Pcounter WebDeposit
Installation & Configuration Guide

2018.10.29

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0.0.0.0 - Introduction

This guide covers installation and configuration of Pcounter WebDeposit (PWD).
Pcounter WebDeposit (PWD) is a web based Pcounter application that enables credit card deposits for authenticated users of all types; Pcounter, Domain, and/or LDAP.

The web server backend used by PWD is Internet Information Services (IIS).
IIS is included in Microsoft Windows Server products.

Currently the three supported payment processors are Authorize.net, PayPal, and Moneris.

Both payment processors use TLS 1.2 for secure communication.

0.0.0.1 - PCI Compliance, Security, & Privacy

Secure communication between client browsers and IIS/PWD server:
- It is the site administrators' responsibility to install and maintain a current authority-signed SSL certificate on the IIS server so that user communications are private and encrypted on the network.

Credit card & personal user information:
- Accounts created in Pcounter (Pcounter Users) will have a user name, password, an email address (used for account forgets/resets), and an account balance used for print credit.
- Credit card numbers are neither cached nor stored anywhere on the system.
- Email communications used with respect to credit card transactions will be done via the email address that was entered by the user on the web form.
- PWD keeps its own activity log (PcounterWebDeposit.txt) which contains activity related to user names, but this file does not include any credit card or other personal information.

Secure communication between PWD and transaction servers:
- All user-submitted input on the transaction form is handled by WebDeposit.exe.
- WebDeposit.exe uses a second utility program based on the payment processor being used (AuthorizeNetTool.exe or PayPalTool.exe). At no time is any credit card information or personal data stored or cached anywhere.
- AuthorizeNetTool.exe and PayPalTool.exe both use TLS 1.2 to communicate with their corresponding transaction servers.

0.0.0.2 - Credit Card Information Workflow

When using **Authorize.net** credit card information is sent from:
WebDeposit.exe -> AuthorizeNetTool.exe -> Authorize.net server

When using **PayPal** credit card information is sent from:
WebDeposit.exe -> PayPalTool.exe -> PayPal server

When using **Moneris** credit card information is sent from:
WebDeposit.exe -> MonerisTool.exe -> Moneris server

1.0.0.0 - Prerequisites

1.1.0.0 - SSL Requirements

Pcounter WebDeposit (PWD) requires SSL. The certificate does not have to be trusted but as credit card information is extremely sensitive it is highly recommended to use a fully trusted, chained certificate.
It is the responsibility of the end user's server administrator to obtain, configure, and maintain all SSL certificates.
This guide shows how to create a self-signed certificate for testing purposes.

1.2.0.0 - Transaction Requirements

Pcounter WebDeposit (PWD) requires a payment processor for user deposits. Currently the two supported payment processors are "Authorize.net" and "PayPal Pro". It is the responsibility of the end user to obtain, configure, and maintain an account with one of the supported payment processors.
This guide includes instructions for doing "sandbox", virtual transactions for testing purposes.

1.3.0.0 - Pcounter Data Server Requirement

Pcounter WebDeposit (PWD) requires a fully licensed and configured Pcounter for Windows Data Server to function in any capacity. To get started installing Pcounter for Windows please go to:
www.pcounter.com/downloads

2.0.0.0 - Installation & Configuration

2.1.0.0 - Install IIS

Pcounter WebDeposit (PWD) uses Internet Information Services (IIS) for its webserver backend and requires certain role features be enabled in the Server Manager.

2.1.1.0 - IIS Role & .Net Installation

1) Open the Server Manager and go into "Add roles and features".
2) In Server Roles > Web Server (IIS), check the following boxes exactly as shown in the image below, then click Next.
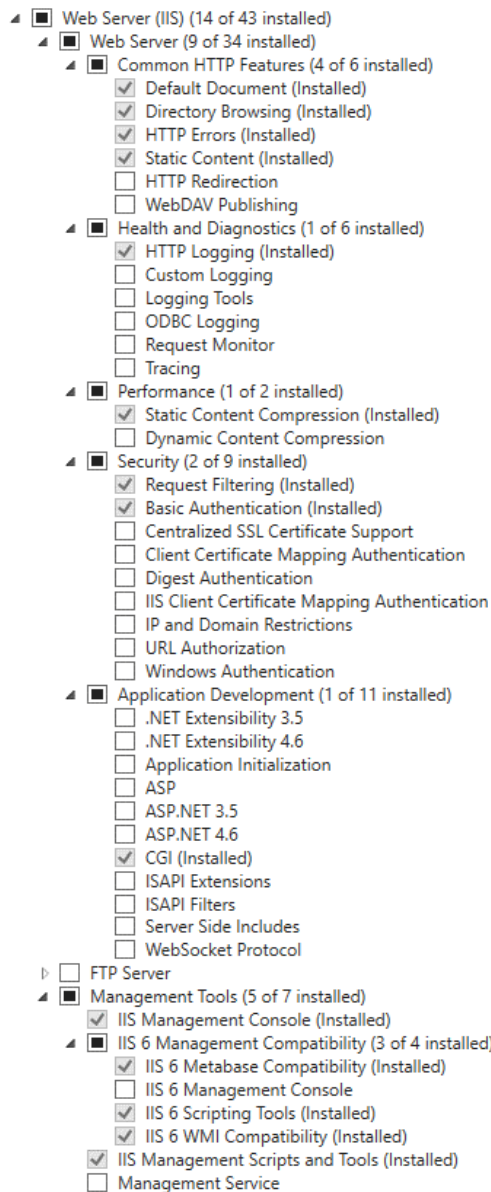
3) In Features > .NET Framework 3.5 Features, enable .NET Framework 3.5, then click Next and then finally click Install to apply the changes. If a reboot is needed do so before next sections.
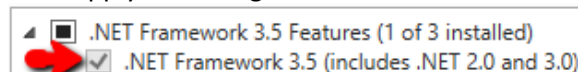
2.1.2.0 - Configure SSL

