# **cWhois**<sup>™</sup>



V2.14

# cWhois Manual

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# Contents

Chapter 1 Introduction	4
What is cWhois	
Chapter 2 Using cWhois with a form	
Calling cWhois from a form	5
Quick Tutorial	
Example forms	
Changing the appearance of the results	
Security	13
Chapter 3 Using cWhois with PHP	
Using cWhois with PHP	14
DAS servers	15
Turing (CAPTCHA code)	15
Checking availability by NS server	
Chapter 4 Support	

# **Chapter 1 Introduction**

# What is cWhois

cWhois is a PHP function that can be called from your own application to check availability of domain names and to retrieve the associated whois data. Also included is a special form handler that can be used to easily add cWhois to your website without knowing anything about PHP. Examples are provided showing how to add domain availability and lookup using various methods. For security cWhois includes an optional turing code (CAPTCHA) system to stop hackers from using your site to make multiple automated lookups.

- Easy to use php function call. More flexible than perl versions
- Simple to add to any page layout. No templates required
- Works with over 800 global and international domain extensions
- Determines whether domain is registered or not
- Returns full domain registration information
- No external whois utility required as cWhois includes this built in
- Supports some domain registrars such as .fm without dedicated whois server
- IDN support (accents) for com .net .de .ch .li .no .at .dk .be .se and others
- Makes use of DAS if available to check for availability
- Easy to include only the extensions that you require or wish to support
- Turing (CAPTCHA) code option stops abuse

For a full list of supported domain extensions please visit the product home page at <a href="http://www.vibralogix.com/cwhois">http://www.vibralogix.com/cwhois</a>

# Chapter 2 Using cWhois with a form

# Calling cWhois from a form

Although cWhois was designed as a PHP function for use in your own application (this is described later) many users prefer to use it from a simple form on their site to check availability and/or perform lookups. We provide a simple form handler that sits between your form and cWhois to make this as easy as possible. Using this form handler you can create forms on your site that allow a user to enter a domain name for checking with the results being displayed either in a popup window or in the same page as your form. For security we also provide a CAPTCHA (turing) feature to help control access.

cwhoisform.php is used to process your form and to call the cWhois function. You can call cwhoisform.php using either the GET or POST method and it expects the following fields

- domain This is the domain name to check. It can be with or without an extension. If no extension is included then this is expected to be in the field domainext.
- domainext This is the optional domain extension if not included in domain.
- turing If enabled this is the turing code required for this action.
- do This is an optional field to determine what results are displayed. The following values are valid.

1 - only availability is displayed.

2 - Availability is displayed and a link to lookup the whois data is provided if the domain is registered. When clicked the whois data is displayed in the same window.

3 - Availability is displayed and a link to lookup the whois data is provided if the domain is registered. When clicked the whois data is displayed in a popup window.

4 - Whois data is displayed for a registered domain.

# **Quick Tutorial**

You will find the tutorial files used in this section in the tutorial folder of the zip. To test them upload them to your server and make sure that you have the following files in the same folder.

```
cwhois.php
cwhoisform.php
cwhoisform.css
turingimagecw.php
turingbg1.jpg
turingbg2.jpg
turingbg3.jpg
turingbg4.jpg
```

Before continuing open up cwhoisform.php and change the setting of \$requireturing which you will find at the top of the file from

\$requireturing=1;

to

#### \$requireturing=0;

This will disable the turing code system for now (we will enable it again later).

#### Lesson 1

Here is a very simple example form which we will expand upon over the next few pages in the style of a tutorial. This first stage will have a domain check form that will open a new browser window to display the results. As no do field is set then mode 3 is used by default when results are displayed in a new window or popup. Mode 3 means that already registered domains will have a lookup link displayed with the results shown in a popup.

```
<form name="cwhoisform" id="cwhoisform" action="cwhoisform.php"
method="POST" target="_blank">
Domain
<input type="text" name="domain">
<input type="submit" value="Check">
</form>
```

You can find this file called tutorial1.html in the tutorial folder of the zip file.

