



# Enabling Payments on your WebMatrix Powered ecommerce Sites

*Everything a developer would need to know !*

March, 26<sup>th</sup> 2011

Rasesh Shah  
Developer Evangelist  
PayPal

# **AGENDA**

- Introduction
- Setting up WebMatrix
- Setting up PayPal sandbox
- Setting up PayPal Helper
- Developing photo sharing site with Chained payment
- Monetize Facebook like button
- Q & A

# ***Introduction***

# ***PAYPALX***



## ***OPEN GLOBAL PAYMENTS PLATFORM***

Enables various monetization models

Over 190 countries and 24 currencies

Flexible Services and APIs

Serves Consumers, Merchants/Sellers & Developers!

Risk and Fraud Management

# ***DIFFERENT MONETIZATION MODELS***

## **Indirect Monetization**

**Advertisizing**

**Offers**

**Referrals**

## **Direct Monetization**

**e/m-commerce**

**Freemium/Causium**

**Pay as you Use**

**Free to use Pay for Services**

**Premium Content**

**Digital Goods**

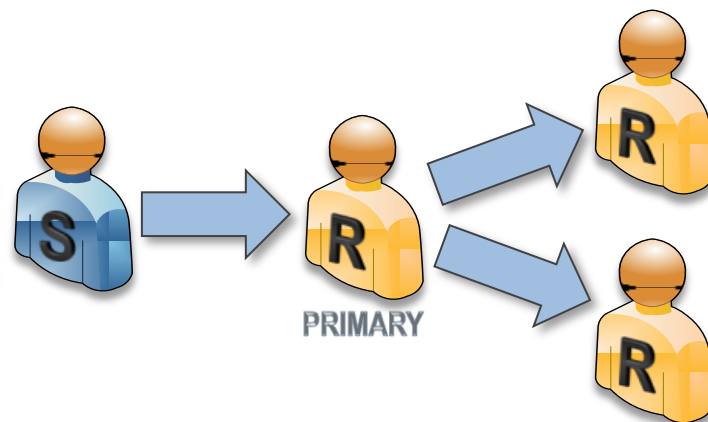
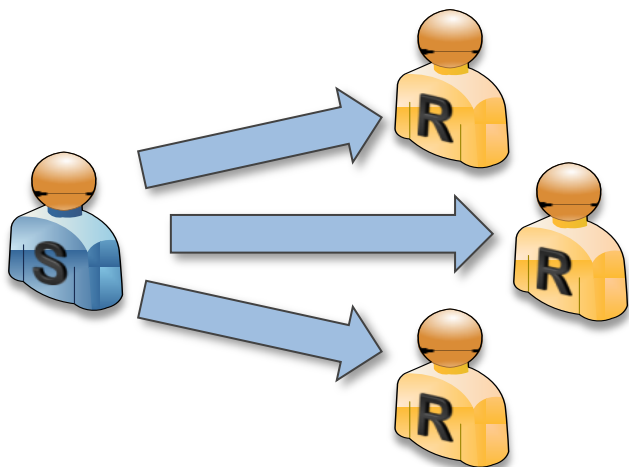
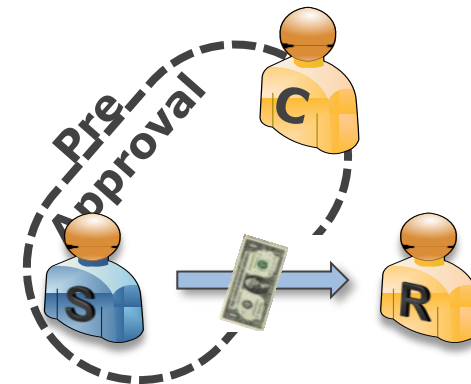
**Virtual Currency**

**Subscriptions**

# DIFFERENT PAYMENT MODELS



Simple Payments  
Chained Payments  
Parallel Payments  
Preapprovals  
Subscriptions  
Recurring Payments  
Web Checkout  
Micro Payments



