

# Platform - Overview

---

## Overview

The Printfection Platform was created to allow any developer the ability to leverage the Printfection service in new and interesting ways. The Printfection Platform is a set of application programming interfaces (APIs), tools, and services that provide a way for external applications to access Printfection content on behalf of Printfection users. The platform gives developers deep integration into all aspects of the Printfection service. You can create, buy and sell real custom printed merchandise programmatically through the APIs; and it even gives you the freedom to build a business around your application. We invite you to build on the Printfection Platform and couldn't be more excited about the endless ways you can leverage the platform.

This document gives a brief overview of the various features of the Printfection Platform & API and is a good starting point for all developers new to the platform. After reading this document we suggest you read the *Getting Started Guide*.

## Authentication

There are two levels of authentication both of which deal with the permissions outlined in the *Permissions* document. The first level is granted by Printfection to each application. Developers must request access to various parts of the API from Printfection. Once an application has been granted permission by Printfection the application can then ask users to authenticate the application to the user's account using the same or less permissions. This is the second level of authentication. Both levels of authentication need to be completed before an application can access user's data.

## Permissions

There are four levels of permissions outlined in the *Permissions* document. They are: no access, read access, write access, and delete access. Write access includes read access and delete access includes both write and read access. These permissions control what an application can access through the Printfection API.

## Methods

Methods, described in the *Methods* document, are used by an application to either get information about objects or manipulate objects such as products, images, etc. via the API. Methods allow an application to create objects, delete objects, make changes and get information back about objects. The current set of methods focus on images, products, stores and sections. To get information about objects developers will usually use a SQL-like syntax called PFQL which is outlined in the *PFQL* document.

## PFQL

The PFQL method, described in the *PFQL* document, provides a uniform and flexible way to get nearly every piece of information available through the API. Currently the only exception is product pricing which require the use of specific methods. PFQL uses SQL-style syntax to request information.

## Application Quotas

To prevent overloading of the API, there are limits on how much each application or session can access the API. These quotas are based on how many methods are called and how much data is returned. Refer to the *Application Quotas* document to ensure you do not exceed the quotas. Once a quota is reached requests will be denied until enough time has passed.

## Root Products & Products

Root products are the building blocks for actual products. A good way to think about this is a root product is a blank product or a template. The template describes the type of physical and virtual product to use as well as a lot more information about that physical and virtual product such as the colors or sizes it comes in or where we can print on the physical product. Products are created from root products and have at least one image applied to them. Every product is virtual until it is actually ordered where it is then matched with its corresponding physical product based on the root product it was based on.

In order to create a product one must know which root product to create the product from as well as choose an image to place on the new product. Products can be created, modified and deleted whereas root products cannot be changed.

## Checkout

Applications which allow their customers to checkout have two supported options outlined in the *Checkout* document. They can send the customer to the product's detail page within the product's store on Printfection. The user will then select the color and size on Printfection's website and complete the checkout through Printfection. The second option is more complex but much more powerful. The application can make use of the cart methods through the API to completely control the process of adding, removing, etc. of products in a cart for the customer. Applications will then send the user to Printfection to complete the last step of checkout which involves the shipping and billing information.

## Support

Changes to the platform & API, updates concerning site status, etc. will be posted to our Service Updates blog located at <http://updates.printfection.com>.

Questions, bug reports, functionality requests, etc. should be directed to our Platform Support Team email: [platform@printfection.com](mailto:platform@printfection.com).