Docker MinIO WHMCS module

WHMCS module for Docker MinIO that automates the provisioning and management of MinIO instances on a Docker server. The module supports automatic container creation, suspension, termination, password management, IP access control, resource monitoring, metric billing, and email notifications for disk space limits.

- Description
- Changelog
- Installation and Configuration Guide
  - Basic concepts and requirements
  - WHMCS setup (install/update)
  - Preparing Docker Server
  - Setting up n8n workflow
  - Add server
  - Product Configuration
  - Metric Billing
  - Email Template (puqDockerMinIO Welcome Email)
  - Email Template (puqDockerMinIO Update Email)
  - Email Template (puqDockerMinIO Notification disk limit)
- Client Area
  - Home screen
  - IP Access Control
  - Reinstall
  - Metrics

- Admin Area
  - Product Information

Description

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Docker MinIO WHMCS module

The **WHMCS Docker MinIO module** is designed for automated provisioning and management of MinIO instances on a Docker server. It seamlessly integrates with WHMCS, allowing businesses to sell and manage MinIO services efficiently.

> Before you start, it is important to read and familiarize yourself with the following articles at this link: https://doc.puq.info/books/docker-modules

---

Key Features

Automated Container Management

- Automatic creation of a MinIO container upon service order
- Automated package upgrades and administrator password reset

Service Control & Security

- Service creation
- Service suspension and reactivation
- Service termination
- Full reinstallation
- IP access control

Advanced Diagnostic Tools

- Built-in tools for diagnosing and managing containers
- Container logs viewer
- Real-time resource monitoring (CPU, Memory, Disk)

Multilingual Support

- Supports multiple languages, including **Arabic, Azerbaijani, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Estonian, Farsi, French, German, Hebrew, Hungarian, Italian, Macedonian, Norwegian, Polish, Romanian, Russian, Spanish, Swedish, Turkish, and Ukrainian**

Fully Customizable Workflows

- Uses **n8n workflows** to automate processes, allowing full customization for business-specific needs

---

Admin Panel Options

- Create, Suspend, Unsuspend, Terminate, Change Package
- Container Start / Container Stop
- Mount Disk / Unmount Disk
- API connection status
- Container status and resource monitoring
- Container logs
- Application information

Client Panel Options

- Web Console and REST API access links

- Username and password with copy buttons
- Change administrator password
- Container status with CPU, Memory, Disk usage
- Application version and user information
- IP Access Control (Restrict by IP)
- Reinstall service
- Metric statistics (Traffic IN/OUT)

System requirements

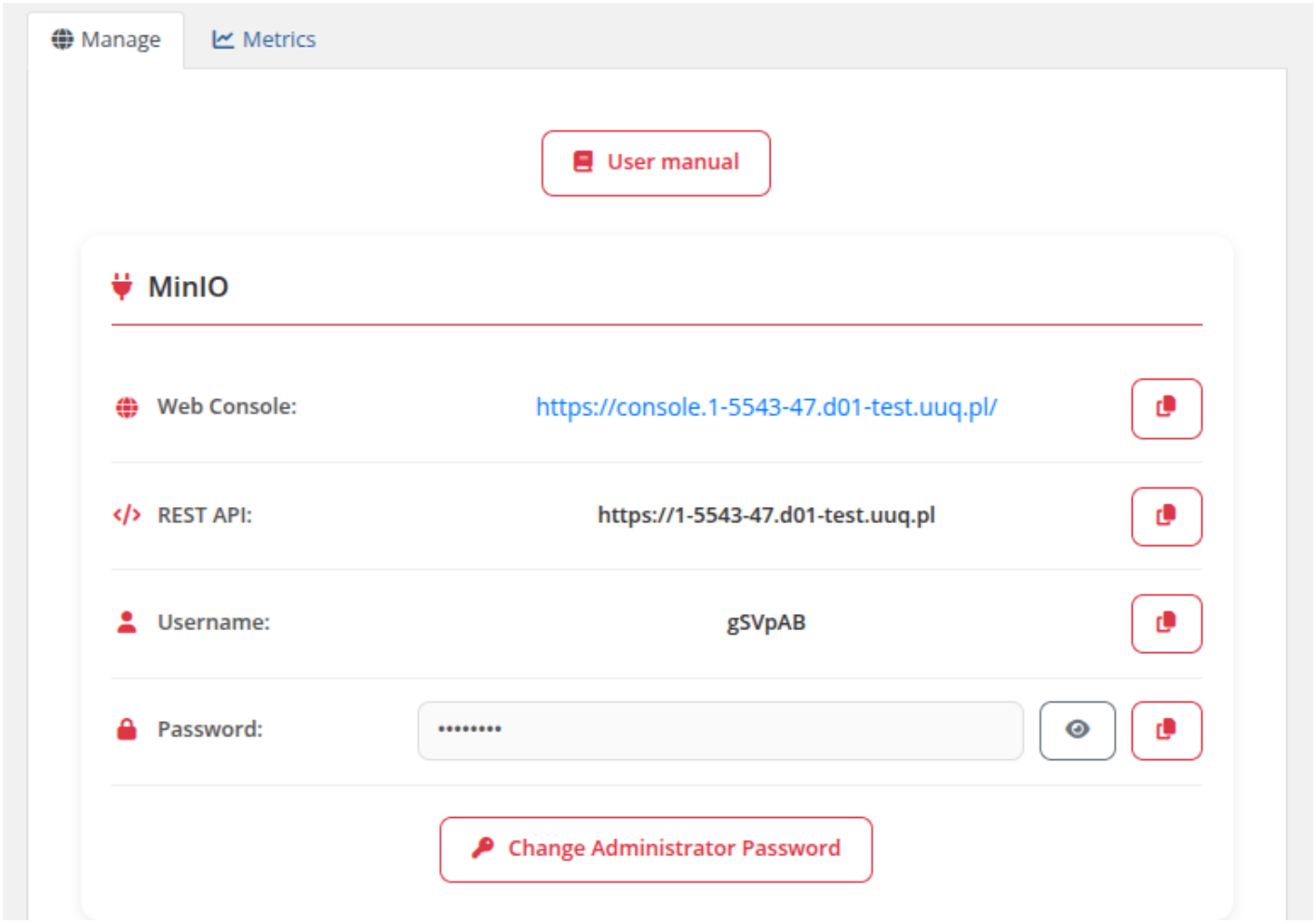
Requirement	Minimum
WHMCS	8.11.0 or higher
PHP	7.4, 8.1, or 8.2
ionCube Loader	v13 or newer (v14, v15)
Docker server	Debian 12 with Docker installed
n8n server	For workflow automation