### Lesson 2

One improvement on the above would be to have the results displayed in a smaller popup window instead of a full browser window. To do this we can use some simple javascript. Also we will add a drop down menu for the domain extension.

```
<script type="text/javascript">
<!--
function cwhoispopup(myform, windowname)
if (! window.focus)return true
window.open(", windowname, 'height=400,width=600,scrollbars=yes')
myform.target=windowname
return true
}
11-->
</script>
<form name="cwhoisform" id="cwhoisform" action="cwhoisform.php"
method="POST" onSubmit="return cwhoispopup(this, 'cWhois');">
Domain
<input type="text" name="domain">
<select name="domainext">
<option value=".com">.com</option>
<option value=".net">.net</option>
<option value=".org">.org</option>
</select>
<input type="submit" value="Check">
</form>
```

You can find this file called tutorial2.html in the tutorial folder of the zip file.

#### Lesson 3

Next we will add a CAPTCHA (turing) code requirement to the form. This stops hackers from using your server to make automated lookups. First of all open up cwhoisform.php and change the setting of \$requireturing which you will find at the top of the file from \$requireturing=0; to \$requireturing=1; This will enable the CAPTCHA system again.

To display a turing code you add an <img> tag to your form which will display the special image called turingimagecw.php. A form field called turingcode is added to get the user entered code along with a hidden field called turing. We also add a few lines of javascript to the forms onSubmit event function to ensure a new turing code is displayed when the form is

submitted (the current code is deleted when cWhois is called anyway so there is no security issue doing this in javascript). The javascript also clears the turingcode input field and copies the value to the turing field.

```
<script type="text/javascript">
<!--
function cwhoispopup(myform, windowname)
ł
tmp = new Date()
tmp = "?"+tmp.getTime()
window.document.images["turingimage"].src = "turingimagecw.php"+tmp
myform.turing.value=myform.turingcode.value
myform.turingcode.value=""
if (! window.focus)return true
window.open(", windowname, 'height=400,width=600,scrollbars=yes')
myform.target=windowname
return true
}
//-->
</script>
<form name="cwhoisform" id="cwhoisform" action="cwhoisform.php"
method="POST" onSubmit="return cwhoispopup(this, 'cWhois');">
Domain
<input type="text" name="domain">
<select name="domainext">
<option value=".com">.com</option>
<option value=".net">.net</option>
<option value=".org">.org</option>
</select>
<br><br>>
Security Code
<input type="hidden" name="turing" value="">
<input type="text" name="turingcode" id="turingcode" size="10">&nbsp;
<img id="turingimage" name="turingimage" src="turingimagecw.php"
align="absmiddle">
<input type="submit" value="Check">
</form>
```

You can find this file called tutorial3.html in the tutorial folder of the zip file.

#### Lesson 4

In the final step of this quick tutorial we will show how to have the results displayed within your page rather than in a popup. To do this we do not need to have the javascript to create the popup window or update the turing (it will update on page refresh anyway). At the point in your page where you want the results displayed insert this.

<?php echo \$cwhoisdata; ?>

At the very top of the page (before any html code) add this line.

<?php include"cwhoisform.php"; ?>

As this uses some PHP we will need to change the extension of the page containing the form to .php. So our page would look like this.

```
<?php include"cwhoisform.php": ?>
<form name="cwhoisform" id="cwhoisform" action="tutorial4.php" method="POST">
Domain
<input type="text" name="domain">
<select name="domainext">
<option value=".com">.com</option>
<option value=".net">.net</option>
<option value=".org">.org</option>
</select>
<br><br>>
Security Code
<input type="text" name="turing" id="turing" size="10">&nbsp;
<img id="turingimage" name="turingimage" src="turingimagecw.php"
align="absmiddle">
<input type="submit" value="Check">
</form>
<?php echo $cwhoisdata; ?>
```

You can find this file called tutorial4.php in the tutorial folder of the zip file.

In the case of displaying the results in the same page if no do field is defined then the default value of 3 will be assumed. This will display a lookup link for any existing domain name which will open a popup window to display the results. To change this behavior just add the do field to the form with the required value.

Lesson 5

cwhoisform.php can accept input with multiple domain extensions so you can use checkboxes on the form. In this case the domain name with each of the extensions will be checked. Make sure to define the checkboxes with the name domainext[] so that several can be submitted like this.

