

# Installation and configuration guide

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# WHMCS setup(install/update)

## Hetzner Datacenter module **WHMCS**

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**Module is coded ionCube v13**

Supported php version:

- php 7.4 WHMCS 8.11.0 -
- php 8.1 WHMCS 8.11.0 +
- php 8.2 WHMCS 8.11.0 +

To install and update a module, you must perform one and the same action.

### 1. Download the latest version of the module.

PHP 8.2

```
wget http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/php82/PUQ_WHMCS-HetznerDatacenter-latest.zip
```

PHP 8.1

```
wget http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/php81/PUQ_WHMCS-HetznerDatacenter-latest.zip
```

PHP 7.4

```
wget http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/php74/PUQ_WHMCS-
```

```
HetznerDatacenter- latest. zip
```

All versions are available via link:

[http://download.puqcloud.com/WHMCS/servers/PUQ\\_WHMCS-HetznerDatacenter/](http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/)

## 2. Unzip the archive with the module

```
unzip PUQ_WHMCS-HestiaCP- latest. zip
```

## 3. Copy and Replace "puqHetznerDatacenter" to "WHMCS\_WEB\_DIR/modules/servers/"

# Basic concepts and requirements

## Hetzner Datacenter module **WHMCS**

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### Requirements for the successful operation of the module

- Minimal WHMCS version 8+
- Hetzner API

### The logic of the module.

You can offer your clients virtual machines from Hetzner. The module allows you to deploy almost any service based on Hetzner.

#### Creating a new Account.

1. Checking the module license
2. Generating the server name in the format `NameServer-[*user_id*]-[*service_id*]`
3. Generating data to create a server
4. Sending data via API and creating a server

#### Package change

1. The package change function allows you to enable and disable backups

#### Suspending an Account

1. Checking the module license
2. Selecting the suspension method: server shutdown or enabling firewall rules
3. Executing the suspension via API

## Unsuspending an Account

1. Checking the module license
2. Selecting the restoration method: server power on or restoring firewall rules
3. Executing the restoration via API

## Terminating an Account

1. Checking the module license
2. Deleting the server via API
3. Updating information in the WHMCS database

## Client Area

The module provides clients with the ability to manage virtual machines through the WHMCS client area, including functions for creating, suspending, restoring, and deleting servers, as well as managing backups and snapshots.

# Setup guide: WHMCS preparation and configuration

## Hetzner Datacenter module **WHMCS**

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### 1. Download the latest version of the module.

PHP 8.X

```
wget http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/PUQ_WHMCS-HetznerDatacenter-latest.zip
```

PHP 7.4

```
wget http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/php74/PUQ_WHMCS-HetznerDatacenter-latest.zip
```

All versions are available via link:

[http://download.puqcloud.com/WHMCS/servers/PUQ\\_WHMCS-HetznerDatacenter/](http://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-HetznerDatacenter/)

### 2. Unzip the archive with the module

```
unzip PUQ_WHMCS-HetznerDatacenter-latest.zip
```

### 3. Copy "HetznerDatacenter" to "WHMCS\_WEB\_DIR/modules/servers/"

## 4. Create new server HetznerDatacenter in WHMCS (System Settings -> Products/Services -> Servers)

System Settings->Servers->Add New Server

- Enter the correct **Name** and **API url** `api.hetzner.cloud`
- In the **Server Details** section, select the "**PUQ Hetzner Datacenter**" module and enter the correct **api key** and for the **Hetzner API**. To get an API key, go to the **Hetzner console** -> **Security** -> **API tokens** -> **Generate API token**
- To check, click the **Test connection** button

Server Details

## 6. Create a new server Group

For the module to work correctly, you need to create a group and add our server that we created to it. If you want to use several projects, you need to create your own server for each project and create a group and add one server to one group.

Password

System Settings->Products/Services->Create New Group

## Edit Group

Name Hetzner Datacenter

Fill Type

- ☒ Add to the least full server  
☐ Fill active server until full then switch to next least used

Selected Servers

Add »

« Remove

Hetzner Datacenter

## 6. Create a new Products/Services

System Settings->Products/Services->Create a New Product

In the **Module settings** section, select the "**PUQ Hetzner Datacenter**" module

Please note that you need to select a group with a configured server, so we can separate services by projects in the Hetzner console





DetailsPricingModule SettingsCustom FieldsConfigurable OptionsUpgradesFree DomainCross-sellsOtherLinks