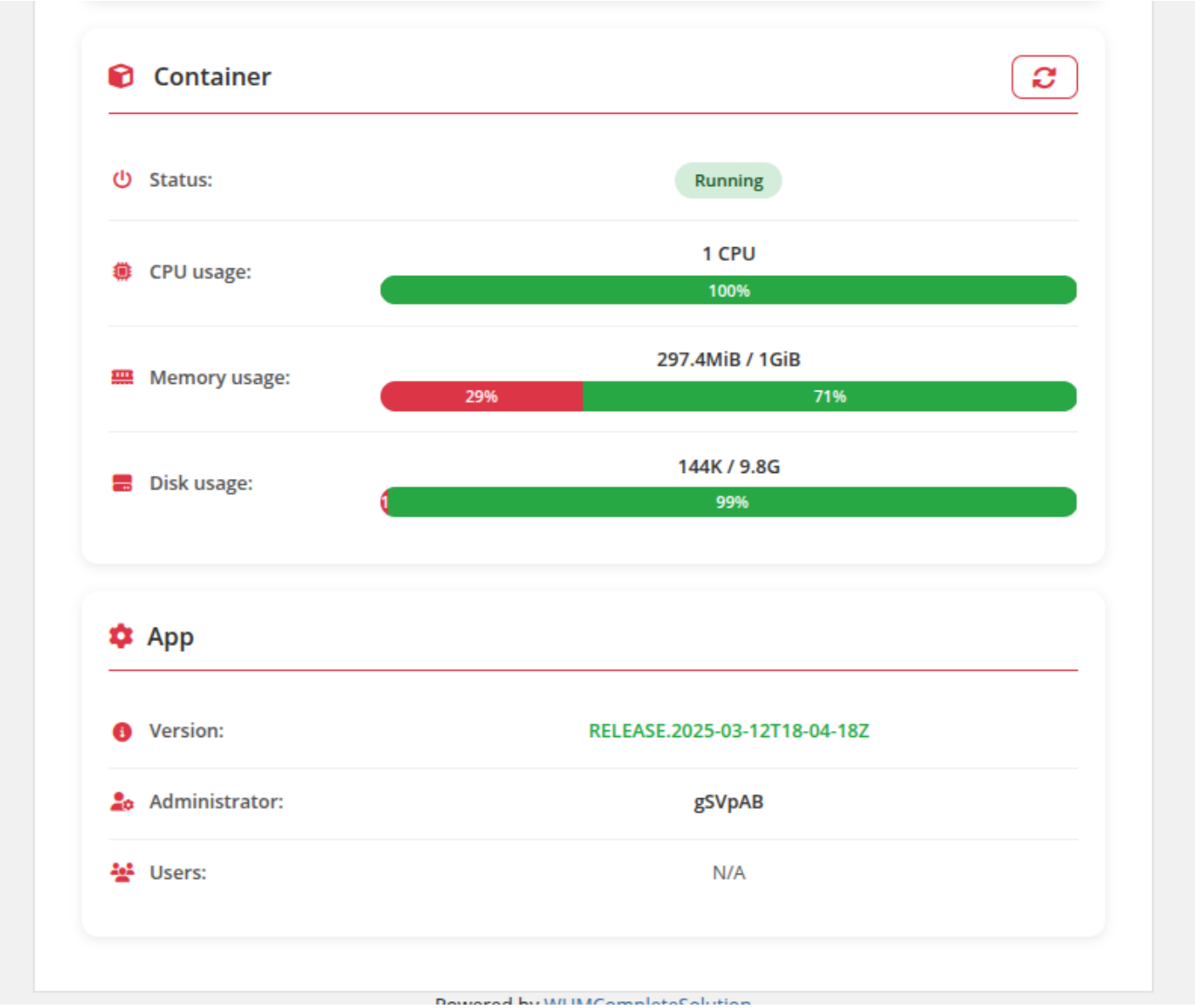
Links

- **Product page:** https://puqcloud.com/whmcs-module-docker-minio.php
- **Documentation:** https://doc.puq.info/books/docker-minio-whmcs-module
- **Support:** https://puqcloud.com/submitticket.php
- **Community:** https://community.puqcloud.com/

