



ISPAPI Registrar Module

Domain Management using WHMCS & HEXONET

Version 1.0.36 (or later version)

December 9, 2015



COPYRIGHT NOTIFICATION

Copyright ©2015 HEXONET GmbH. All rights reserved.

DISCLAIMER AND LIMITATION OF LIABILITY

HEXONET GmbH and its affiliates ("HEXONET") have made efforts to ensure the accuracy and completeness of the information in this document. However, HEXONET makes no warranties of any kind (whether express, implied or statutory) with respect to the information contained herein. HEXONET assumes no liability to any party for any loss or damage (whether direct or indirect) caused by any errors, omissions or statements of any kind contained in this document. Further, HEXONET assumes no liability arising from the application or use of the product or service described herein and specifically disclaims any representation that the products or services described do not infringe upon any existing or future intellectual property rights. Nothing herein grants the reader any license to make, use, or sell equipment or products constructed in accordance with this document. Finally, all rights and privileges related to any intellectual property right described in this document are vested in the patent, trademark, or service mark owner, and no other person may exercise such rights without express permission, authority, or license secured from the patent, trademark, or service mark owner.

HEXONET reserves the right to make changes to any information herein without further notice.

NOTICE AND CAUTION

Concerning Patent or Trademark Rights

The inclusion in this document, the associated on-line file, or the associated software of any information covered by any patent, trademark, or service mark rights will not constitute nor imply a grant of, or authority to exercise, any right or privilege protected by such patent, trademark, or service mark. All such rights and privileges are vested in the patent, trademark, or service mark owner, and no other person may exercise such rights without express permission, authority, or license secured from the patent, trademark, or service mark owner.

This document was created using LibreOffice 3

ISPAPI Registrar Module

Domain Management using WHMCS & HEXONET
Version 1.0.36 (or later version)

December 9, 2015

The logo for HEXONET, featuring the word "HEXONET" in a bold, blue, sans-serif font. The "X" is stylized with a horizontal line through it.

HEXONET GmbH
Talstrasse 27
66424 Homburg
Germany

E-Mail: support@hexonet.net
Internet: <http://www.hexonet.net>

Table of Contents

Supported Features.....	4
Installation.....	6
Configuration.....	7
Reseller Credentials.....	7
Nameservers.....	8
Cronjob configuration.....	8
Hexonet widget activation.....	9
Additional domain fields.....	10
UTF-8 Support.....	12
Domain Name WHOIS Privacy.....	13
Support for the new WHMCS 'toggle ID protection' functionality.....	13
Client area WHOIS Privacy management.....	13
Special features.....	15
.CA Registrant WHOIS Privacy.....	15
.CA Change of Registrant.....	15
.IT Change of Registrant.....	16
Ispapi Domain Import Addon.....	17

Supported Features

The registrar module supports the following functions and features:

- Domain Registration
 - Additional domain fields
- Domain Transfer (with AuthInfo code support)
- Domain Management
 - Domain locking
 - Update Contact Information (with UTF-8 support)
 - Change Nameservers
 - Nameserver Registration (Add, Modify, Delete)
 - Explicit Deletions supported in Admin panel
- Domain Renewal
 - Special handling for registries without explicit renewals (many ccTLDs)
- DNS Management
 - Record-Types: A, AAAA, MX, MXE, CNAME, TXT
 - Allows user defined TTL values and MX priorities
- Email forwarding
- URL forwarding
 - Redirect using HTTP
 - Forward using HTML Frame
- Optional TLS/SSL for API connection
 - Supports proxy server for accelerated API access
- Support for testing environment
- WHOIS Privacy management of .CA domain names
- Change of Registrant for .CA / .IT domain names
- Support for WHOIS Privacy / ID Protection
 - Uses privacy service WHOISTRUSTEE.com
 - ID Protection toggle in Admin area gets synchronized
 - Client area WHOIS Privacy management

- Support for all bulk update operations
- Support for IDNs
 - automatically selects IDNA2008 if supported by TLD (e.g. .de)
 - uses API based IDN conversion by default
 - can be configured to use PHP method instead
- Support for new domain sync method (_Sync)
 - Workaround for ccTLDs that need to get renewed before expiration

Installation

Copy all files from the **install/** subdirectory to your WHMCS installation root directory (**\$YOUR_WHMCS_ROOT**), while keeping the folder structure intact.

