

# Adaptive Subscriptions: User Manual

Version 3.1 – For Magento® 2.1+ – Updated 2019-04-25

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## Installation

The installation process differs based on where you purchased our extension.

### If you purchased from Magento Marketplace

**NOTE: You will not be able to install by downloading the extension files from Marketplace.**

The Marketplace download does not include all of the necessary files. You must install using either the Web Setup Wizard or Composer, with the following directions.

#### Step 1: Install

We strongly recommend installing, configuring, and testing all extensions on a development website before installing and using them in production.

If you encounter any problems during this process, please contact Magento Marketplace Support.

#### *Via Web Setup Wizard*

Follow the official guide here to install using the Web Setup Wizard:

[http://docs.magento.com/marketplace/user\\_guide/quick-tour/install-extension.html](http://docs.magento.com/marketplace/user_guide/quick-tour/install-extension.html)

#### *OR Via Composer (command-line/SSH)*

If you would prefer, you can also install using Composer rather than the Web Setup Wizard. This requires proficiency with your server's command line. Ensure your server has composer set up and linked to your Magento Marketplace account (including repository <https://repo.magento.com>). Then in SSH, from your site root, run the following commands:

```
composer require paradoxlabs/subscriptions:*  
php bin/magento module:enable -c ParadoxLabs-TokenBase ParadoxLabs-Subscriptions  
php bin/magento setup:upgrade
```

If your site is in production mode, you will also need to run these commands to recompile sources:

```
php bin/magento setup:di:compile  
php bin/magento setup:static-content:deploy
```

These commands should load and install the extension packages from the Marketplace repository.

Composer installation is only available for Marketplace purchases.

#### Step 2: Configure

See the configuration section below.

## If you purchased from [store.paradoxlabs.com](https://store.paradoxlabs.com)

**NOTE:** This file upload installation applies **only** to purchases from the ParadoxLabs Store. Marketplace purchases must follow the Marketplace installation directions above.

### Step 1: Upload files

Upload all files within the **upload** folder into the root directory of Magento.

Folder in Download	Folder on Server
/upload/app/	→ /app/

### Step 2: Run Installation

In SSH, from your site root, run the following commands:

```
php bin/magento module:enable -c ParadoxLabs-TokenBase ParadoxLabs-Subscriptions
php bin/magento setup:upgrade
```

These will enable the module, flush the cache, and trigger the installation process to run.

If your site is in production mode, you will also need to run these commands to recompile sources:

```
php bin/magento setup:di:compile
php bin/magento setup:static-content:deploy
```

### Step 3: Configure

See the configuration section below.

## Updating Adaptive Subscriptions

All extension updates are free. Just follow these directions to update to the latest version.

### If you purchased from Magento Marketplace

#### Via Web Setup Wizard

Follow the official guide here on using the Web Setup Wizard:

[https://docs.magento.com/m2/ce/user\\_guide/system/web-setup-extension-manager.html](https://docs.magento.com/m2/ce/user_guide/system/web-setup-extension-manager.html)

If you've already set up and installed with the Web Setup Wizard, you just need to open it, click 'Review Updates', and follow the process.

#### OR Via Composer (command-line/SSH)

If you installed with composer, you can update using the following commands, in SSH at your site root:

```
composer update paradoxlabs/*
php bin/magento setup:upgrade
```

This will download and update to the latest extension version compatible with your system.

If your site is in production mode, you will also need to run these commands to recompile sources:

```
php bin/magento setup:di:compile
php bin/magento setup:static-content:deploy
```

### If you purchased from store.paradoxlabs.com

#### Step 1: Upload files

Log into your account at [store.paradoxlabs.com](https://store.paradoxlabs.com) and download the latest version.

Open the extension archive and extract it onto your composer.

Upload all files within the **upload** folder into the root directory of Magento.

Folder in Download	Folder on Server
/upload/app/	→ /app/

#### Step 2: Run Update

In SSH, from your site root, run the following commands:

```
php bin/magento setup:upgrade
```

If your site is in production mode, you will also need to run these commands to recompile sources:

```
php bin/magento setup:di:compile
php bin/magento setup:static-content:deploy
```

## Configuration

Open your Admin Panel and go to **Admin > Stores > Settings > Configuration > Catalog > Adaptive Subscriptions**. You'll find a settings page like the below.

### General

**Adaptive Subscriptions by ParadoxLabs**

Version Installed [store view] 3.1.0 (2019-04-24)

Enable [global]

Allow customers to cancel [store view]

Allow customers to pause [store view]

Group same-day subscriptions [global]   
If 'Yes', will attempt to group together matching subscriptions billing the same day (having same customer, shipping, and payment details).

Enable Shipping Fallback [global]   
If 'Yes', subscriptions will use the cheapest available shipping method if the customer's chosen method is unavailable. 'No' will put the subscription on hold.

Always add product option [global]   
If 'Yes', subscription-enabled products will always have a custom option to choose the subscription interval, even if only one choice is available. 'No' will allow you to add single-option subscription simple products to configurable, grouped, and bundle products.

Default products to one-time purchase [global]   
If 'Yes', when one-time purchase is allowed, subscription products will default to it, and users will not be required to select a subscription option. Otherwise, the subscription dropdown will be required and include 'One Time' as an option.

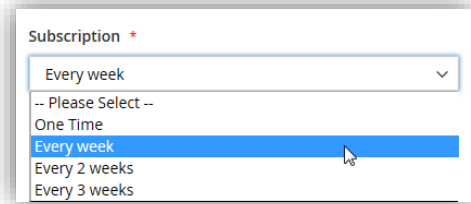
Enable public API [store view]   
If 'Yes', Magento's REST and GraphQL APIs will allow customer subscription management. Only enable this if you use them.

Product option label [global]   
Caution: Changing this value will not affect existing Subscription custom options.

Installation term [global]   
Enter the term to use for billings, as in: "Every week for 52 **installments**".  
 Caution: Changing this value will not affect existing Subscription custom options.

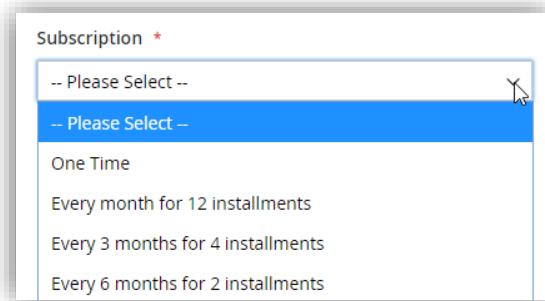
- **Enable:** Yes to enable the subscriptions module. If disabled, the tabs and grids will disappear, and subscription generation will stop.
- **Allow customers to cancel:** If yes, customers will have a 'cancel' button when viewing their subscription (if it is not already canceled or complete). Once canceled, you cannot rebill, edit, or reactivate a subscription. If no, the customer will have to contact you to cancel.
- **Allow customers to pause:** If yes, customers will have a 'pause' button when viewing their subscription (if it is active). While paused, the subscription will not rebill. The customer will be able to reactivate it themselves. If no, the customer will have to contact you to pause.
- **Group same-day subscriptions:** If yes, scheduled billing will look for any matching subscriptions due the same day, and run them together in the same order. A matching subscription is one that is due the same day, with identical customer, billing, payment, and shipping information.

- **Enable Shipping Fallback:** If yes, when the subscription’s original/chosen shipping method is unavailable, it will automatically use the cheapest available shipping method instead. If no, the subscription will be put on hold if its assigned shipping method is not available at time of billing.
- **Always add product option:** If yes, subscription products will always have a custom option added to choose the subscription interval, even if only one choice is available. If you set this to ‘no’, you can add single-option subscription simple products to configurable, grouped, and bundle products. In that situation, communicating the subscription details to the customer is up to you.
- **Default products to one-time purchase:** If yes, when one-time purchasing is allowed for a product, those products will default to it and users will not be required to select an option to add it to cart. Otherwise, the subscription custom option dropdown will be required, and users can select ‘One-Time’ to purchase it without any renewal.
- **Enable public API:** If yes, Magento’s REST and GraphQL APIs will allow customer subscription management. We recommend leaving this disabled unless you use them (most will not).
- **Product option label:** This text (“Subscription”) is set as the default custom option label for each subscription product:



We strongly recommend setting this value before creating any subscription products, and not changing it afterward. Changing the text **will not** impact any custom options that were already generated.

- **Installment term:** This text (“installments”) is used to refer to subscription recurrences in several locations, particularly length-limited subscription options:



We strongly recommend setting this value before creating any subscription products, and not changing it afterward. Changing the text **will not** impact any custom options that were already generated.

## Scheduling

This section allows you to customize how subscription scheduling and billing occurs.

### Scheduling

**Enable automatic scheduled billing** [global]

If 'No', subscriptions will not be rebilled automatically via Magento's scheduler. **Caution:** Changing from 'No' to 'Yes' will result in all outstanding subscriptions running on the next billing event.

**Schedule on days of week** [store view]

Sunday  
Monday  
Tuesday  
Wednesday  
Thursday

Choose days of the week installments should be scheduled on. Scheduling will choose the next available day after the expected billing date. Any changes will not affect existing scheduled installments.

**Schedule on days of month** [store view]

1  
2  
3  
4  
5

Choose days of the month installments should be scheduled on. Scheduling will choose the next available day after the expected billing date. Any changes will not affect existing scheduled installments.

**Schedule on months** [store view]

January  
February  
March  
April  
May

Choose months installments should be scheduled on. Scheduling will choose the next available day after the expected billing date. Any changes will not affect existing scheduled installments.

**Blackout Dates** [store view]

Enter any specific dates installments should **NOT** be scheduled on, one per line. Scheduling will choose the next available day. Any changes will not affect existing scheduled installments, so always enter dates farther in advance than your longest subscription interval.

- **Enable automatic scheduled billing:** Yes to enable automatic billing via Magento's cron scheduler. If disabled, subscriptions will never run unless you trigger them manually.
- **Schedule on days of week:** Choose days of the week installments should be scheduled on. For example, if you deselect Saturday and Sunday, subscriptions will only schedule on Monday through Friday.
- **Schedule on days of month:** Choose days of the month installments should be scheduled on.
- **Schedule on months:** Choose months installments should be scheduled on.



- **Blackout dates:** Enter any specific dates installments should **NOT** be scheduled on, one per line. Use this to skip holidays, etc. Note: Any changes will not affect existing scheduled installments, so always enter blackout dates farther in advance than your longest subscription interval.

See the

Billing and Scheduling section for more info on how scheduling occurs.

### Billing Failed Email

This section allows you to control the billing failure notification. This is sent to an administrator any time a subscription fails to bill, for any reason: Payment failure, product disabled or out of stock, shipping method unavailable, etc.

**Billing Failed Email**

This will alert you (administrator) whenever a subscription fails to bill, for any reason.