Pcounter WebDeposit (PWD) requires SSL. The certificate does not have to be trusted, however credit card information is extremely sensitive and it is highly recommended to use a fully trusted, chained certificate.

It is the responsibility of the end user's server administrator to obtain, configure, and maintain all SSL certificates.

To enable HTTPS as well as create and enable a self-signed certificate **for testing purposes**:

1) Open the IIS Manager. Left click your server in the Connections pane, then doubleclick Server Certificates.
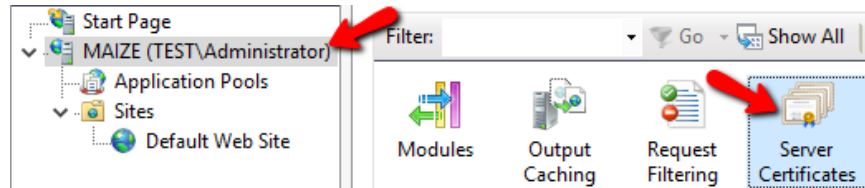
2) Click 'Create Self-Signed Certificate' on the right.
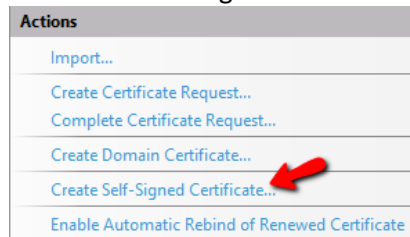
3) Specify a name and click OK to create the self-signed certificate.
4) In the Connections pane, right click the Web Site that will be used for PWD and click 'Edit Bindings'.
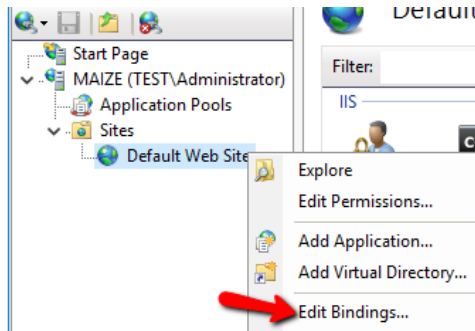
5) Click Add on the right to open the Add Site Binding window.
6) Change Type to https, select the certificate created previously with the dropdown, and click OK.
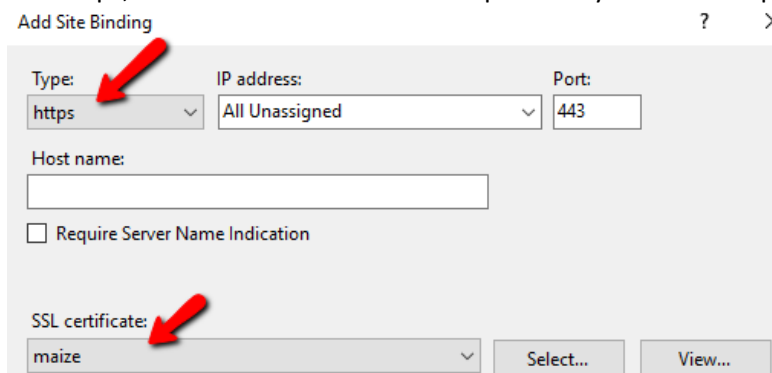
7) Https will now be in the list of Site Bindings, click Close to exit and complete the process.

2.1.3.0 - Configure Trusted SSL

If using a self-signed certificate, users will see a certificate warning when accessing the PWD web page. Using a fully trusted certificate will eliminate certificate warnings seen by users in their web browsers. To obtain a fully trusted certificate for your server contact a Certificate Authority such as DigiCert. It is the responsibility of the end user's server administrator to obtain, configure, and maintain all SSL certificates.