# ADAPTIVE PAYMENT API OPERATIONS

API Operation	Description
CancelPreapproval	Cancels a preapproval
ConvertCurrency	Obtains Foreign Exchange currency conversion rates for a list of amounts
ExecutePayment	Executes a payment
GetPaymentOptions	Obtain the settings specified with the SetPaymentOptions API operation
Pay	Transfers funds from a sender's PayPal account to one or more receivers' PayPal accounts (up to 6 receivers)
PaymentDetails	Obtains information about a payment set up with the Pay API operation
Preapproval	Sets up preapprovals, which is an approval to make future payments on the sender's behalf
PreapprovalDetails	Obtains information about a preapproval
Refund	Refunds all or part of a payment
SetPaymentOptions	Sets payment options

# HTTP HEADERS FOR API CALLS

## HTTP Headers for Authentication

Header	Description
X-PAYPAL-SECURITY-USERID	Your API username
X-PAYPAL-SECURITY-PASSWORD	Your API password
X-PAYPAL-SECURITY-SIGNATURE	Your API signature, which is required only if you use 3-token authorization; a certificate does not use a signature
X-PAYPAL-SECURITY-SUBJECT	Third-party permission specification, which specifies the email address or phone number (for mobile) of the party on whose behalf you are calling the API operation. The subject must grant you third-party access in their PayPal profile.  <b>NOTE:</b> Resources specified by the API operation, such as a payment or preapproval identified by a key, must be owned by the subject granting the third-party permission.

## HTTP Headers for JSON, NVP, and XML Data Formats

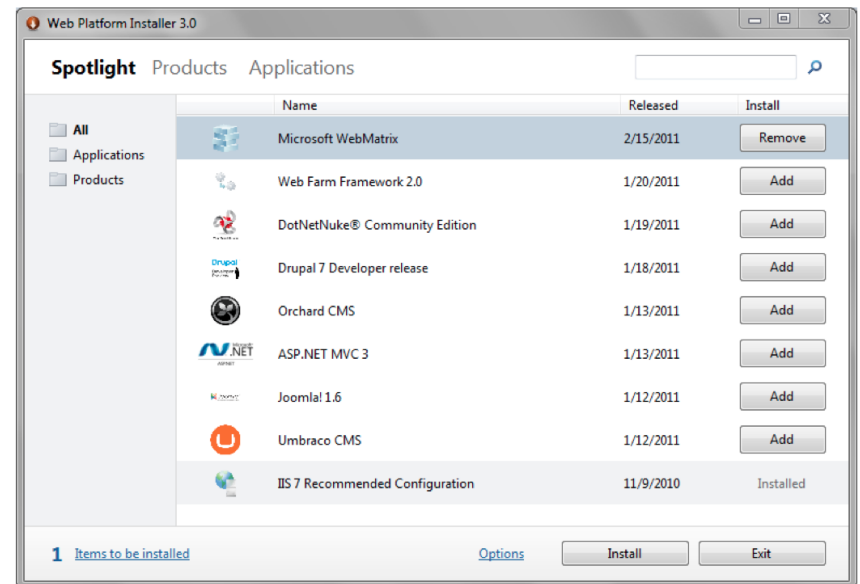
Header	Description
X-PAYPAL-REQUEST-DATA-FORMAT	The payload format for the request. Allowable values are: <ul style="list-style-type: none"><li>• NV – Name-value pairs</li><li>• XML – Extensible markup language</li><li>• JSON – JavaScript object notation</li></ul>
X-PAYPAL-RESPONSE-DATA-FORMAT	The payload format for the response. Allowable values are: <ul style="list-style-type: none"><li>• NV – Name-value pairs</li><li>• XML – Extensible markup language</li><li>• JSON – JavaScript object notation</li></ul>



# *Setting up WebMatrix*

# ENVIRONMENT SETUP

- Download WebMatrix
  - <http://www.microsoft.com/web/webmatrix/>
- Use Web Installer to install the WebMatrix

