

Google Analytics E-commerce Tracking

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Summary

I consider Google Analytics the best tracking software on the market. It is packed with tons of useful features, one of which is E-Commerce tracking.

If you don't have E-Commerce setup, you are missing out on one of the most useful features that Google Analytics offers. What good is it study visitor behavior if you can't determine which visitors are making purchases and how much they are spending? This is exactly what E-Commerce tracking can teach you.

With Google Analytics E-commerce enabled, you can view a record of every purchase that was made on your site, how much the purchase was for, how the customer found your site, and how many visits they made before buying. These are just a few of the features available with E-Commerce tracking.

I spent countless hours and a few hundred dollars setting up E-Commerce for my single product websites. Even though there are many webmasters using Google Analytics, there isn't a lot of information available on the web concerning the E-Commerce feature.

After testing several scripts and methods, I finally found something that worked and worked well. I decided to write a quick guide detailing how to setup Google Analytics E-Commerce Tracking for Paypal.

I hope this guide is helpful and saves you time and money. I've tried to be as detailed as possible. If you have moderate web experience, you should have no problem setting this up.

If configuring and setting up this script is beyond your capabilities, I've offered a couple of options at the end of this guide.

Good Luck,

Brent Crouch

<http://www.brentcrouch.com>

Paypal Account Setup

1. Sign into your Paypal account.
2. Click the [My Account](#) tab.
3. Click the [Profile](#) subtab.
4. Click the [Website Payment Preferences](#) link in the Selling Preferences column on the right. The Website Payment Preferences page opens.
5. Follow the directions on the following page. Click [Save](#).

A confirmation message will appear at the top of the page indicating that you have successfully enabled Payment Data Transfer. Your identity token will appear within that message, as well as below the Payment Data Transfer On/Off radio buttons.

Copy and paste your identity token in notepad for use later.

Website Payment Preferences

[Back to Profile Summary](#)

Auto Return for Website Payments

Auto Return for Website Payments brings your buyers back to your website immediately after payment completion. Auto Return applies to PayPal Website Payments, including Buy Now, Donations, Subscriptions, and Shopping Cart. [Learn More](#)

Auto Return: On
 Off

Make sure Auto Return is "On"

Return URL: Enter the URL that will be used to redirect your customers upon payment completion. This URL must meet the guidelines detailed below. [Learn More](#)

Go ahead and enter a "default url" here. You can change it later when setting up payment buttons.

Return URL:

Return URL Requirements: The following items are required in order to set up Auto Return.

- Per the user agreement, you must provide verbiage on the page displayed by the Return URL that will help the buyer understand that the payment has been made and that the transaction has been completed.
- You must provide verbiage on the page displayed by the Return URL that explains that payment transaction details will be emailed to the buyer.
- Example: Thank you for your payment. Your transaction has been completed, and a receipt for your purchase has been emailed to you. You may log into your account at www.paypal.com/us to view details of this transaction.

Payment Data Transfer (optional)

Payment Data Transfer allows you to receive notification of successful payments as they are made. The use of Payment Data Transfer depends on your [system configuration](#) and your Return URL. Please note that in order to use Payment Data Transfer, you **must** turn on Auto Return.

Payment Data Transfer: On
 Off

Turn on Payment Data Transfer and copy and paste your identity token into notepad for use later.

Identity Token: -nwJzMe3nAz6e7FHYQmzC9g-su_

Encrypted Website Payments

Using encryption enhances the security of website payments by decreasing the possibility that a 3rd party could manipulate the data in your button code. If you plan on only using encrypted buttons you can block payments from non-encrypted ones.

[Learn more about Encrypted Website Payments](#)

Note: If you enable Encrypted Website Payments, all of your Buy Now, Donations, and Subscriptions buttons **must** be encrypted via one of the following methods:

- Using the [Button Factory](#) with the security settings enabled.
- Using your own code, you encrypt all website payments before sending them to PayPal.

By enabling this feature, any Buy Now, Donation, or Subscription button that is not encrypted will be rejected by PayPal.

Block Non-encrypted On

Doesn't matter for our purposes.

- Using your own code, you encrypt all website payments before sending them to PayPal.

By enabling this feature, any Buy Now, Donation, or Subscription button that is not encrypted will be rejected by PayPal.

Block Non-encrypted Website Payment: On Off

Doesn't matter for our purposes.

PayPal Account Optional

When this feature is turned on, your customers will go through an optimized checkout experience. This feature is available for Buy Now, Donations, and Shopping Cart buttons, but not for Subscription buttons. [Learn More](#)

PayPal Account Optional: On Off

Doesn't matter for our purposes.

