Document for PaypallPN.php

Oct 2nd 2022: I have just begun adding comments to this code. From a space standpoint, more notes should be added at the bottom over time.

```
<?php class PaypalIPN</pre>
/**
* 09-12-12 MAJOR CODE CHANGES FOR CONSTANT DEFINING
    Need constants
                    1)
                        public function set name:
*
                        Defined in the running code,
*
                        so must use "define" for constants.
*
                        public function get_name:
*
                        Get a 0 or 1 via if statements
*
                        if (..) ){define two CONSTANTS}
*
                        else {define two CONSTANTS the opposite
way}
                        Now in main block of code call the
constant a new way:
                        if ($res == self::VALID) {
                        replaced with:
*
                        if ($res == VALID) {
*
                             by definition of "define" the
CONSTANT
                             it is visible EVERYWHERE.
                        Therefore, 1) Can define from parent
script = paypal_ipn.php
                        variable: $test_local = 0;
Local, 0 = Paypal Simulator
                        Thus put these functions inside this
CLASS and
                        just Below: const SANDBOX VERIFY URI =
                        Now LOCAL and PP IPN SIMULATOR can be
                    6)
managed with one
                        variable on line approx line 65 of
paypal-ipn.php script!
                    THE END OF DOC ON THIS TOPIC
* 09-27-22 - echo print lines have been left in for local
debugging & do not affect PP Simulator.
* 09-27-22 - DVA re-testing locally, tested Paypal Simulator.
Both Good!
* 09-26-22 - DVA re-testing locally
* 09-09-22 @8:31pm - DVA This is SIMULATOR USE - SANDBOX
* 09-09-22 5pm DVA -Starting IPN Simulator Testing
* Simulator URL Used = https://www.wpappsforthat.com/index.php/
pavpal-ipn/
    PP Said: IPN was sent and the handshake was verified.
    DVA commenting out all ECHO STATEMENTS
\star 09-09-22 DVA - Now writing to a text file. Still must add DB +
test various values for type of transaction
```

One major code change: I changed how CONSTANTS are defined, so the code can be dynamic, and keep all the user-defined variables in the paypal-ipn.php script. I hope this make the code more friendly from a testing / use standpoint. I do not know if my logic is solid (yet).

```
* 09-02-22 DVA - Testing down to line 107 and then seems to call
ipn (other script)
* 08-28-22 DVA - this code from here on github, it seems like
* https://github.com/paypal/ipn-code-samples/blob/master/php/
PaypalIPN.php
* Maybe) Latest commit cb738c4 on Mar 16, 2018
* 09-03-22 -> https://stackoverflow.com/questions/14015144/
sample-php-code-to-integrate-paypal-ipn
*/
   // ************ //
{
   // BEGIN ALL CLASS CODE //
   // ************* //
    /** @var bool Indicates if the sandbox endpoint is used. */
    //private $use sandbox = false;
    private $use sandbox = true;
    /** @var bool Indicates if the local certificates are used.
*/
   private $use local certs = true;
   /** Production Postback URL */
    // 09-7-22 think only one can be used
   //const VERIFY_URI = 'https://ipnpb.paypal.com/cgi-bin/
webscr':
    /** Sandbox Postback URL */
    const SANDBOX_VERIFY_URI = 'https://
ipnpb.sandbox.paypal.com/cgi-bin/webscr';
    /** Response from PayPal indicating validation was
successful */
        // 09-07-22 Per PP https://developer.paypal.com/api/nvp-
soap/ipn/IPNTesting/#local-development-testing
        // local testing flip-flop code logic, but I am
       // un-sure if do it here. So try here and see if
       // we get IPN-8b echoed. If so, may be going the right
direction.
