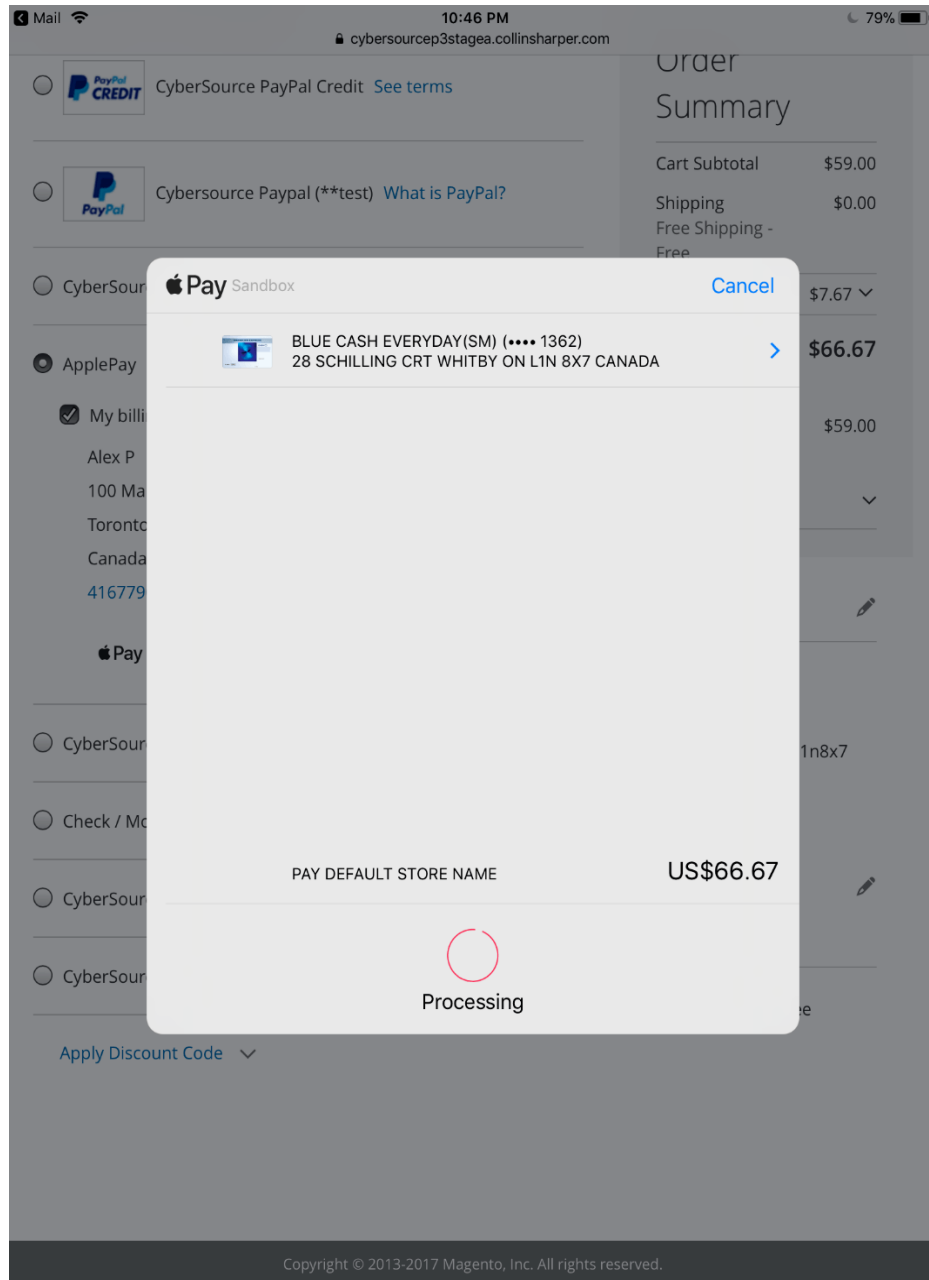


Figure 4.8: ApplePay interaction with Touch ID device

Now you should see order success page. Verify the Transaction details in Business center.