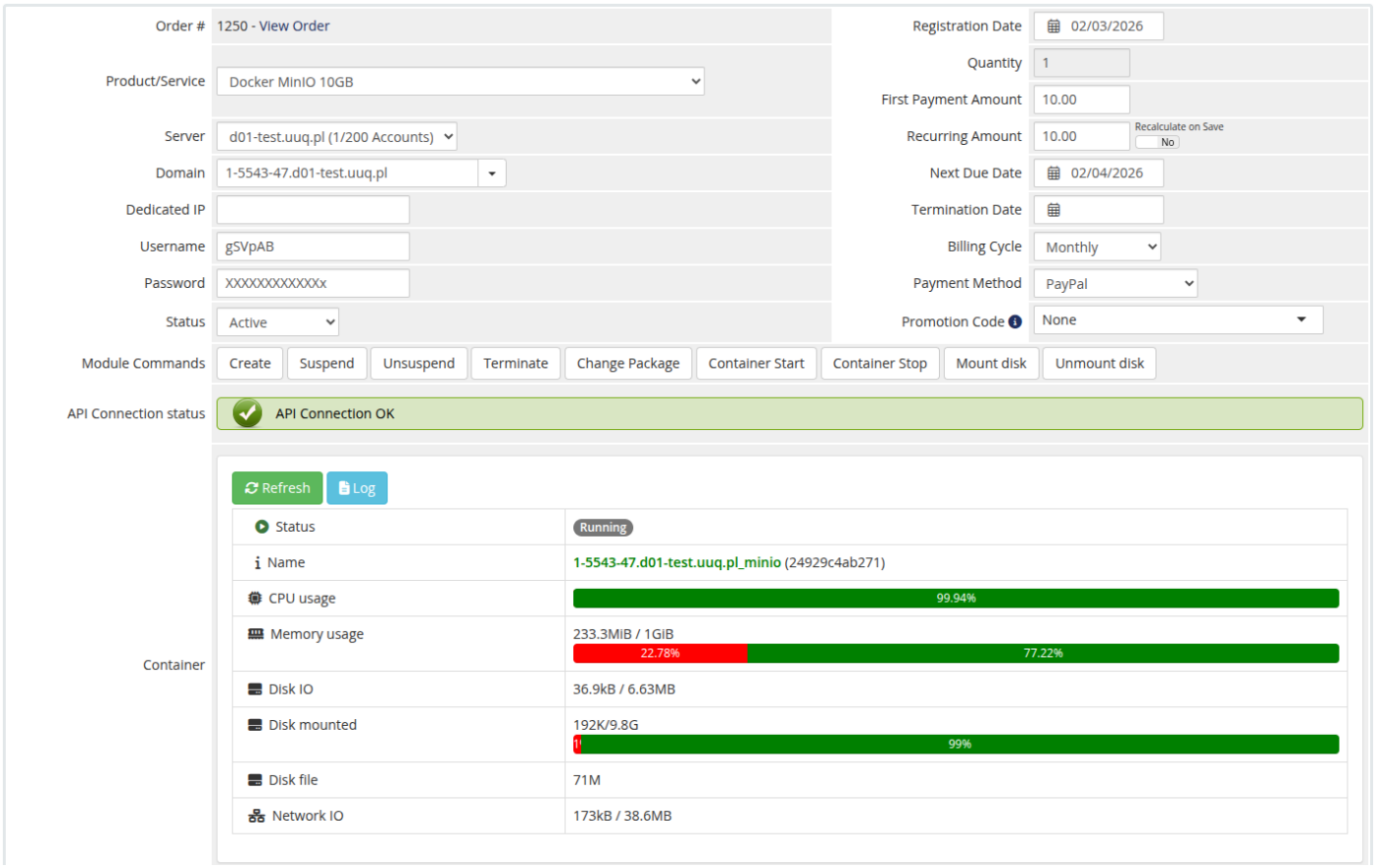
Screenshots

Client area — Home screen


Manage
Metrics
User manual
MinIO
Web Console:
https://console.1-5543-47.d01-test.uuq.pl/
REST API:
https://1-5543-47.d01-test.uuq.pl
Username:
gSVpAB
Password:
••••••••
Change Administrator Password



Admin area — Product information


Order # 1250 - View Order
Registration Date 02/03/2026
Product/Service Docker MinIO 10GB
Quantity 1
First Payment Amount 10.00
Server d01-test.uuq.pl (1/200 Accounts)
Recurring Amount 10.00
Recalculate on Save No
Domain 1-5543-47.d01-test.uuq.pl
Next Due Date 02/04/2026
Dedicated IP
Termination Date
Username gSVpAB
Billing Cycle Monthly
Password XXXXXXXXXXXx
Payment Method PayPal
Status Active
Promotion Code None
Module Commands Create Suspend Unsuspend Terminate Change Package Container Start Container Stop Mount disk Unmount disk
API Connection status API Connection OK
Container
Refresh Log
Status Running
Name 1-5543-47.d01-test.uuq.pl_minio (24929c4ab271)
CPU usage 99.94%
Memory usage 233.3MiB / 1GiB
22.78% 77.22%
Disk IO 36.9kB / 6.63MB
Disk mounted 192K/9.8G
1% 99%
Disk file 71M
Network IO 173kB / 38.6MB

Changelog

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

---

v2.0 (02-03-2026)

- Support for WHMCS 9+
- Product module settings have been redesigned
- Updated client area interface design
- Improved license management and admin notifications
- Enhanced product configuration experience

> **Note:** Product reconfiguration is required after update.

---

v1.0 (17-03-2025)

- First release

Installation and Configuration Guide

Step-by-step instructions for installing, configuring, and setting up the Docker MinIO WHMCS module, including Docker server preparation, n8n workflow setup, WHMCS integration, email templates, and product configuration.

Basic concepts and requirements

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

> Before you start, it is important to read and familiarize yourself with the following articles at this link: https://doc.puq.info/books/docker-modules

The **WHMCS Docker MinIO module** is part of the **WHMCS Docker module series** developed by **PUQcloud**. This module enables service providers to offer **MinIO Docker containers** as a service to their clients, allowing for seamless automation and integration.

The system consists of three core components:

WHMCS Module

The **core component**, installed in WHMCS, manages service provisioning and automation from the WHMCS side.

Debian 12 Server

A server running **Debian 12** with the following pre-installed:

- **Docker** — For container management

We have prepared instructions for installing and configuring Docker:
https://doc.puq.info/books/docker-modules/page/installing-docker-for-puqcloud-modules

n8n Server

This server facilitates communication between the WHMCS module and the Docker server, ensuring smooth workflow execution. To explore n8n's full potential, visit the **official n8n website** for documentation, tutorials, and community support.

Key Features & Concepts

Workflow Automation

n8n provides a **graphical workflow builder**, allowing users to automate various tasks, such as:

- **Sending notifications**
- **Configuring firewalls** on external routers
- **Managing DNS settings**
- **Custom automation processes** tailored to specific needs

Flexibility & Customization

The module offers **personalized settings** and supports **elastic automation**, giving clients full control over their n8n workflows.

WHMCS setup (install/update)

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

System requirements

The module uses ionCube encoding. Your server must meet the following requirements:

Requirement	Minimum
PHP	8.2
WHMCS	9+ or higher
ionCube Loader	v13 or newer (v14, v15)

> **Note:** Module is coded with ionCube v13

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

Step 1 — Download the latest version of the module

PHP 8.2

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

All versions are available via link: https://download.puqcloud.com/WHMCS/servers/PUQ_WHMCS-Docker-MinIO/

Step 2 — Unzip the archive with the module

```
unzip PUQ_WHMCS-Docker-MinIO-latest.zip
```

Step 3 — Copy and Replace

Copy the `puqDockerMinIO` directory from the extracted `PUQ_WHMCS-Docker-MinIO` archive to your WHMCS installation:

```
WHMCS_WEB_DIR/modules/servers/
```

> **Note:** To install and update a module, you must perform one and the same action — download and copy the latest version over the existing files.

Preparing Docker Server

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

To install the Docker server for this module, please follow the instructions at the following link:

https://doc.puq.info/books/docker-modules/page/installing-docker-for-puqcloud-modules

Setting up n8n workflow

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Overview

The **Docker MinIO WHMCS module** uses a specially designed workflow for **n8n** to automate deployment processes. The workflow provides an API interface for the module, receives specific commands, and connects via SSH to a server with Docker installed to perform predefined actions.

Prerequisites

- You must have your own **n8n** server.
- Alternatively, you can use the official **n8n** cloud installations available at: n8n Official Site

Installation Steps

Install the Required Workflow on n8n

You have two options:

Option 1: Use the Latest Version from the n8n Marketplace

- The latest workflow templates for our modules are available on the official n8n

marketplace.
- Visit our profile to access all available templates: PUQcloud on n8n

Option 2: Manual Installation

- Each module version comes with a workflow template file.
- You need to manually import this template into your n8n server.

n8n Workflow API Backend Setup for WHMCS

Configure API Webhook and SSH Access

- Create a **Basic Auth Credential** for the Webhook API Block in n8n.
- Create an **SSH Credential** for accessing a server with Docker installed.