    // 09-07-22 see URL and discussion below: https://
developer.paypal.com/api/nvp-soap/ipn/IPNTesting/ #local-
development-testing
    // GET VALUE FOR SIMULATOR USE - LOCAL or IPN SIMULATOR //
        // Properties
        public $test_location;
```

```
// Methods - got passed setting from var = $test local =
0 | 1
       public function set name($test location) {
            $this->test_location = $test_location;
        }
        // Get value from above function to determine LOCAL or
IPN SIMULATOR test condition
        function get_name ($test_location) {
echo "<br/>br>IPN-1a1-> Inside get name function: $this-
>test location<br>";
           // LOCAL - DEFINE CONSTANTS //
            if ($this->test location ==1) {
               define("VALID", "INVALID");
               define("INVALID", "VERIFIED");
               $sim verified = "";
               $sim_invalid = "";
               $local verified = "INVALID":
               $local invalid = "VERIFIED";
echo "IPN-1a2-> Invalid = ";
echo INVALID:
echo "<br/>br>IPN-1a3-> <br/>b> <FONT COLOR='green'>RUN LOCAL TEST</
font></b><br>";
           else {
               // PP SIMULATOR - DEFINE CONSTANTS //
echo "<br/>br>IPN-1b1->USE SIMULATOR IPN TEST<br>":
               define("VALID", "VERIFIED");
               define("INVALID", "INVALID");
               $local_verified = "";
               $local invalid = "";
               $sim_verified = "VERIFIED";
               $sim invalid = "INVALID":
echo "IPN-1b2-> Valid = ";
echo VALID;
echo "<br/>br>IPN-1b3-> <FONT COLOR='red'>USE SIMULATOR TEST</
font><br>";
            return array ($local_verified, $local invalid.
$sim_verified, $sim invalid);
    /**
```

```
* Sets the IPN verification to sandbox mode (for use when
testing,
     * should not be enabled in production).
     * @return void
     */
    public function useSandbox() {
        $this->use sandbox = true;
    }
    /**
     * Sets curl to use php curl's built in certs (may be
required in some
     * environments).
     * @return void
     */
    public function usePHPCerts() {
        // 09-04-22 Using certs from wpappsforthat.com
        $this->use_local_certs = false;
        //$this->use local certs = true;
        // if req'd using = "/home1/davelkwd/wpappsforthat.com/
wp-includes/certificates/ca-bundle.crt"
    }
     * Determine endpoint to post the verification data to.
     * @return string
    public function getPaypalUri() {
        if ($this->use_sandbox) {
            return self::SANDBOX_VERIFY_URI;
        } else {
            return self::VERIFY_URI;
        }
    }
    /**
     * Verification Function
     * Sends the incoming post data back to PayPal using the
cURL library.
     * @return bool
     * @throws Exception
     */
    public function verifyIPN() {
```

```
//$this->test location = $test location;
        //die;
        if ( ! count($ POST)) {
           throw new Exception("Missing POST Data");
echo "<br/>br>IPN-1c1-> Valid = ";
echo VALID;
echo "<br>":
echo "IPN-1c2-> Invalid = ";
echo INVALID:
echo "<br>";
        $raw_post_data = file_get_contents('php://input');
09-02-22 Seems to want datae. Time to pass real data per example
from PP
        $raw_post_array = explode('&', $raw_post_data);
        $mvPost = arrav();
        foreach ($raw_post_array as $keyval) {
           $keyval = explode('=', $keyval);
            if (count($keyval) == 2) {
               // Since we do not want the plus in the datetime
string to be encoded to a space, we manually encode it.
               if ($keyval[0] === 'payment date') {
                   if (substr_count($keyval[1], '+') === 1) {
                       $keyval[1] = str replace('+', '%2B',
$keyval[1]);
                   }
               $myPost[$keyval[0]] = urldecode($keyval[1]);
           }
        }
       // Build the body of the verification post request,
adding the notify-validate command.
        $req = 'cmd= notify-validate';
        $logfile = "";
       // really need to save to DB here
        foreach ($myPost as $key => $value) {
           $req = "&$key=$value";
        }
        // 09-09-22 DVA REVIEW THIS PP CODE FOR CURL lines
https://developer.paypal.com/api/nvp-soap/ipn/ht-ipn/
```

```
//
                   May have to page down a way.
                   Also review all that code (even though old)
        //
it may have some interesting info to make better code.
        // Post the data back to PayPal, using curl. Throw
exceptions if errors occur.