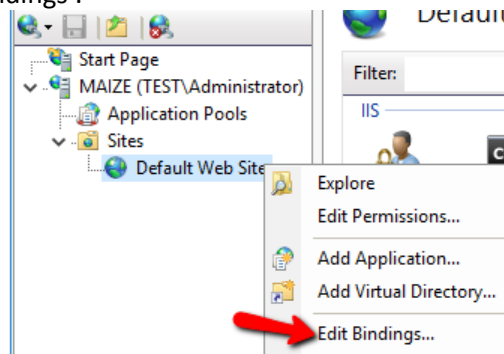To change from using a self-signed certificate to using a trusted certificate:
1) Acquire a trusted certificate from a CA and install it on the server.
2) Open the IIS Manager. In the Connections pane, right click the Web Site that will be used for PWD and click 'Edit Bindings'.

3) Click the https binding in the list and click Edit.
4) Use the SSL Certificate dropdown to choose the trusted certificate and click OK, then Close.
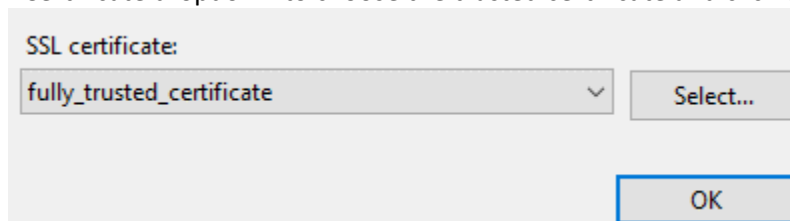
5) To complete the change, right click the Default Web Site and choose Manage Website > Restart. The newly selected certificate will now be used.

2.2.0.0 - Install PWD

Once IIS is fully prepared, PWD can be prepared and installed.
PWD will be installed in a sandbox transaction mode initially then later configured for live transactions in section 2.3.0.0.

2.2.1.0 - Create PWD Directory & Download

First a directory must be created on the Pcounter server's local file system for the PWD files to reside.
In this guide the directory used is: C:\PcounterWebDeposit.
1) Browse to C:\ and create a new folder named PcounterWebDeposit.
2) Request the PWD files here.
3) Once obtained, extract the contents of the .zip to C:\PcounterWebDeposit.

2.2.2.0 - Set Pcounter Data Server/Port & Test Connection

1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file WebDeposit.ini located at C:\PcounterWebDeposit.
2) Find the section ":::: Communicate with Pcounter data server":
   - Set DataServer= to point to the DNS name or IP address of the Pcounter Data Server.
   - Set HTTPSPort= to the HTTPS port used by the Pcounter Data service, by default 6443.
     e.g.
     DataServer=192.168.0.1
     HTTPSPort=6443
3) Save all changes.
4) To test the Pcounter Data Server connection, open a command prompt using the 'run as administrator' option and run the command:
   cd c:\PcounterWebDeposit (or wherever it is located)
5) Run the command:
   WebDeposit.exe TestPcounter
6) After a moment, if successful the <ReturnValue> should read:
   <ReturnValue>True</ReturnValue>

2.2.3.0 - Configure Pcounter Data Server's "AllowedAPIAddresses"

1) On the Pcounter Data Server where the Pcounter Data service is installed and running, open Regedit and browse to:
   HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Pcounter\DataServer
2) Create or edit the **string** named "AllowedAPIAddresses" with no quotes.
3) The value data should always start with "127.0.0.1", then after a comma add the IP address of the PWD server if it is different from the Pcounter Data server.
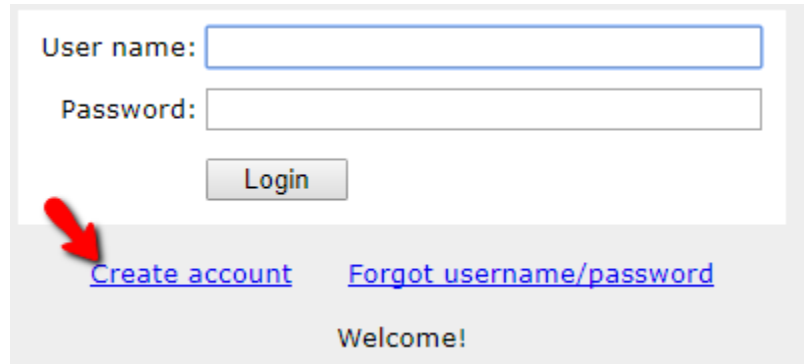   e.g.

4) Restart the Pcounter Data service if a change was made.
5) If the Windows Firewall is enabled on the Pcounter Data server make an allowed incoming exception for the ports 6442, 6443, 7442,7443.