Modify Template Parameters

In the **Parameters** block of the template, update the following settings:

- `server_domain` — Must match the domain of the WHMCS Docker server.
- `clients_dir` — Directory where user data related to Docker and disks will be stored.
- `mount_dir` — Default mount point for the container disk (recommended not to change).

Do not modify the following technical parameters:

- `screen_left`
- `screen_right`

Deploy-docker-compose

In the **Deploy-docker-compose** element, you have the ability to modify the Docker Compose configuration, which will be generated in the following scenarios:

- When the service is created
- When the service is unlocked
- When the service is updated

nginx

In the **nginx** element, you can modify the configuration parameters of the web interface proxy server.

- The **main** section allows you to add custom parameters to the **server** block in the proxy server configuration file.
- The **main_location** section contains settings that will be added to the **location /** block of the proxy server configuration. Here, you can define custom headers and other parameters specific to the root location.
- The **console** section allows you to add custom parameters to the **server** block in the WEB console proxy server configuration file.
- The **console_location** section contains settings that will be added to the **location /** block of the WEB console proxy server configuration. Here, you can define custom headers and other parameters specific to the root location of WEB console.

Bash Scripts

Management of Docker containers and all related procedures on the server is carried out by executing Bash scripts generated in **n8n**. These scripts return either a JSON response or a string.

- All scripts are located in elements directly connected to the **SSH** element.
- You have full control over any script and can modify or execute it as needed.

Add server

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Add a new server to the system WHMCS

Navigate to: **System Settings → Servers → Add New Server**

- Enter the correct **Name** and **Hostname**

> **Attention: Important Information** The **hostname** field represents the actual domain of the server running Docker and must match the **server_domain** parameter in the **n8n workflow**. If they do not match, communication will not function correctly. Additionally, this domain must be configured so that all its subdomains resolve to the IP address of the server running Docker.

Module settings

In the **Server Details** section, select the **"PUQ Docker MinIO"** module and enter the correct **username** and **password** for the **API endpoint** in the n8n workflow.

> Additionally, in the **Access Hash** field, insert the **URL of the API entry point** for the n8n workflow.

Server Details

Module	PUQ Docker MinIO — Test Connection — ✓ Connection successful. Some values have been auto-filled.
Username	minio
Password	••••
Access Hash	https://n8n.puqcloud.com/webhook/docker-minio
Secure	☑ Check to use SSL Mode for Connections
Port	443 ☐ Override with Custom Port

Save Changes | Cancel Changes

Product Configuration

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Add new product to WHMCS

Navigate to: **System Settings → Products/Services → Create a New Product**

In the **Module Settings** section, select the **"PUQ Docker MinIO"** module.

Configuration parameters

Parameter	Description
License key	A pre-purchased license key for the PUQ Docker MinIO module. For the module to work correctly, the key must be active
Disk space (GB)	Allocated disk space for the Docker container in GB
CPU	CPU cores allocated for the Docker container (e.g., 0.1, 1, 2)
RAM (GB)	RAM allocated to the Docker container in GB (e.g., 0.1, 1, 2)
Main domain	The primary domain for the web interface of the application. If not set, the main domain will be taken from the **hostname** parameter in the server settings
Subdomain	A personal subdomain assigned to each service. If left empty or if the subdomain is already taken, it will be automatically generated
Link to instruction	URL to a guide that will be displayed in the client panel if provided

Parameter	Description
Notification at %	The percentage threshold for disk space usage that triggers a notification to the client. Set 0 to disable
Notification email template	The email template for the notification that will be sent when the threshold is reached

Supported Macros for Subdomain

Macro	Description
`{user_id}`	Client ID
`{service_id}`	Service ID
`{random_digit_x}`	Random number (x defines the length)
`{random_letter_x}`	Random letter (x defines the length)
`{unixtime}`	Unix timestamp
`{year}`	Year
`{month}`	Month
`{day}`	Day
`{hour}`	Hour
`{minute}`	Minute
`{second}`	Second

Default subdomain template: `{user_id}-{service_id}-{second}`

License key: XXXXXX-XXXXXXX-XXXXXX-XXXXXX-XXXXXX

success: 2027-04-09T17:58:30+02:00

Docker Settings

Disk space (GB)

10

Allocated disk space for Docker container in GB. Ex: 1

CPU

1

CPU cores allocated. Ex: 0.1

RAM (GB)

1

RAM allocated in GB. Ex: 0.1

Domain Settings

Main domain

The main domain to which the container subdomain will be added.
If not filled in, the server domain will be used.

Subdomain

{user_id}-{service_id}-{second}

The app subdomain template using macros.
`{user_id}`, `{service_id}`, `{random_digit_x}`, `{random_letter_x}`
`{unixtime}`, `{year}`, `{month}`, `{day}`, `{hour}`, `{minute}`, `{second}`

Service Notifications

Notification at %

80

Threshold to notify the user about disk space usage. Set 0 to disable.

Notification email template

puqDockerMinIO Notification disk limit

Email template for disk limit notifications

Client Area

Link to instruction

https://puq.info/

A link to the instruction will be reflected in the client area.

Metric Billing

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

To bill certain metrics separately, you can use the standard WHMCS Metric Billing mechanism.

To configure it, you need to enable the required metrics and set the desired prices. Metrics work based on the standard WHMCS mechanism, the description of which can be found here:

https://docs.whmcs.com/products/configuration-options/usage-billing/

The module provides the following metrics:

Metric	Description
Traffic IN (GB)	Incoming network traffic in gigabytes
Traffic OUT (GB)	Outgoing network traffic in gigabytes



Email Template (puqDockerMinIO Welcome Email)

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Create an email template for customer notifications.

Navigate to: **System Settings → Email Templates → Create New Email Template**

Template configuration

Parameter	Value
Email Type	Product/service
Unique Name	`puqDockerMinIO Welcome Email`

Email Subject

```
MinIO Order Information
```

Email Body

```
Dear {$client_name},

Your order has been accepted for implementation.

Product/Service: {$service_product_name}
Payment Method: {$service_payment_method}
Amount: {$service_recurring_amount}
Billing Cycle: {$service_billing_cycle}
Next Due Date: {$service_next_due_date}



The installation and setup of your MinIO instance is in progress.
Within the next 4 minutes, you will be able to use your MinIO instance.

Upon your first login, you will need to create an account.

Here is the link to your MinIO server.

https://console.{$service_domain}/
Thank you for choosing us.

{$signature}
```

Available template variables

Variable	Description
`{$client_name}`	Client full name
`{$service_product_name}`	Product/service name
`{$service_payment_method}`	Payment method
`{$service_recurring_amount}`	Recurring amount
`{$service_billing_cycle}`	Billing cycle

Variable	Description
`{$service_next_due_date}`	Next due date
`{$service_domain}`	Service domain

> **Note:** Standard WHMCS merge fields are also available in this template.