**Enable** [global]

**Billing Failed Email Sender** [store view]

**Billing Failed Email Receiver** [store view]

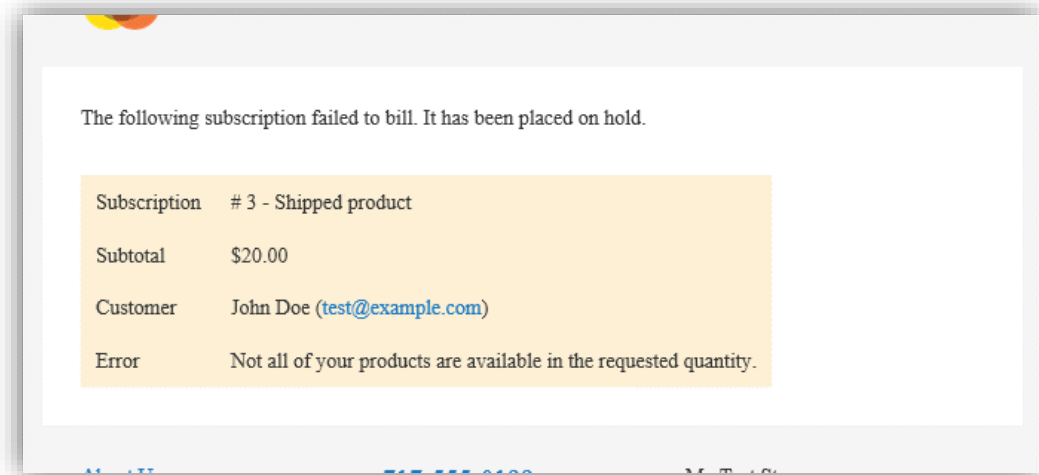
**Billing Failed Template** [store view]   
Email template chosen based on theme fallback when "Default" option is selected.

**Send Billing Failed Email Copy To** [store view]   
Separate by ",".

**Send Billing Failed Email Copy Method** [store view]

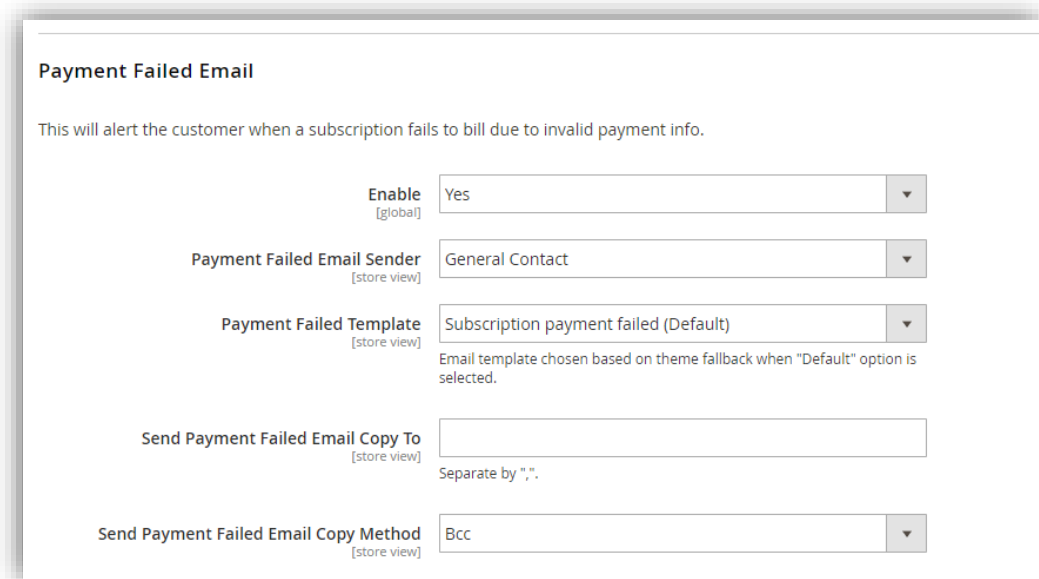
- **Enable:** If yes, an email will be sent any time a subscription fails to bill.
- **Billing Failed Email Sender:** Any billing failure emails would be sent 'from' this contact.
- **Billing Failed Email Receiver:** Any billing failure emails would be sent to this contact.
- **Billing Failed Template:** The billing failure email will use the selected template. You can customize the default template through the **Admin > Marketing > Communications > Email Templates** section.
- **Send Billing Failed Copy To:** If you want the emails to go to multiple contacts, enter the additional emails in this field, separated by commas.
- **Send Billing Failed Email Copy Method:** Choose 'CC' to include all contacts on one email; 'Bcc' to send a separate email to each.

The default email looks like:



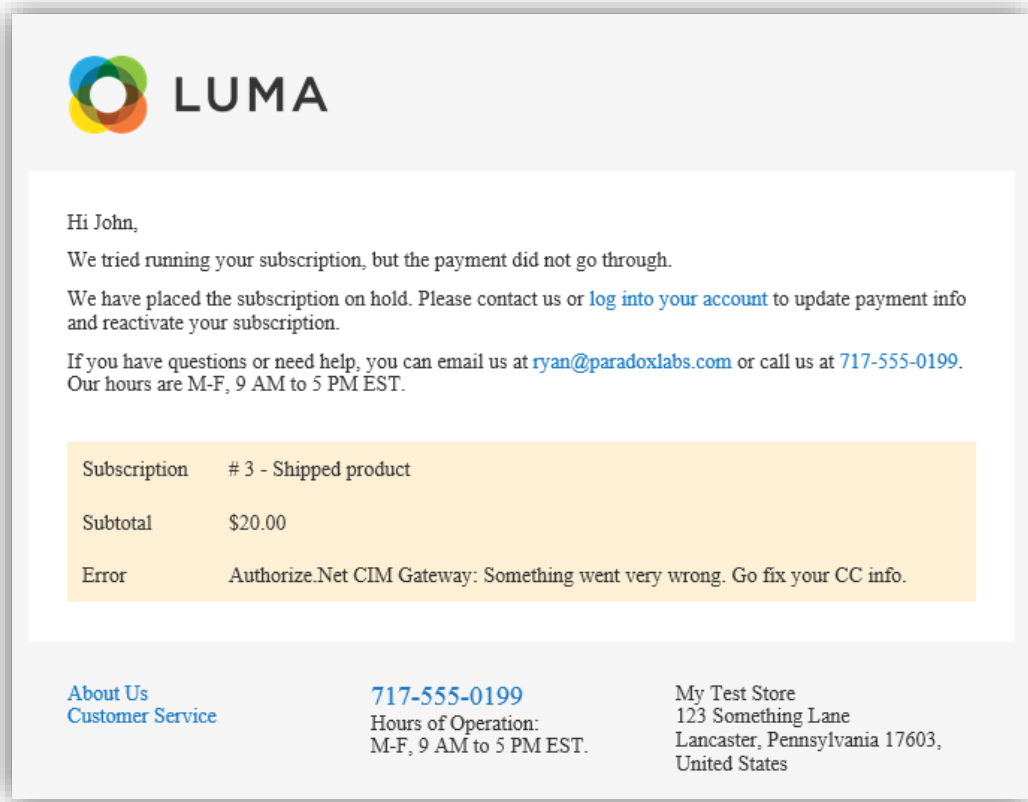
### Payment Failed Email

This section allows you to control the payment failure email. This is sent to the customer if their subscription fails with a payment error (expired CC, insufficient funds, etc.). Customers will not be notified of any other failures.



- **Enable:** If yes, the customer will be notified of subscription rebilling payment failures.
- **Payment Failed Email Sender:** Any payment failure emails would be sent 'from' this contact.
- **Payment Failed Template:** The payment failure email will use the selected template. You can customize the default template through the **Admin > Marketing > Communications > Email Templates** section.
- **Send Payment Failed Copy To:** If you want the emails to go to multiple contacts, enter the additional emails in this field, separated by commas.
- **Send Payment Failed Email Copy Method:** Choose 'CC' to include all contacts on one email; 'Bcc' to send a separate email to each.

The default email looks like:



### Billing Notice Email

This section allows you to control the billing notice email. This is sent to the customer in advance of their subscriptions' scheduled installment dates.

### Billing Notice Email

This will notify the customer in advance of when their subscription is due to rebill.

<b>Enable</b> <small>[global]</small>	<input type="text" value="Yes"/>
<b>Days in Advance to Notify</b> <small>[store view]</small>	<input type="text" value="7"/>
<b>Billing Alert Email Sender</b> <small>[store view]</small>	<input type="text" value="General Contact"/>
<b>Billing Alert Template</b> <small>[store view]</small>	<input type="text" value="Subscription billing notice (Default)"/>
	<small>Email template chosen based on theme fallback when "Default" option is selected.</small>
<b>Send Billing Alert Email Copy To</b> <small>[store view]</small>	<input type="text"/>
	<small>Separate by ",".</small>
<b>Send Billing Alert Email Copy Method</b> <small>[store view]</small>	<input type="text" value="Bcc"/>

- **Enable:** If yes, the customer will be notified of upcoming subscription installments.
- **Days in Advance to Notify:** This is the number of days before the billing date that customers should be notified of an upcoming installment. The email will be sent at approximately the same time of day as they placed the original order.
- **Billing Alert Email Sender:** Emails would be sent 'from' this contact.
- **Billing Alert Template:** The email will use the selected template. You can customize the default template through the **Admin > Marketing > Communications > Email Templates** section.
- **Send Billing Alert Copy To:** If you want the emails to go to multiple contacts, enter the additional emails in this field, separated by commas.
- **Send Billing Alert Email Copy Method:** Choose 'CC' to include all contacts on one email; 'Bcc' to send a separate email to each.

The default email looks like:



Hi Ryan,

We hope you're enjoying your subscription. This is a reminder that it's scheduled to renew on 11/20/17.

Please contact us or [log into your account](#) to change your subscription.

If you have questions or need help, you can email us at [support@example.com](mailto:support@example.com).

Subscription # 25 - Medicine Ball (8lb) Subscription

Subtotal \$9.99

Scheduled 11/20/17

Shipping To  
Ryan Hoerr  
123 Test Ln  
Lancaster, Pennsylvania, 17603  
United States  
T: 111-111-1111

Billing To  
Visa XXXX-0027  
Ryan Hoerr  
9th Floor  
Lancaster, Pennsylvania, 17603  
United States  
T: 111-111-1111

## Creating a Subscription Product

Once you've configured the module, you'll want to create a subscription product. Start by creating a new product, or editing the product you want to turn into a subscription, in **Admin > Products > Catalog**. On the product form, go to the **Subscriptions** section toward the bottom. You should see options like the following.

The screenshot shows the 'Medicine Ball (8lb) Subscription' form. It includes a 'Subscription' section with 'Enable' and 'Allow one-time purchase' toggle buttons. Below is the 'Subscription Options' section, which contains a table with the following columns: Frequency, Length, Installment Price, and Adjustment Price. The table has four rows of options. A dropdown menu is open under the 'Length' column of the first row, showing options for Days, Weeks, Months, and Years.

Frequency	Length	Installment Price	Adjustment Price
Every 1	Months	for ∞ installments of \$ 4.00	plus \$ upfront
Every 6	Months	for ∞ installments of \$ 3.00	plus \$ upfront
Every 12	Months	for ∞ installments of \$ 2.00	plus \$ upfront
Every 18	Months	for ∞ installments of \$ 2.00	plus \$ upfront

- **Enable:** This controls whether the rest of the subscription settings actually take effect. If yes, a 'subscription' custom option will be generated on save, and customers will be able to purchase the item as a subscription. If no, the item cannot be purchased as a subscription. Changing this **will not affect** any subscriptions already purchased.
- **Allow one-time purchase:** If yes, customers will be able to choose a 'One time' option for the product, and no subscription would be generated.
- **Subscription Options:** Enter the interval options you want the customer to be able to choose from. If there is only one option, and one-time purchase is not enabled, the product will always be a subscription—customers will not have to choose a subscription interval to purchase.
  - **Frequency:** Enter the subscription interval, in conjunction with the unit dropdown (as in: Every 30 days, every 3 months, etc.).
  - **Unit:** Choose the unit for the subscription interval. Possible values: Day, week, month, year
  - **Length:** If entered (greater than 0), the subscription will run for this number of installments before ending. Otherwise, it will continue indefinitely (until failure or canceled).
  - **Installment Price:** This will override the normal product price if (and only if) the product is purchased as a subscription. The subscription price will displayed in the cart and through checkout. It will **not** be reflected on the product page. If no installment price is entered, the normal product price will be used.
  - **Adjustment Price:** This will be added to the subscription price for the initial purchase only. The value can be positive or negative. Use this to add an additional setup fee, or give a first-

installment discount. You can discount the initial purchase price all the way down to \$0.00. (Note, some payment methods do not support \$0 checkout.)