E.g.

```
install/modules/registrars/ispapi/ispapi.php  
=> $YOUR_WHMCS_ROOT/modules/registrars/ispapi/ispapi.php
```

Configuration

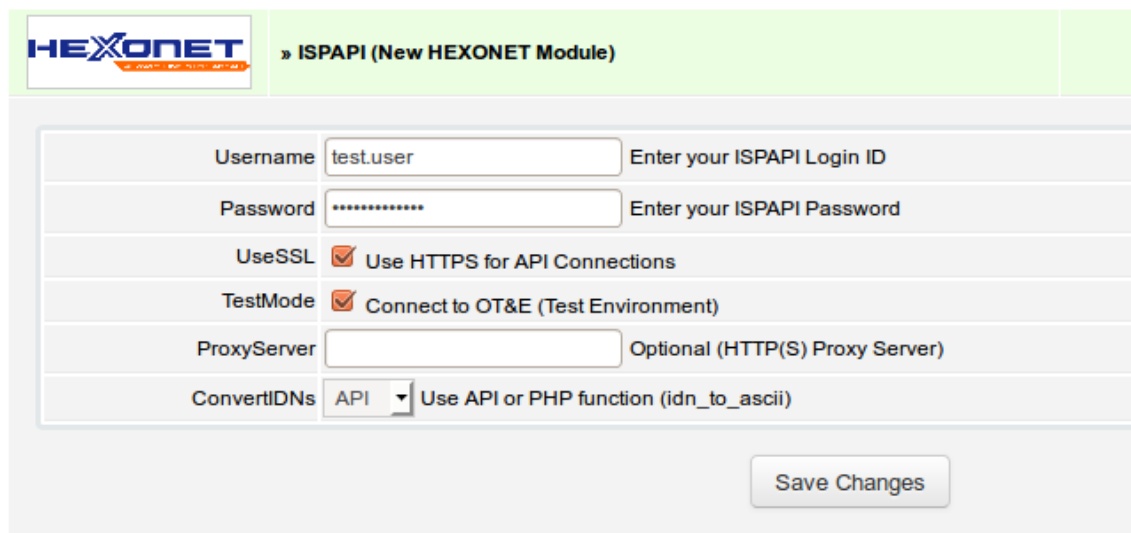
Reseller Credentials

Within the WHMCS Admin area, go to

Setup => **Products/Services** => **Domain Registrars**

Activate the new registrar **ISPAPI (New HEXONET Module)**, and enter your Hexonet credentials. You can create your account here: <https://www.hexonet.net/sign-up>

If you want to use the “TestMode”, you have to create your OTE account here: <https://www.hexonet.net/signup-ote>



The screenshot shows the configuration interface for the ISPAPI (New HEXONET Module) in WHMCS. The form includes the following fields and options:

- Username:** test.user (with a hint: Enter your ISPAPI Login ID)
- Password:** [masked] (with a hint: Enter your ISPAPI Password)
- UseSSL:** ☒ Use HTTPS for API Connections
- TestMode:** ☒ Connect to OT&E (Test Environment)
- ProxyServer:** [empty] (with a hint: Optional (HTTP(S) Proxy Server)
- ConvertIDNs:** API (dropdown menu) (with a hint: Use API or PHP function (idn_to_ascii))

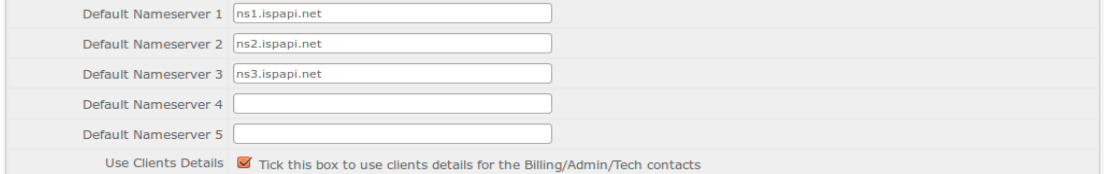
A "Save Changes" button is located at the bottom right of the form.

Make sure that the account you are using is set to renewalmode AUTOEXPIRE in your Control Panel, otherwise domains might be renewed without being paid for by the customer

Nameservers

If you want to use DNS/URL/Emailforwarding, domains must resolve to the ISPAPI nameserver cluster (**ns1.ispapi.net**, **ns2.ispapi.net**, **ns3.ispapi.net**).

You might want to enter them in **Setup** => **General Settings** => **Domains** as **Default Nameservers** for your customers:



Default Nameserver 1	ns1.ispapi.net
Default Nameserver 2	ns2.ispapi.net
Default Nameserver 3	ns3.ispapi.net
Default Nameserver 4	
Default Nameserver 5	

Use Clients Details ☒ Tick this box to use clients details for the Billing/Admin/Tech contacts

You can also create your own nameserver hostnames and use them, as long as they are registered and resolve to the correct IP addresses.

