

Platform - Getting Started Guide

Overview

This guide will help you get your first application up and running. It will not cover setting up a server or any programming specific issues. It assumes you have a server which you can use to send REST requests and can receive and parse the XML response from Printfection. This guide also assumes you've read and agree to all of the Printfection Platform legal documents.

This guide will cover the following topics:

- Requesting and setting up your application on Printfection's website
- User authentication
- Verifying your application can access the Printfection API after it has been authenticated to an account
- High level walkthrough explaining how to upload an image, change an image's name, create a product, etc.
- An overview of the checkout process

Setting up your Application

The first step is to request an API key which you will use in every call to the Printfection API. Assuming you are one of our Alpha testers you can login to your account and click on 'Applications' -> 'My API Keys'. (If you are not one of our Alpha testers you can request to be one by filling out the form on our developers site at <http://developers.printfection.com>.) If you have never requested a key then this will direct you to the Request an API Key page. Fill out the form making sure to describe your future application as detailed yet concise as possible. Keep in mind that you will not be able to change your application type after requesting an API key. Choose the permissions you will want for your application. Look over the *Permissions* document for an explanation of the API permissions.

You will not be able to actually use the API key until Printfection has approved and activated the application. We'll send you an e-mail when we do activate the application, or if we need more information from you. Regardless if the application has been activated or not, once you've requested an application you can now customize your application. To customize your application go to 'Applications' -> 'My API Keys'. Here you will see a lot of information about each application you own. You will want to click on the 'Edit Settings' link to enter some basic information for your application. We highly suggest you fill out every field to help your customers fully understand what your application does.

Once Printfection activates your application you will be able to start using your API key and allowing other users to use your application.

User authentication of your application

This section assumes you are using an active application. You can check the status of your application by going to 'Applications' -> 'My API Keys'.

In order to fully understand authentication you should read both the *Authentication* and *Permissions* documents. These will give you an in-depth look at what authentication means and how permissions come into play when authenticating users.

The basic steps are:

1. Generate the JSON permission string using the link on your 'My API Keys' page.
2. Create the URL which links to the authentication page on Printfection's website.
3. Send the user to the authentication page.
4. The user will login and select the access they want the application to have to their account.
5. After authenticating the application you will get the session key and use that for all future requests relating to that user.

During testing application owners should authenticate their application to their own account to ensure it works correctly.

Creating your application

Once an application has an active session associated with it, it can then start using the Printfection Platform. Take a look at the Methods and PFQL documentation which detail out what can be done through the Printfection Platform. Here a couple of actions your application will most likely want to do and a high level overview of the process to complete each action. This assumes you have an active application and a session which grants you the correct access. (The correct access depends on each action. Read the *Permissions* document for more information.)

Upload an image

1. Get all possible image sets and the permission granted to each image set using the permissions PFQL table.
 - a. Possible query: `SELECT image_sets FROM permissions WHERE session_key='{your session key}'`
 - b. Select one of the image sets which has either write or delete access.
2. Using the `printfection.images.upload` method and the image set, from the previous set format a request to upload an image.
3. If the request is successful you will receive the ID of the new image within the 'imageid' element of the response.

Changing an image name

1. Get all possible image sets and the permission granted to each image set using the permissions PFQL table.

- a. Possible query: `SELECT image_sets FROM permissions WHERE session_key='{your session key}'`
 - b. Select one of the image sets which has either write or delete access.
2. Using the images PFQL table find all images in the image set found in the previous step.
 - a. Possible query: `SELECT imageid, name FROM images WHERE imagesetid='{your imagesetid }'`
 - b. Find the imageid of one of the images returned.
3. Use the `printfection.images.set` method and the imageid from the previous step to format a request to set the name of the image.
4. If the request is successful you will receive an 'OK' within the 'name' element of the response.

