

Platform - PFQL

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Description

The Printfection Query Language (PFQL) allows a single, flexible interface into the Printfection Platform. The following rules apply to all of the tables listed in this document.

General Rules

All tables which have an indexable field must be indexed. To index a statement use the following syntax in the WHERE clause where the field_name is an indexable field: field_name=value. If a table does not have an indexable field then at a minimum a 'WHERE 1' statement must be used.

All boolean values are represented as either a 0 (false) or 1 (true).

Data returned from PFQL requests uses up your quota. A general rule of thumb is to only get information you absolutely need. The use of the LIMIT clause in every query is highly suggested.

Constructing a PFQL statement

All PFQL statements will have at least three parts: the SELECT clause, the FROM clause, and the WHERE clause. The SELECT clause lists all fields you want returned. The FROM clause describes the table to pull the fields from, and the WHERE clause constrains the statement. The basic syntax is: SELECT [fields] FROM [table] WHERE [conditions]. The ORDER BY and LIMIT clauses are optional and are used to order the results and limit the number of results returned. The full syntax with the ORDER BY and LIMIT clauses is: SELECT [fields] FROM [table] WHERE [conditions] ORDER BY [field] [direction] LIMIT [offset,] [limit]. Only a single table name can be specified in the FROM clause.

Here is a list of operators and keywords which can be used in the WHERE clause:

- AND
- OR
- IN
- =
- !=
- <
- >
- <=
- >=
- Parenthesis

The possible directions in the ORDER BY clause are:

- ASC
- DESC

Tables

Images

Required Permission

read permission to the image set the image exists in.

Fields

Field Name	Type	Indexable	Description
imageid	int	Yes	The ID of the image.
imagesetid	int	Yes	The ID of the image set this image belongs to.
custid	int		The ID of the customer.
name	string		The name of the image.
keywords	string		A comma separated list of keywords.
url_small	string		The URL of the small version of the image.
url_large	string		The URL of the large version of the image.
width	int		The width of the original image which was uploaded in pixels.
height	int		The height of the original image which was uploaded in pixels.
ppi	int		The pixels per inch (PPI) of the image.
background_rootcolorid	int		The ID of the global color used as the background.
date_uploaded	unix time		The date the image was uploaded.

Example PFQL

```
SELECT imageid, name, keywords FROM images
WHERE imagesetid=76 ORDER BY name DESC LIMIT 1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <image>
      <imageid>258</imageid>
      <name>Test Image</name>
      <keywords>test1, test2, red, green, blue</keywords>
    </image>
  </PFQL_query>
</printfection_response>
```

image_sets

Required Permission

read permission to the image set.

Fields

Field Name	Type	Indexable	Description
imagesetid	int	Yes	The ID of the image set.
custid	int	Yes	The ID of the customer.
default	bool		This is the default ('unorganized') set if set to true. Each customer has one and only one default set.
name	string		The name of the image set.
preview_imageid	int		The ID of the image which is used as the preview image for the set.
preview_image_url	string		The URL of the image used as the preview image for the set.
date_created	unix time		The date the image set was created.

Example PFQL

```
SELECT name FROM image_sets
  WHERE custid=1847 AND default != 1 ORDER BY date_created DESC
  LIMIT 1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <image_set>
      <name>Test Set</name>
    </image_set>
  </PFQL_query>
</printfection_response>
```

stores

Required Permission

read permission to the store.

Fields

Field Name	Type	Indexable	Description
storeid	int	Yes	The ID of the store.
custid	int	Yes	The ID of the customer.
logo_imageid	int	Yes	The ID of the image used as the store logo.

logo_width	int	The width of the store logo.
logo_transparency	bool	This is true if the logo is displayed as a transparent GIF.
root_sectionid	int	The ID of the root section of a store. All sections will be created below this section.
name	string	The name of the store.
description	string	The description of the store.
url	string	The URL of the store.
store_access	int	The current access of the store. Can be 0 (open), 1 (closed), 2 (hidden).
logo_url	string	The URL of the store logo.
personal	bool	True if this is a personal store. Products in this store can only be purchased by the store owner.
date_created	unix time	The date this store was created.

Example PFQL

```
SELECT name, root_sectionid, description FROM stores WHERE storeid=13
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <store>
      <name>Test Store</name>
      <root_sectionid>16</root_sectionid>
      <description>This is my test store</description>
    </store>
  </PFQL_query>
</printfection_response>
```

store_sections

Required Permission

read permission to store this section exists in.