Email Template (puqDockerMinIO Update Email)

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Create an email template for customer notifications.

Navigate to: **System Settings → Email Templates → Create New Email Template**

Template configuration

Parameter	Value
Email Type	Product/service
Unique Name	`puqDockerMinIO Update Email`

Email Subject

```
MinIO Update Information
```

Email Body

```
Dear {$client_name},

Your instance is currently being updated.
You will be able to use your MinIO server again within 3 minutes.

Here is the link to your MinIO server.

https://console.{$service_domain}/
Thank you for choosing us.

{$signature}
```

Available template variables

Variable	Description
`{$client_name}`	Client full name
`{$service_domain}`	Service domain

> **Note:** Standard WHMCS merge fields are also available in this template.

Email Template (puqDockerMinIO Notification disk limit)

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Create an email template for customer notifications.

Navigate to: **System Settings → Email Templates → Create New Email Template**

Template configuration

Parameter	Value
Email Type	Product/service
Unique Name	`puqDockerMinIO Notification disk limit`

Email Subject

```
Disk space usage {$disk_used_percentage}%
```

Email Body

```
Dear {$client_name},

We want to inform you that your MinIO service is running low on disk space.
Please take action to prevent service interruptions.

Service Details:

Product/Service: {$service_product_name}
Domain: {$service_domain}
Total Disk Space: {$disk_total}
Used Disk Space: {$disk_used} ({$disk_used_percentage}%)
Consider freeing up space or upgrading your plan if needed.

{$signature}
```

Available template variables

Variable	Description
`{$client_name}`	Client full name
`{$service_product_name}`	Product/service name
`{$service_domain}`	Service domain
`{$disk_total}`	Total disk space
`{$disk_used}`	Used disk space
`{$disk_used_percentage}`	Used disk space percentage

> **Note:** Standard WHMCS merge fields are also available in this template.

Client Area

Overview of the client-facing features available in the Docker MinIO WHMCS module, including the home screen, IP access control, reinstall, and metrics.