Module NamePUQ Hetzner Datacenter

Server GroupHetzner Datacenter

License key

success: 2024-09-11T16:42:34+02:00

Parameters for package:

hestiacp

Server name

Name server This option will allow you to add a ids string to the server name. A new name will be generated each time the create account function is called. Where NameServer- will only be present if the field is set: `nameserver-["user_id"]-["service_id"]`

Server type

CX11Server type

Server location

HEL1Server location

Server placement groups

PRIVATE\_WEB (SPREAD)Server placement groups

Server image

DEBIAN-11 - DEBIAN 11Server image

SSH keys

IT@PUQ.PLSSH keys

Server networks

Server networks

Server firewalls

HESTIACP  
FIREWALL-2  
FOR SUSPENDServer firewalls

User data

```
#cloud-config
package_update: true
package_upgrade: true

write_files:
- path: /root/hestia_install.sh
  content: |
    #!/bin/bash

    # Define variables
    HESTIA_INSTALL_SCRIPT="/root/hst-install.sh"
    LOG_FILE="/root/hst_install.log"
    HESTIA_PASSWORD="${Password}"
    HESTIA_HOSTNAME="${Hostname (Domain)}"
    HESTIA_EMAIL="${clientemail}"

    # Download Hestia install script
    wget https://raw.githubusercontent.com/hestiacp/
    /hestiacp/release/install/hst-install.sh -o
    $HESTIA_INSTALL_SCRIPT

Available variables:
$(username) - Username from the service
$(userpassword) - Password from the service
$(hostname) - Domain name from the service
$(nameserver1_server) - Nameserver 1 from the server options
$(nameserver2_server) - Nameserver 2 from the server options
$(nameserver1_service) - Nameserver 1 from the service options
$(nameserver2_service) - Nameserver 2 from the service options
$(clientemail) - Client email
Available variables from the service configurable options:
$(operating_system)
$(backup)
Available variables from the service custom fields:
$(Password)
$(hostname (Domain))
Cloud-init user data to use during Server creation. This field is limited to 32KIB.
```

Package setting

Hide PTR open record☐ Hide PTR open record. When the checkbox is checked, it hides the button.

Not allow access to noVNC☐ Not allow access to server on noVNC. This setting prohibits access to the server console if enabled.

Not allow access to Charts☐ Not allow access to server charts. This setting prohibits access to the server charts if enabled.

Not allow reset password☐ Not allow reset password. This setting prohibits access to the server charts if enabled.

Backup

☒ Allow access to server backup. This parameter allows access to server backup: below you need to select the name of the custom field. *(Important! The field must be yes/no checkbox)*

Backup

Backuptext

Custom option name for server backup. Select the name of the option that will determine the backup for the user.

Snapshot

☒ Allow access to server snapshot. This setting allows access to the server snapshot if enabled.

☐ Save all snapshots created by the user in case of server deletion. This option will save all snapshots created by the user when the "Terminate services" option is enabled. This means that the virtual machine will be deleted, but the snapshots will still be saved and available in your Hetzner panel. You can delete them manually or restore the virtual machine for the user. Please note that after deleting the virtual machine, the snapshots will no longer be available to the user in the reinstall section.

Server labels

Server

Server

HestiaCP

Add Label

Server labels. The user\_id and service\_id fields with the corresponding values will be automatically added.

Hide inputs on client area

☒ Hide inputs on client area. This setting hides the inputs [domain, password, username, nameserver1, nameserver2 and all Set up a server labels] on the client area if enabled.

for suspend

API:

Step 1: Choose server type and location

Select Server and Location

cx11 - x86 1 Cores 2 GB 20 GB

hel1 - Net: 0.0052 EUR, Gross: 0.0052 EUR

Attribute	Value
ID	1
Name	cx11
Description	CX11
Cores	1
Memory	2 GB
Disk	20 GB
CPU Type	shared
Storage Type	local
Architecture	x86
Included Traffic	20 TB
Location	hel1
Price Hourly (Net)	0.0052 EUR
Price Hourly (Gross)	0.0052 EUR
Price Monthly (Net)	3.29 EUR
Price Monthly (Gross)	3.29 EUR

Step 2: Choose deployment image and configure access, group name and SSH keys

Select Image

☐ Show Backups☐ Show Snapshots

System

debian-11 - Debian 11

Attribute	Value
Id	45557056
Type	system
Status	available
Name	debian-11
Description	Debian 11
Disk Size	5
Created	16.08.2021, 11:12 UTC
Os Flavor	debian
Os Version	11
Rapid Deploy	true
Protection	Delete: false
Architecture	x86

Do not use (selected image will be used)

Custom option name for image. Select the name of the option that will define the image displayed to the user when the service is deployed.