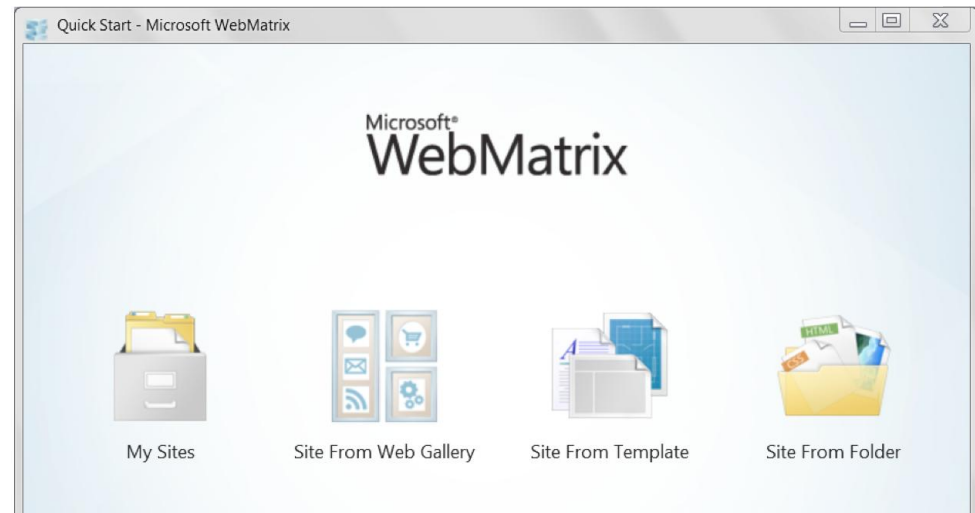


# ***FEATURES***

- Create, develop and publish your web site
- Small but complete package
- Simple database connectivity
- Start > Open Source

# QUICK START

- Start WebMatrix
- Site from Web Gallery
- Site from template
- Site from folder



# ***Setting up PayPal Sandbox***

# ***PAYPAL SANDBOX***

- Create the developer account
  - <http://developer.paypal.com>
- Set up the test accounts buyer , seller, developer
- Note down the API credentials
  - User Name , Password , Signature

# PAYPAL SANDBOX

[PayPal Home](#) | [Contact Us](#)

**Member Log In**  
 Email Address  
 Password  
☐ Keep me logged in  
[Log In](#)  
[Trouble Logging In?](#)

**Additional resources**  
[Documentation](#)  
[PayPal Developer Network](#)  
[Customer Support](#)

**PayPal DEVELOPER CENTRAL IS MOVING TO X.COM.**  
 Find sample code, forums, documentation and more. [EXPLORE X.COM](#)

**Need an account? Sign up now to access PayPal's Sandbox Test Environment.**

Use the Sandbox Test Environment to create and manage test accounts and their associated email and API credentials. You can also access valuable developer resources from Help.

[Sign Up Now](#)

[Fees](#) | [Privacy](#) | [Security Center](#) | [Contact Us](#) | [Legal Agreements](#) | [User Agreement](#)  
 Copyright © 1999-2010 PayPal. All rights reserved.

[Help](#) | [Profile](#) | [Log Out](#)

**Sandbox**  
[Home](#)  
[Test Accounts](#)  
[Test Email](#)  
**API Credentials**  
[Test Tools](#)

**Additional resources**  
[Documentation](#)  
[PayPal Developer Network](#)  
[Customer Support](#)

**API Credentials**

You must have credentials to test APIs for Website Payments Pro and Express Checkout in the Sandbox. In most cases, you will use API signatures and not download certificates.

The test accounts identified below are enabled for API access.

**Note:** These credentials will not work outside the Sandbox. You will need new credentials from paypal.com to go live.

Test Account	Date Created
<b>Test Account:</b> devz_1299018449_biz@yahoo.com <b>API Username:</b> devz_1299018449_biz_api1.yahoo.com <b>API Password:</b> 1299018457 <b>Signature:</b> AOJg8whuGwKAwwAJyvgkG3niq1Jr8Akkrd0NjQLbIz4ThW6DRnU.KjGcl	Mar. 1, 2011 14:27:37 PST

[Help](#) | [Profile](#) | [Log Out](#)

**Sandbox**  
[Home](#)  
**Test Accounts**  
[Test Email](#)  
[API Credentials](#)  
[Test Tools](#)

**Additional resources**  
[Documentation](#)  
[PayPal Developer Network](#)  
[Customer Support](#)

**Test Accounts**

- To test a merchant transaction, you must use a test Business Account.
- To test a buyer transaction, you must use a test Personal Account.