Cronjob configuration

In order to have your WHMCS always synchronized with our systems, you should make sure to run the WHMCS Domain Sync at least once per day:

```
php -q $YOUR_WHMCS_ROOT/crons/domainsync.php
```

More information about the Domain Sync can be found here:

http://docs.whmcs.com/Domains_Tab#Domain_Sync_Enabled

Hexonet widget activation

If you want to keep your WHMCS modules up to date, you should activate the Hexonet widget which will display a message with a download link as soon as a new version is available.

To activate it, go in **Setup** => **Staff Management** => **Administrator Roles** select your administrator role and activate the “Hexonet” widget.



Additional domain fields

The registration of some extension requires sometimes additional domain fields. (e.g. Legal Type and CIRA Agreement for .CA domain)

In order to provide this additional fields on the registration page and map them with our module you have to extend the **\$additionaldomainfields** array in the **includes/additionaldomainfields.php** file.

Our module supports the following new config fields: **Ispapi-Name**, **Ispapi-Options**, **Ispapi-Replacements**, **Ispapi-IgnoreForCountries** and **Ispapi-Eval**.

- **Ispapi-Name** (string): Name of the parameter in Ispapi
- **Ispapi-Options** (string): Comma-separated list of parameter values, the order must match the ones in **Options**. The mapping of values from **Options** to **Ispapi-Options** is stored in **Ispapi-Replacements**
- **Ispapi-Replacements** (array): If the parameter value is a valid key of this array, it gets replaced by the respective value. Indirect use via Ispapi-Options is preferred, direct use makes sense to map older values for backwards compatibility.
- **Ispapi-Eval** (string): PHP code to execute, the parameter value after all replacements is stored in \$value

In our module you will find a file named "additionaldomainfields_sample.php" containing a lot of preconfigured extensions running with our systems. (updated on a regular basis) This file will assist you configuring the WHMCS additionaldomainfields.php file located under: **includes/additionaldomainfields.php**.

Examples:

```
// Maps the "Application Purpose" value on the Ispapi parameter
// "X-US-NEXUS-APPPURPOSE".
// e.g. for "Government purposes": X-US-NEXUS-APPPURPOSE=P5
$additionaldomainfields[".us"][] = array(
    "Name" => "Application Purpose",
    "Type" => "dropdown",
    "Ispapi-Name" => "X-US-NEXUS-APPPURPOSE",
    "Ispapi-Options" => ",P1,P2,P3,P4,P5",
    "Options" => ",P1 - Business use for profit,P2 - Non-
profit business; club; association; religious organization; etc.,P3
- Personal Use,P4 - Educational purposes,P5 - Government purposes",
    "Default" => "",
    "Required" => true
);
```

```
// Maps the "Nexus Country" value on the Ispapi parameter
// "X-US-NEXUS-VALIDATOR", converting to uppercase.
// e.g. for "de": X-US-NEXUS-VALIDATOR=DE
$additionaldomainfields[".us"][] = array(
    "Name" => "Nexus Country",
    "Type" => "text",
    "Description" => "<div>Specify the two-letter country-code of
the registrant (if Nexus Category is either C31 or C32).</div>",
    "Size" => "2",
    "Default" => "",
    "Required" => false,
    "Ispapi-Name" => "X-US-NEXUS-VALIDATOR",
    "Ispapi-Eval" => '$value = strtoupper($value);'
);
```

```
// Custom local presence service for .it
$my_local_presence = array(
    "FIRSTNAME" => "John",
    "LASTNAME" => "Doe",
    "ORGANIZATION" => "Local Presence",
    "STREET" => "Via Presence 123",
    "CITY" => "Milano",
    "STATE" => "MI",
    "ZIP" => "12345",
    "COUNTRY" => "IT",
    "PHONE" => "+39.123456",
    "EMAIL" => 'info@localpresence.it'
);

$additionaldomainfields[".it"][] = array(
    "Name" => "Local Presence",
    "Type" => "dropdown",
    "Options" => ",Use Local Presence Service",
    "Default" => "",
    "Required" => false,
    "Ispapi-Options" => "0,1",
    "Ispapi-Eval" => 'if ( $value ) {
        $command["OWNERCONTACT0"] = $my_local_presence;
        $command["ADMINCONTACT0"] = $my_local_presence;
    }'
);
```

UTF-8 Support

For **WHMCS < 5**, if the system charset for WHMCS is set to utf8, the ISPAPI module will enable some workarounds to support UTF-8 for domain registrations, transfers and contact updates.