2.2.7.0 - Account Creation & Default User Balance

By default PWD has an option enabled to allow users to create Pcounter User account. Pcounter Users can be used with the Pcounter Popup, Pcounter Station, and all Pcounter Embedded enabled MFPs. Pcounter Users are not Domain accounts and cannot be used to login to a workstation.
Newly created Pcounter Users can have a default balance applied automatically as well as described later in this section.

To modify User Account Creation and/or the default user balance:
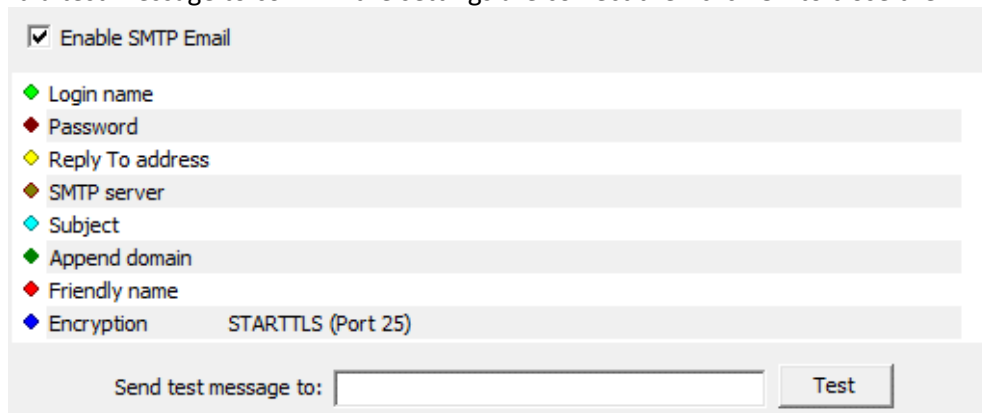
1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file WebDeposit.ini located at C:\PcounterWebDeposit.
2) Find the section "[Settings]" and set AllowAccountCreation= to either AllowAccountCreation=1 for enabled or AllowAccountCreation=0 for disabled.
3) In the same ini locate the section ":::: Comment this out if new users do not get a default balance".
4) If a default balance should be applied type the desired value after DefaultNewUserBalance=
   e.g.
   DefaultNewUserBalance=3.33
5) If a default balance is not wanted add a : just before the D in DefaultNewUserBalance= to comment the line out.
   e.g.
   :DefaultNewUserBalance=
6) Save any changes to the WebDeposit.ini.

2.2.8.0 - Configure SMTP Server (Optional)

If PWD will be sending emails to users when making a deposit or for Pcounter User password resets and recovery then an SMTP server must be configured.

To configure the PWD SMTP server:

7) Open a command prompt using the 'run as administrator' option and run the command:
    cd c:\PcounterWebDeposit (or wherever it is located)
8) Run the command:
    WebDeposit_EmailConfig.bat
9) The "Messaging configuration" window will open. Check the box at the top to enable email, then configure the following settings:
    - **Login name -** This is the name that is used as identification to the SMTP server. Some SMTP servers require a valid address or domain in order to relay messages.
    - **Password -** Passwords may be optional for local email delivery, but are normally required for relaying email to other mail servers.
    - **Reply address -** If users are to be able to reply to Pcounter email messages, then enter a valid email address for replies.
    - **Subject -** enter an optional email subject, such as "Printer notification message". If left blank, the document name will be used.
    - **Append domain –** (Optional) The domain is added to the end of the username before sending. For example, if a username is joe and the domain is company.com, then the full email address to which messages are sent will be joe@company.com.
    - **Encryption.** Define the encryption typed used by the receiving SMTP server.
10) Send a test message to confirm the settings are correct then click OK to close the window.

2.2.9.0 - Customize Email Templates (Optional)

If using STMP to send users emails the templates used by PWD can be further customized.

1) Browse to c:\PcounterWebDeposit (or wherever it is located).
2) Modify the file **depositEmail.html** to customize the message sent when users make a deposit.
3) Modify the file **resetEmail.html** to customize the message sent when a Pcounter User resets their password.
4) The special symbols that can be used in the message are:
    - %C = Cost charged to credit card (receipt only)
    - %B = Account balance updated after charge to credit card (receipt only)
    - %U = User name
    - %L = URL link to the password reset URL (reset only)
5) Save any changes to the template files.

2.2.10.0 - Run DisplayIISWebSites.bat

If multiple Web Sites are installed in IIS the web site "number" desired must be obtained and specified before installing PWD.

To do so:

1) Open a command prompt using the 'run as administrator' option and run the command:
   cd c:\PcounterWebDeposit (or wherever it is located)
2) Run the command:
   DisplayIISWebSites.bat
3) Make note of the number used by the Web Site that PWD is to be installed to. By default 1.