☒ Allow user to select ISO image.  
If you enable this option, the user will be able to select the attached ISO image you have allowed.

☒ Allow user to reinstall service. If you enable this option, the user will be able to reinstall the service.

☒ Allow user to choose backup and snapshot when reinstalling service. If you enable this option, the user will be able to select backups and snapshots during the service installation process. *(Important! Each user only gets access to their backups and snapshots based on the user's services)*

Select Placement Group

☒ private\_web (spread)

☐ private\_mail (spread)

☐ private\_cloud (spread)

Select SSH Keys

☒ it@puq.pl

Step 3: Choose networks and firewalls

Important! It is necessary that at least one of the networks is enabled for successful server deployment. Choose from network options for your server. You can also create servers without a public network. If you want to disable a public network, you must first select a private network.

Public Networks

☒ Public IPv4, if you want to disable a public network, you must first select a private network.

☒ Public IPv6, if you want to disable a public network, you must first select a private network.

Private Networks

☐ 1111111111 (10.1.0.0/16)

☐ network-10-22 (10.22.0.0/16)

Select Firewalls

☒ hestiacp

☐ firewall-2

☐ for suspend

# Package Settings

**License key:** A pre-purchased license key for the "PUQ Hetzner Datacenter" module. For the module to work correctly, the key must be active.

**Server name:** This option allows you to add a prefix string to the server name. A new name will be generated each time the create account function is called. When NameServer will only be present if the field is set: `NameServer-[*user_id*]-[*service_id*]`.

**Server type:** The type of server to be deployed. This is selected from the available server types provided by Hetzner. This field is automatically populated based on your selection from Select Server and Location.

**Server location:** The physical location of the server. This is selected from the available locations provided by Hetzner. This field is automatically populated based on your selection from Select Server and Location.

**Server placement groups:** The placement groups for the server. This allows you to specify how the server should be grouped within the data center. This field is automatically populated based on your selection from the Select Placement Group.

**Server image:** The operating system image to be used for the server. This is selected from the available images provided by Hetzner. This field is automatically populated based on the selection from Select Image.

**SSH keys:** The SSH keys to be used for accessing the server. You can add multiple SSH keys. This field is automatically populated based on your selection from Select SSH Keys.

**Server networks:** The networks to which the server will be connected. This field is automatically populated based on your selection from Private Networks.

**Server firewalls:** The firewall rules to be applied to the server. You can select from predefined firewall rules or create custom ones. This field is automatically populated based on your selection from Select Firewalls.

**User data:** Custom user data to use during server creation. This field is limited to 32KB. You can use this to provide cloud-init configuration scripts or other initialization data.

**Package setting:** Additional settings for the package, including:

- **Hide PTR open record:** Hide PTR open record. When the checkbox is checked, it hides the button.
- **Not allow access to server on VNC/NC:** This setting prohibits access to the server console if enabled.
- **Not allow access to Charts:** This setting prohibits access to the server charts if enabled.

- **Not allow reset password:** This setting prohibits access to the server charts if enabled.
- **Backup:** Allow access to server backup. The parameter allows access to server backups. You need to select the name of the custom field. (Default: Backup)
- **Snapshot:** Allow access to server snapshot. The setting allows access to the server snapshot if enabled.
- **Server labels:** Add labels to the server. The user\_id and service\_id fields with the corresponding values will be automatically added.
- **Hide inputs on client area:** Hide inputs in client area. This setting hides the inputs (domain, password, username, nameserver1, and nameserver2) and sets up a server label(s) in the client area if enabled.
- **Firewall for suspend service:** This setting allows you to select a firewall to be used for suspending the service or disable the VM.
- **Link to instruction:** A link to the instruction will be reflected in the client area.

## API Settings

**Select Server and Location:** Choose the server type and location from the available options provided by Hetzner.

**Select Image:** Choose the operating system image for the server from the available options provided by Hetzner.

**Custom option name for image:** Specify a custom option name for the server image if needed.

**Allow user to select ISO image:** Enable this option to allow users to select an ISO image.

**Allow user to reinstall service:** Enable this option to allow users to reinstall the service from the client area.

**Allow user to choose backup and snapshot when reinstalling service:** Enable this option to allow users to choose a backup and snapshot when reinstalling the service.

