

2008

# New PayPal® Integration Tools for Developers

eBay Developers Conference 2008

Srini Pasupulati

Principal Integration Engineer, PayPal

Amish Patel

Senior Integration Engineer, PayPal

Ketan Babaria

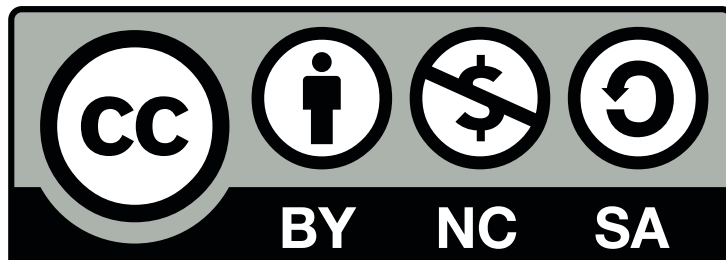
Senior Product Marketing Manager, PayPal



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# New PayPal Integration Tools

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- New Integration Wizard
- New Standard Button factory
- Sandbox environment and IPN simulator

# New Integration Wizard

# Integration Wizard

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- What it is
  - Guides you through a complete implementation
  - Code generator
    - Code can be used as-is or as a starting point
- What it is not
  - Not all optional parameters are included
  - It is not a complete enterprise solution
  - Reporting is not addressed
- What products and features it has

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# Integration Wizard

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- Express Checkout PayPal
- Express Checkout Payflow edition
- Credit Card Payflow
- PayPal recurring payments
  - Express Checkout API
  - Billing Agreement API
  - Direct Payments (credit card)
- Payflow Pro recurring billing
  - Credit card

# Integration Wizard

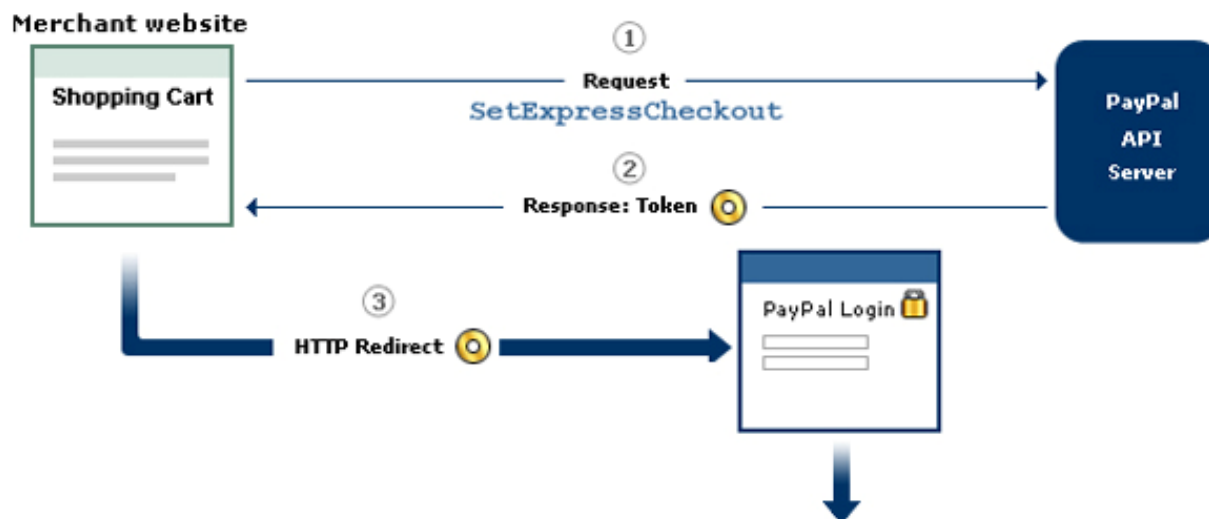
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## Provides concise understanding of the feature

Before you use the wizard you will need:

1. Understanding how to set up a billing agreement using the [Express Checkout API](#)
  - The `DoExpressCheckoutPayment` call is made only if the order includes a one-time purchase.
  - The `CreateRecurringPaymentsProfile` call is made for each recurring payment profile included in the order.
  - Up to 10 recurring payment profiles can be included in one express checkout order.