Home screen

Docker MinIO module **WHMCS**

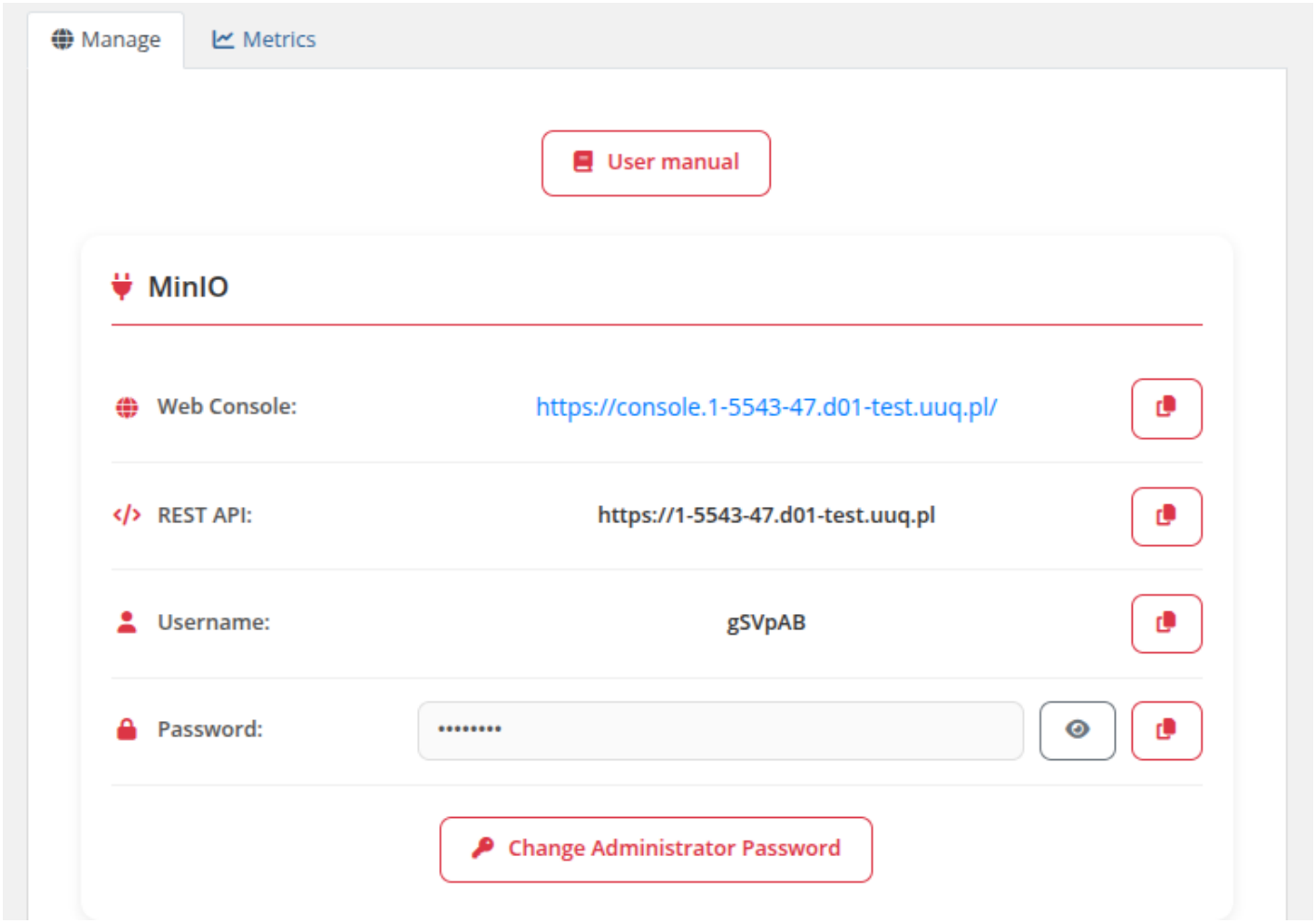
Order now | Download | FAQ | n8n

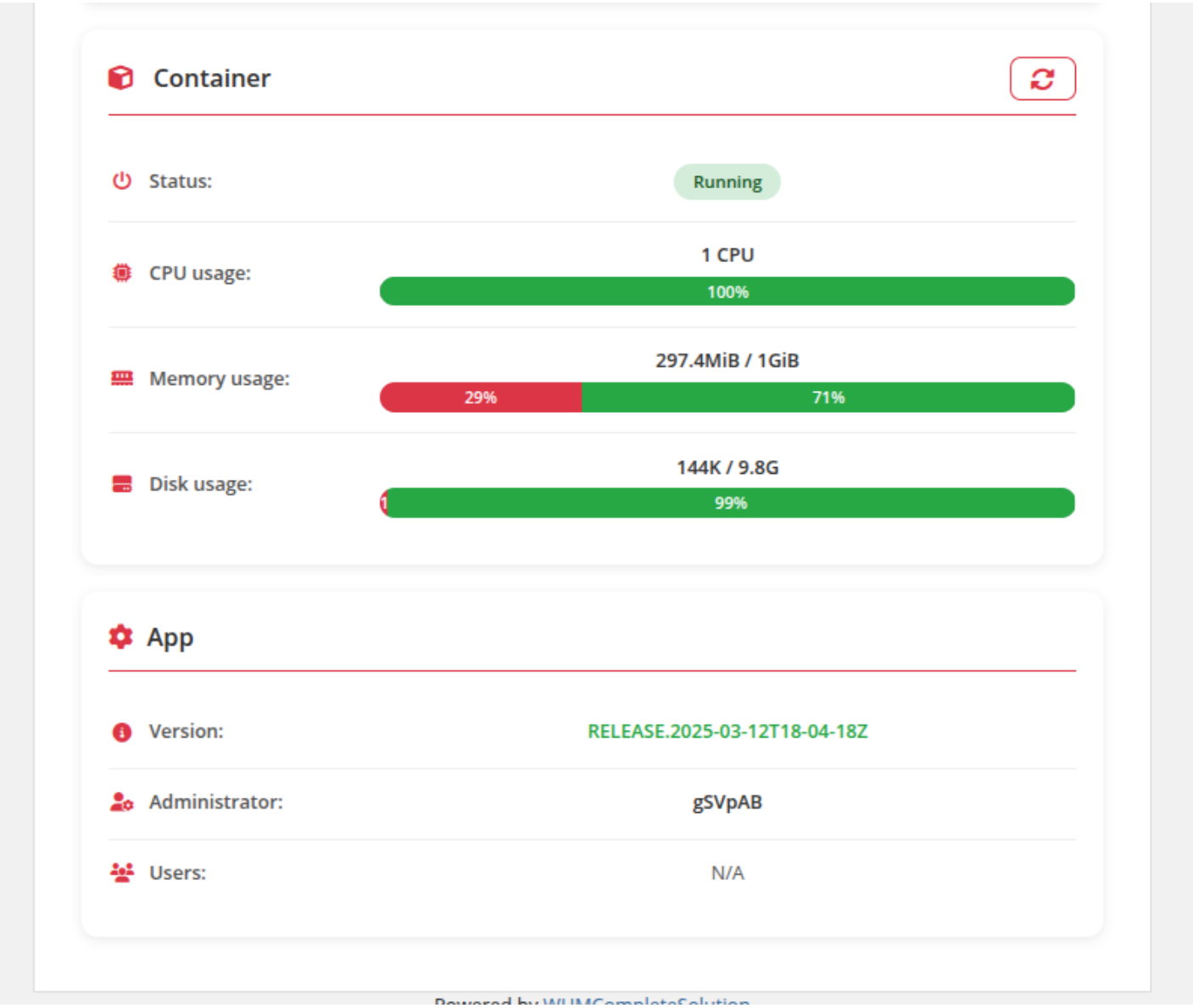
Client Area Overview — Logical Structure

The **main screen** of the client area is divided into **three logical sections**:

1. **Navigation Block**
   - **"User Manual"**: Opens the official documentation or user guide (link configured by administrator).
2. **Connection Details Block**
   - **Web Console**: Direct link to access the MinIO web console with copy button.
   - **REST API**: Link to the MinIO REST API endpoint with copy button.
   - **Username**: MinIO account username with copy button.
   - **Password**: MinIO account password with show/hide toggle and copy button.
   - **Change Administrator Password**: Button to reset the administrator password.
3. **Resource Usage Block**
   - Displays real-time statistics on container resource usage:
     - **Status**: Current container state (Running / Stopped / Paused).
     - **CPU Usage**: Number of allocated CPUs and current load.
     - **Memory Usage**: RAM consumption with progress bar.
     - **Disk Usage**: Storage consumption within the container with progress bar.
   - This section includes a **Refresh** button for real-time data updates.
4. **Application Information**
   - **Version**: Displays the installed MinIO version.
   - **Administrator**: Indicates the primary administrator of the application.
   - **Users**: Shows active users associated with the instance.

This **clear structure** ensures that users have **quick access** to their application, **real-time monitoring** of resource usage, and **essential management functions** in one place.

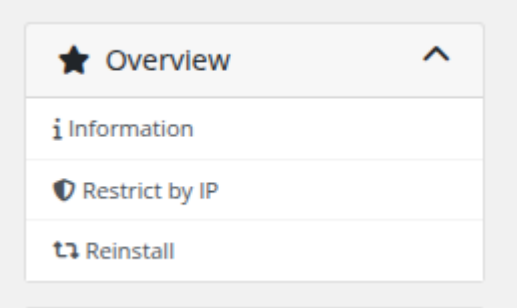

Manage
Metrics
User manual
MinIO
Web Console:
https://console.1-5543-47.d01-test.uuq.pl/
REST API:
https://1-5543-47.d01-test.uuq.pl
Username:
gSVpAB
Password:
••••••••
Change Administrator Password



Sidebar Navigation

The client area sidebar provides quick access to:

- **Information** — Main service page with connection details and resource monitoring
- **Restrict by IP** — IP access control page
- **Reinstall** — Service reinstallation page