5. Administration Use

The Secure Acceptance Web/Mobile and Silent Order POST payment methods can be configured with two different payment modes.

1. Authorize – transactions performed on the site while in this mode are Authorized only. This only reserves funds and guarantees that later, the merchant can Capture funds up to the reserved amount. Capturing funds is done by preparing a Magento Invoice.
2. Authorize and Capture – transactions performed in this mode are both Authorized and Captured at the same time.

5.1. Capturing Funds for Authorized Transactions

While in Authorize mode (see section 2), the system will create an Order record, but it will not create an invoice. Capturing funds for Authorized transactions is done implicitly when you prepare an invoice.

To prepare an invoice, open a Payment Pending order and Click the 'Invoice' button.

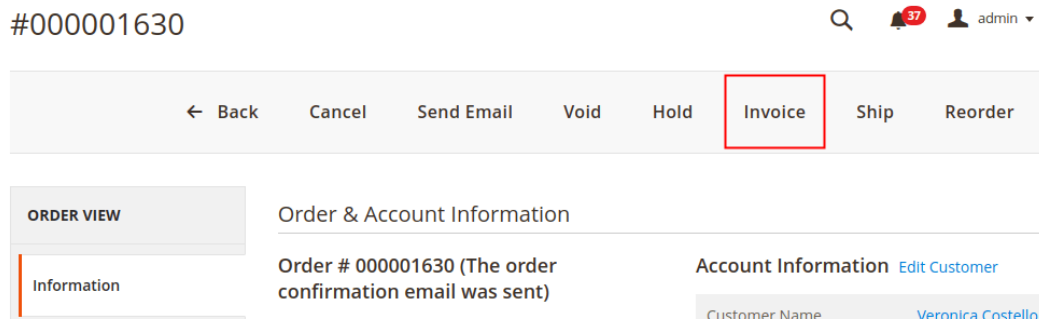


Figure 5.1: Admin view of payment pending order featuring the Invoice Button

When preparing an invoice make note of the section Items to Invoice. Each line item listed can be individually or partially invoiced by altering the Qty to Invoice column. This is how multiple invoices can be prepared for each order.

Items to Invoice

Product	Price	Qty	Qty to Invoice	Subtotal	Tax Amount	Discount Amount	Row Total
Radiant Tee SKU: WS12-L-Orange Size: L Color: Orange	\$22.00	Ordered 2	<input type="text" value="2"/>	\$44.00	\$0.00	\$0.00	\$44.00
Desiree Fitness Tee SKU: WS05-M-Black Size: M Color: Black	\$24.00	Ordered 1	<input type="text" value="0"/>	\$0.00	\$0.00	\$0.00	\$0.00
Gwyn Endurance Tee: "your choice" SKU: WS01-XS-Yellow Size: XS Color: Yellow	\$24.00	Ordered 1	<input type="text" value="1"/>	\$24.00	\$0.00	\$0.00	\$24.00
Diva Gym Tee SKU: WS11-M-Yellow Size: M Color: Yellow	\$32.00	Ordered 1	<input type="text" value="0"/>	\$0.00	\$0.00	\$0.00	\$0.00
				<input type="button" value="Update Qty's"/>			

Figure 5.2: Items to Invoice Section

To complete invoice creation and capture funds click the Submit Invoice button.

Invoice Totals

Subtotal	\$152.00
Grand Total	\$152.00

Amount

☐ Append Comments
 ☐ Email Copy of Invoice

Figure 5.3: Submit Invoice Button

5.2. Canceling Authorized Transactions

To cancel the transaction that has been Authorized but not Captured (an invoice has not yet been created for the order), open the order and select the Cancel or Void button on the order.

The main difference between Cancel and Void operation is that cancelling will close the order after Authorization reversal while voiding will let you to create the offline invoice later.