If you do not have a 'Subscription' tab, verify that the subscription attributes are in the product attribute set.

### Product Type Compatibility

Subscription compatibility with product types depends on the features and limitations of each product type. Multiple-option subscriptions require custom options, so products that do not support custom options (like bundled products, or child-products of bundled, configurable, or grouped products) cannot have multiple options.

- **Simple products:** All subscription functionality is compatible.
- **Virtual products:** All subscription functionality is compatible.
- **Downloadable products:** All subscription functionality is compatible.
- **Configurable products:** All subscription functionality is compatible. Note that you can have multiple subscription options on the configurable product itself, but you **cannot** have multiple options on child products. You can add subscription simple or virtual products to a configurable product, as long as they do not have a custom option (only one interval).
- **Grouped products:** You cannot have group product subscriptions (you can't purchase a grouped product directly). You can add subscription simple or virtual products to a grouped product, as long as they do not have a custom option (only one interval).
- **Bundled products:** You can have single-interval bundled products; you cannot allow choice of intervals (no custom option support). Bundled products have a different form because of this limitation. You can add subscription simple or virtual products to a bundle product, as long as they do not have a custom option (only one interval).

### Subscription Pricing

If the customer purchases a product as a subscription, the price will be calculated by the following logic: The installment price will override the normal product price, if any. The adjustment price (positive or negative) will be added to the installment price, for the initial purchase only.

Normal Price	Installment Price	Initial Order Adjustment	Initial Order Price	Later Installment Price
\$50.00	-	-	\$50.00	\$50.00
\$50.00	\$35.00	-	\$35.00	\$35.00
\$50.00	\$35.00	\$10.00	\$45.00	\$35.00
\$50.00	\$35.00	-\$10.00	\$25.00	\$35.00
\$50.00	-	-\$10.00	\$40.00	\$50.00

You can skip the installment price, or the adjustment price, or both. An installment price will override any complex pricing the product might have (regular price, special price, grouped price, tiered price).

By default, the installment price for a subscription is calculated once when the subscription is purchased, and all installments have the same price. Changing a product's price will not affect the price of existing subscriptions for that product. This behavior can be changed by customization.

For more advanced pricing control (percentage discounts and more), consider a cart price rule (below).

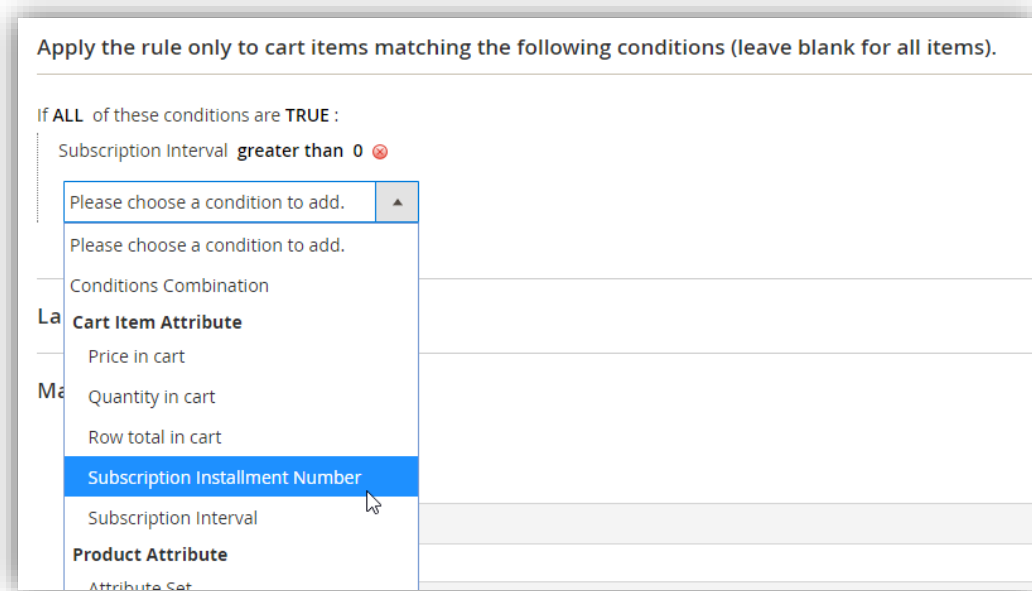


Currency is automatically converted for store views according to standard Magento currency handling. All prices should be entered in your base currency.

## Cart Price Rules

You can also alter subscription prices using Magento's **Cart Price Rules**. You will find two new condition options, 'Subscription Interval' and 'Subscription Installment Number'.

- Subscription Installment Number:** This is the installment number of the subscription being purchased. For the initial purchase, this is 1. For the second billing, the installment number is 2, for the third billing it is 3, etc.  
 To apply a special discount to the initial order only, add a condition '*Subscription Installment Number equal to 1*'.
- Subscription Interval:** This is the numeric interval the customer added to their cart. For example, if a product's interval options are 1, 2, or 3 weeks, the interval would be 1, 2, or 3. If the customer chose to purchase it one-time (with no subscription), the interval will be 0.  
 To apply a special discount to subscription purchases only, add a condition '*Subscription Interval greater than 0*'.



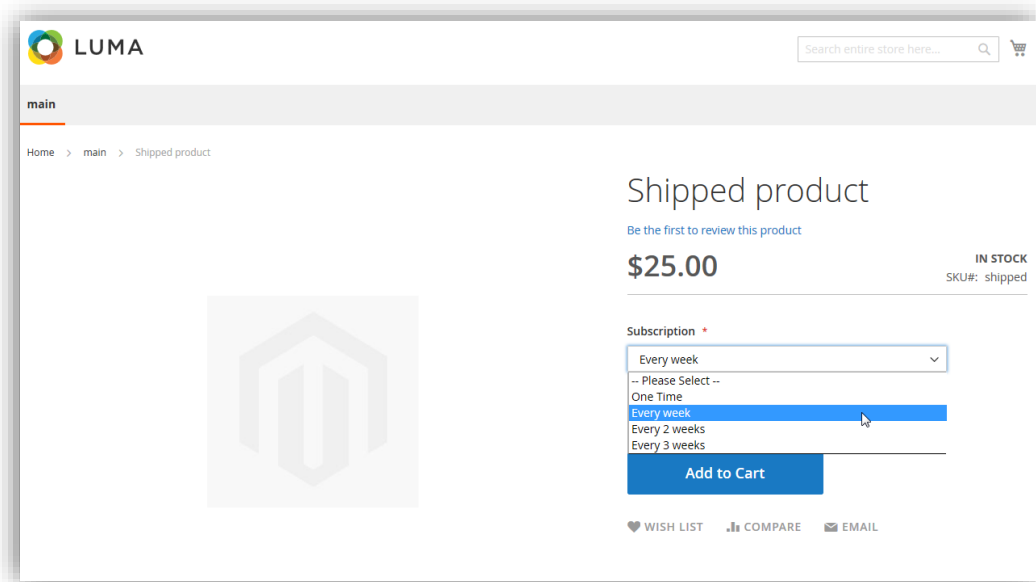
Note: Coupons *only* apply to the initial purchase of a subscription. By default, coupon codes are intentionally not copied from the original order to the subscription and later orders. That means that if you require a coupon code, a cart price rule will only apply to the initial order. If you do not require a coupon code, the cart price rule may apply for the entire duration of the subscription.

Per standard Magento behavior, discounts from Cart Price Rules show up as a 'Discount' on the order totals. They do not display per-item on the frontend.

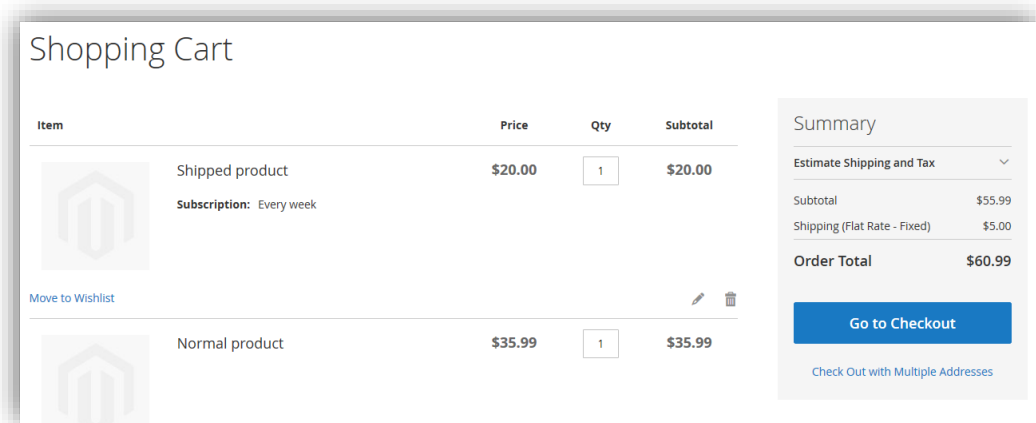
## Purchasing a Subscription

To purchase a subscription, just find it and go through the normal purchase process.

Locate your subscription product on the frontend or admin order creation. The product will have a 'subscription' option, allowing you to choose from the allowed intervals you set for that product.



Choose an option, and proceed through checkout. That's all there is to it. The option you chose will be displayed under the product info throughout the process, and the subscription price (if any) will be shown. You can purchase any number of subscriptions and non-subscription items at the same time.



If you purchase a subscription as a guest, you will be automatically registered during checkout. An email will be sent with login instructions.

## Payment Methods

Not all payment methods can be used to purchase subscriptions. Payment methods that are compatible include:

- **ParadoxLabs payment methods:** This includes **Authorize.Net CIM**, **First Data**, and **Stripe**.
- **Magento Vault payment methods:** The Vault adds stored card support for some default and third-party payment methods. This includes the built-in **Braintree** and **PayPal Payments Pro** payment methods. **Any third-party payment method supporting Magento Vault** should also be compatible. Some payment methods may require additional compatibility code to handle the rebilling process.  
If you use a Vault-compatible payment method, with the Vault setting enabled, customers will be able to purchase subscriptions using that payment method. Be aware that as of Magento 2.3, the Vault does not provide the ability to add or edit credit cards outside of checkout.
- **Offline payment methods:** This includes Bank Transfer, Cash on Delivery, Check / Money Order, Purchase Order, Zero-Total Checkout, and any third-party payment method in the `offline` payment method group.

Also note: Adaptive Subscriptions supports \$0 checkout, but not all payment methods do. Of the payment methods listed above, Braintree **does not** support \$0 checkout. Third-party payment methods may or may not.

## Shipping Methods

All normal shipping methods are compatible with subscriptions. Shipping cost is recalculated for each installment to account for rate changes over time.