Client Area

IP Access Control

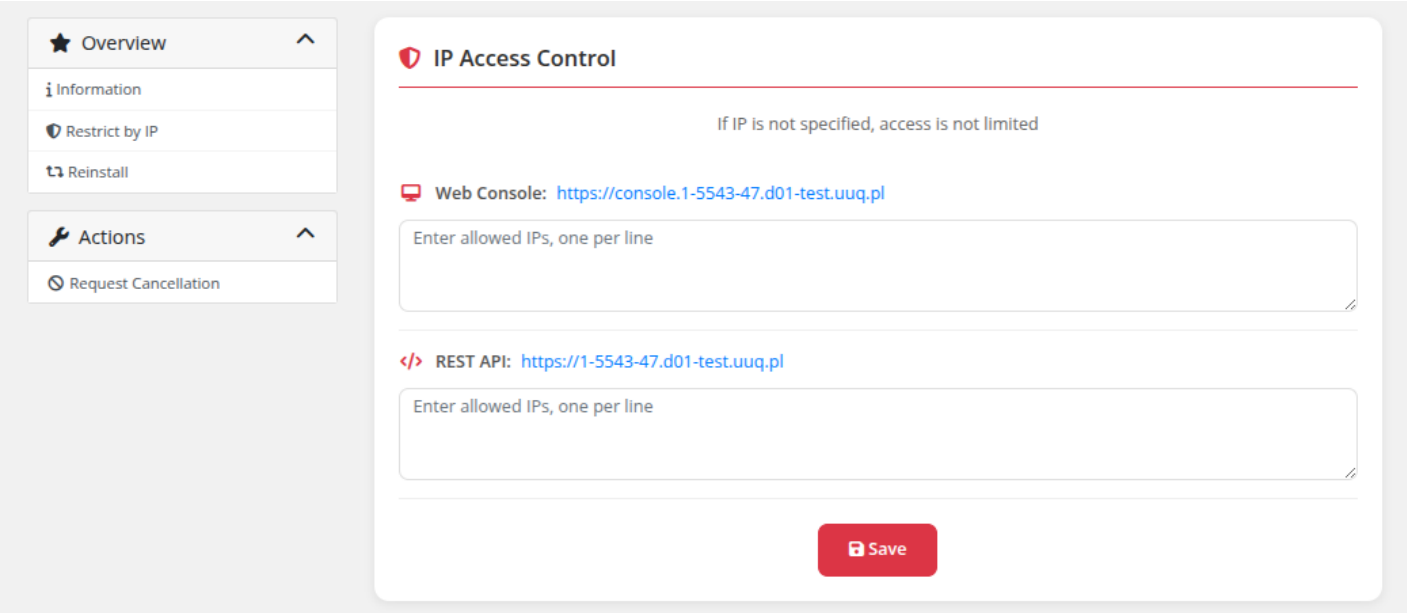
Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

In the client area, the client can configure access to their resource by entering allowed IP addresses in the appropriate section on the **Restrict by IP** page.

If no IP addresses are specified, access is open to all IP addresses.

The page displays the service URLs (**Web Console** and **REST API**) and provides separate text areas for entering allowed IPs for each endpoint — one IP address per line.



Client Area

Reinstall

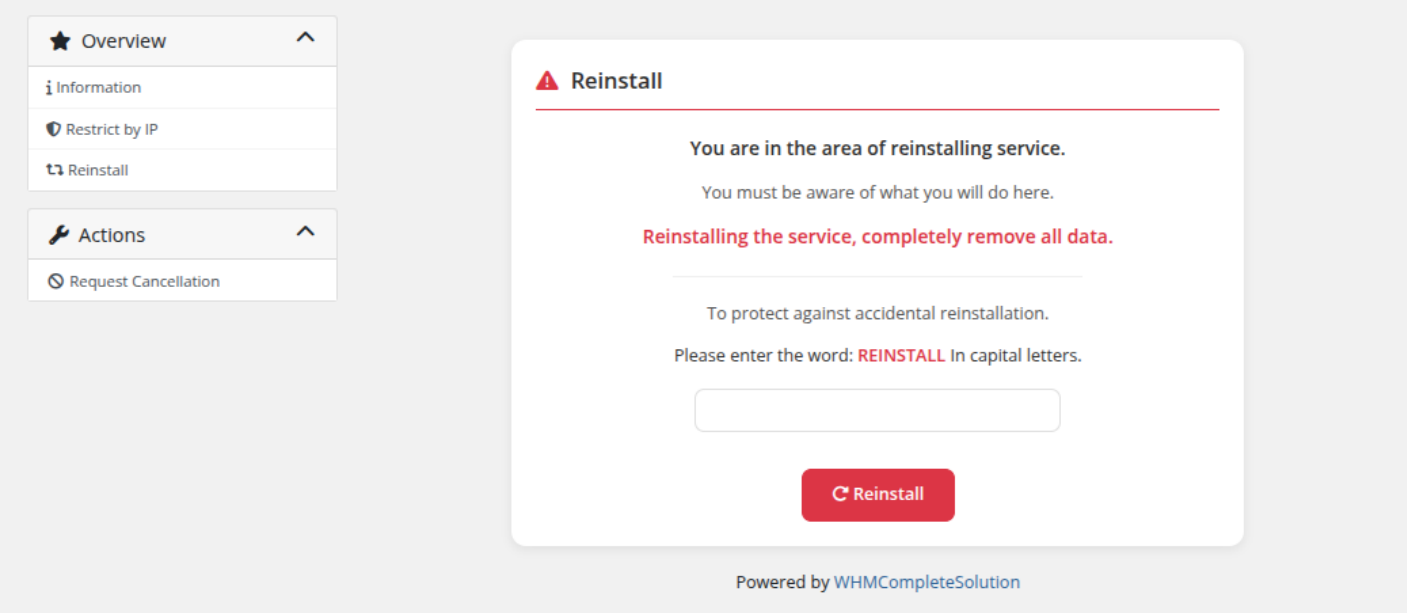
Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

The client has the option to **fully reinstall the application**, which will result in **complete data loss**.

This action can be performed on the **Reinstall** page, which also includes **protection against accidental reinstallation**.

To proceed with the reinstall, the client must enter the word **REINSTALL** in capital letters and confirm the action.



Metrics

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

If you use metrics for application traffic billing, the **Metrics** tab will display the usage statistics for the metrics.

The following metrics are available:

Metric	Description
Traffic IN (GB)	Incoming network traffic in gigabytes
Traffic OUT (GB)	Outgoing network traffic in gigabytes

The Metrics tab is accessible from the client area navigation alongside the **Manage** tab.

Admin Area

Administrative features and tools available in the WHMCS admin panel for managing Docker MinIO services.

Product Information

Docker MinIO module **WHMCS**

Order now | Download | FAQ | n8n

Admin Panel — Container Management Overview

The **admin panel** is structured into two main sections with additional control buttons for container management.

Module Commands

- **Create** — Provision a new MinIO container
- **Suspend** — Suspend the service
- **Unsuspend** — Reactivate the service
- **Terminate** — Remove the service
- **Change Package** — Update the service package
- **Container Start** — Start the Docker container
- **Container Stop** — Stop the Docker container
- **Mount Disk** — Attach the container's disk to the host system (modifies fstab)
- **Unmount Disk** — Detach the container's disk from the host system

API Connection Status

Displays the current connection status to the n8n workflow API endpoint.