Contact Telephone Number

When you activate this option, your customers will be asked to include a Contact Telephone Number with their payment information. [Learn More](#)

Note: Selecting **On (Required Field)** could have a negative effect on buyer conversion.

Contact Telephone On (Optional Field) On (Required Field) Off (PayPal recommends this option)

Doesn't matter for our purposes.

Express Checkout Settings

With this setting you determine if you technically support the German funding methods giro pay and bank transfer in your Express Checkout implementation.

Support giro pay and bank transfer payments: Yes No

Doesn't matter for our purposes.

Save

Cancel

Configure and Upload the PDT Script

The next step is setting up the Paypal PDT script on your site. For most people, this will be the most difficult part of the setup. You can name the script anything you want as long as it ends with the extension .cgi. For our example, we'll name the script paymentprocessing.cgi.

There are a few variables you'll need to setup in the script. When a buyer makes a payment, Paypal will direct them to the paymentprocessing.cgi page for just a few seconds. During this time, you can execute the Google Analytics code, your affiliate tracking codes, and any other PPC conversion data.

You can download the paymentprocessing.cgi script in text form from my site at the URL below. Be sure to rename the file with a .cgi extension before loading it to your site. Also, upload the file in ASCII and set the permissions to 755.

<http://www.brentcrouch.com/pdt/paymentprocessing.txt>.

Configuring the variables

Note 1. If you are using Overture Conversion Data, you will need to replace the red colored font with your account id. If not, you can remove everything between **OPTIONAL 1 START** and **OPTIONAL 1 END**.

If you have any other javascript that needs to be added in the Head section of the page, you should add it here.

Note 2. If you are using Google Conversion Data, you will need to replace the red colored font with your account id. If not, you can remove everything between **OPTIONAL 2 START** and **OPTIONAL 2 END**.

Note 3. When you enabled PDT in your Paypal profile, you were given an authorization token. Copy and paste your payment authorization in the field provided.

Note 4. When your customer makes a payment, they will be returned to the payment processing script long enough to write the Google Analytics E-Commerce code. After a few seconds, the script will redirect to the URL of your choice. This can be your product download page or a Thank You for your Order Page. Place the final URL in the space provided.

Note 5. I use this section to write tracking codes for a few scripts I use. You should be able to take a look at how I used the Paypal PDT variables in this section and get a good idea of how to setup your own tracking codes. If you don't need to write any tracking codes, just delete everything between **OPTIONAL 5 START** and **OPTIONAL 5 END**.

Note 6. Enter your Google Analytics account info here.

Note 7. Analytics allows you to enter your product category to be later displayed on your E-Commerce reports. You can hard code any value you want here or just leave it like it is.

```

#!/usr/bin/perl -w
###
#
# PayPal PDT (Payment Data Transfer) CGI
#Brent Crouch
#http://www.brentcrouch.com
###

use strict;
use CGI qw(:all unescape);
use CGI::Carp qw(fatalsToBrowser);
# These modules are required to make the secure HTTP request to PayPal.
use LWP::UserAgent;
use Crypt::SSLeay;

# Javascript modules go here
my $JSCRIPT_HEAD=<<EOF_HEAD;

    OPTIONAL 1 START
<!-- Overture Services Inc. 07/15/2003
var cc_tagVersion = "1.0";
var cc_accountID = "XXXXXXXXXXXX"; See Note 1
var cc_marketID = "0";
var cc_protocol="http";
var cc_subdomain = "convctr";
if(location.protocol == "https:")
{
    cc_protocol="https";
    cc_subdomain="convctrs";
}
var cc_queryStr = "?" + "ver=" + cc_tagVersion + "&aID=" + cc_accountID +
    "&mkt=" + cc_marketID + "&ref=" + escape(document.referrer);
var cc_imageUrl = cc_protocol + "://" + cc_subdomain +
    ".overture.com/images/cc/cc.gif" + cc_queryStr;
var cc_imageObject = new Image();
cc_imageObject.src = cc_imageUrl;

    OPTIONAL 1 END

// -->

EOF_HEAD
;

my $JSCRIPT_BODY=<<EOF_BODY
    OPTIONAL 2 START
<!-- Google Code for Purchase Conversion Page -->
<script language="JavaScript" type="text/javascript">
<!--
var google_conversion_id = 10XXXXXXXX; See Note 2
var google_conversion_language = "en_US";
var google_conversion_format = "2";
var google_conversion_color = "FFFFFF";
if (1) {
    var google_conversion_value = 1;
}
var google_conversion_label = "Purchase";
//-->
</script>
<script language="JavaScript" src="http://www.googleadservices.com/pagead/conversion.js">
</script>

<noscript> See Note 2

</noscript>
<!-- End Google Code for Purchase Conversion Page -->
    OPTIONAL 2 END

EOF_BODY
;

my $auth_token = "-nwJzMe3nAz6e7FHYQmzCXXXXXXXXXXXXXXXXXXXXX"; See Note 3

sub done_text {
    return (p("Your transaction has been completed, and a receipt for your purchase has been emailed to you. You may log into your account
at <a href="https://www.paypal.com/">www.paypal.com</a> to view details of this transaction.
You will now be sent to the download area."), end_html());
}

print header(), start_html(-title=>'Paypal Processing Script', See Note 4
    -head=>meta({-http_equiv=>'refresh',-content=>'1'; URL=http://www.jillianentertainment.com/XXXX/XXXXXX.html'}),
    -script=>$JSCRIPT_HEAD
);

print $JSCRIPT_BODY; #Puts Javascript code into HTML BODY

# Set up the secure request to the PayPal server to fetch the transaction info
my $paypal_server = "www.paypal.com";

my $transaction = param("tx");

if (not $transaction) {
    print (h2("The transaction ID was not found."), done_text());
    exit();
}

my $paypal_url = "https://$paypal_server/cgi-bin/webscr";