All subscription installments will use the same shipping method as the original order, unless the shipping method is changed by an administrator. If the order shipping method is not available, the system will attempt to automatically fall back to the cheapest shipping method that is available.

Note that free shipping rules with a minimum order total can cause unexpected behavior: Purchase of a subscription plus other items can pass the minimum for free shipping, while the subscription alone does not. If this happens, the subscription installments should fall back to the cheapest alternative shipping method.

If you wish to force all subscription installments to use a specific shipping method other than what the customer chose at checkout, there is a hidden setting that can be used to do so (`subscriptions/general/force_shipping_method`). Please contact us if needed.

## Managing a Subscription

### As a customer

Customers can view and manage their subscriptions from My Account, via an added 'Subscriptions' menu item on the left navigation.


The screenshot displays the 'My Subscriptions' page in the LUMA system. The page header includes the LUMA logo, a search bar, and a currency selector set to USD - US Dollar. The left sidebar contains a navigation menu with 'My Subscriptions' highlighted. The main content area shows a table of 15 subscription items, sorted by Reference Number (Ref #). Each row in the table includes a Ref #, Description, Status, Frequency, Subtotal, Last Run, and Next Run, along with 'View' and 'Edit' links. A note at the bottom of the table states: 'Note: Subtotals do not include shipping, tax, or other possible surcharges. Actual order totals may vary over time.'

Ref #	Description	Status	Frequency	Subtotal	Last Run	Next Run	
1000000092	Medicine Ball (8lb) Subscription	Active	Every Month	\$2.00	1/17/18	7/17/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000091	Free subscription	Active	Every Month	\$0.00	1/16/18	3/16/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000090	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000089	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000088	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000087	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000086	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000085	Unique Options Test	Active	Every Month	\$30.00	1/15/18	2/15/18	<a href="#">View</a>   <a href="#">Edit</a>
1000000082	Medicine Ball (8lb) Subscription	Active	Every Month	\$2.00	1/15/18	2/14/18	<a href="#">View</a>   <a href="#">Edit</a>

Clicking 'View' will display information about the subscription item, billing and shipping addresses, payment info, frequency, and billing history.

Depending on the current subscription status and settings, the customer may have buttons allowing them to 'Pause', 'Reactivate', or 'Cancel'.

Subscription # 1000000082 ACTIVE Pause Cancel Edit

Item	Price	Qty	Subtotal
 <p>Medicine Ball (8lb) Subscription Subscription: Every month</p>	\$2.00	1	\$2.00

---

Details

<p><b>Bill To</b></p> <p>Visa XXXX-0027 (Expires 12/2022) Test Account 123 Test Lane Test City, Pennsylvania, 17603 United States T: 111-111-1111</p>	<p><b>Ship To</b></p> <p>Test Account 123 Test Lane Test City, Pennsylvania, 17603 United States T: 111-111-1111</p>
---	--

**Subscription**

Medicine Ball (8lb) Subscription

**Runs every** 1 Month

**Last run** Jan 15, 2018

**Next run** Feb 14, 2018

---

History

Date	Order #	Description
Jan 15, 2018	000000703	Subscription billed. Order total: \$14.00
Dec 14, 2017	000000672	Subscription billed. Order total: \$14.00
Nov 14, 2017	000000635	Subscription created. Initial order total: \$11.99

If the subscription is not complete or canceled, the customer will also be able to 'Edit'. The edit form allows the customer to change billing/payment and shipping information. Payment account can be selected from any cards the customer has stored. The billing address is updated from that card. Shipping address can be selected from the customer's address book, or entered manually.

## Subscription # 1000000082

Any changes to the settings below will take effect with the next billing.

### Payment Information

**Payment Account \***

Visa XXXX-0027

To change your payment options, please go to [My Payment Data](#).

### Shipping Address

**Shipping Address \***

Test Account, 123 Test Lane, Test City, Pennsylvania 17603, United

[Save Subscription](#)

Any changes will take effect the next time the subscription runs.

### As an admin

As administrator, you have access to some more information and options than the customer. The subscriptions grid is located at **Admin > Sales > Subscriptions**.

Subscriptions

View All Logs

John Doe

Active filters: Keyword: John Doe Created: 01/01/2018 - ...

2 records found

ID	Description	Status	Firstname	Lastname	Created	Last Run	Next Run	Times Billed	Subtotal	Action
1000000094	Medicine Ball (8lb) Subscription	Active	John	Doe	Feb 7, 2018 11:51:40 AM	Feb 7, 2018 11:52:19 AM	Apr 7, 2018 12:51:40 PM	2	\$2.00	<a href="#">View</a>
1000000093	Medicine Ball (8lb) Subscription	Paused	John	Doe	Feb 7, 2018 11:34:24 AM	Feb 7, 2018 11:34:24 AM	Mar 7, 2018 11:34:24 AM	1	\$2.00	<a href="#">View</a>

Like other admin grids, you can customize the columns shown, sort, filter, and export the records. The keyword search field covers the customer name, email, description, subscription ID, and order IDs.

Click into a subscription to get the full information and edit form.

Subscription # 100000094 🔍 🔔 👤 paradox ▾

← Back Reset Bill Now Pause Cancel Save and Continue Edit Save Subscription

**SUBSCRIPTION**

Details

Payment

Shipping

History

### Subscription Details

**Product** Medicine Ball (8lb) Subscription (SKU: med-ball-sub)


**Description**

**Subtotal** \$2.00  
Note: Subtotals do not include shipping, tax, or other possible surcharges. Actual order totals may vary over time.

**Status** Active

**Started** Feb 7, 2018, 11:51 AM

**Last run** Feb 7, 2018, 11:52 AM

**Next run**  

**Number of times billed** 2

**Frequency: Every**

**Length**   
Number of cycles the subscription should run. 0 for indefinite.

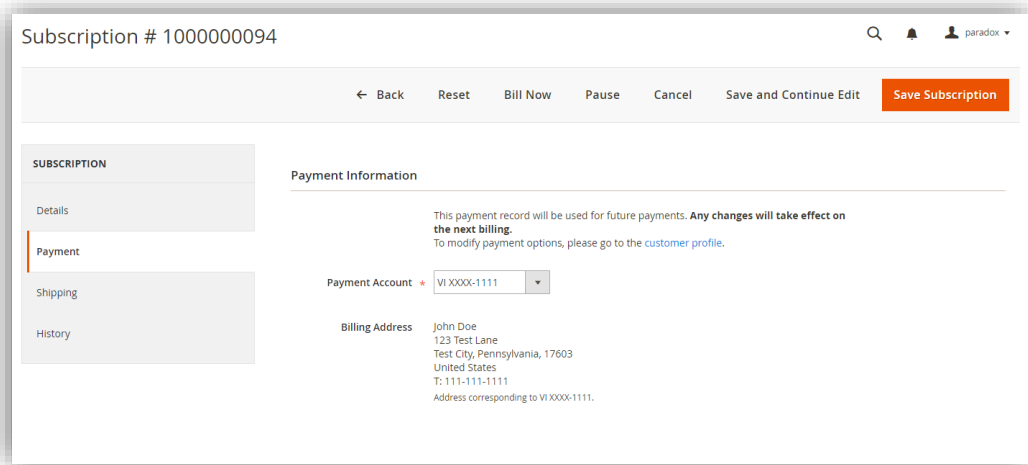
**Customer** [John Doe \(tes2387@example.com\)](#)

**Purchase Point** Default Store View

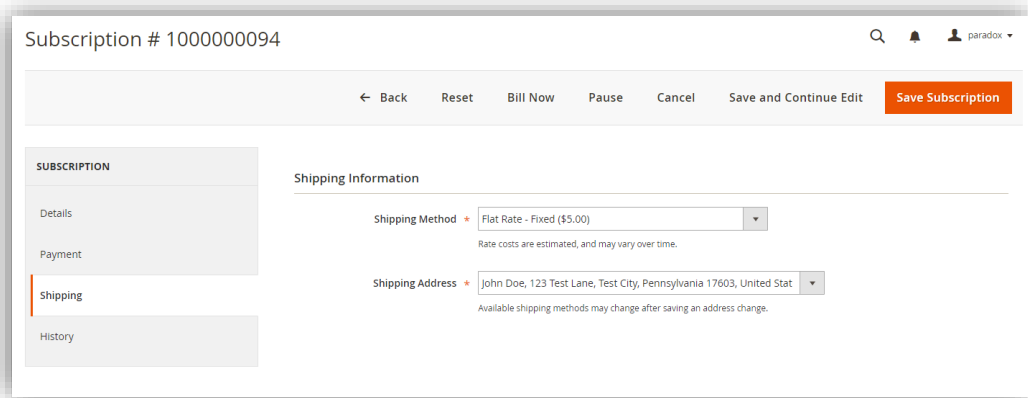
**Notes**

The top buttons allow you to change the subscription status, based on the current status and available options.

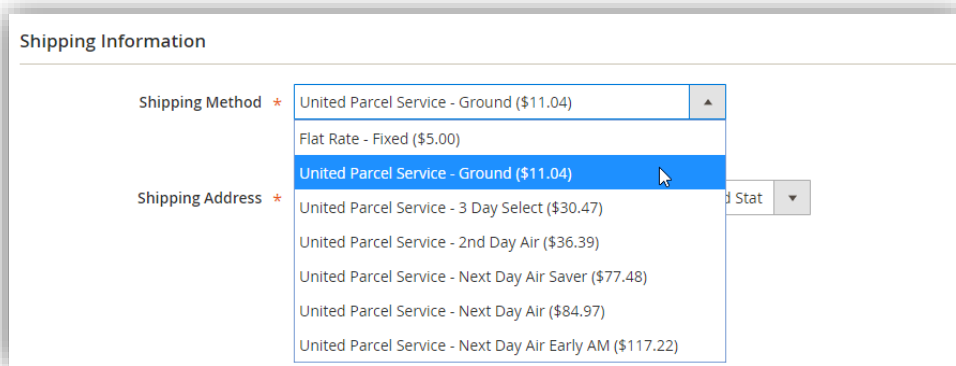
The form allows you to change the subscription description, next run (installment) date, frequency, and length. These options are not given to the customer directly. You can also add reference notes for internal use—these will only be visible to administrators.



The payment tab allows you to change the payment account, from the customer’s saved cards. You’ll need to go to the customer’s profile to add or edit cards before assigning to the subscription (ParadoxLabs payment methods only).

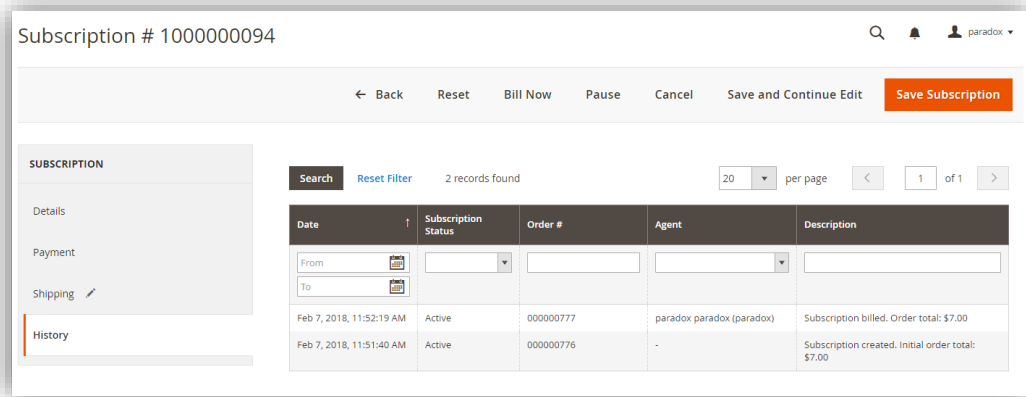


The shipping tab allows you to change the shipping method and shipping address of the subscription. You can choose from the customer’s stored addresses, or enter an address manually.