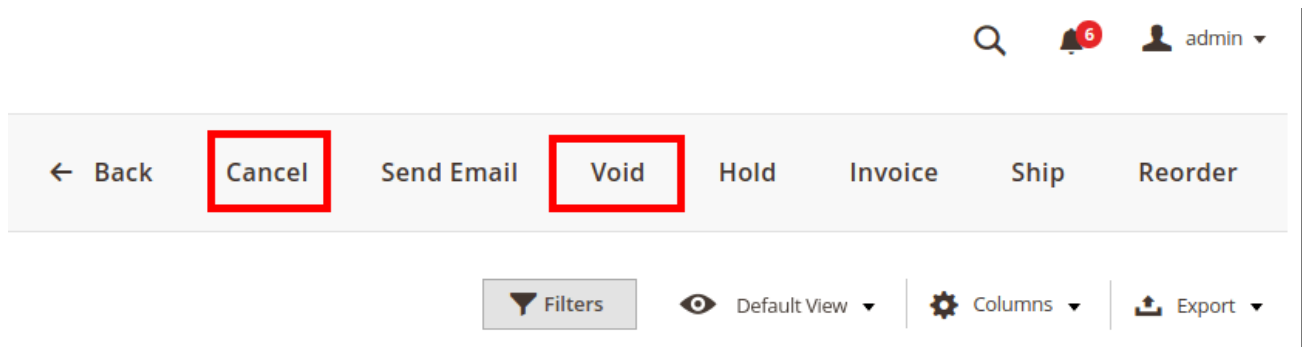
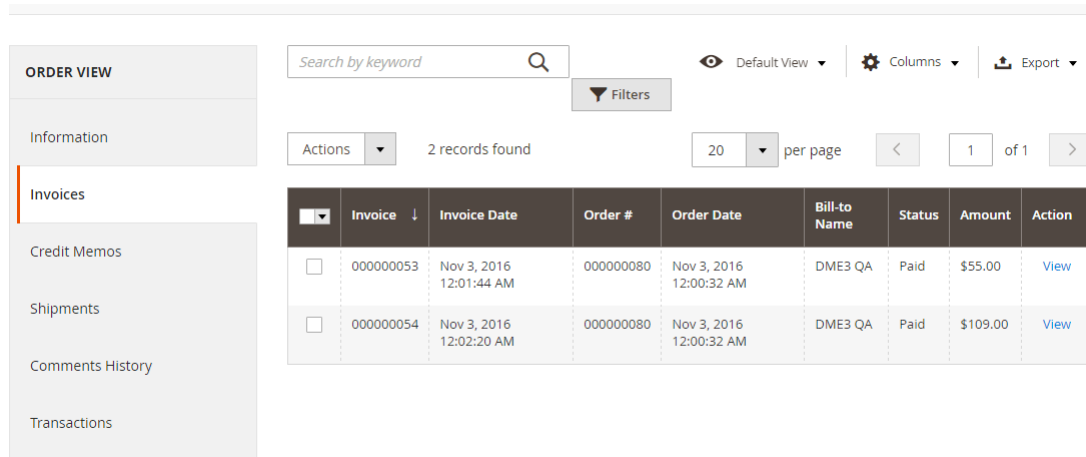


Figure 5.4: Cancel and Void order buttons

5.3. Refunding a Captured Order

To refund an order that has been captured, a Credit Memo must be created. Please note that there are two types of Credit Memos: Offline Refunds and Online Refunds. Offline refunds can be created from the main Order view page, but no funds will be returned to the customer. You will need to refund the money using another way outside Magento.

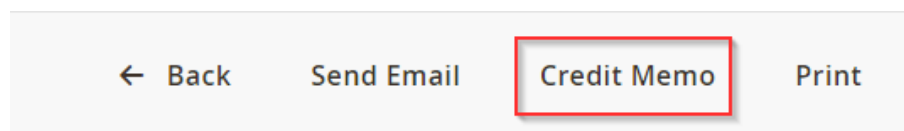
To refund customers in a way that triggers a credit of funds to the customer's card, you must prepare a credit memo from the invoice record.