<input type="checkbox" name="domainext[]" value=".com">.com <input type="checkbox" name="domainext[]" value=".net">.net <input type="checkbox" name="domainext[]" value=".org">.org

It is also possible to submit multiple domain names in the domain field separated by a newline character. This is ideal if you use a text area input and have the user enter each domain name on a separate line. For example

```
<textarea name="domain" rows="6" cols="50">
</textarea>
```

# **Example forms**

We have included a number of example pages you can use as is or incorporate in your own pages. Just make sure that cwhois.php and cwhoisform.php are in the same folder. We have included the CAPTCHA code (turing) in all of them but you can remove the code if required. Remember in cwhoisform.php that \$requireturing must be set as follows:

\$requireturing=2; to enable the turing code system

\$requireturing=0; to disable the turing code system

You can find this setting at the top of cwhoisform.php. Each of the examples also make use of a popup for the results but you can change this as required. See the earlier tutorial for further details.

#### freetext.html

This example uses a text input where the full domain is entered. The results are displayed in a popup.

Domain		
Security C	Code	
	KPLDF	
Check		

#### dropmenu.html

This example uses a separate drop down menu for the domain extensions. This is ideal if you want to restrict domain types that can be entered.

		.com 🛟	
Security Coo	ie		
	NHSFM		

#### checkbox.html

This example as its name suggests uses checkboxes that allow the user to enter a domain name and select one or more extensions to check.

Domain	
.com .net .org	
Security Code	
Check	

#### textarea.html

This example allows a user to enter multiple domain names each on a separate line. For security reasons we limit the number of entries by default to 20 but you can change this in cwhoisform.php using the setting \$maxdomains.

Enter domains one per line	
Security Code	h
Check	

#### textareacheckbox.html

This example allows a user to enter multiple domain names (without extensions) each on a separate line and to select the required extensions using checkboxes.. For security reasons we limit the number of entries by default to 20 but you can change this in cwhoisform.php using the setting \$maxdomains.

com 🗌 .net 📄		 	6
ecurity Code			
FGB	Q		
Check			

# Changing the appearance of the results

The appearance of the results is determined by the styles in cwhoisform.css which you can change as required. This css file is loaded automatically when using a popup for the results. If you display the results in your own page then you should load this css file in the <head> section of your page as follows.

```
k href="cwhoisform.css" rel="stylesheet" type="text/css">
```

You can change the text used within the results as you wish either to change the wording or perhaps to translate to other languages. You will find all of the text used at the top of cwhoisform.php. Each entry looks something like this.

\$cwlang['securitycode']="security code did not match";

Only change the text between the double quotes. You can if you wish use html within the text. For example here is how you can display a graphic to show if a domain is available or not:-

\$cwlang['available']="<img src='avail.gif' align='absmiddle'>"; \$cwlang['notavailable']="<img src='notavail.gif' align='absmiddle'>";

notice that instead of using the " character in the html use a ' character.

# Security

There are many hackers and other undesirables that search for whois lookup systems and then use them with an automated system to perform thousands of lookups and other data mining. This not only slows your server down but is likely to get your server IP banned from accessing the whois server. To control this we recommend using the turing code (CAPTCHA) system mentioned previously. This requires that a human readable code is entered before access is made to the whois server.

cwhoisform.php allows multiple domain names or extensions to be entered in one call for the convenience of your clients. However to stop this being abused we limit the number of lookups performed each time to 20. You can change this limit in the *maxdomains* setting found at the top of cwhoisform.php.

# **Chapter 3 Using cWhois with PHP**

# Using cWhois with PHP

Although for most applications you can probably use the form handler cwhoisform.php to control access to cWhois there maybe instances where you require more control. In this case it is best to call the cWhois PHP function directly as follows.