Fields

Field Name	Type	Indexable	Description
sectionid	int	Yes	The ID of the section.
parent_sectionid	int	Yes	The ID of the parent section for this section. This will be 0 if the section is the root section of a store.
storeid	int	Yes	The ID of the store this section belongs to.
custid	int		The ID of the customer.
name	string		The name of this section.
imageid	int	Yes	The ID of the image used as the section image.

image_width	int	The width in inches of the section image.
image_transparency	bool	This is true if the image is displayed as a transparent GIF.
image_url	string	The URL of the section image.
teaser	string	A quick description of the section displayed before a user enters the section.
description	string	A description of the section displayed after a user enters a section.
section_order	int	The order or sequence of this section within the current section.
hidden	bool	True if this section is hidden.

Example PFQL

```
SELECT name FROM store_sections
WHERE storeid=13 AND parent_sectionid=16
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <section>
      <name>Test Section</name>
    </section>
    <section>
      <name>Another Test Section</name>
    </section>
  </PFQL_query>
</printfection_response>
```

products

Required Permission

read permission to the store this product exists in.

Fields

Field Name	Type	Indexable	Description
productid	int	Yes	The ID of the product.
sectionid	int	Yes	The ID of the section this product belongs to.
custid	int		The ID of the customer.
rootid	int		The ID of the root product type.
title	string		The title of this product.
description	string		The description of the product.
primary_rootcolorid	int		The global color ID of the primary color of this product
primary_productsideid	int		The ID of the primary side for this product.

product_order	int	The order or sequence of this product within the current section.
pending	bool	True if this product is pending. A product is pending if one of the images on the product is pending. A pending product cannot be added to the cart or purchased.
product_key	string	This key is used when formatting URLs for product images.
date_created	unix time	The date this product was created.

Example PFQL

```
SELECT title, rootid, sectionid FROM products WHERE productid=333
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <product>
      <title>My Baseball Jersey</title>
      <rootid>22</rootid>
      <sectionid>16</sectionid>
    </product>
  </PFQL_query>
</printfection_response>
```

product_colors

Required Permission

read permission to the store this product exists in.

Fields

Field Name	Type	Indexable	Description
productcolorid	int	Yes	The ID of the color specifically for this product. This will change if a color is removed then re-added to a product.
productid	int	Yes	The ID of the product.
rootcolorid	int		The global ID of this color.
show_white	bool		True if this color will show white in the preview and print white on the product.
primary_color	bool		True if this is the primary side.

Example PFQL

```
SELECT productcolorid, rootcolorid, show_white FROM product_colors
WHERE productid=333 AND primary_color=1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <product_color>
      <productcolorid>2684</productcolorid>
      <rootcolorid>422</rootcolorid>
      <show_white>0</show_white>
    </product_color>
  </PFQL_query>
</printfection_response>
```

product_sides

Required Permission

read permission to the store this product exists in.

Fields

Field Name	Type	Indexable	Description
productsideid	int	Yes	The ID of the side of the product.
productid	int	Yes	The ID of the product.
side_order	int		The order of this side in relation to the other sides. The front is 0, back is 1, etc.
customized	bool		True if this side is customized. A customized side has an image associated with it.
primary_side	bool		True if this is the primary side
vertical	bool		True if this side is shown vertically. Used for products like cutting boards and mousepads where the entire root product rotates vertically.
side_key	string		This key is used when formatting URLs for design images.

Example PFQL

```
SELECT productsideid, customized FROM product_sides
WHERE productid=333 AND primary_side=1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <product_side>
      <productsideid>598</productsideid>
      <customized>1</customized>
    </product_side>
  </PFQL_query>
</printfection_response>
```

```
</PFQL_query>
</printfection_response>
```

product_layers

Currently we only support one layer per side.

Required Permission

read permission to the store this product exists in.

Fields

Field Name	Type	Indexable	Description
productlayerid	int	Yes	The ID of the layer on the side of the product.
productsideid	int	Yes	The ID of the side of the product this layer is on.
imageid	int	Yes	The ID of the image applied to this layer
height	float		The height of the image in inches after rotation. This height is used to base the actual printing height off of.
position	int		Some products have multiple positions. All sides have position 1, the first position. Some products have more, such as a pocket position.
rotation	int		The clockwise rotation for this image. This can be 0, 90, 180, or 270.
center_percent_x	float		This is the percent from the top of the current position to the center of the image
center_percent_y	float		This is the percent from the left of the current position to the center of the image.