For **WHMCS >= 5**, it uses the original unmodified parameters as provided by the system.

WHMCS >= 6 decided to strip the umlauts in domain names and contacts. This module is able to fix this issue and will keep the umlauts.

In any case, the module should be able to handle umlauts and special characters in whois contacts, as long as the respective registry supports it.

For registries that don't support umlauts, some characters will be mapped automatically, e.g. é to e, ö to oe and so on.

Domain Name WHOIS Privacy

The registrar module fully supports the WHOIS Privacy service WHOISTRUSTEE.com:



Support for WHOIS Privacy (aka ID Protection in WHMCS) been integrated in two ways:

Support for the new WHMCS 'toggle ID protection' functionality

Whenever the ID protection flag gets enabled or disabled in the WHMCS Admin area, the module synchronizes the new protection status to the domain.

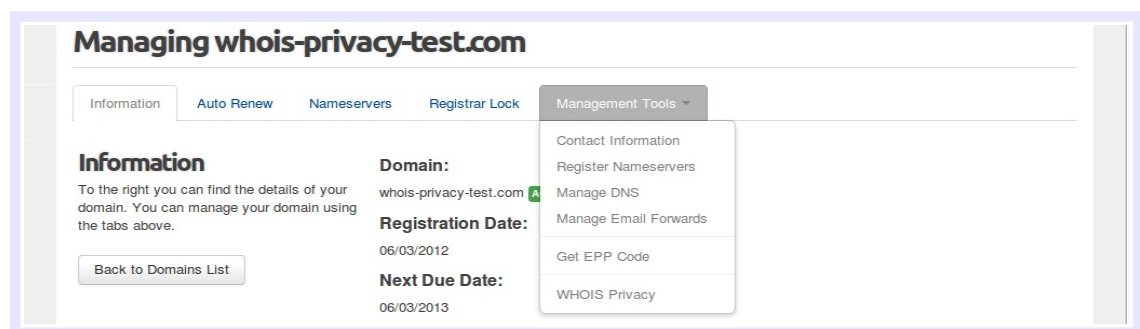
This functionality is compatible to the WHMCS API “domaintoggleidprotect” call.

If the ID Protection flag gets disabled in the Admin area, clients will not be able to re-enable WHOIS Privacy themselves, but it can only be re-enabled by an admin!

Client area WHOIS Privacy management

The registrar module registers a new client area function, which will only be visible when using a template thats compatible to the new WHMCS 5 default one.

In the **Management Tools** section of a domain that got ID Protection enabled, there's a new item called **WHOIS Privacy**.



Using that new function, a client can verify the current protection status, and enable or disable it automatically.

The new WHOIS Privacy page looks as follows (protection is enabled in example):

WHMCS

Home Services Domains Billing Support Open Ticket Affiliates Hello, Jens!

WHOIS TRUSTEE whois-privacy-test.com

Your WHOIS information is currently protected!

Why WHOIS Privacy is important: Domain name registrations requires contact information be provided for storage and display in the public WHOIS database. This means that anyone in the world can view the name, address, phone number and email without restriction. Publicly making this information available puts domain owners at a risk for spam and potential identity theft. Our WHOIS Privacy service securely replaces all of this information, and completely shields all WHOIS data from the outside world.

Unprotected Public WHOIS	WHOIS TRUSTEE Protected
Example Org Ltd. John Doe 123 Main Street SmallTown, CA 95021 USA +1 (416) 000-0000 me@mydomain.com	Registrant of MYDOMAIN.COM c/o WHOISTrustee.com Limited Suite 3686, 24b Moorefield Road Johnsonville, Wellington 6037 NZ +64 0000 75d34d@mydomain.com.whoistrustee.com

WHOIS Privacy Status:
Enabled - WHOIS is protected
[Disable WHOIS Privacy](#)

« Back

Powered by [WHMCompleteSolution](#)