\$result=cWhois(\$domain,\$domainext,\$data,\$turing,\$turingused);

\$data \$turing	<ul> <li>String containing the domain name</li> <li>String containing the domain extension (e.gcom)</li> <li>An array passed by reference that returns the whois data.</li> <li>Optional string parameter. If the turing system is enabled then pass in the turing code in this string.</li> <li>Optional integer parameter. If set to 0 will not reset the turing enabling you to make further calls with the same code. If set to 1 (default) then the code is flagged as used.</li> <li>This is an integer value flagging if the domain is available etc.</li> <li>The following values are valid.</li> <li>0 - Domain is not registered</li> <li>1 -The domain is registered. \$data should populate now with an array, each element being a line from the whois output.</li> <li>2 - Domain extension is not recognised by cWhois</li> </ul>
	<ul> <li>3 - Domain name is not valid</li> <li>4 - Turing code check failed (if enabled)</li> <li>5 - Error connecting with whois server</li> </ul>
Here is a sin	nple call not using the turing code system.
if (\$result==) if (\$result==) if (\$result==)	ibralogix";

```
if ($result==5) echo "unable to connect to whois server";
```

```
if ($result==1) {
```

```
for ($k=0; $k<count($a);$k++) echo $a[$k]."<br>\n";
```

```
}
```

Page 14

# **DAS** servers

Because of widespread abuse of whois servers some registrars now have separate server for availability checking and full whois checking. These are called DAS for short (Domain Availability Server) and often allow greater use before blocking than the full whois server. cWhois uses these DAS servers wherever possible if only an availability check is required. Therefore if you are just checking availability and do not need to get the returned whois data we recommend telling cWhois this so that it will use DAS if it can. To do this pass in a \* character in the \$data parameter when making the call. For example.

\$domain="vibralogix"; \$domainext=".com"; \$data="\*"; \$result=cWhois(\$domain,\$domainext,\$data);

# Turing (CAPTCHA code)

To control abuse of your scripts using cWhois we have built in a turing (CAPTCHA) code system. To use this system first make sure that the include line for cwhois.php is at the very top of your page before the <html> and any other characters in the page. Also before this include add the setting \$requireturing as follows:-

```
<?php
$requireturing=2;
include"cwhois.php";
?>
```

The setting of *\$requireturing* has three allowed values.

- 0 This disables the turing code system
- 1 This requires a valid turing code for both availability checking and full lookup.
- 2 This requires a valid turing code for a full lookup only.

To display the turing code in your page use the following html.

<img src="turingimagecw.php" width="60" height="30">

Just get the user to input what they see and send this to the cWhois function with the call. The cWhois function will then flag the code as used so that it cannot be used again.

```
$requireturing=1;
include "cwhois.php";
$domain=$_REQUEST['domain'];
$domainext=$_REQUEST['domainext'];
$turing=$_REQUEST['turing'];
$result=cWhois($domain,$domainext,$data,$turing);
if ($result==0) echo "domain is available";
if ($result==2) echo "domain extension not supported";
if ($result==3) echo "domain name not valid";
if ($result==4) echo "security code was not valid";
if ($result==5) echo "unable to connect to whois server";
if ($result==1) {
for ($k=0; $k<count($a);$k++) echo $a[$k]."<br>n";
}
```

There maybe be circumstances where you will need to make multiple calls to the cWhois function with only one turing code entered by the user. In this case you can set the optional parameter **\$turingused** to 0 as follows.

\$result=cWhois(\$domain,\$domainext,\$data,\$turing,0);

On the final call that uses the same turing code make sure to set \$turingused to be 1 so that the code gets flagged as used.

# Checking availability by NS server

We have tried to add support for all the domain extensions that have whois servers available. However you can also check availability for non supported domain extensions by checking for a name server. This is not as reliable but it may be sufficient form some applications. To add this support for specific domain extensions add the lines to cwhois (near the other entries) like this

\$dtd[]=".ext,ns,not found";

Replace the .ext with the extension required.

# **Chapter 4 Support**

Hopefully if you have followed this manual carefully everything will be working fine. However sometimes things don't go quite so smoothly so if you have any questions or problems then please check the FAQ on the support page or email us.

Support and updates for cWhois are free of charge for one year after purchase. Shortly after purchase you should receive a username and password that provide you with access to the latest downloads, FAQ and other resources.

Support area: http://www.vibralogix.com/support

Email: <a href="mailto:support@vibralogix.com">support@vibralogix.com</a>