Example PFQL

```
SELECT productlayerid, imageid, height, center_percent_x,
       center_percent_y FROM product_layers WHERE productsideid=598
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <product_layer>
      <productlayerid>500</productlayerid>
      <imageid>243</imageid>
      <height>1</height>
      <center_percent_x>0.5</center_percent_x>
      <center_percent_y>0.5</center_percent_y>
    </product_layer>
  </PFQL_query>
</printfection_response>
```

root_products

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootid	int		The ID of the root product.
title	string		The title of the root product.
description	string		The description of the root product.

Example PFQL

```
SELECT rootid, title FROM root_products WHERE 1 ORDER BY title LIMIT 1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product>
      <rootid>22</rootid>
      <title>Baseball Jersey</title>
    </root_product>
  </PFQL_query>
</printfection_response>
```

root_product_colors

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootid	int	Yes	The ID of the root product.
rootcolorid	int	Yes	The ID of the color for this root product.
name	string		The name of the color.
show_white	bool		If true then the color white will be shown in the preview image and will print on the actual product.
color_swatch_url	string		The URL of the color swatch.
hex_color	string		The HEX code for this color without the leading pound sign.

Example PFQL

```
SELECT rootcolorid, name, color_swatch_url FROM root_product_colors
```

```
WHERE rootid=22 LIMIT 1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product_color>
      <rootcolorid>422</rootcolorid>
      <name>White/Black</name>
      <color_swatch_url>
        http://www.printfection.com/images/root/A6bS2e.GIF
      </color_swatch_url>
    </root_product_color>
  </PFQL_query>
</printfection_response>
```

root_product_sizes

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootcolorid	int	Yes	The ID of the color for this root product.
rootsizeid	int	Yes	The ID of the size for this root product.
name	string		The name of the size.
price	float		Any extra cost due to this size.
size_order	int		A number ordering the sizes from smallest to largest. These numbers may not start at 0.

Example PFQL

```
SELECT rootsizeid, name FROM root_product_sizes
WHERE rootcolorid=422 LIMIT 2
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product_size>
      <rootsizeid>430</rootsizeid>
      <name>Small</name>
    </root_product_size>
    <root_product_size>
```

```
<rootsizeid>431</rootsizeid>
<name>Medium</name>
</root_product_size>
</PFQL_query>
</printfection_response>
```

root_product_sides

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootid	int	Yes	The ID of the root product.
side	int		The side of this root product. All products have side 0 (usually the front of the product) and most products have side 1 (the back of the product).
name	string		The name of the side.
rootspecid	int		The ID of the specs associated to this side.
allow_vertical	bool		If true then this root product side can be viewed vertically.
has_mask	bool		If true then this root product side has a mask.

Example PFQL

```
SELECT rootspecid, name, side, name FROM root_product_sides
WHERE rootid=22
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product_side>
      <rootspecid>101</rootspecid>
      <name>Front</name>
      <side>0</side>
    </root_product_side>
    <root_product_side>
      <rootspecid>102</rootspecid>
      <name>Back</name>
      <side>1</side>
    </root_product_side>
  </PFQL_query>
</printfection_response>
```

root_product_specs

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootspecid	int	Yes	The ID of this spec for the root product.
position	int		The number of the position. Positions start at 1 and go up to 3.
name	string		The name of the position.
width	float		The max width of this position in inches.
height	float		The max height of this position in inches.
position_x	int		The number of pixels from the left of the root image to the left of this position.
position_y	int		The number of pixels from the top of the root image to the top of this position.
preview_size_ratio	float		The ration from full size to the preview size displayed on the root image. To calculate the preview size of an image on a product multiply the width by the PPI the preview image is displayed at (usually 72) by the preview size ratio to get the size to display the image at on the root product image.

Example PFQL

```
SELECT name, width, height FROM root_product_specs
WHERE rootspecid=101 AND position=1
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product_spec>
      <name>Center</name>
      <width>10</width>
      <height>12</height>
    </root_product_spec>
  </PFQL_query>
</printfection_response>
```

root_product_pricing_ranges

Required Permission

read permission to root products.

Fields

Field Name	Type	Indexable	Description
rootid	int	Yes	The ID of the root product.
range	int		The number of this range. Range numbers go from 1 to 7.
min_qty	int		The minimum quantity this range applies to.
max_qty	int		The maximum quantity this range applies to.