**Legend:**  Web Flow  API Call  Token  Profile ID



# Integration Wizard

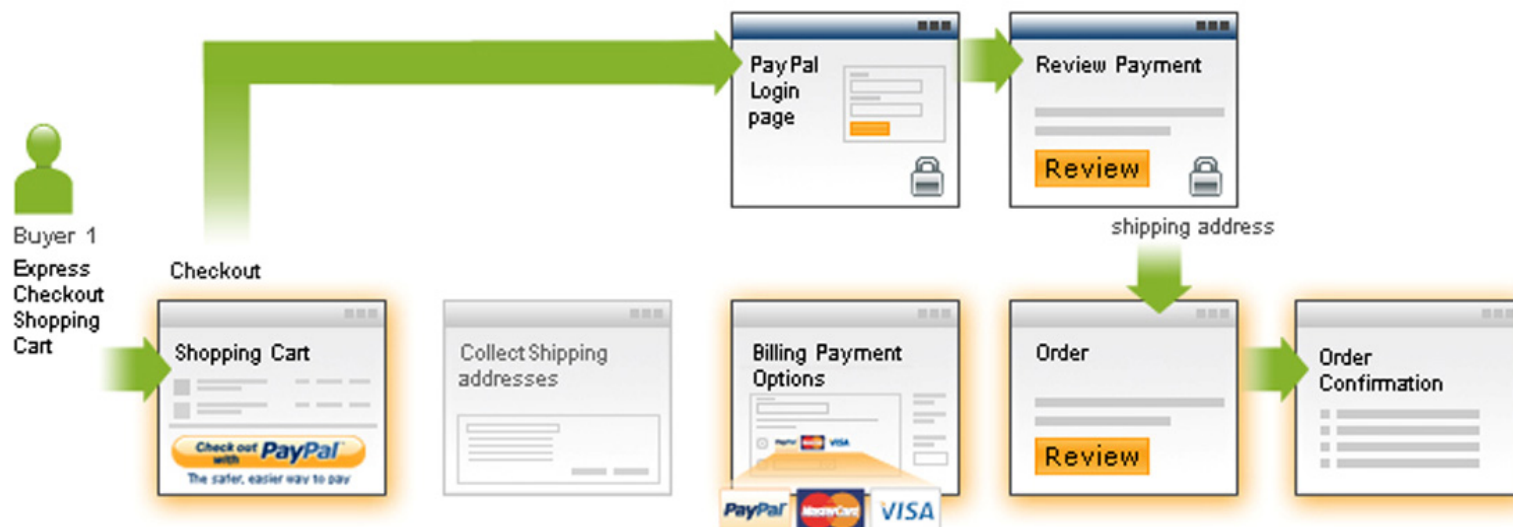
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## Visualize within the context of a shopping cart flow

The following diagrams show a typical shopping cart flow and the page updates to support PayPal from the shopping cart, and from the payment options page. You can code to support both flows using the wizard.



1: Express Checkout Flow





# Integration Wizard

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## Step-by-step instructions with code generation

1 Code 2 **Cart** 3 Billing 4 Review 5 Confirm 6 Complete

### Step 2. Add PayPal to your shopping cart page

[» Start Over](#)

2a. Insert this code snippet into the section of your code that handles shopping cart.\*

```
<form action='expresscheckout.asp' METHOD='POST'>
<input type='image' name='submit'
src='https://www.paypal.com/en_US/i/btn/btn_xpressCheckou
t.gif' border='0' align='top' alt='PayPal' />
</form>
```

\* Click inside the textbox to auto select all, then paste the code snippet into your shopping cart handler page.

2b. Download these files to your shopping cart web directory

[» expresscheckout.asp](#)

[» paypalfunctions.asp](#)

# Integration Wizard

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## Code generation

User input

**API Credentials**

API Username

API Password

Signature

How to get [PayPal API credentials?](#)

Code selection

**Shopping Cart Programming Language**

Active Server Pages (ASP) ▼

- Active Server Pages (ASP)
- ASP.NET (ASPX)
- Java Server Pages (JSP)
- Java
- PHP

**Environment**

Pilot (for testing) ▼

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# Integration Wizard

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## Need Help?

## Detailed Help Text

**API Credentials Help Text**

Obtain API Credentials from a Sandbox Test Account

1. Go to <https://developer.paypal.com/>
2. Login to your PayPal's Sandbox Test environment account. (or create an account if you don't have one.)
3. Select **Test Accounts**.
4. Click the Create **Test Accounts** link.
5. Select **Test Accounts**.
6. Choose **Seller** for the Account Type.
7. Change the password to something you can remember and make a note of it.