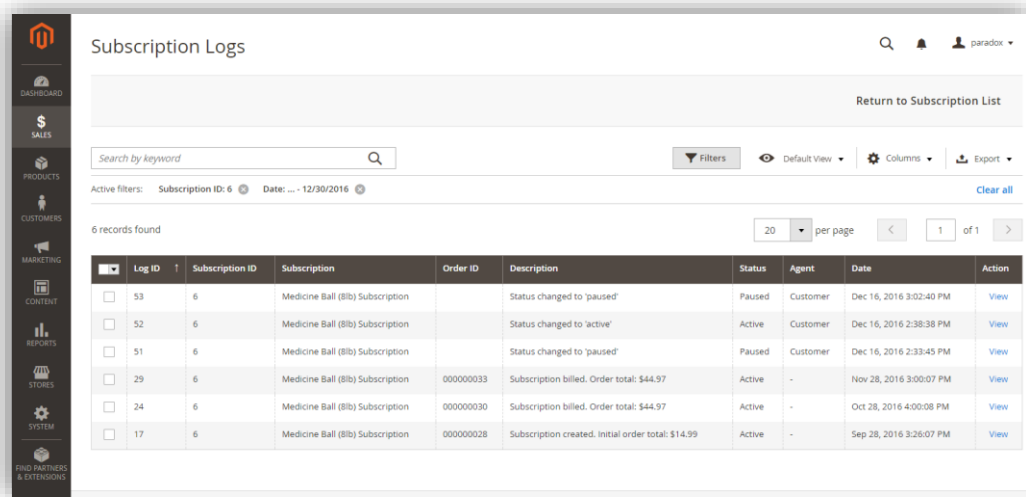
The available shipping methods and rates are based on the shipping address currently saved. If you change the shipping address, you will need to save the changes to see the rates for it. Rates for live shipping methods (UPS, USPS, FedEx, etc.) may change over time.



Finally, the history tab shows you everything that has happened with the subscription: Every billing, every failure, and every change of status or info. Note that customers will only see billing logs on the frontend.

Billing logs include the order number and total, and allow you to click through to the full order details.

Back on the subscription grid, you can use the 'View All Logs' button at the top to view and filter logs for all subscriptions at once. Use this to track billings and failures.



## Billing and Scheduling

By default, with scheduled billing enabled and Magento's cron set up, the billing process will run every hour. Each time it runs, it looks for any subscriptions with a 'next run' date in the past, and then generates an order for them.

**Disable scheduled billing in configuration to prevent subscriptions from running automatically.** We strongly recommend that you do this in any non-production environments to prevent any chance of accidental double-billing.

### Subscription grouping

If you have the '*Group same-day subscriptions*' setting enabled, the billing process will pull all subscriptions due through midnight of the day it runs, and group them together by fulfillment info (store, customer, payment record, shipping address, shipping method). Each resulting group of subscriptions will be billed together if any one of the subscriptions in that group is due. The net result is that all of the items from all of the subscriptions in that group will be combined into one single order, with one single shipping charge.

### Schedule calculation

Any time a subscription runs successfully, the 'next run' date (next installment) is calculated. This is always calculated forward from the last 'next run' date, meaning subscriptions will always follow their original schedule unless that 'next run' date explicitly changed.

For example, say a 1-month subscription was purchased March 15<sup>th</sup>, and so has a next run date of April 15<sup>th</sup>. But you run it ahead of time, on April 9<sup>th</sup>. The next run date after that would be calculated as April 15<sup>th</sup> + 1 month = May 15<sup>th</sup> – *not* May 9<sup>th</sup> (1 month from the date billed). Or, alternatively, your Magento cron malfunctions, and the subscription that was due April 15<sup>th</sup> doesn't get billed until the 18<sup>th</sup>. Again, the next run date would be calculated as April 15<sup>th</sup> + 1 month = May 15<sup>th</sup> – *not* May 18<sup>th</sup>. If desired, this behavior is easily customized in code.

### Schedule blackouts

Global settings allow you to restrict subscriptions to only bill on certain days of week, days of month, or months of year, and to specifically exclude additional blackout dates (like holidays). You'll find those settings in global Magento configuration (see Scheduling).

All billing calculations are subject to those scheduling blackout settings. Scheduling will choose the next available day after the expected run date. Following the above example, if you only allow billing on weekdays and May 15<sup>th</sup> is a Saturday, the next run date would be set to May 17<sup>th</sup> (Monday). If May 17<sup>th</sup> was set as a blackout date (say it's a holiday), the date would be May 18<sup>th</sup> instead. The following installment would then be on May 18<sup>th</sup> + 1 month = June 18<sup>th</sup>, assuming that is a weekday.

Any changes you make to the scheduling blackout settings will not affect existing scheduled run dates (schedule changes are not retroactive). They would take effect as each subscription bills and the next run date gets calculated.

Regardless of your scheduling blackout settings, billing is dependent on your billing process. If you disable automatic scheduled billing, and do not have anything else in place to run them on a schedule, they will only ever bill when you manually trigger them.

## Alternate ways to run billing

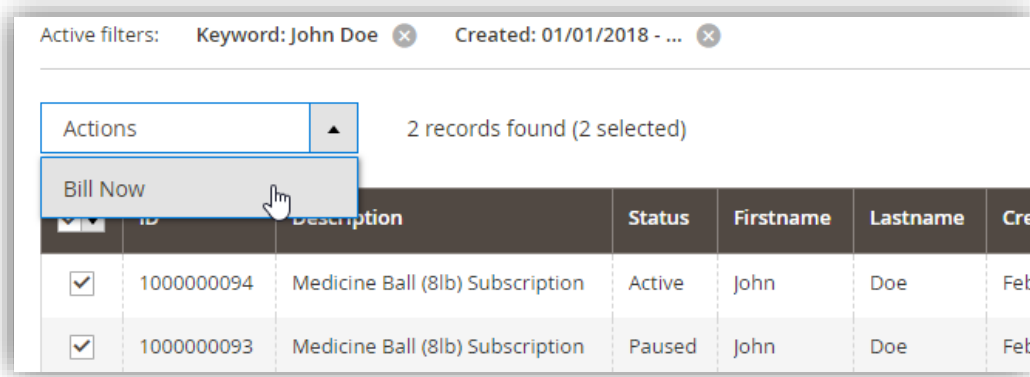
There are other ways you can run billing, in addition to the scheduled process.

**Command line:** We've included a 'bill' process in Magento's command-line interface. This runs the exact same process as the scheduled cron task, but with several benefits: (1) It will not interfere with any other Magento scheduled tasks; (2) you can control when it runs; and (3) you can control where it runs from (if you have a multi-server environment). Run it by executing the following command via SSH, from the site root:

```
php bin/magento subscriptions:bill
```

You could use this in a number of ways, including automated billing on a more limited basis than the normal scheduled task. For instance, you could set it as a cron job to run the 1<sup>st</sup> and 15<sup>th</sup> of every month, rather than every hour; or to only run overnight.

**Manual billing:** The admin subscriptions grid allows you to check particular subscriptions and mass-bill. This will generate an order for each of the subscriptions in question, regardless of whether those subscriptions were due or not.



You can use this to bill certain subscriptions ahead of schedule (say a customer calls in and wants to receive the product before a vacation), or to run all of your subscriptions under total manual control.

You will find this useful if you want complete control over exactly when subscriptions run. For example, If you have a club product that runs once every month, you may want to bill and fulfill all of them together, and you may not want to do that until you actually have the product ready. You can get everything ready, wait until the first business day of the month or whatever your schedule might be, and then select all of the relevant subscriptions and generate their orders all at once.

There is also a 'Bill Now' button on the edit page, which behaves the same way.

## Error Handling

Any error of any sort during the order generation process (rebilling a subscription) will place the subscription on hold. If the failure is payment-related (invalid/expired credit card, insufficient funds, etc.), the subscription will be moved to 'Payment Failed' status. For any other error (product disabled or out of stock, API failure, etc.), the subscription will be moved to 'Paused' status. Either way, the subscription will be on hold indefinitely until reactivated by customer or admin.

For payment failures, the customer will be sent a notification email, subject to the 'Payment Failed Email' settings discussed in Configuration.

For all subscription failures (including payment failures), the store owner will be sent a notification email, subject to the 'Billing Failed Email' settings. The customer will not be notified except for payment failures.

## Technical / Integration Details

### Architecture

Products are defined as subscriptions via added product attributes and metadata. The ‘subscription options’ grid is stored in `paradoxlabs_subscription_product_interval`, model `\ParadoxLabs\Subscription\Model\Interval`. Each subscription option becomes a custom option value on the product, and each custom option value has a corresponding Interval storing the product, option, and value IDs, and the additional subscription option data (frequency, prices, etc.). All of that is generated dynamically upon product save. If there is only one option for the product (no custom option), the values will be stored on the product subscription attributes and there will be no `Interval`.

Any custom subscription price is applied as `custom_option_price` when added to the cart. On purchase, after order place, any subscription items are converted into actual subscriptions (one per item) during the `sales_model_service_quote_submit_success` event.

Those subscriptions are stored in `paradoxlabs_subscription`, model `\ParadoxLabs\Subscriptions\Model\Subscription`, containing data on run schedule, length, customer, etc. The entirety of the fulfillment information (billing, payment, shipping, items) is stored in a quote, tied by column `quote_id`. On each billing, the storage quote is duplicated and then converted to an order.

Billing happens in `\ParadoxLabs\Subscriptions\Model\Service\Subscription::generateorder()`, by various entry points (admin interface, command line interface, crontab scheduled task).

Every change and occurrence regarding a subscription is recorded in table `paradoxlabs_subscription_log`, model `\ParadoxLabs\Subscriptions\Model\Log`.

If you are planning customizations: Start by exploring the `\ParadoxLabs\Subscriptions\Model\Service` folder. Use events or plugins wherever possible. If you must rewrite a class, extend the class and copy/replace as little code as possible to accomplish your goal. Events will be most resistant to breaking changes from future updates. Please never modify our code directly unless instructed to do so.