	Invoice	Invoice Date	Order #	Order Date	Bill-to Name	Status	Amount	Action
<input type="checkbox"/>	000000053	Nov 3, 2016 12:01:44 AM	000000080	Nov 3, 2016 12:00:32 AM	DME3 QA	Paid	\$55.00	View
<input type="checkbox"/>	000000054	Nov 3, 2016 12:02:20 AM	000000080	Nov 3, 2016 12:00:32 AM	DME3 QA	Paid	\$109.00	View

Figure 5.5: Invoice Grid Showing Invoices Created for a Particular Order

Clicking View on an invoice will open the invoice and from there you can create an Online Refund by creating a Credit Memo from within the Invoice Record.



Account Information

Figure 5.6: Credit Memo Button inside Invoice Record

When creating a Credit Memo, you could refund all or part of an invoice. To issue a partial refund, alter the numbers in the column Qty to Refund. Don't forget to click 'Update Qty's' button.

Items to Refund								
Product	Price	Qty	Return to Stock	Qty to Refund	Subtotal	Tax Amount	Discount Amount	Row Total
Aim Analog Watch SKU: 24-MG04	\$45.00	Ordered 1 Invoiced 1	<input type="checkbox"/>	<input type="text" value="1"/>	\$45.00	\$0.00	\$0.00	\$45.00
Endurance Watch SKU: 24-MG01	\$49.00	Ordered 1 Invoiced 1	<input type="checkbox"/>	<input type="text" value="1"/>	\$49.00	\$0.00	\$0.00	\$49.00
Breathe-Easy Tank SKU: WT09-M-Yellow Color: Yellow Size: M	\$34.00	Ordered 1 Invoiced 1	<input type="checkbox"/>	<input type="text" value="1"/>	\$34.00	\$0.00	\$0.00	\$34.00
Gwyn Endurance Tee SKU: WS01-S-Green Color: Green Size: S	\$24.00	Ordered 1 Invoiced 1	<input type="checkbox"/>	<input type="text" value="1"/>	\$24.00	\$0.00	\$0.00	\$24.00
<input type="button" value="Update Qty's"/>								

Figure 5.7: Quantity to Refund Column on Items to Refund Grid

To complete the Credit Memo, click the Refund button.

Refund Totals

Subtotal	\$152.00
Refund Shipping	<input type="text" value="0"/>
Adjustment Refund	<input type="text" value="0"/>
Adjustment Fee	<input type="text" value="0"/>
Grand Total	\$152.00

☐ Append Comments
☐ Email Copy of Credit Memo

Figure 5.8: Credit Memo Summary Section with Refund Totals

5.4. Creating an order in the Admin

Payment & Shipping Information

Payment Method

- ☐ CyberSource PayPal Billing Agreements
☐ CyberSource Stored Cards
☒ CyberSource

* Credit Card Type

Visa ▼

* Credit Card Number

4111111111111111

* Expiration Date

05 - May ▼ 2024 ▼

* Card Verification Number

123

- ☐ Check / Money order

Shipping Method *

You don't need to select a shipping method.

Figure 5.9: Creating new order with Silent Order POST

Simply create an order as you usually would: Sales > Orders > Create New Order.

✓ Your order has been successfully created!

ORDER VIEW

[Information](#)

[Invoices](#)

[Credit Memos](#)

[Comments History](#)

[Transactions](#)

Order & Account Information

Order # 000001580 (The order confirmation email was sent)

Order Date	Sep 5, 2019, 2:12:47 PM
Order Status	Complete
Purchased From	Main Website Main Website Store Default Store View

Account Information [Edit Customer](#)

Customer Name	Veronica Costello
Email	roni_cost@example.com
Customer Group	General

Address Information

Billing Address [Edit](#)

Veronica Costello
6146 Honey Bluff Parkway
Calder, Michigan, 49628-7978
United States
T: [\(555\) 229-3326](#)

Figure 5.10: Order confirmation

Note: CyberSource PayPal is not available with create order in the Magento Admin.

6. Best security practices

According to industry best practices, the hosting environment should enable rate limiting or implement a service like Cloudflare that will protect against these types of attacks.