```

```

print (h2("The transaction ID was not found."), done_text());

exit();
}

my $paypal_url = "https://$paypal_server/cgi-bin/webscr";
my $query = join("&", "cmd=_notify-synch", "tx=$transaction", "at=$auth_token");

my $user_agent = new LWP::UserAgent;
my $request = new HTTP::Request("POST", $paypal_url);

$request->content_type("application/x-www-form-urlencoded");
$request->content($query);

# Make the request
my $result = $user_agent->request($request);

if ($result->is_error) {
    print(h1("An error was encountered"), br(), p("An error was encountered contacting the PayPal server:")),
    $result->error_as_HTML, done_text());
    exit();
}

# Decode the response into individual lines and unescape any HTML escapes
my @response = split("\n", unescape($result->content));

# The status is always the first line of the response.
my $status = shift @response;

if ($status eq "SUCCESS") {
    # success
    my %transaction;

    foreach my $response_line (@response) {
        my ($key, $value) = split "=", $response_line;
        $transaction{$key} = $value;
    }

    OPTIONAL 5 START

    See Note 5

    print('<!--Start Adtrackz Conversion Tracking Code-->
<!--End Adtrackz Conversion Tracking Code-->'),

    (<!--Start BestAdTracking Tracking Code-->

<!--End BestAdTracking Tracking Code-->'),

    (<!--Start Affiliate Tracking Code-->

<!--End Affiliate Tracking Code-->));

    OPTIONAL 5 END

#Google Analytics Tracking Code

print qq[
<script type="text/javascript">
var gaJsHost = (("https:" == document.location.protocol) ? "https://ssl." : "http://www.");
document.write(unescape("%3Cscript src=" + gaJsHost + "google-analytics.com/ga.js" type="text/javascript"%3E%3C/script%3E"));
</script>

<script type="text/javascript">
var pageTracker = _gat._getTracker("UA-XXXXXXXXXXXX"); See Note 6
pageTracker._initData();
pageTracker._trackPageview();

pageTracker._addTrans(
"$transaction{'first_name'} $transaction{'last_name'}",
",
"$transaction{'mc_gross'}",
",
"$transaction{'address_city'}",
"$transaction{'address_state'}",
"$transaction{'address_country'}"
);

pageTracker._addItem(
"$transaction{'first_name'} $transaction{'last_name'}",
"$transaction{'item_number'}",
"$transaction{'item_name'}",
"Product Category", See Note 7
"$transaction{'mc_gross'}",
"$transaction{'quantity'}"
);

pageTracker._trackTrans();
</script>
];
} elseif ($status eq "FAIL") {
    print(h2("Unable to retrieve transaction details.));
    # failure
} else {
    # unknown error
    print(h2("Error retrieving transaction details.));
}

print done_text();

```

Creating Paypal Buy it Now Buttons

You'll need to recreate your Paypal buy it now buttons to include a return url. Follow the steps below to make buy it now buttons compatible with Paypal's PDT.