Note: The Login Email is a pseudo-randomized address, which is based on the email address you used to create your sandbox account. Credit card and bank account numbers are also generated randomly.

**Payflow Credentials Help Text**

What are the Credentials?

1. **Vendor** - This is the PayPal Merchant Login created when you registered for a PayPal Manager Account.
2. **Password** - This is the Password of the PayPal Merchant Login.
3. **User** - Same as Vendor, unless a separate user was created for Payflow Pro from within your PayPal Manager Account.
4. **Partner** - The ID provided to you by the authorized PayPal Reseller who registered you for the Payflow Pro service. If you purchased your account directly from PayPal, use PayPal. This value is case-sensitive.

I don't have a PayPal Merchant Login - Create a PayPal Manager Account

1. Go to [https://www.paypal.com/us/cgi-bin/webscr?cmd=\\_payflow-pro-overview-outside](https://www.paypal.com/us/cgi-bin/webscr?cmd=_payflow-pro-overview-outside)
2. Click on the **Start Now** button on the right side of the page where it says "Sign up for Payflow payment gateway"

# Integration Wizard

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## Call to Action

- Go to [integrationwizard.x.com](http://integrationwizard.x.com)
- You are the business owner
  - Impress upon your “tech guys”—tell them all about it!
- You are a developer
  - Try the wizard—it’s free!

# Q&A

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Amish Patel  
amish@ebay.com

# Standard Button Designer

# Current Button Designer

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## Add a button to your website

### Copy your custom HTML code

Copy the code below just like you would normal text.

**Note:** If you are using button encryption, an email link will not be generated. To turn button encryption off and create an email link, click your browser's **Back** button, click the **No** radio button to turn off button encryption, and then click **Create Button Now**.

**Encrypted HTML code for Websites:**  
(Copy and paste this HTML code onto your website)

```
<form
action="https://www.paypal.com/cgi-bin/
method="post">
<input type="hidden" name="cmd"
value="_s-xclick">
<input type="image"
```

### Paste the HTML code onto your website

**Go to Your Website:** In your files, go to the HTML code for the web page where you want the payment button to appear. You can do this by using a text editor or your HTML editor.

Paste the HTML code above into your website's HTML code next to the item you wish to sell. Now view your web page and you should see the payment button for buyers to click and pay!

Please ensure that the HTML code on your web page exactly matches the code above. Some HTML editors may add, delete, or change some characters in your code. If this is the case, please change the code on your web page to exactly match the code above.

### To Create Another Button

Once you have copied and pasted the above HTML onto your website or into your email, you can create additional payment buttons for other items you would like to sell. Just click **Create Another Button** and complete these steps again.

**Selling Single Items**

Sell individual items on your website by creating a custom button. Your buyers will be able to make their purchases quickly and securely through PayPal-hosted payment pages.

Enter the details of the item you wish to sell

Item Name/Service: Apple iPhone - New Unused

Item ID/Number: 3456312

Price of Item/Service you want to sell: 600 (\$2,000.00 USD limit for new items)

Currency: U.S. Dollars

Buyer's Country (Optional): United States

Choose a button to copy to

☒ Buy Now [Choose a different button](#)

Customize your button by entering a custom image URL

Button Image URL: http://

**Security Settings**

Safeguard your transactions by creating encrypted buttons that cannot be altered by a third party.

Note: Selecting encryption makes some button fields optional.

Note: Selecting encryption means an email link will not be generated.

Click **Yes** to encrypt your payment button.

☒ Yes ☐ No

Before accepting donations through PayPal, click <http://www.paypal.com/nonprofit> for more information.

To add sales tax, shipping costs, and other details, click [Add Details](#).

**Single-Item Purchases - Page 2**

**Shipping and Sales Tax (optional)**

**Shipping Cost Calculation**

|                             |         |
|-----------------------------|---------|
| \$0.01 USD - \$9.99 USD     | 4.000 % |
| \$10.00 USD - \$49.99 USD   | 0.000 % |
| \$50.00 USD - \$99.99 USD   | 0.000 % |
| \$100.00 USD - \$199.99 USD | 0.000 % |
| \$200.00 USD -              | 0.000 % |

You are currently calculating shipping costs based on a [percentage](#) method.

**Sales Tax Calculation**

Tax rates set for buyers in multiple regions.

**Add Option Fields to Your Page (optional)**

Option Fields are not compatible with [Encrypted Buttons](#). To use Option Fields, please return to the previous page by clicking the **Back** button below and changing the Security Settings so that your buttons are not encrypted.