Example PFQL

```
SELECT range, min_qty, max_qty FROM root_product_pricing_ranges
WHERE rootid=22 AND range > 1 AND range < 3
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <root_product_pricing_range>
      <range>2</range>
      <min_qty>2</min_qty>
      <max_qty>11</max_qty>
    </root_product_pricing_range>
  </PFQL_query>
</printfection_response>
```

carts

Required Permission

write permission to carts.

Fields

Field Name	Type	Indexable	Description
cart_key	string	Yes	The unique ID for this cart.
ships_in_days	int		The maximum number of business days it should take for the products in this cart to be produced and handed over to the shipping carrier (i.e. leave our warehouse). This field is only valid in the SELECT clause.
subtotal	float		The subtotal of all products in this cart. This field is only valid in the SELECT clause.

Example PFQL

```
SELECT cart_key, ships_in_days, subtotal FROM carts WHERE
cart_key='ac2ef74e8581fda65c6db28eeb63042e'
```

Example XML Response

```
<printfection_response>
  <PFQL_query>
    <cart>
      <cart_key>ac2ef74e8581fda65c6db28eeb63042e </cart_key>
      <ships_in_days>3</ships_in_days>
      <subtotal>31.98</subtotal>
    </cart>
  </PFQL_query>
</printfection_response>
```

cart_products

Required Permission

write permission to carts.

Fields

Field Name	Type	Indexable	Description
cart_key	string	Yes	The unique ID for this cart.
productid	int		The ID of the product.
rootcolorid	int		The ID of the color for this root product.
rootsizeid	int		The ID of the size for this root product.
qty	int		The quantity of this product to purchase.
ships_in_days	int		The maximum number of business days it should take for this product to be produced and handed over to the shipping carrier (i.e. leave our warehouse). This field is only valid in the SELECT clause.
price_each	float		The price of this product taking into account sizing, color, quantity, and commission. To find the total cost of this line item multiple the price_each by the quantity. This field is only valid in the SELECT clause.

Example PFQL

```
SELECT productid, rootcolorid, rootsizeid, qty, ships_in_days,
       price_each FROM cart_products
WHERE cart_key='ac2ef74e8581fda65c6db28eeb63042e' LIMIT 1
```

Example XML Response

```
<printfection_response>
  <PFQL_query>
    <cart>
      <cart_key>ac2ef74e8581fda65c6db28eeb63042e</cart_key>
      <productid>1</productid>
      <rootcolorid>111</rootcolorid>
```

```

<rootsizeid>167</rootsizeid>
<qty>1</qty>
<ships_in_days>3</ships_in_days>
<price_each>18.99</price_each>
</cart>
</PFQL_query>
</printfection_response>

```

sessions

Required Permission

read permission to sessions. This is always granted to every API key.

Fields

Field Name	Type	Indexable	Description
session_key	string	Yes	A session key which links a user's account to an application.
custid	int		The ID of the customer this session key belongs to.
date_created	unix time		The date this session was created.
date_expire	unix time		The date this session will expire. If 0 then this session will never expire.

Example PFQL

```

SELECT custid, date_created, date_expire FROM sessions
WHERE session_key='d9b8e39b2e311039-17'

```

Example XML Response

```

<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <custid>14578</custid>
    <date_created>1218129274</date_created>
    <date_expire>0</date_expire>
  </PFQL_query>
</printfection_response>

```

permissions

Required Permission

read permission to sessions. This is always granted to every API key.

Fields

Field Name	Type	Indexable	Description
------------	------	-----------	-------------

session_key	string	Yes	A session key which links a user's account to an application.
image_sets	list (string)		A list of image set IDs and the permission per image set in a JSON formatted array.
stores	list (string)		A list of store IDs and the permission per store in a JSON formatted array.
add_store	string		This can be none or write.
add_image_set	string		This can be none or write.

Example PFQL

```
SELECT add_image_set, image_sets FROM permissions
WHERE session_key=' d9b8e39b2e311039-147'
```

Example XML Response

```
<?xml version="1.0" encoding="UTF-8"?>
<printfection_response>
  <PFQL_query>
    <add_image_set>Write</add_image_set>
    <image_sets>
      <image_set>
        <imagesetid>1</imagesetid>
        <permission>Delete</permission>
      </image_set>
      <image_set>
        <imagesetid>72</imagesetid>
        <permission>Delete</permission>
      </image_set>
    </image_sets>
  </PFQL_query>
</printfection_response>
```