        $ch = curl init($this->getPaypalUri());
        curl_setopt($ch, CURLOPT_HTTP_VERSION,
CURL HTTP VERSION 1 1);
        curl_setopt($ch, CURLOPT_POST, 1);
        curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
        curl_setopt($ch, CURLOPT_POSTFIELDS, $req);
        //curl_setopt($ch, CURLOPT_SSLVERSION, 6);
                                                     // Not
used by AngellEYE PaypayIPN
        curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 1);
        curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, 2);
        // DVA: NOT EVEN SURE IF USED / REQUIRED: This is often
required if the server is missing a global cert bundle, or is
using an outdated one.
        //if ($this->use local certs = "true") { // 09-27-22 was
returning invalid result, so change to match above if correct
        if ($this->use local certs = "true") {
echo "IPN-1d1-> Use local cert = $this->use local certs<br>";
echo "IPN-1d2-> In local Cert if clause, and not sure why here!
<br>":
            curl setopt($ch, CURLOPT CAINFO, "/home1/davelkwd/
wpappsforthat.com/wp-includes/certificates/ca-bundle.crt");
        curl setopt($ch, CURLOPT FORBID REUSE, 1);
        curl_setopt($ch, CURLOPT_CONNECTTIMEOUT, 30);
        curl setopt($ch, CURLOPT HTTPHEADER, array(
            'User-Agent: PHP-IPN-Verification-Script',
            'Connection: Close'.
        ));
        $res = curl exec($ch);
echo "IPN-1e-> res = $res<br/>;
        // 09-27-22 might want to re-write this if clause as can
be misleading.
        if (! ($res)) {
            $errno = curl errno($ch);
            $errstr = curl error($ch);
            curl close($ch);
            throw new Exception("cURL error: [$errno] $errstr");
```

```
}
        $info = curl getinfo($ch);
        $http code = $info['http code'];
        if ($http code != 200) {
            throw new Exception("PayPal responded with http code
$http code");
        }
        curl close($ch);
        // 09-06-22: LOCAL TEST HAS NO PP RETURNS
        // Check if PayPal verifies the IPN data, and if so,
return true.
        if ($res == VALID) {
            $i = 0;
            $data text=$txn id=$txn type = "";
            foreach ($ POST as $key => $value) {
                $i++;
                $data text .= $key . "=" . $value . "\r\n";
                // Retrieve specific $key & $value
                if ($key == "txn_id") {
                    $txn id = $value;
                }
                if ($key == "txn_type") {
                    $txn type = $value;
                }
            }
            /* CUSTOM LOGFILE CREATION & WRITING TO IT - found
alternate */
            date default timezone set("America/Chicago");
            list($year, $month, $day, $hour, $minute, $second,
$timezone) = explode(":", date("Y:m:d:H:i:s:T"));
            $timestamp = date i18n('Ymd-His'); // Grab Time
            $write to db
                            = 1;
            $save_log_file = 1; // Set this to true to save a
log file:
            $log file_dir = "/home1/davelkwd/
wpappsforthat.com/wp-content/uploads/paypal-ipn-logs/"; //
08-22-22 took (partially) from product.php log directory ($a)
```

```
$logfile = $timestamp . ":" . "id-$txn_id" .
":". "txntyp-$txn_type" . ".txt";
            $filename
                         = "$log file dir" . "$logfile";
            // WRITE TO TEXT FILE (temporary process) // //
            if (($save_log_file == 1) && ($data_text)) {
                $fh = fopen($filename, 'w');
                fwrite($fh, $data_text);
                                             //write data
                fclose($fh);
                                             //close file
            }
            // ADD DATABASE SAVING HERE! //
                /*
                * DB codes for types of transactions
                    payment status=Completed => New record
                    payer status=verified
                    payment_status=
                *
                */
            if ($write_to_db) {
                // PENDING
            // *******************************//
            //return true;
            return array (1,$logfile,$data_text);
        } else {
            // echo "IPN-Return below res=$res<br>"; // No
content for SIMULATOR VERSION
            return false;
        }
    }
}
       // END ALL CLASS CODE //
```