### Custom product attributes

- `subscription_active`
- `subscription_allow_onetime`
- `subscription_intervals`
- `subscription_unit`
- `subscription_length`
- `subscription_price`
- `subscription_init_adjustment`

### Custom database tables

- `paradoxlabs_subscription`
- `paradoxlabs_subscription_log`
- `paradoxlabs_subscription_product_interval`
- `sequence_subscription_*`

## Events

- `paradoxlabs_subscription_collect_totals_before` (`quote`, `subscriptions`): Fires for each subscription billing occurrence, after the quote is generated, but before totals or shipping rates are collected. Use this to alter prices or make other pre-billing adjustments.
- `paradoxlabs_subscription_generate_before` (`quote`, `subscriptions`): Fires for each subscription billing occurrence, after the quote is generated, before being converted to an order. Use this to alter subscription orders before they go through.
- `paradoxlabs_subscription_prepare_payment_{paymentMethodCode}` (`quote`, `subscriptions`): Fires immediately after the `generate_before` event, before the subscription billing occurs. Use this for payment method initialization before rebilling. The dynamic event code allows soft dependencies
- `paradoxlabs_subscription_generate_after` (`quote`, `order`, `subscriptions`): Fires for each subscription billing occurrence, after order has been created and placed successfully, but before the subscription(s) are saved and order email is sent. Use this to perform follow-up actions after a subscription billing.
- `paradoxlabs_subscription_status_change` (`old_status`, `new_status`, `message`, `subscription`): Fires each time a subscription status changes, in any way. Use this to perform actions related to changed subscription status (active, paused, payment\_failed, completed, canceled, etc.).
- `paradoxlabs_subscription_billing_failed` (`subscriptions`, `exception`): Fires for each subscription billing occurrence that fails, prior to the status being changed or failure emails being sent.
- `adminhtml_subscription_view_tab_main_prepare_form` (`form`): Fires after adding standard fields to the admin subscription edit form, 'main' tab. Use this to add or modify fields on the subscription form.
- `adminhtml_subscription_view_tab_payment_prepare_form` (`form`): Fires after adding standard fields to the admin subscription edit form, 'payment' tab.
- `paradoxlabs_subscription_interval_duplicate_before` (`old_interval`, `new_interval`, `new_product_option`): Fires after cloning each Interval when duplicating a product, before the interval is saved.
- `paradoxlabs_subscription_interval_duplicate_after` (`old_interval`, `new_interval`, `new_product_option`): Fires after cloning each Interval when duplicating a product, after the interval is saved.
- `paradoxlabs_subscription_billing_failed_set_email_vars` (`sender`, `transport`): Fires before sending the admin Billing Failed email, allowing customization of the email template variables (in `transport`).
- `paradoxlabs_subscription_payment_failed_set_email_vars` (`sender`, `transport`): Fires before sending the Payment Failed email, allowing customization of the email template variables (in `transport`).
- `paradoxlabs_subscription_billing_notice_set_email_vars` (`sender`, `transport`): Fires before sending the customer upcoming-billing notification email, allowing customization of the email template variables (in `transport`).
- `paradoxlabs_subscription_billing_hash_fulfillment_info` (`subscription`, `service`, `transport`): Fires during subscription hash calculation during rebilling, allowing customization of the subscription grouping logic.

## Magento API: REST and SOAP

This module supports the Magento API via standard interfaces. You can use it to create, read, update, and delete subscriptions and subscription logs, and trigger billings.

If you have a specific use case in mind that is not covered, please let us know.

You can purchase/generate a subscription by creating an order for the associated product(s), with the necessary option selected. See the Magento REST API Swagger documentation for how to fetch a product's custom options and select them when adding a product to cart.

Available REST API requests below. Some response data has been omitted for brevity.

### Integration / Admin-Authenticated API Endpoints

These API requests allow solutions acting with an admin user login, OAUTH authentication, or token-based authentication to take action on any card in the system. Data and behavior are not limited.

#### *GET /V1/subscription/:subscriptionId (get subscription by ID)*

Example request:

```
GET /rest/v1/subscription/42 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "id": 42,
  "quote_id": 428,
  "description": "Medicine Ball (8lb) Subscription",
  "customer_id": 1,
  "created_at": "2017-09-11 15:18:41",
  "updated_at": "2017-09-11 15:21:29",
  "store_id": 1,
  "next_run": "2017-11-11 15:18:41",
  "last_run": "2017-09-11 15:21:29",
  "subtotal": 9.99,
  "complete": false,
  "length": 0,
  "run_count": 2,
  "status": "active",
  "frequency_count": 1,
  "frequency_unit": "month",
  "additional_information": []
}
```

#### *GET /V1/subscription/search (get subscription(s) by searchCriteria)*

Example request:

```
GET /rest/v1/subscription/search?searchCriteria[pageSize]=1 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "items": [
    {
      "id": 1,
      // ... other subscription data
    }
  ],
  "search_criteria": {
    "filter_groups": [],
    "page_size": 1
  },
  "total_count": 42
}
```

See also: [Search using REST APIs](#) (Magento DevDocs)

#### *POST /V1/subscription (create subscription)*

Example request:

```
POST /rest/v1/subscription HTTP/1.1
Host: {host}
```

```
Authorization: Bearer {api_key}
Content-Type: application/json
```

```
{
  "subscription": {
    "quote_id": 428,
    "description": "Medicine Ball (8lb) Subscription",
    "customer_id": 1,
    "created_at": "2017-09-11 15:18:41",
    "updated_at": "2017-09-11 15:21:29",
    "store_id": 1,
    "next_run": "2017-11-11 15:18:41",
    "last_run": "2017-09-11 15:21:29",
    "subtotal": 9.99,
    "complete": false,
    "length": 0,
    "run_count": 2,
    "status": "active",
    "frequency_count": 1,
    "frequency_unit": "month",
    "additional_information": []
  }
}
```

Example response:

```
{
  "id": 43,
  "quote_id": 428,
  "description": "Medicine Ball (8lb) Subscription",
  "customer_id": 1,
  "created_at": "2017-09-25 18:26:37",
  "updated_at": "2017-09-25 18:26:37",
  "store_id": 1,
  "next_run": "2017-11-11 15:18:41",
  "last_run": "2017-09-11 15:21:29",
  "subtotal": 9.99,
  "complete": false,
  "length": 0,
  "run_count": 2,
  "status": "active",
  "frequency_count": 1,
  "frequency_unit": "month",
  "additional_information": []
}
```

**PUT /V1/subscription/:subscriptionId (update subscription)**

Example request:

```
PUT /rest/v1/subscription/43 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
Content-Type: application/json
```

```
{
  "subscription": {
    "id": 43,
    "quote_id": 428,
    "description": "Medicine Ball (8lb) Subscription",
    "customer_id": 1,
    "created_at": "2017-09-11 15:18:41",
    "updated_at": "2017-09-11 15:21:29",
    "store_id": 1,
    "next_run": "2017-11-11 15:18:41",
    "last_run": "2017-09-11 15:21:29",
    "subtotal": 9.99,
    "complete": false,
    "length": 0,
    "run_count": 2,
    "status": "active",
    "frequency_count": 1,
    "frequency_unit": "month",
    "additional_information": []
  }
}
```



Example response:

```
{
  "id": 43,
  "quote_id": 428,
  "description": "Medicine Ball (8lb) Subscription",
  "customer_id": 1,
  "created_at": "2017-09-11 15:18:41",
  "updated_at": "2017-09-25 18:27:52",
  "store_id": 1,
  "next_run": "2017-11-11 15:18:41",
  "last_run": "2017-09-11 15:21:29",
  "subtotal": 9.99,
  "complete": false,
  "length": 0,
  "run_count": 2,
  "status": "active",
  "frequency_count": 1,
  "frequency_unit": "month",
  "additional_information": []
}
```

*POST /V1/subscription/:subscriptionId/bill (bill subscription by ID)*

Example request:

```
POST /rest/v1/subscription/43/bill HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
true
```

*DELETE /V1/subscription/:subscriptionId (delete subscription by ID)*

Example request:

```
DELETE /rest/v1/subscription/43 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
true
```

*GET /V1/subscriptionLog/:logId (get log by ID)*

Example request:

```
GET /rest/v1/subscriptionLog/234 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "id": 234,
  "subscription_id": 42,
  "status": "active",
  "order_increment_id": "000000505",
  "order_id": "268",
  "description": "Subscription billed. Order total: $9.99",
  "agent_id": 1,
  "created_at": "2017-09-11 15:21:29",
  "additional_information": []
}
```

### GET /V1/subscriptionLog/search (get log(s) by searchCriteria)

Example request:

```
GET /rest/v1/subscriptionLog/search
  ?searchCriteria[filter_groups][0][filters][0][field]=subscription_id
  &searchCriteria[filter_groups][0][filters][0][value]=42 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "items": [
    {
      "id": 233,
      "subscription_id": 42,
      "status": "active",
      "order_increment_id": "000000504",
      "order_id": null,
      "description": "Subscription created. Initial order total: $9.99",
      "agent_id": 0,
      "created_at": "2017-09-11 15:18:41",
      "additional_information": []
    },
    {
      "id": 234,
      "subscription_id": 42,
      "status": "active",
      "order_increment_id": "000000505",
      "order_id": "268",
      "description": "Subscription billed. Order total: $9.99",
      "agent_id": 1,
      "created_at": "2017-09-11 15:21:29",
      "additional_information": []
    }
  ],
  "search_criteria": {
    "filter_groups": [
      {
        "filters": [
          {
            "field": "subscription_id",
            "value": "42",
            "condition_type": "eq"
          }
        ]
      }
    ]
  },
  "total_count": 2
}
```

### POST /V1/subscriptionLog (create log)

Example request:

```
POST /rest/v1/subscriptionLog HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
Content-Type: application/json

{
  "log": {
    "subscription_id": 42,
    "status": "active",
    "order_increment_id": null,
    "order_id": null,
    "description": "Custom subscription log",
    "agent_id": 0,
    "additional_information": []
  }
}
```

Example response:

```
{
  "id": 238,
  "subscription_id": 42,
  "status": "active",
  "order_increment_id": null,
  "order_id": null,
  "description": "Custom subscription log",
  "agent_id": 0,
  "created_at": "2017-09-25 18:37:12",
  "additional_information": []
}
```

### *PUT /V1/subscriptionLog/:logId (update log)*

Example request:

```
PUT /rest/v1/subscriptionLog/238 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
Content-Type: application/json

{
  "log": {
    "id": 238,
    "subscription_id": 42,
    "status": "active",
    "order_increment_id": "",
    "order_id": "",
    "description": "Custom subscription log",
    "agent_id": 0,
    "created_at": "2017-09-25 18:37:12",
    "additional_information": []
  }
}
```

Example response:

```
{
  "id": 238,
  "subscription_id": 42,
  "status": "active",
  "order_increment_id": "",
  "order_id": "",
  "description": "Custom subscription log",
  "agent_id": 0,
  "created_at": "2017-09-25 18:37:12",
  "additional_information": []
}
```

### *DELETE /V1/subscriptionLog/:logId (delete log by ID)*

Example request:

```
DELETE /rest/v1/subscriptionLog/238 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
true
```

[GET /V1/subscriptionInterval/:intervalId \(get product subscription interval by ID\)](#)  
[GET /V1/subscriptionInterval/search \(get product subscription intervals by searchCriteria\)](#)  
[GET /V1/subscriptionInterval/product/:productId \(get product subscription intervals by product ID\)](#)  
[GET /V1/subscriptionInterval/option/:optionId \(get product subscription intervals by option ID\)](#)  
[POST /V1/subscriptionInterval \(create product subscription interval\)](#)  
[PUT /V1/subscriptionInterval/:intervalId \(update product subscription interval\)](#)  
[DELETE /V1/subscriptionInterval/:intervalId \(delete product subscription interval\)](#)

Note: These subscription interval endpoints are exposed for advanced users. Intervals directly relate to a product custom option value by definition. They are created automatically when saving a subscription-enabled product with multiple options. We expose them by API so that the data is accessible, and because this may allow customization in ways we don't necessarily foresee.

Creating intervals manually would require also creating the associated custom option values manually, in advance, in order for everything to work as expected.

Please see Swagger documentation if you need specifics on usage of these endpoints.