To simulate a transaction on PayPal.com, choose a test account.

New test account: [Preconfigured](#) | [Create Manually](#)

Log-in Email	Payment Review	Negative Test Mode	Reset
<input checked="" type="radio"/> dev@csg.com Business Unverified <a href="#">View Details</a>	Disabled	Disabled	N/A
<input type="radio"/> devz_1299018449_biz@yahoo.com Business Verified <a href="#">View Details</a>	Disabled	Disabled	Reset
<input type="radio"/> selz_1299017766_biz@yahoo.com Business Verified	Disabled	Disabled	Reset

**Sandbox**  
[Home](#)  
**Test Accounts**  
[Test Email](#)  
[API Credentials](#)  
[Test Tools](#)

**Additional resources**  
[Documentation](#)  
[PayPal Developer Network](#)  
[Customer Support](#)

**Create a Sandbox Test Account**

After creating the account, you can delete the account or you can provide additional information in the Sandbox Test Site. How to automatically create verified accounts.

Country

Account Type  
☒ Buyer (Use to represent your customer's experience)  
☐ Seller (Use to represent yourself as the merchant)  
☐ Website Payments Pro (Use to represent yourself as a merchant using Pro)

Login Email  
  
 This email address is only used inside the Sandbox.

Password  
  
 Your password must be at least 8 characters.

Add Credit Card

Add Bank Account  
☒ Yes  
☐ No

Account Balance  
 \$  .00 USD

Notes

[Create Account](#) [Cancel](#)

# ***PayPal Helpers for WebMatrix***



## ***PAYPAL HELPERS***

- Wrapper classes on top of Adaptive Payments API
- Wrapper classes on top of Button Manager APIS
- Payment enabled Bakery template to bootstrap your application
- Open source for making any modification to your need

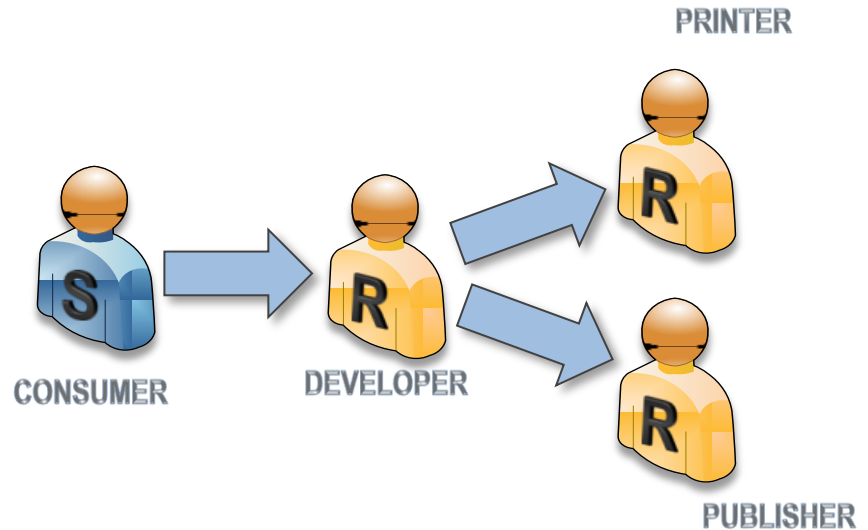
## ***GET STARTED IN 60 SECONDS***

- Download the PayPal helper library
  - <http://paypalhelper.codeplex.com>
- Create a new website or template in WebMatrix
- Create a bin folder off the root
- Copy and paste the PayPal library into the bin folder
- Read the documentation and start monetizing

# ***Monetizing Photo Sharing Site***

## USE CASE

- Developer hosts a photo sharing site
- Publisher publishes good quality pictures
- Printer prints a picture copy and send it to consumer
- Consumer orders a copy of the picture