4) If not using the Web Site numbered 1, then open notepad using the 'run as administrator' option, go to File > Open and choose the file WebDeposit_Install_IIS.bat located at C:\PcounterWebDeposit.
5) At the top of the text, find the line that says set "IISSITE=1" and change the 1 to whatever Web Site number is desired. Save any changes that were made.

2.2.11.0 - Run WebDeposit_Install_IIS.bat

Before running the WebDeposit_Install_IIS.bat to install PWD **please make certain all** previous sections in this guide have been completed.
If the previous sections have not been completed first PWD will not function after running the .bat.
To install the PWD User Portal:

1) Open a command prompt using the 'run as administrator' option and run the command:
   cd c:\PcounterWebDeposit (or wherever it is located)
2) Run the command:
   WebDeposit_Install_IIS.bat
3) Once the script is complete open the IIS Manager and expand Sites, then the name of the site where PWD was installed and left click on WebDeposit.
4) On the far right click on "Browse *:443 (https)" to view the PWD User Portal webpage.
5) The PWD user portal is now accessible when browsing via https to 'localhost', the server's IP, and the server's DNS name. /WebDeposit must be in the URL after localhost, IP, or DNS name if using default settings.
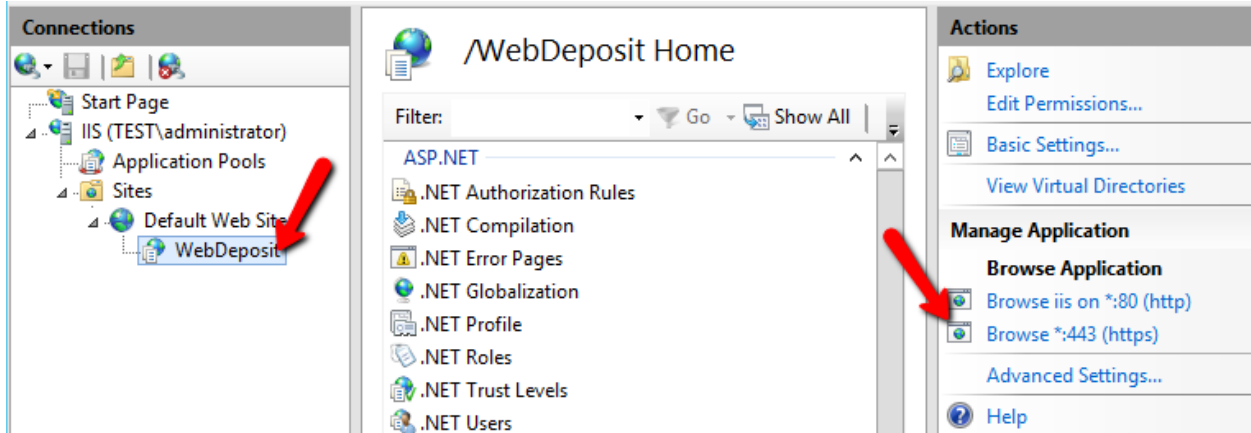
PWD User Portal
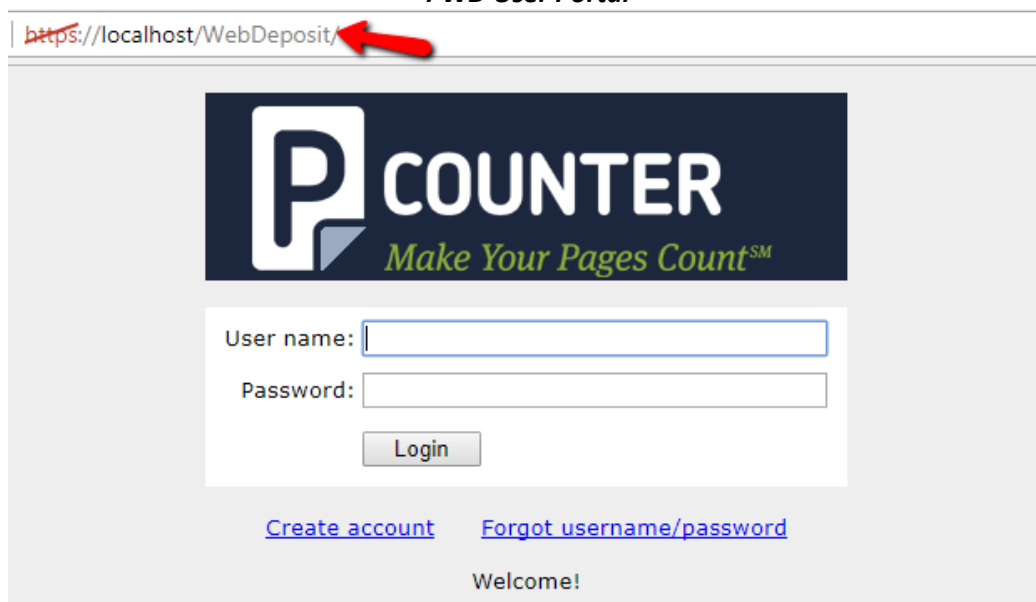
2.3.0.0 Configure Transaction Mode