Learn more about [how to use option fields](#) on your website.

**Customize Your Payment Pages (optional)**

Choose a Custom Payment Page Style to match your website and give customers a seamless payment experience. [Learn more.](#)

Primary Page Style: PayPal

Custom Payment Page Style: Select one

**Customize Your Buyer's Experience (optional)**

Successful Payment URL - this is where your customers will go after they complete their payment. (e.g. www.yourshop.com)

Successful Payment URL: http://www.hobmail.com

Payment Data Transfer: Off

Cancel Payment URL - This is where your customers will go if they cancel their payment. (e.g. www.yourshop.com/cancel)

Cancel Payment URL: http://

**Miscellaneous (optional)**

Would you like your buyers to be able to purchase more than one of this item or service?

☒ Yes ☐ No

Would you like your buyers to provide you with their shipping address?

Make shipping optional. ☐ Yes, require shipping. ☒ No shipping needed.

**Add Additional Information From Your Customers (optional)**

Would you like your customers to have the option of including a note with their payment?

☒ Yes ☐ No

Note Title: Optional Instructions (30 character limit)

**Use an email address to receive payment (optional)**

Would you like to receive payments at the following email address:

Email Address: kbabar@yahoo.com

[Preview](#) [Create Button Now](#) [Edit](#)

Create Another Button

Done

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# Coming Soon...

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## Customize button

- ☒ Add drop-down menu with price/option [Example](#)

Name of drop-down menu (ex.: "Colors", "Sizes")

Size

Menu choice

Price

Currency

Small

\$11.99

USD



Medium

\$12.99

USD

Large

\$13.99

USD

[Add option 4](#)

Done

[Cancel](#)

- ☐ Add drop-down menu without prices [Example](#)

- ☐ Add text field [Example](#)

► [Button appearance](#)

## Buyer's view

Size

Small - \$11.99



**Add to Cart**

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# Coming Soon...

2008

### Customize button

☒ Add drop-down menu with price/option [Example](#)

Name of drop-down menu (ex.: "Colors", "Sizes")

Size

| Menu choice | Price   | Currency |
|-------------|---------|----------|
| Small       | \$11.99 | USD      |
| Medium      | \$12.99 | USD      |
| Large       | \$13.99 | USD      |

[Add option 4](#)

[Cancel](#)

☐ Add drop-down menu without prices [Example](#)

☐ Add text field [Example](#)

► [Button appearance](#)

### Buyer's view

Size

Small - \$11.99

[Add to Cart](#)

Drop-Down  
Menus

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# Coming Soon...

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### Customize button

☒ Add drop-down menu with price/option [Example](#)

Name of drop-down menu (ex.: "Colors", "Sizes")

| Menu choice                         | Price                                | Currency                           |
|-------------------------------------|--------------------------------------|------------------------------------|
| <input type="text" value="Small"/>  | <input type="text" value="\$11.99"/> | <input type="text" value="USD"/> ▼ |
| <input type="text" value="Medium"/> | <input type="text" value="\$12.99"/> | <input type="text" value="USD"/>   |
| <input type="text" value="Large"/>  | <input type="text" value="\$13.99"/> | <input type="text" value="USD"/>   |

[Add option 4](#)

[Cancel](#)

☐ Add drop-down menu without prices [Example](#)

☐ Add text field [Example](#)

► [Button appearance](#)

### Buyer's view

Size  
 ▼

Drop-Down Menus

Set Price by Drop-Down Option

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# Coming Soon...

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The screenshot shows the 'Customize button' interface on the left and a 'Buyer's view' on the right. The 'Customize button' section has a checked option 'Add drop-down menu with price/option' with an 'Example' link. Below it is a text field 'Name of drop-down menu (ex.: "Colors", "Sizes")' containing 'Size'. A table lists menu choices with prices and currencies:

| Menu choice | Price   | Currency |
|-------------|---------|----------|
| Small       | \$11.99 | USD      |
| Medium      | \$12.99 | USD      |
| Large       | \$13.99 | USD      |

Below the table is a link 'Add option 4', 'Done' and 'Cancel' buttons. At the bottom are unchecked options 'Add drop-down menu without prices' and 'Add text field', and a link 'Button appearance'.