## ***STEP BY STEP DEVELOPMENT***

1. Start WebMatrix and create a new web site from photo gallery template
2. Paste PayPal.dll in bin folder
3. Run the web Site and see the starting page
4. Data stored in /App\_Data/PhotoGallery.sdf file

## ***APP START FILE***

Modify \_AppStart.html file to initialize PayPal helper

```
PayPal.Profile.Initialize(  
    "msft_1284494024_biz_api1.yahoo.com",  
    "1284494030",  
    "AXmPHOGI57wrwF1dy49VI0W9gisLAWm4raYoWQy9KHCtpd7kLISQ  
csFG",  
    "sandbox",  
    "APP-80W284485P519543T"  
);
```

## ***MODIFY THE VIEW PAGE***

Add button for buying a print in /Photo/View file

```
<div id="paypal">
```

Order this Print for just \$1

```
<form name="frmPayPal" action="/Photo/OrderSuccess">  
  <input type="hidden" name="publisher" value="@user.Email">  
  Shipping Address : <input type="text" name="shippingAddress"  
value=""/><br/><br/>  
  <input type="submit" value="Buy"/>  
</form>  
</div>
```

## ***ORDER SUCCESS SCRIPT***

- Add new chtml file OrderSuccess under Photo folder
- Set the pricing options

```
var shippingAddress = Request["shippingAddress"];  
var qty = "1";  
var price = new Decimal(1);  
var publisher = "mytest_1296498503_biz@yahoo.com";  
var printer = "isv_1284493468_biz@yahoo.com";  
var developer = "msft_1284494024_biz@yahoo.com";
```



# ***ORDER SUCCESS SCRIPT***

- Set the receivers

```
var DevRcv = new PayPal.AdaptivePayments.Receiver();  
DevRcv.email = developer;  
DevRcv.amount = price;
```

```
var PayReceivers = new List<PayPal.AdaptivePayments.Receiver>();
```

```
var PubRcv = new PayPal.AdaptivePayments.Receiver();  
PubRcv.email = publisher;  
PubRcv.amount = decimal.Round(price * .10m, 2);  
PayReceivers.Add(PubRcv);
```

```
var PrintRcv = new PayPal.AdaptivePayments.Receiver();  
PrintRcv.email = printer;  
PrintRcv.amount = decimal.Round(price * .70m, 2);  
PayReceivers.Add(PrintRcv);
```

# EXECUTE THE CALL

```
var Language = "en_US";
var CancelUrl = "http://localhost:30546"; //Change the domain and port to your environment
var returnUrl = "http://localhost:30546"; //Change the domain and port to your environment
var CurrencyCode = "USD";

var response = PayPal.AdaptivePayments.ChainedPay.Execute
    (DevRcv, PayReceivers, "", "Test Photo Payment", "127.0.0.1",
    "MyDevice",CancelUrl,ReturnUrl,"",CurrencyCode,Language);

if (response == null) {
    Response.Write("null");
}
else
{
    Response.Write("full");
}

var payKey = response.payKey;

//Points to the paypal sandbox account. Change it to production url for live.
var redirectUrl = "https://www.sandbox.paypal.com/webscr?cmd=_ap-payment&paykey=" +
payKey;

Response.Redirect(redirectUrl);
```

## ***OTHER HELPERS***

1. Pre approval helpers
2. Refund helpers
3. Payment Detail helpers
4. Currency Conversion helpers
5. Button Manager Helpers (Buy Now , Add to Cart etc)

***Little fun - Monetize Facebook like button***

## ***FACEBOOK LIKE BUTTON***

1. Download Facebook helpers  
<http://facebookhelper.codeplex.com>
2. Copy facebook.chnml into App\_Code folder
3. Modify View.chnml file to make a call  
`@Facebook.LikeButton([your site url])`
4. Share revenue with the like referrer by adding him as one more receiver of the payment

# Q&A

[www.x.com](#)

Twitter: @paypalx, @srasesh

[www.facebook.com/paypalx](#)