1. Sign into your Paypal account.
2. Click the [Merchant Services](#) tab.
3. Click the [Buy it Now Buttons](#).
4. Fill out the options on the first page and Click [Add More Options](#) at the bottom of the page.
5. Make sure [Auto Return](#) is set to on.
5. You'll see an entry for [Successful Payment Url](#). This is where you will enter the URL for your payment processing script.
Ex. <http://www.myurl.com/paymentprocessing.cgi>
6. Also, make sure the PDT option is set to "On".
7. Now Click [Create Button Now](#).

Buy Now buttons

See Demo

Sell individual items on your website by creating a customized payment button.

[More Resources](#)
Techniques, examples,
and more.

Create Buy Now button

Item details

Item name/service:

Item ID/number:
(optional)

Price:

Currency: ?

You can change the default checkout language and content for your buyer by selecting from the countries below. Otherwise, do nothing and your buyers can choose for themselves.

Buyer's default country: ?

Weight: (Optional) Lbs ?

Choose button style

- | | |
|----------------------------------|-----------------------|
| <input checked="" type="radio"/> | <input type="radio"/> |
| <input type="radio"/> | <input type="radio"/> |
| <input type="radio"/> | <input type="radio"/> |

Need more choices?

[Other button sizes](#) | [Use your own button image](#)

Button encryption

- Yes Your item price and other details are [encrypted](#) and cannot be altered.
Note: Selecting encryption means you cannot use option fields or create email links.
- No Non-encrypted buttons allow you to directly modify your HTML code, create [option fields](#), and generate email links.

Shipping Method Options

- Configure your shipping method options for this button.
- Use my shipping calculations set up in my Profile ?
- Use a flat rate amount USD ?

Sales Tax Options

- Configure your sales tax options for this button.
- Use my sales tax calculations set up in my Profile ?
- Use a flat rate amount USD ?

Create Button Now

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Auto Return: On
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Payment Data Transfer (optional)

Payment Data Transfer allows you to receive notification of successful payments as they are made. The use of Payment Data Transfer depends on your [system configuration](#) and your Return URL. Please note that in order to use Payment Data Transfer, you **must** turn on Auto Return.

Payment Data Transfer: On
 Off

Identity Token: -nwJzMe3nAz6e7FHYQmzC9n-sH_2qkkoX-r3pI-4rnrk-1234

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[Learn more about Encrypted Website Payments](#)

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FAQ

1. How do I know if the script is working?

It takes Google Analytics 24 hours to update and show the most recent sales. This is why configuring and debugging this script can be pretty frustrating. The only way to know that E-Commerce is setup properly is to sign into your Analytics account 24 hours after you make a sale and confirm it was recorded.

One thing you can do to make sure the script is setup on your server correctly is to type the URL in your browser. Normally, the page should load for about 2 seconds and redirect to the URL you set in the configuration. If this happens, then chances are E-Commerce will work. However, if you get a 500 error, you need to take a closer look at your script configuration.

2. Why does this script need to direct to another page?

When you send a customer to your product download page, most will bookmark the page and visit it several times. In my opinion, this isn't the place to write tracking codes. If you do, a customer revisiting this page could record bad data in your tracking and conversion programs.

In my experience, it is better to direct the customer to a temporary page to write tracking data and then direct them to the final download page.

3. Does this script work with anything other than Paypal?

This script is currently setup to work just with Paypal. I do have some experience setting this up on one of my sites using a standard merchant account. Depending on how much demand there is for this type of thing, I may make options other than Paypal available in the future.

4. I can't get the script setup. Can you do it for me?

If you know the basics, I'll help you out answering any questions I can. You can just email me at brent@brentcrouch.com or write me a message at the Warrior Forum.

If you don't know the basics, I'm not going to spend the time to teach you how to FTP a file to your server and configure it. I offer a paid option at the end of the manual.

5. I am already using Paypal's IPN. Will PDT and IPN work together?

Using PDT will not affect IPN at all. They both operate independently of each other. I currently use Paypal IPN to write my database and there has been no problem adding PDT.

Expert Setup Option

My goal in creating this book was to give you detailed info so you can setup and install this script yourself. If you are having problems that are beyond resolving by email or just aren't comfortable setting this up yourself, I would like to offer you the option of having me setup and install the script for you.

I'll install and setup Google Analytics on your website as well as install and configure the PDT script for only \$99. This offer is for sites that are using Paypal as a payment option and have 20 pages or less. If you need Analytics setup on more pages, please contact me for a quote.

If this option is of interest to you, please visit the link below for payment options.

<http://tinyurl.com/2pomm8>

Good Luck,

Brent Crouch

<http://www.brentcrouch.com>