**Select Placement Group:** Choose the placement group for the server from the available options provided by Hetzner.

**Select SSH Keys:** Choose the SSH keys to be used for accessing the server from the available options provided by Hetzner.

**Public Networks:** Configure the public network settings for the server. This includes enabling or disabling public IPv4 and IPv6 addresses.

**Private Networks:** Configure the private network settings for the server.

**Select Firewalls:** Choose the firewall rules to be applied to the server from the available options provided by Hetzner.

**Email configuration:** Setting up email templates. Selection of pre-prepared templates to inform

the user about some actions:

- **Custom Welcome Email:** Template for the welcome email.
- **Custom start stop service Email:** Template for the start/stop service email.
- **Custom reset server password Email:** Template for the reset server password email.
- **Custom snapshot action Email:** Template for the snapshot action email.
- **Custom backup action Email:** Template for the backup action email.
- **Custom ISO action Email:** Template for the ISO action email.
- **Custom reinstall action service Email:** Template for the reinstall action service email.

**Metric Billing:** Configuration for metric billing, including:

- **Floating IPv4 addresses:** Configure pricing for floating IPv4 addresses.
- **Floating IPv6 addresses:** Configure pricing for floating IPv6 addresses.
- **Bandwidth Usage (GB):** Configure pricing for bandwidth usage.
- **Snapshot Usage (GB):** Configure pricing for snapshot usage.

# Add server (Hetzner)

## Hetzner Datacenter module **WHMCS**

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Add a new server to the system WHMCS.

System Settings->Servers->Add New Server

- Enter the correct **Name** and **API** url `api.hetzner.cloud`

- In the **Server Details** section, select the "**PUQ Hetzner Datacenter**" module and enter the correct **api key** and for the **Hetzner API**. To get an API key, go to the **Hetzner**

**console** -> **Security** -> **API tokens** -> **Generate API token**

- To check, click the **Test connection** button

# Email Template (puqHetznerDatacenter Custom Welcome Email)

Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom Welcome Email

Subject

Create New Email Template

✕

Your Server is Now Ready for Use

Email Type

Body:

Product/Service

▼

Dear {\$client\_name},

Congratulations! Your server has been successfully deployed and is ready for you to begin configuring.

Server Details:

IPv4 DNS PTR: {\$ipv4\_dns\_ptr}

IPv4 IP: {\$ipv4\_ip}

IPv6 IP: {\$ipv6\_ip}

Server Cores: {\$server\_cores}

Server Memory: {\$server\_memory}

Server Disk: {\$server\_disk}

Root Password: {\$root\_password}

Accessing Your Server

To begin managing your new server, you will need to connect via SSH (Secure Shell). Here's how you can do that:

Open an SSH client on your computer. For Windows, we recommend using PuTTY, while macOS and Linux users can use the built-in Terminal application.

Connect to your server by executing the following command in your terminal or SSH client:

```
ssh root@{$ipv4_ip}
```

When prompted, enter the root password provided below:

Root Password: {\$root\_password}

Once connected, you'll have full access to your server's console and can monitor the installation.

Need Assistance?

If you have any questions or encounter any issues during this process, please do not hesitate to reach out to our support team. We are here to help! You can submit a support ticket via the following link: [Submit a Ticket](#).

Thank you for choosing us as your hosting provider. We're excited to be part of your journey and are committed to ensuring your experience is successful.

Kind regards,

{\$signature}

---



# Email Template

(puqHetznerDatacenter  
Custom start stop service  
Email)

# Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

## Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom start stop service Email

Create New Email Template

X

{if \$server\_action eq "start"}Your Server Has Been Successfully Started{/if}{if \$server\_action eq "stop"}Important: Your Server Has Been Stopped{/if}

Product/Service

▼

Body:

Dear {\$client\_name},

{if \$server\_action eq "start"}Your server has been successfully started.{/if}{if \$server\_action eq "stop"}Your server has been stopped.{/if}

Product/Service: {\$service\_product\_name}

If you have any questions or need further assistance, do not hesitate to contact our support team.

Thank you for choosing us.

{signature}

---

# Email Template (puqHetznerDatacenter Custom reset password Email)

Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom reset password Email

Subject:

Create New Email Template

✕

For user {\$user} on Product/Service: {\$service\_product\_name} password has been change

Email Type

Body:

Product/Service

▼

Dear {\$client\_name},

You change password for user {\$user} on Product/Service: {\$service\_product\_name}. Below is the user logging data.