Now that the user portal is accessible PWD's transaction settings can be fully configured for live transaction. This will require a merchant account with either Authorize.net, PayPal, or Moneris. There are two modes for each merchant, standard and simple. Both modes are completely secure and do not store sensitive information on any server internal or external. That being said; 'Simple' mode uses an external server to provide the credit card info entry form to the user which negates the requirement for PCI compliance or certificate. By comparison 'Standard' mode uses the PWD server to provide the same credit card form to the user and thus would require PCI compliance certification.

2.3.1.0 - Authorize.net Configuration

This section is for Authorize.net configuration. If using Moneris or PayPal please move to their corresponding chapter in the guide.
Authorize.net has two modes, standard and simple.
With Authorize.net **standard** mode the credit card form comes from the onsite server.
With Authorize.net **simple** mode the credit card form comes from an offsite server for **PCI compliance.**
To use Authorize.net in either mode an account with Authorize.net must first be created. Please contact Authorize.net directly for more information.

2.3.1.1 - AuthorizeNetTool.ini & WebDeposit.ini

The files AuthorizeNetTool.ini and WebDeposit.ini must first be modified:

1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **AuthorizeNetTool.ini** located at C:\PcounterWebDeposit.
2) Find the line 'RunEnvironment=' and set to either SANDBOX or PRODUCTION. Sandbox is for testing and Production is for real transactions.
3) Find the line 'APILoginID=' and after the = insert the API Login ID that was received from Authorize.net when the merchant account was created.
4) Find the line 'TransactionKey=' and after the = insert the Transaction Key that was received from Authorize.net when the merchant account was created.
5) Save the changes made to the AuthorizeNetTool.ini.

```
[AuthorizeNetAccount]
::::: RunEnvironment can be PRODUCTION or SANDBOX
RunEnvironment=PRODUCTION
APILoginID=XXXXXXXXXXXX
TransactionKey=XXXXXXXXXXXXXXXXX
```

6) Next, open notepad again using the 'run as administrator' option, then go to File > Open and choose the file **WebDeposit.ini** located at C:\PcounterWebDeposit.
7) Find the section ":::: Choose Authorize.net or Authorize.net.simple or PayPal or Paypal.simple or Moneris or Moneris.simple".
8) One line below that set Processor= to either Authorize.net or if the credit card form should come from the server onsite or a server offsite for PCI compliance set to Authorize.net.simple.

```
::::: Choose Authorize.net or Authorize.net.simple or Paypal or Paypal.simple
or Moneris or Moneris.simple
Processor=Authorize.net.simple
```

9) Save the changes made to the WebDeposit.ini.
10) If using "Authorize.net" mode the configuration is complete, and a transaction can be tested now.
11) If using "Authorize.net.simple" mode then move to section 2.3.1.2 'Authorize.net Simple'.

2.3.1.2 - Authorize.net Simple

If using "Authorize.net.simple" in the WebDeposit.ini then further configuration must be done.
Please see our 'Authorize.net Simple' document for the rest of the required steps to take online at:
https://apps.pcounter.com/docs/PWD_Authorize.net.simple.pdf
Once complete with the 'Authorize.net Simple' document please return to the section '3.0.0.0 - Testing' in this document.

2.3.2.0 - PayPal Configuration

This section is for PayPal configuration. If using Moneris or Authorize.net please move to their corresponding chapter in the guide.
PayPal has two modes, standard and simple.
With PayPal **standard** mode the credit card form comes from the onsite server.
With PayPal **simple** mode the credit card form comes from an offsite server for **PCI compliance.**
To use PayPal in either mode an account with PayPal must first be created. Please contact PayPal directly for more information.

2.3.2.1 - PayPalTool.ini & WebDeposit.ini

First the PayPalTool.ini and WebDeposit.ini files must be modified:

1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **PayPalTool.ini** located at C:\PcounterWebDeposit.
2) Find the line 'RunEnvironment=' and set to either sandbox or live. Sandbox is for testing and live is for real transactions.
3) Find the line 'ClientID=' and after the = insert the Client ID that was received from PayPal when the merchant account was created.
4) Find the line 'ClientSecret=' and after the = insert the Client Secret that was received from PayPal when the merchant account was created.
5) Save the changes made to the PayPalTool.ini.

```
[PayPalAccount]
:::::: RunEnvironment can be 'sandbox' or 'live'
RunEnvironment=sandbox
ClientId=A▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮_
ClientSecret=▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
ConnectionTimeout=360000
RequestRetries=1
```

6) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **WebDeposit.ini** located at C:\PcounterWebDeposit.
7) Find the section ":::: Choose Authorize.net or Authorize.net.simple or PayPal or Paypal.simple or Moneris or Moneris.simple".
8) One line below that set Processor= to either PayPal or if the credit card form should come from the server onsite or a server offsite for PCI compliance set to Paypal.simple.

```
:::: Choose Authorize.net or Authorize.net.simple or Paypal or Paypal.simple
or Moneris or Moneris.simple
Processor=Paypal.simple  ⬅
```

9) Save the changes made to the WebDeposit.ini.
10) If using "Paypal" mode the configuration is complete, and a transaction can be tested now.
11) If using "Paypal.simple" mode then move to section 2.3.2.2 'PayPal Simple'.

2.3.2.2 - PayPal Simple

If using "Paypal.simple" in the WebDeposit.ini then further configuration must be done.
Please see our 'PayPal Simple' document for the rest of the required steps to take online at:
https://apps.pcounter.com/docs/PWD_Paypal.simple.pdf
Once complete with the 'PayPal Simple' document please return to the section '3.0.0.0 - Testing' in this document.

2.3.3.0 - Moneris Configuration

This section is for Moneris configuration. If using PayPal or Authorize.net please move to their corresponding chapter in the guide.

Moneris has two modes, standard and simple.

With Moneris **standard** mode the credit card form comes from the onsite server.

With Moneris **simple** mode the credit card form comes from an offsite server for **PCI compliance.**

To use Moneris in either mode an account with Moneris must first be created. Please contact Moneris directly for more information.

2.3.3.1 - MonerisTool.ini & WebDeposit.ini

First the MonerisTool.ini and WebDeposit.ini files must be modified:

1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **MonerisTool.ini** located at C:\PcounterWebDeposit.
2) Find the line 'RunEnvironment=' and set to either SANDBOX or PRODUCTION. Sandbox is for testing and Production is for real transactions.
3) Find the line 'StoreID=' and after the = insert the Store ID that was received from Moneris when the merchant account was created.
4) Find the line 'APIToken=' and after the = insert the API Token that was received from Moneris when the merchant account was created.
5) Find the line 'ProcessingCountry=' and after the = set to either CA or US.
6) Save the changes made to the MonerisTool.ini.

```
[MonerisAccount]
; RunEnvironment can be 'SANDBOX' or 'PRODUCTION'
RunEnvironment=SANDBOX
StoreID=
APIToken=
; ProcessingCountry can be 'US' or 'CA'
ProcessingCountry=US
```

7) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **WebDeposit.ini** located at C:\PcounterWebDeposit.
8) Find the section ":::: Choose Authorize.net or Authorize.net.simple or PayPal or Paypal.simple or Moneris or Moneris.simple".
9) One line below that set Processor= to either Moneris or if the credit card form should come from the server onsite or a server offsite for PCI compliance set to Moneris.simple.

```
:::: Choose Authorize.net or Authorize.net.simple or Paypal or Paypal.simple
or Moneris or Moneris.simple
Processor=Moneris.simple
```

10) Save the changes made to the WebDeposit.ini.
11) If using "Moneris" mode the configuration is complete, and a transaction can be tested now.
12) If using "Moneris.simple" mode then move to section 2.3.2.2 'Moneris Simple'.

2.3.3.2 - Moneris Simple

If using "Moneris.simple" in the WebDeposit.ini then further configuration must be done.

Please see our 'Moneris Simple' document for the rest of the required steps to take online at:

https://apps.pcounter.com/docs/PWD_Moneris.simple.pdf

Once complete with the 'Moneris Simple' document please return to the section '3.0.0.0 - Testing' in this document.

2.4.0.0 - Licensing & Testing

When all sections in 2.0.0.0 have been completed PWD can be tested.