Container Status & Resource Monitoring

Field	Description

Status	Current state of the container (Running / Stopped)
Name	Unique identifier and domain of the container
CPU Usage	Current CPU load with progress bar
Memory Usage	RAM consumption in real-time with progress bar
Disk IO	Disk input/output operations
Disk Mounted	Mounted disk usage with progress bar
Disk File	Actual disk image size
Network IO	Network traffic statistics

Additional controls:

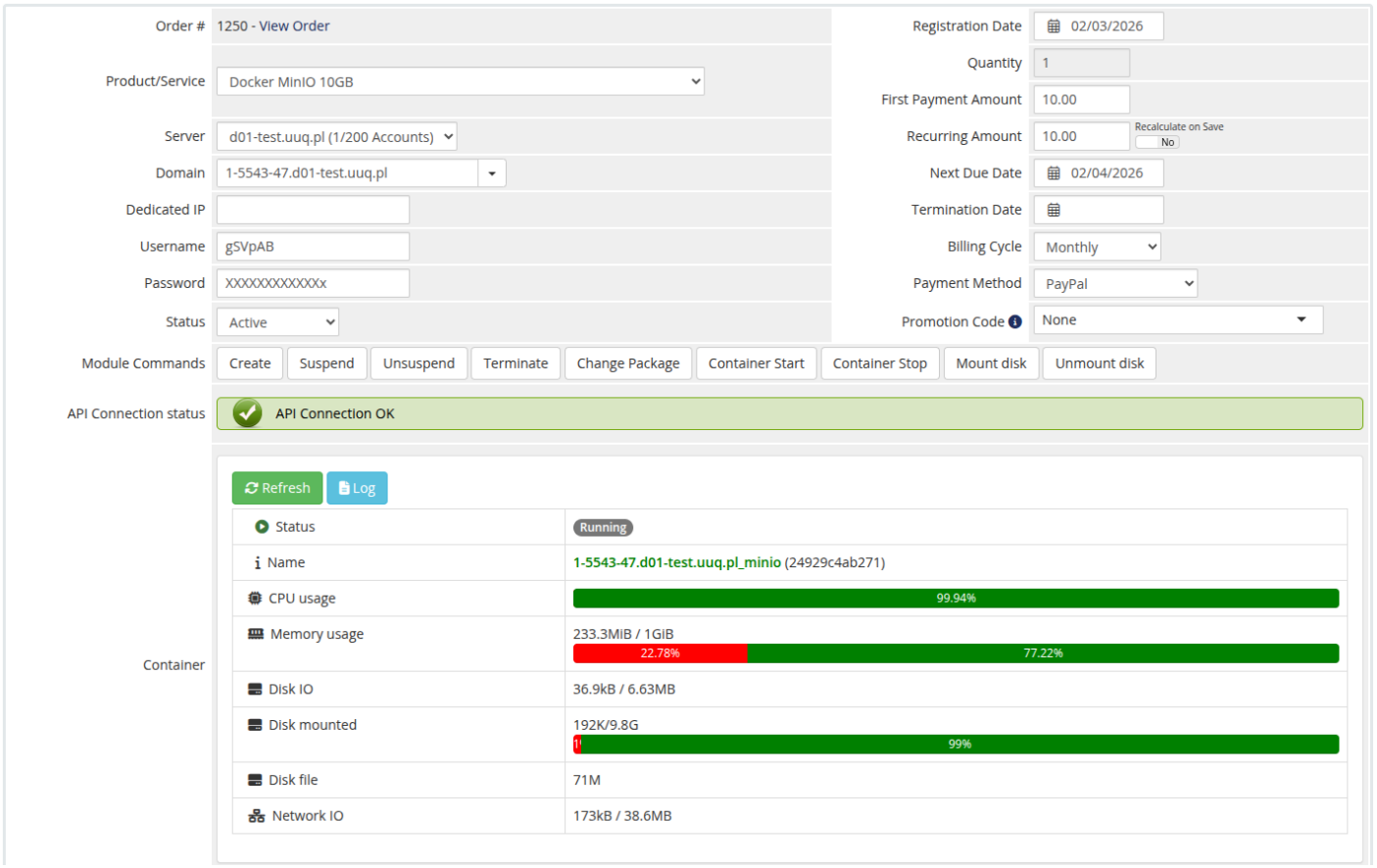
- **Refresh** button — Reload container status data
- **Log** button — Load and display the container logs for debugging and monitoring

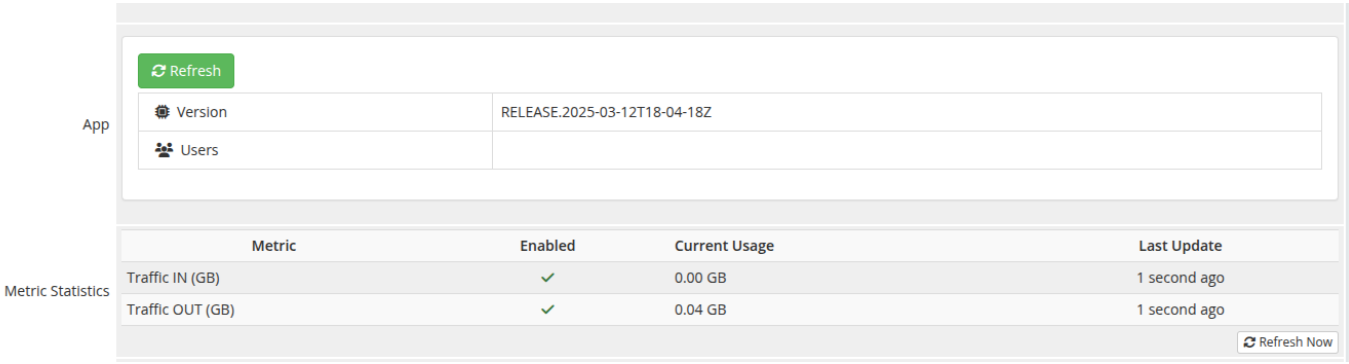
Application Information

Field	Description
Version	Installed MinIO version
Users	List of assigned users with access to the application

Metric Statistics

Metric	Description
Traffic IN (GB)	Incoming network traffic
Traffic OUT (GB)	Outgoing network traffic





Metric Statistics

Metric	Enabled	Current Usage	Last Update
Traffic IN (GB)	✓	0.00 GB	1 second ago
Traffic OUT (GB)	✓	0.04 GB	1 second ago

Refresh Now