The 'Buyer's view' on the right shows a 'Size' dropdown menu with 'Small - \$11.99' selected, and an 'Add to Cart' button. Three blue callout boxes with orange arrows point to specific features: 'Drop-Down Menus' points to the 'Add drop-down menu with price/option' checkbox; 'Set Price by Drop-Down Option' points to the price column in the table; and 'Choose Different Button Copy, to Display Credit Cards, Etc.' points to the 'Button appearance' link.

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# Demonstration

# Q&A

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Ketan Babaria  
kbabaria@paypal.com

# Sandbox Environment & IPN Simulator

# Sandbox Environment

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- Simulation of Live PayPal environment
  - [developer.paypal.com](https://developer.paypal.com)
- All money is fake
- Endpoints are different
  - [sandbox.paypal.com](https://sandbox.paypal.com)



# Sandbox Emails

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- All Sandbox emails are delivered to the Email tab
- No Sandbox emails are ever sent to a real email address

**PayPal** Developer Central [Help](#) | [Profile](#) | [Log Out](#)

**Sandbox**  
Home  
Test Accounts  
**Test Email**  
API Credentials

**PayPal Sandbox**

**Test Email**

Test account email addresses are not real. Email sent to them is never delivered outside the Sandbox.

Below are the most recent messages sent to your Sandbox test accounts.

| Inbox                    |                    |                            |                            |
|--------------------------|--------------------|----------------------------|----------------------------|
| To                       | From               | Subject                    | Date                       |
| damon-sandbox@paypal.com | service@paypal.com | Your Payment Has Been Sent | Dec. 11, 2007 06:18:07 PST |

Can We Help?  
Visit the [PayPal Developer Community](#) to get answers to integration questions or to file a [support ticket](#).

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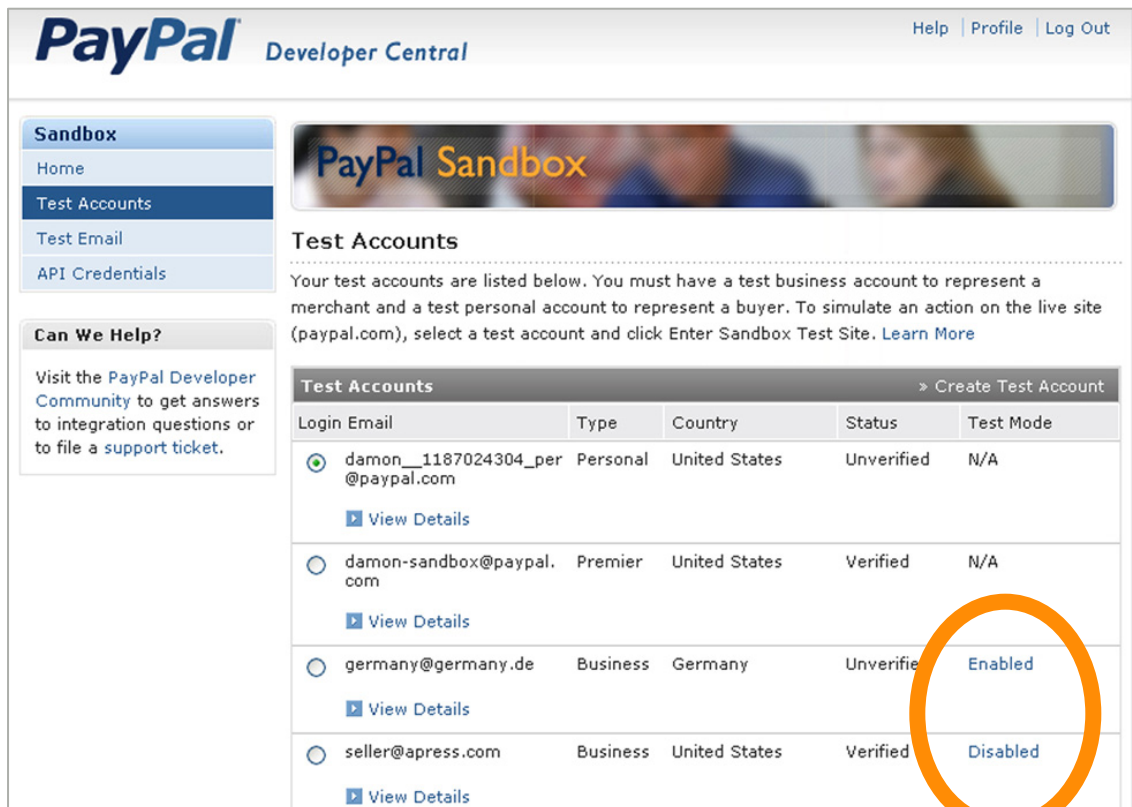
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# Negative Testing

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- Put Sandbox account in Test Mode
- Trigger specific API error codes, CVV/AVS responses



**PayPal Developer Central** Help | Profile | Log Out

**Sandbox**

- Home
- Test Accounts**
- Test Email
- API Credentials

**Can We Help?**

Visit the [PayPal Developer Community](#) to get answers to integration questions or to file a [support ticket](#).