Create a T-shirt

1. Get all possible stores and the permission granted to each store by using the permissions PFQL table.
 - a. Possible query: `SELECT stores FROM permissions WHERE session_key='{your session key}'`
 - b. Select the storeid of one of the stores with either write or delete access.
2. Get information about the root section in that store from the stores PFQL table. (The root section has no parents and is the top or root section of the store.)
 - a. Possible query: `SELECT root_sectionid FROM stores WHERE storeid='{the storeid a previous step}'`
 - b. Remember the sectionid returned from this query.
3. Get an image which can be put on the product.
 - a. Find an image set with either read, write, or delete permission using the permissions PFQL table
 - i. Possible query: `SELECT image_sets FROM permissions WHERE session_key='{your session key}'`
 - ii. Find an image set with either read, write or delete permission.
 - b. Find an image within the image set found in the last step using the images PFQL table.
 - i. Possible query: `SELECT imageid FROM images WHERE imagesetid='{the imagesetid from a previous step}'`
 - ii. Find an imageid within the results which you want to put on the product.
4. Get information about root products which we'll use when we create the product. (See the Overview document for a brief explanation of root products vs. products)
 - a. Possible query to find all root products: `SELECT rootid, title FROM root_products WHERE 1`
 - b. Find the root product with the title T-Shirt and remember the rootid.
5. Get a list of colors which this root product comes in from the root_product_colors PFQL table.
 - a. Possible query: `SELECT rootcolorid, name FROM root_product_colors WHERE rootid='{the rootid from a previous step}'`
 - b. Find the rootcolorid's of all colors you want to create the new product in.
6. Get the possible sides for this root product.

- a. Possible query: `SELECT side, name, rootspecid FROM root_product_sides WHERE rootid='{the rootid found in a previous step}'`
 - b. Find the side you want to put the image on.
7. Get the possible positions for the side of the root product.
 - a. Possible query: `SELECT name, position FROM root_product_specs WHERE rootspecid='{the rootspecid found in a previous step}'`
 - b. Find the position you want to put the image in.
8. Format a call to the `printfection.products.create` method using these arguments
 - a. `rootid`: Found in a previous step
 - b. `sectionid`: Found in a previous step
 - c. `rootcolorids`: A comma separated list of `rootcolorid`'s found in a previous step
 - d. `specs`: A JSON serialized array
 - i. `side`: Found in a previous step
 - ii. `position`: Found in a previous step
 - iii. `imageid`: Found in a previous step
9. Call the `printfection.products.create` method
10. If the request is successful you will receive the ID of the new product within the 'productid' element of the response.

View a Product's Primary Image

This assumes you have already found the productid(s).

1. Get information about the product using the `products PFQL` table.
 - a. Possible query: `SELECT primary_rootcolorid, primary_productsideid, product_key FROM products WHERE productid='{your productid}'`
2. Taking the information found in the previous step, use the *Image URLs* document to format the product image URL.

Checkout Process

There are two supported ways to send a user to checkout. This guide will cover the more advanced method which allows an application complete control over the entire checkout experience until the shipping and billing information is needed. Both supported ways as well as a much more in depth discussion of the entire checkout process are included in the *Checkout* document.

Using the cart methods outlined in the *Method* document applications have the ability to add products to a cart, remove products from a cart, update the quantity of products in a cart and find the shipping methods and cost of each shipping method for products in a cart. This functionality coupled with the `carts` and `cart_products` PFQL tables specified in the *PFQL* document gives an application a full view of a cart.

Creating and Using a Cart

1. Create a cart using the `printfection.carts.create` method.

2. Assign the new cart to a customer, most likely by giving the customer a unique cookie with the cart_key or another unique identifier which links the customer to the cart.
3. Add a product to the cart using the printfection.carts.addProduct method.
 - a. All the information needed by this method can be found using the corresponding PFQL tables.
4. Display the cart to the customer using the carts and cart_products PFQL tables.
 - a. Possible query: SELECT ships_in_days, subtotal FROM carts WHERE cart_key='{your cart_key}'
 - b. Possible query: SELECT productid, rootcolorid, rootsizeid, qty, ships_in_days, price_each FROM cart_products WHERE cart_key='{your cart_key}'
5. Display the shipping options to the customer using the printfection.carts.getShippingMethods method.
6. Once the customer is ready to checkout direct that customer to <http://www.printfection.com/app/checkout.php> which will place the customer on the shipping and billing information page.
7. If the customer does complete the order their cart will be cleared and the owners of the products purchased will be notified.