User: {\$user}

New password: {\$password}

{signature}

---

# Email Template (puqHetznerDatacenter Custom snapshot action service Email)

Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom snapshot action service Email

Subject

Create New Email Template

```
{if $snapshot_action eq "create"}Snapshot started create Successfully{/if}{if $snapshot_action eq "remove"}Snapshot Removed Successfully{/if}{if $snapshot_action eq "rollback"}A restore from your snapshot has been initiated{/if}
```

Body:

Unique Name

```
Dear {$client_name},

{if $snapshot_action eq "create"}Snapshot creation started.{/if}{if $snapshot_action eq "remove"}Your snapshot has been successfully removed.{/if}{if $snapshot_action eq "rollback"}A restore from your snapshot has been initiated.{/if}
```

{if \$snapshot\_id}Snapshot ID: {\$snapshot\_id}{/if}

{if \$snapshot\_description}Snapshot Description: {\$snapshot\_description}{/if}

{if \$service\_product\_name}Service name: {\$service\_product\_name}{/if}

If you have any questions or need further assistance, do not hesitate to contact our support team.

Thank you for choosing us.

{\$signature}

---

# Email Template (puqHetznerDatacenter Custom backup action service Email)

Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom backup action service Email

Subject:

Create New Email Template

Body:

```
{if $backup_action eq "enable"}Backup Enabled Successfully{/if}{if $backup_action eq "disable"}Backup Disabled Successfully{/if}{if $backup_action eq "create"}Backup Creation Initiated Successfully{/if}{if $backup_action eq "remove"}Backup Removed Successfully{/if}{if $backup_action eq "restore"}Backup Restoration Initiated Successfully{/if}
```

Unique Name

puqHetznerDatacenter Custom backup action service Email

Dear {client\_name},

```
{if $backup_action eq "enable"}Your backup has been successfully enabled.{/if}{if $backup_action eq "disable"}Your backup has been successfully disabled.{/if}{if
```

`$backup_action eq "create"}`The creation of your backup has been successfully initiated.`{/if}``{if $backup_action eq "remove"}`Your backup has been successfully removed.`{/if}``{if $backup_action eq "restore"}`The restoration of your backup has been successfully initiated.`{/if}`

`{if $backup_id}`Backup ID: `{ $backup_id }``{/if}`

`{if $backup_description}`Backup Description: `{ $backup_description }``{/if}`

If you have any questions or need further assistance, do not hesitate to contact our support team.

Thank you for choosing us.

`{ $signature }`

---



# Email Template

(puqHetznerDatacenter  
Custom ISO action service  
Email)

# Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

## Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** pugHetznerDatacenter Custom ISO action service Email

Subject:

Create New Email Template

X

{if \$iso\_action eq "mount"}ISO Mounted Successfully{/if}{if \$iso\_action eq "unmount"}ISO Unmounted Successfully{/if}

Product/Service

V

Body:

Dear {client\_name},

{if \$iso\_action eq "mount"}Your ISO has been successfully mounted.{/if}{if \$iso\_action eq "unmount"}Your ISO has been successfully unmounted.{/if}

{if \$iso\_id}ISO ID: {\$iso\_id}/{/if}

{if \$iso\_name}ISO Name: {\$iso\_name}{/if}

{if \$iso\_description}ISO Description: {\$iso\_description}{/if}

If you have any questions or need further assistance, do not hesitate to contact our support team.

Thank you for choosing us.

{\$signature}

---

# Email Template (puqHetznerDatacenter Custom reinstall action service Email)

Hetzner Datacenter module **WHMCS**

[Order now](#) | [Download](#) | [FAQ](#)

Create an email template for customer notifications.

System Settings->Email Templates->Create New Email Template

- **Email Type:** Product/service

**Unique Name:** puqHetznerDatacenter Custom reinstall action service Email

Subject

Create New Email Template

✕

Server Rebuild Initiated Successfully

Email Type

Body:

Product/Service

▼

Dear {\$client\_name},

We are pleased to inform you that the rebuild of your server has been successfully initiated.  
The server will be rebuilt using the following image:

Image Name: {\$image\_name}

Image Description: {\$image\_description}

Disk Size: {\$image\_disk\_size} GB

Architecture: {\$image\_architecture}

Image Type: {\$image\_type}

Please be patient as the rebuild process completes. If you have any questions or need further assistance, do not hesitate to contact our support team.

Thank you for choosing us.

{\$signature}

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