**Test Accounts**

Your test accounts are listed below. You must have a test business account to represent a merchant and a test personal account to represent a buyer. To simulate an action on the live site (paypal.com), select a test account and click Enter Sandbox Test Site. [Learn More](#)

| Test Accounts   |          |               |            |           | <a href="#">» Create Test Account</a> |
|---|----------|---------------|------------|-----------|---------------------------------------|
| Login Email   | Type     | Country       | Status     | Test Mode |                                       |
| <input checked="" type="radio"/> <a href="#">damon__1187024304_per@paypal.com</a> | Personal | United States | Unverified | N/A       |                                       |
| <a href="#">View Details</a>  |          |               |            |           |                                       |
| <input type="radio"/> <a href="#">damon-sandbox@paypal.com</a>                    | Premier  | United States | Verified   | N/A       |                                       |
| <a href="#">View Details</a>  |          |               |            |           |                                       |
| <input type="radio"/> <a href="#">germany@germany.de</a>                          | Business | Germany       | Unverified | Enabled   |                                       |
| <a href="#">View Details</a>  |          |               |            |           |                                       |
| <input type="radio"/> <a href="#">seller@apress.com</a>                           | Business | United States | Verified   | Disabled  |                                       |
| <a href="#">View Details</a>  |          |               |            |           |                                       |

# IPN Simulator

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## Utility to send IPNs to a specific IPN listener

**PayPal** Developer Central Help | Profile | Log Out

**Sandbox**  
Home  
Test Accounts  
Test Email  
API Credentials  
**Test Tools**

**PayPal Sandbox**

### Instant Payment Notification (IPN) simulator

Select from the transaction types supported to test the Instant Payment Notification (IPN) feature. Enter the URL of the webpage where you wish to receive IPNs, and the transaction type for this test.

**General information**

|                  |   |
|------------------|---|
| IPN handler URL  | <input type="text"/>  |
| Transaction type | <div>- select -<br/>- select -<br/>eCheck - pending<br/>eCheck - complete<br/>eCheck - declined<br/>Express Checkout<br/>Cart checkout<br/>Web Accept<br/>Refund<br/>eBay checkout<br/>Reversal<br/>Canceled reversal</div> |

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# IPN Simulator

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### Instant Payment Notification (IPN) simulator

Select from the transaction types supported to test the Instant Payment Notification (IPN) feature. Enter the URL of the webpage where you wish to receive IPNs, and the transaction type for this test.

**General information**

**IPN handler URL**

**Transaction type**

Default values provided in the fields below are valid. You may change any of these values, but your changed values will not be validated.

**Payment information**

payment\_type ☐ echeck  
☒ instant

payment\_date

payment\_status

pending\_reason

**Buyer information**

address\_status ☐ unconfirmed  
☒ confirmed

payer\_status ☒ unverified  
☐ verified

first\_name

last\_name

payer\_email

payer\_id

address\_name

address\_country

address\_country\_code

address\_zip

address\_state

address\_city

address\_street

**Basic information**

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# IPN Simulator

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## Sandbox

[Home](#)

[Test Accounts](#)

[Test Email](#)

[API Credentials](#)

[Test Tools](#)

## Can We Help?

Visit the [PayPal Developer Community](#) to get answers to integration questions or to file a [support ticket](#).

## PayPal Sandbox

### Instant Payment Notification (IPN) simulator



IPN successfully sent.

Select from the transaction types supported to test the Instant Payment Notification (IPN) feature. Enter the URL of the webpage where you wish to receive IPNs, and the transaction type for this test.

#### General information

**IPN handler URL**

**Transaction type**

Default values provided in the fields below are valid. You may change any of these values, but your changed values will not be validated.

#### Payment information

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# Q&A

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Srini Pasupulati  
[spasupulati@paypal.com](mailto:spasupulati@paypal.com)

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# Thank you!

## Questions?

To learn more, visit

[www.ebay.com/devcon](http://www.ebay.com/devcon)