As a starting point a merchant should have their environment setup with rate limits for all web applications and additional limits for the following endpoints:

On the merchants hosting environment for the following urls:

- **/cybersource3ds/cca/requestToken**
 - Limit to 5 POST requests per session per minute
 - Limit to 20 POST requests per IP per minute for unknown networks
 - Limit to 500 POST requests per IP per minute for known networks
- **/cybersource/index/loadSilentData/**
 - Limit to 5 POST requests per session per minute
 - Limit to 20 POST requests per IP per minute for unknown networks
 - Limit to 500 POST requests per IP per minute for known networks
- **/cybersource/index/placeorder/**
 - Limit to 5 POST requests per session per minute
 - Limit to 20 POST requests per IP per minute for unknown networks
 - Limit to 500 POST requests per IP per minute for known networks

These numbers are recommendations only and each environment should be monitored on a high and average traffic volume day to determine the actual values of the rate limit that will not affect the consumer experience.

As additional security measures, the following could be done:

- Implement captcha as an option during checkout (see [Section 3.1.1](#)).
- Modify the payment module to allow for session / IP rate limiting in Magento web application

7. CyberSource Documentation

The CyberSource extension utilizes services and connection methods found in the following related documentation:

- Secure Acceptance Web/Mobile
http://apps.cybersource.com/library/documentation/dev_guides/Secure_Acceptance_WM/Secure_Acceptance_WM.pdf
- Secure Acceptance Silent Order POST
http://apps.cybersource.com/library/documentation/dev_guides/Secure_Acceptance_SOP/Secure_Acceptance_SOP.pdf
- SOAP Toolkit API
http://apps.cybersource.com/library/documentation/dev_guides/SOAP_Toolkits/SOAP_toolkits.pdf
- Credit Card Services
http://apps.cybersource.com/library/documentation/dev_guides/CC_Svcs_SO_API/Credit_Cards_SO_API.pdf
- Decision Manager
 - Developer Guide
https://ebctest.cybersource.com/ebctest/documentation/resource/DM_Dev_Guide_SO_API/DM_developer_guide_SO_API.pdf
 - Device Fingerprinting Guide
https://ebctest.cybersource.com/ebctest/documentation/resource/DM_Device_Fingerprint_Guide/DecisionManagerDeviceFingerprint.pdf
 - Reporting Guide
https://ebctest.cybersource.com/ebctest/documentation/resource/DM_Report_Guide/DMReportingGuide.pdf
- Payment Authentication Services
http://apps.cybersource.com/library/documentation/dev_guides/Payer_Authentication_SO_API/Payer_Authentication_SO_API.pdf

- Token Management Services

http://apps.cybersource.com/library/documentation/dev_guides/Token_Management/SO_API/TMS_SO_API.pdf

- PayPal Express Checkout Services

Available on request

- Online Bank Transfer Services

http://apps.cybersource.com/library/documentation/dev_guides/OnlineBankTransfers_SO_API/OnlineBankTransfers_SO_API.pdf

- Electronic Check Services

http://apps.cybersource.com/library/documentation/dev_guides/EChecks_SO_API/Electronic_Checks_SO_API.pdf

- Klarna Services

http://apps.cybersource.com/library/documentation/dev_guides/Klarna_SO_API/Klarna_SO.pdf

- Visa Checkout

http://apps.cybersource.com/library/documentation/dev_guides/VCO_SO_API/Visa_Checkout_SO_API.pdf

- Apple Pay

http://apps.cybersource.com/library/documentation/dev_guides/apple_payments/SO_API/Apple_Pay_SO_API.pdf

- Tax Calculation Service

http://apps.cybersource.com/library/documentation/dev_guides/Tax_SO_API/Tax_SO_API

- Delivery Address Verification Services

http://apps.cybersource.com/library/documentation/dev_guides/Verification_Svcs_SO_API/Verification_Svcs_SO_API.pdf

- Account Updater

http://apps.cybersource.com/library/documentation/dev_guides/Account_Updater_UG/Account_Updater.pdf

- Reporting Developer Guide

http://apps.cybersource.com/library/documentation/dev_guides/Reporting_Developers_Guide/Reporting_DG.pdf