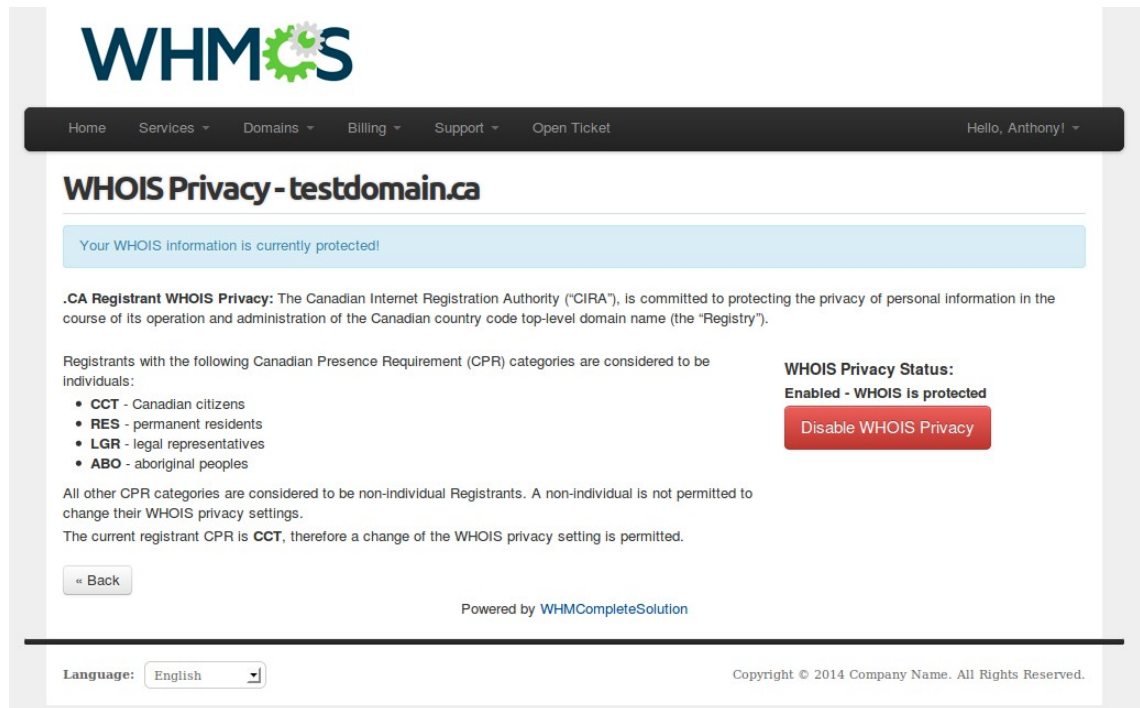
Language: English

Copyright © 2011 HEXONET - WHMCS DEMO. All Rights Reserved.

Special features

.CA Registrant WHOIS Privacy

The new WHOIS Privacy page for .CA domain names looks as follows (protection is enabled in example):



The screenshot shows the WHMCS interface for the WHOIS Privacy page of a .CA domain. At the top, the WHMCS logo is displayed. Below it is a navigation bar with links: Home, Services, Domains, Billing, Support, and Open Ticket. The user is logged in as 'Hello, Anthony!'. The main heading is 'WHOIS Privacy - testdomain.ca'. A light blue box states 'Your WHOIS information is currently protected!'. The text explains that the Canadian Internet Registration Authority (CIRA) is committed to protecting the privacy of personal information. It lists the Canadian Presence Requirement (CPR) categories considered to be individuals: CCT (Canadian citizens), RES (permanent residents), LGR (legal representatives), and ABO (aboriginal peoples). A red button labeled 'Disable WHOIS Privacy' is visible. The WHOIS Privacy Status is 'Enabled - WHOIS is protected'. A 'Back' button is at the bottom left. The footer shows the language set to English and the copyright notice: Copyright © 2014 Company Name. All Rights Reserved.

.CA Change of Registrant

The Change of Registrant page for .CA domain names is available under the Management Tools of a .CA domain.

.IT Change of Registrant

.IT Change of Registrant requires a special procedure called TRADE. This function is available under the Management Tools of a .IT domain.

Ispapi Domain Import Addon

This package includes an domain importer addon. You can use it to automatically import domain names from your Hexonet account into your WHMCS.

To activate it, go in **Setup** => **Addon Modules** and activate the **Ispapi Domain Import**.

Once done, you will find a new menu item called Ispapi Domain Import under **Addons**

Addons

Ispapi Domain Import

Import Domains from ISPAPI Account

ISPAPI Test Account: **test.user** - **Connected!**

Query Domainlist

Domain:

Pull Domainlist

Import Domains

Payment Gateway	Bank Transfer
Currency	USD
Domains	<div></div>

Import Domains

Just enter the list of domains into the **Domains** field, or pull the list from your account, select a payment gateway, a default currency for new client accounts, and press **Import Domains**.

For each domain, the tool will create a new WHMCS client account using the selected currency and the registrant info, if there's no existing WHMCS client account using the same email address.

Also it will use the current renewal prices as the recurring amounts of imported domain names, using the respective client account currency.