### Customer Authenticated API Endpoints

These API requests allow authenticated frontend customers to manage their stored cards. This is intended for headless implementations or app integration where card management needs to be exposed outside of Magento's standard frontend.

Customers will only be able to access and manipulate active cards assigned to their specific customer ID.

Note: These requests are disabled by default. You can enable them at **Admin > Stores > Configuration > Catalog > Adaptive Subscriptions > Enable public API**. Only enable this if you use them.

[GET /V1/subscription/mine/:subscriptionId \(Get customer's subscription by ID\)](#)

Example request:

```
GET /rest/V1/subscription/mine/2 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "id": 2,
  "increment_id": "000000002",
  "quote_id": 5,
  "description": "Multi-opt Subscription",
  "customer_id": 2,
  "created_at": "2018-11-28 17:28:40",
  "updated_at": "2019-03-08 18:57:58",
  "store_id": 1,
  "next_run": "2019-01-27 17:28:40",
  "last_run": "2018-11-28 17:28:40",
  "last_notified": "0000-00-00 00:00:00",
  "subtotal": 18.01,
  "complete": false,
  "length": 0,
  "run_count": 1,
  "status": "active",
  "frequency_count": 60,
  "frequency_unit": "day",
  "additional_information": [],
  "keyword_fulltext": "John Doe email@example.com 000000002 000000003"
}
```

### GET /V1/subscription/mine/search (Search customer's subscriptions)

Example request:

```
GET /rest/v1/subscription/mine/search?searchCriteria[pageSize]=1 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "items": [
    ...
  ],
  "search_criteria": {
    "filter_groups": [
      {
        "filters": [
          {
            "field": "customer_id",
            "value": "2",
            "condition_type": "eq"
          }
        ]
      }
    ]
  },
  "page_size": 1
},
"total_count": 4
}
```

See also: [Search using REST APIs](#) (Magento DevDocs)

### POST /V1/subscription/mine (Create subscription for customer)

Example request:

```
POST /rest/v1/subscription/mine HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
Content-Type: application/json
{
  "subscription": {
    "quote_id": 9,
    "description": "Medicine Ball (8lb) Subscription",
    "customer_id": 2,
    "created_at": "2017-09-11 15:18:41",
    "updated_at": "2017-09-11 15:21:29",
    "store_id": 1,
    "next_run": "2017-11-11 15:18:41",
    "last_run": "2017-09-11 15:21:29",
    "subtotal": 9.99,
    "complete": false,
    "length": 0,
    "run_count": 2,
    "status": "active",
    "frequency_count": 1,
    "frequency_unit": "month",
    "additional_information": []
  }
}
```

Example response:

```
{
  "id": 18,
  "increment_id": "000000018",
  "quote_id": 9,
  "description": "Medicine Ball (8lb) Subscription",
  "customer_id": 2,
  "created_at": "2019-04-25 03:11:28",
  "updated_at": "2019-04-25 03:11:28",
  "store_id": 1,
}
```

```

"next_run": "2017-11-11 15:18:41",
"last_run": "2017-09-11 15:21:29",
"last_notified": null,
"subtotal": 9.99,
"complete": false,
"length": 0,
"run_count": 2,
"status": "active",
"frequency_count": 1,
"frequency_unit": "month",
"additional_information": [],
"keyword_fulltext": "John Doe email@example.com 000000018"
}

```

### *PUT /V1/subscription/mine/:subscriptionId (Update subscription for customer)*

Example request:

```

PUT /rest/v1/subscription/mine/2 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
Content-Type: application/json
{
  "subscription": {
    "id": 2,
    "increment_id": "000000002",
    "quote_id": 5,
    "description": "Multi-opt Subscription",
    "customer_id": 2,
    "created_at": "2018-11-28 17:28:40",
    "updated_at": "2018-11-28 17:28:40",
    "store_id": 1,
    "next_run": "2019-01-27 17:28:40",
    "last_run": "2018-11-28 17:28:40",
    "last_notified": "0000-00-00 00:00:00",
    "subtotal": 18.01,
    "complete": false,
    "length": 0,
    "run_count": 1,
    "status": "active",
    "frequency_count": 60,
    "frequency_unit": "day",
    "additional_information": [],
    "keyword_fulltext": "John Doe email@example.com 000000002 000000003"
  }
}

```

Example response:

```

{
  "id": 2,
  "increment_id": "000000002",
  "quote_id": 5,
  "description": "Multi-opt Subscription",
  "customer_id": 2,
  "created_at": "2018-11-28 17:28:40",
  "updated_at": "2019-04-25 03:12:33",
  "store_id": 1,
  "next_run": "2019-01-27 17:28:40",
  "last_run": "2018-11-28 17:28:40",
  "last_notified": "-0001-11-30 00:00:00",
  "subtotal": 18.01,
  "complete": false,
  "length": 0,
  "run_count": 1,
  "status": "active",
  "frequency_count": 60,
  "frequency_unit": "day",
  "additional_information": [],
  "keyword_fulltext": "John Doe email@example.com 000000002 000000003"
}

```

### *GET /V1/subscriptionLog/mine/search (Get customer's subscription logs)*

Example request:

```
GET /rest/v1/subscriptionLog/mine/search?searchCriteria[pageSize]=2 HTTP/1.1
Host: {host}
Authorization: Bearer {api_key}
```

Example response:

```
{
  "items": [
    {
      "id": 1,
      "subscription_id": 1,
      "status": "active",
      "order_increment_id": "000000003",
      "order_id": "3",
      "description": "Subscription created. Initial order total: $108.01",
      "agent_id": 0,
      "created_at": "2018-11-28 17:28:40",
      "additional_information": []
    },
    ...
  ],
  "search_criteria": {
    "filter_groups": [
      {
        "filters": [
          {
            "field": "customer_id",
            "value": "2",
            "condition_type": "eq"
          }
        ]
      },
      {
        "filters": [
          {
            "field": "order_increment_id",
            "value": "1",
            "condition_type": "nonnull"
          }
        ]
      }
    ]
  },
  "page_size": 2
},
"total_count": 5
}
```

See also: [Search using REST APIs](#) (Magento DevDocs)

## Magento API: GraphQL

For Magento 2.3.1+, this extension supports the GraphQL API for subscription management. This is intended for PWA and headless implementations where subscription management needs to be exposed outside of Magento's standard frontend.

Customers will only be able to access and manipulate subscriptions assigned to their specific customer ID.

Note: These requests are disabled by default. You can enable them at **Admin > Stores > Configuration > Catalog > Adaptive Subscriptions > Enable public API**. Only enable this if you use them.

We recommend using [GraphiQL](#) or the Chrome [ChromeiQL browser extension](#) for browsing your store's GraphQL schema and testing API requests.

## Queries

### *subscriptions(entity\_id: Int!): [Subscription]*

Get the current customer's subscriptions, if any. Takes an entity\_id for a specific subscription (optional); returns one or more `Subscription` records.

## Mutations

### *changeSubscriptionStatus(entity\_id: Int!, status: String!): Subscription*

Change the subscription matching `entity_id` to `status`. Returns the `Subscription` if successful.

### *updateSubscription(input: SubscriptionUpdateInput!): Subscription*

Update an existing subscription. Takes `SubscriptionUpdateInput`; returns `Subscription` if successful.

## Data Types

### *Subscription*

A subscription record.

```

type Subscription {
  entity_id: Int           Subscription ID
  increment_id: String     Subscription Increment ID (user-visible)
  quote_id: Int           Subscription Quote ID
  description: String      Description
  customer_id: Int        Customer ID
  created_at: String       Created-at date
  updated_at: String       Updated-at date
  store_id: Int           Store ID
  next_run: String         Next scheduled run date
  last_run: String         Last run date
  last_notified: String    Last upcoming-billing notified date
  subtotal: Float          Subtotal amount
  length: Int             Length (total number of installments)
  run_count: Int           Run count (number of installments completed)
  status: String           Status
  frequency_count: Int     Frequency count (how often it runs)
  frequency_unit: String   Frequency unit (how often it runs)
  additional: [TokenBaseKeyValue] Subscription metadata
  quote: SubscriptionQuote Subscription contents/fulfillment details
  logs: [SubscriptionLog] Subscription history logs
}

```

### *SubscriptionQuoteItem*

A subscription item.

```

type SubscriptionQuoteItem {
  item_id: Int
  sku: String
  name: String
  description: String
  product_id: Int
  parent_item_id: Int
  is_virtual: Boolean
  weight: Int
  qty: Int
  price: Float
  custom_price: Float
  discount_amount: Float
  tax_percent: Float
  tax_amount: Float
  row_total: Float
  row_total_with_discount: Float
  product_type: String
  original_custom_price: Float
  price_incl_tax: Float
  row_total_incl_tax: Float
  discount_tax_compensation_amount: Float
  free_shipping: Boolean
}

```



```

weee_tax_applied_amount: Float
weee_tax_applied_row_amount: Float
weee_tax_disposition: Float
weee_tax_row_disposition: Float
}

```

### *SubscriptionQuoteBillingAddress*

The subscription billing address

```

type SubscriptionQuoteBillingAddress {
  address_id: Int
  customer_address_id: Int
  region: String
  region_id: Int
  country_id: String
  street: [String]
  company: String
  telephone: String
  fax: String
  postcode: String
  city: String
  firstname: String
  lastname: String
  middlename: String
  prefix: String
  suffix: String
  vat_id: String
}

```

### *SubscriptionQuoteShippingAddress*

The subscription shipping address

```

type SubscriptionQuoteShippingAddress {
  address_id: Int
  customer_address_id: Int
  same_as_billing: Boolean
  region: String
  region_id: Int
  country_id: String
  street: [String]
  company: String
  telephone: String
  fax: String
  postcode: String
  city: String
  firstname: String
  lastname: String
  middlename: String
  prefix: String
  suffix: String
  vat_id: String
  shipping_method: String
  shipping_description: String
  weight: Float
  subtotal: Float
  subtotal_with_discount: Float
  tax_amount: Float
  shipping_amount: Float
  shipping_tax_amount: Float
  discount_amount: Float
  grand_total: Float
  customer_notes: String
  discount_description: String
  shipping_discount_amount: Float
  subtotal_incl_tax: Float
  discount_tax_compensation_amount: Float
  shipping_discount_tax_compensation_amount: Float
  shipping_incl_tax: Float
  free_shipping: Boolean
  customer_balance_amount: Float
}

```

### SubscriptionQuotePayment

The subscription payment info

```

type SubscriptionQuotePayment {
  entity_id: Int
  method: String
  cc_type: String
  cc_last_4: String
  cc_owner: String
  cc_exp_month: String
  cc_exp_year: String
  cc_ss_owner: String
  cc_ss_start_month: String
  cc_ss_start_year: String
  po_number: String
  additional_data: [TokenBaseKeyValue]
  cc_ss_issue: String
  additional_information: [TokenBaseKeyValue]
  paypal_payer_id: String
  paypal_payer_status: String
  paypal_correlation_id: String
  tokenbase_id: Int
}

```

### SubscriptionLog

A subscription event log

```

type SubscriptionLog {
  log_id: Int
  created_at: String
  status: String
  order_id: Int
  order_increment_id: String
  agent_id: Int
  description: String
  additional_information: [TokenBaseKeyValue]
}

```

### TokenBaseKeyValue

Container for generic key/value data.

```

type TokenBaseKeyValue {
  key: String          Generic key
  value: String        Generic value
}

```

### SubscriptionUpdateInput

Input parameters for a subscription update. Allows changing of the payment method (by hash) and shipping address.