2.4.1.0 - Test Server-side Login

1) On the PWD server, open a web browser and go to https://localhost/webdeposit. Note https is required and http will not function.
2) This should display the Pcounter WebDeposit User Login Portal. This is what users will see first when they use PWD to make a credit card deposit or to create a Pcounter User account.
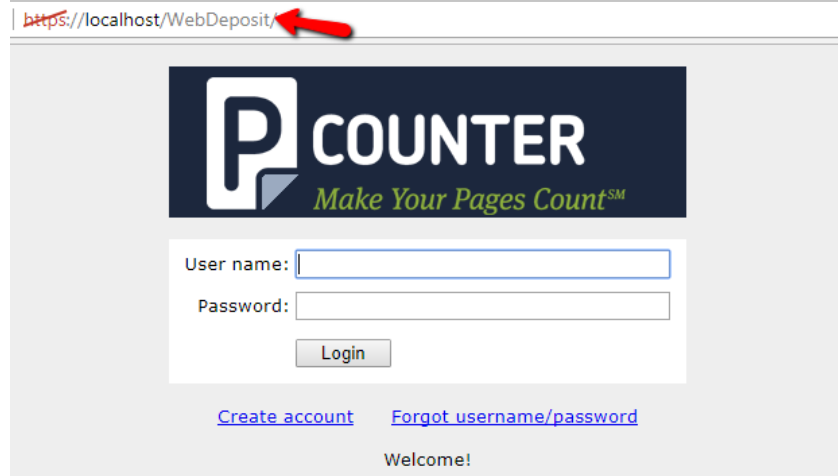
3) If the previous sections were followed and completed successfully any Domain user or Pcounter user can now login.
4) Enter the username and password of a valid Domain user or Pcounter user and click Login.
5) If the error "License is invalid" is displayed please email support@pcounter.com with a screenshot of the error message.
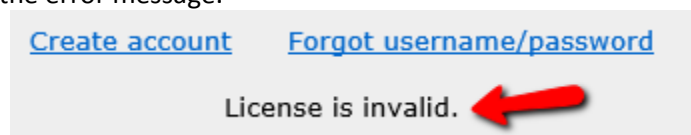
6) If successful, the user's name and their balance will be displayed. If not balance is displayed please repeat sections 2.2.2.0 and 2.2.3.0.
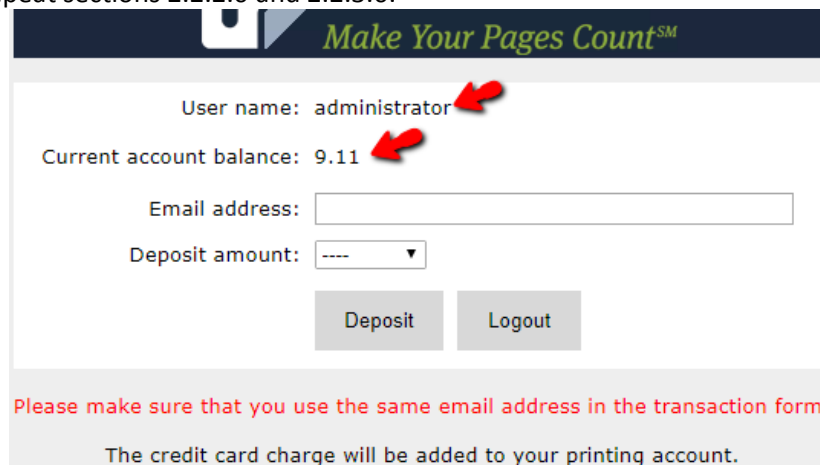
2.4.2.0 - Insert PWD License

Once a new PWD license has been received it should be applied immediately. This action will not interrupt service if the license is correct, but just in case make sure to hold onto the previous license so it can be reverted.

To apply a PWD license:

1) Open notepad using the 'run as administrator' option, then go to File > Open and choose the file **WebDeposit.ini** located at C:\PcounterWebDeposit.
2) Find the line 'License=' and delete everything after the = on that line.
3) Insert the newly obtained PWD license after the = with no spaces before or after the number.
4) No restarts are needed, the license will take effect immediately with no further action.

```
[Settings]
License=XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Debug=0
SessionTimeout=300
AllowAccountCreation=1
MinimumUserNameLength=4
MinimumPasswordLength=5
```

10.0.0 - Documentation and Video Links

This concludes the guide. If there are any questions, please email support@pcounter.com.

Links to recommended Pcounter documents and videos:

All Pcounter Videos:
https://www.youtube.com/user/andtechsf

Pcounter for Windows - Primary Documentation :
www.pcounter.com/supportfiles/pcounterwin.pdf

Pcounter for Windows - Prepare, Install, Configure:
https://www.youtube.com/watch?v=hyOaYOnVp3k

Pcounter Client and Printer Distribution Guide :
www.pcounter.com/supportfiles/Pcounter_Distribution_Guide.pdf

Pcounter WebPrint Installation and Customization Guide:
www.pcounter.com/supportfiles/Pcounter_webprint_Guide.pdf

Pcounter Administrator Training Video Part 1:
https://www.youtube.com/watch?v=FxwmXCE6ebU

Pcounter Administrator Training Video Part 2:
https://www.youtube.com/watch?v=5jLsOj4tKJw

Pcounter Popup Training Video:
https://www.youtube.com/watch?v=chSbuDZJIhQ

Pcounter Station - Installation and Troubleshooting Guide:
www.pcounter.com/supportfiles/pstation_guide.pdf

Pcounter for Windows - Balance.exe as a Web App:
https://www.youtube.com/watch?v=J_IVgsgopnI