Leave out `payment_account` or `shipping_address/shipping_address_id` to leave them unchanged.

`shipping_address_id` will override any `shipping_address`, if both are given. Provide one or the other, not both.

```

input SubscriptionUpdateInput {
  entity_id: Int!           Subscription ID to update (required)
  payment_account: String   Identifier hash of the TokenBase or vault record to use for payment.
  shipping_address_id: Int  Customer address ID to change the subscription shipping address to.
  shipping_address: CustomerAddressInput Customer address to change the subscription shipping address to.
}

```

### GraphQL Query Examples

Some response data has been omitted for brevity.

*Fetch subscription by ID*

Example request:

```
{
  subscriptions(entity_id:8) {
    entity_id,
    increment_id,
    quote_id,
    description,
    customer_id,
    created_at,
    updated_at,
    store_id,
    next_run,
    last_run,
    last_notified,
    subtotal,
    length,
    run_count,
    status,
    frequency_count,
    frequency_unit,
    additional {
      key,
      value
    },
    quote {
      entity_id
      customer_email
      subtotal,
      grand_total,
      quote_currency_code,
      items {
        item_id
        sku
        name
        description
        product_id
        parent_item_id
        is_virtual
        weight
        qty
        price
        custom_price
        discount_amount
        tax_percent
        tax_amount
        row_total
        row_total_with_discount
        product_type
        original_custom_price
        price_incl_tax
        row_total_incl_tax
        discount_tax_compensation_amount
        free_shipping
        weee_tax_applied_amount
        weee_tax_applied_row_amount
        weee_tax_disposition
        weee_tax_row_disposition
      },
      billing_address {
        address_id
        customer_address_id
        region
        region_id
        country_id
        street
        company
        telephone
        fax
        postcode
        city
        firstname
        lastname
        middlename
        prefix
        suffix
        vat_id
      }
    }
  }
}
```

```

},
shipping_address {
  address_id
  customer_address_id
  same_as_billing
  region
  region_id
  country_id
  street
  company
  telephone
  fax
  postcode
  city
  firstname
  lastname
  middlename
  prefix
  suffix
  vat_id
  shipping_method
  shipping_description
  weight
  subtotal
  subtotal_with_discount
  tax_amount
  shipping_amount
  shipping_tax_amount
  discount_amount
  grand_total
  customer_notes
  discount_description
  shipping_discount_amount
  subtotal_incl_tax
  discount_tax_compensation_amount
  shipping_discount_tax_compensation_amount
  shipping_incl_tax
  free_shipping
  customer_balance_amount
},
payment {
  entity_id
  method
  cc_type
  cc_last_4
  cc_owner
  cc_exp_month
  cc_exp_year
  cc_ss_owner
  cc_ss_start_month
  cc_ss_start_year
  po_number
  additional_data {
    key
    value
  }
  cc_ss_issue
  additional_information {
    key
    value
  }
  paypal_payer_id
  paypal_payer_status
  paypal_correlation_id
}
},
logs {
  log_id
  created_at
  status
  order_id
  order_increment_id
  agent_id
  description
  additional_information {
    key,
    value
  }
}
}
}

```

```
}
```

Example response:

```
{
  "data": {
    "subscriptions": [
      {
        "entity_id": 8,
        "increment_id": "000000008",
        "quote_id": 24,
        "description": "Single-opt Subscription",
        "customer_id": 1,
        "created_at": "2018-12-27 18:21:41",
        "updated_at": "2019-04-24 19:51:16",
        "store_id": 1,
        "next_run": "2020-12-27 18:21:41",
        "last_run": "2018-12-27 18:22:31",
        "last_notified": "0000-00-00 00:00:00",
        "subtotal": 20,
        "length": 5,
        "run_count": 2,
        "status": "active",
        "frequency_count": 1,
        "frequency_unit": "year",
        "additional": [],
        "quote": {
          "entity_id": 24,
          "customer_email": "roni_cost@example.com",
          "subtotal": 20,
          "grand_total": 24.49,
          "quote_currency_code": "USD",
          "items": [
            {
              "item_id": 30,
              "sku": "single-opt",
              "name": "Single-opt Subscription",
              "description": null,
              "product_id": 2048,
              "parent_item_id": null,
              "is_virtual": false,
              "weight": 1,
              "qty": 1,
              "price": 20,
              "custom_price": null,
              "discount_amount": 2,
              "tax_percent": 8.25,
              "tax_amount": 1.49,
              "row_total": 20,
              "row_total_with_discount": 0,
              "product_type": "simple",
              "original_custom_price": null,
              "price_incl_tax": 21.65,
              "row_total_incl_tax": 21.65,
              "discount_tax_compensation_amount": 0,
              "free_shipping": false,
              "weee_tax_applied_amount": null,
              "weee_tax_applied_row_amount": null,
              "weee_tax_disposition": null,
              "weee_tax_row_disposition": null
            }
          ]
        },
        "billing_address": {
          "address_id": 66,
          "customer_address_id": 1,
          "region": "Michigan",
          "region_id": 33,
          "country_id": "US",
          "street": [
            "6146 Honey Bluff Parkway"
          ],
          "company": null,
          "telephone": "(555) 229-3326",
          "fax": null,
          "postcode": "49628-7978",
          "city": "Calder",
          "firstname": "Veronica",
          "lastname": "Costello",

```

```

    "middlename": null,
    "prefix": null,
    "suffix": null,
    "vat_id": null
  },
  "shipping_address": {
    "address_id": 67,
    "customer_address_id": 1,
    "same_as_billing": true,
    "region": "Michigan",
    "region_id": 33,
    "country_id": "US",
    "street": [
      "6146 Honey Bluff Parkway"
    ],
    "company": null,
    "telephone": "(555) 229-3326",
    "fax": null,
    "postcode": "49628-7978",
    "city": "Calder",
    "firstname": "Veronica",
    "lastname": "Costello",
    "middlename": null,
    "prefix": null,
    "suffix": null,
    "vat_id": null,
    "shipping_method": "flatrate_flatrate",
    "shipping_description": "Flat Rate - Fixed",
    "weight": 1,
    "subtotal": 20,
    "subtotal_with_discount": 18,
    "tax_amount": 1.49,
    "shipping_amount": 5,
    "shipping_tax_amount": 0,
    "discount_amount": -2,
    "grand_total": 24.49,
    "customer_notes": null,
    "discount_description": null,
    "shipping_discount_amount": 0,
    "subtotal_incl_tax": 21.65,
    "discount_tax_compensation_amount": 0,
    "shipping_discount_tax_compensation_amount": 0,
    "shipping_incl_tax": 5,
    "free_shipping": false,
    "customer_balance_amount": null
  },
  "payment": {
    "entity_id": null,
    "method": "checkmo",
    "cc_type": null,
    "cc_last_4": null,
    "cc_owner": null,
    "cc_exp_month": null,
    "cc_exp_year": "0",
    "cc_ss_owner": null,
    "cc_ss_start_month": "0",
    "cc_ss_start_year": "0",
    "po_number": null,
    "additional_data": [],
    "cc_ss_issue": null,
    "additional_information": [
      {
        "key": "method_title",
        "value": "Check / Money order"
      },
      {
        "key": "is_subscription_generated",
        "value": "1"
      }
    ],
    "paypal_payer_id": null,
    "paypal_payer_status": null,
    "paypal_correlation_id": null
  }
},
"logs": [
  {
    "log_id": 13,
    "created_at": "2018-12-27 18:21:41",
    "status": "active",

```

```

        "order_id": 19,
        "order_increment_id": "000000019",
        "agent_id": 0,
        "description": "Subscription created. Initial order total: $29.36",
        "additional_information": []
      },
      {
        "log_id": 14,
        "created_at": "2018-12-27 18:22:31",
        "status": "active",
        "order_id": 20,
        "order_increment_id": "000000020",
        "agent_id": 1,
        "description": "Subscription billed. Order total: $24.49",
        "additional_information": []
      }
    ]
  }
}
}
}
}
}
}

```

### Change subscription status

Example request:

```

mutation {
  changeSubscriptionStatus(entity_id:8, status:"paused") {
    entity_id,
    increment_id,
    quote_id,
    description,
    customer_id,
    created_at,
    updated_at,
    store_id,
    next_run,
    last_run,
    last_notified,
    subtotal,
    length,
    run_count,
    status,
    frequency_count,
    frequency_unit
  }
}

```

Example response:

```

{
  "data": {
    "changeSubscriptionStatus": {
      "entity_id": 8,
      "increment_id": "000000008",
      "quote_id": 24,
      "description": "Single-opt Subscription",
      "customer_id": 1,
      "created_at": "2018-12-27 18:21:41",
      "updated_at": "2019-04-25 04:00:02",
      "store_id": 1,
      "next_run": "2020-12-27 18:21:41",
      "last_run": "2018-12-27 18:22:31",
      "last_notified": "0000-00-00 00:00:00",
      "subtotal": 20,
      "length": 5,
      "run_count": 2,
      "status": "paused",
      "frequency_count": 1,
      "frequency_unit": "year"
    }
  }
}

```

### Update subscription

Example request:

```
mutation {
  updateSubscription(input: {
    entity_id:8,
    payment_account:"88bb7dc06faad55c77177446ed83047811234008",
    shipping_address: {
      region: {
        region_code: "PA",
        region: "Pennsylvania",
        region_id: 51
      },
      country_id: US,
      street: [
        "123 Test Lane"
      ],
      telephone: "111-111-1111",
      postcode: "12345",
      city: "Lancaster",
      firstname: "John",
      lastname: "Doe"
    }
  }) {
    entity_id,
    increment_id,
    description,
    status,
    quote {
      shipping_address {
        customer_address_id
        region
        country_id
        street
        telephone
        fax
        postcode
        city
        firstname
        lastname
      },
      payment {
        method
        cc_type
        cc_last_4
        cc_exp_month
        cc_exp_year
      }
    }
  }
}
```

Example response:

```
{
  "data": {
    "updateSubscription": {
      "entity_id": 8,
      "increment_id": "000000008",
      "quote_id": 24,
      "description": "Single-opt subscription",
      "status": "paused",
      "quote": {
        "shipping_address": {
          "customer_address_id": null,
          "region": "Pennsylvania",
          "country_id": "US",
          "street": [
            "123 Test Lane"
          ],
          "company": "",
          "telephone": "111-111-1111",
          "fax": null,
          "postcode": "12345",
          "city": "Lancaster",
          "firstname": "John",

```



```
    "lastname": "Doe"  
  },  
  "payment": {  
    "method": "authnetcim",  
    "cc_type": "DI",  
    "cc_last_4": "0027",  
    "cc_exp_month": "03",  
    "cc_exp_year": "2021"  
  }  
}  
}  
}
```

## Split Database

This module fully supports Magento Enterprise's split database feature. We strongly recommend setting up the split database environment prior to installing this module, but no special setup should be needed otherwise. The `paradoxlabs_subscription` and `paradoxlabs_subscription_log` tables will be added to the checkout database for proximity to the quote tables. `paradoxlabs_subscription_product_interval` will be added to the primary (catalog) database.

If you encounter any problems, please let us know.

## Support

If you have any questions not covered by this document, or something isn't working right, please open a ticket in our support system: [support.paradoxlabs.com](https://support.paradoxlabs.com)

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