

# Release Notes



Looking for something more advanced than NOC-PS? Take a look at our self-developed DCIM system.

## Version 2.7.0

Released: 20.09.2024

Type	Information
Feature	Added support for WHMCS 8.11 & PHP 8.2.
Bugfix	Fixed a provisioning bug.
Bugfix	On some installations the traffic statistics were not collected correctly.

## Version 2.6.1

Released: 09.01.2023

Type	Information
Feature	Added options to automatically remove RDNS entries on service creation/termination.
Improvements	Several small improvements for PHP 8.1.

## Updated documentation pages:

- [Module Settings - Notifications and Automation](#)

## Version 2.6.0

Released: 21.09.2022

Type	Information
Info	<b>This release contains template changes. If you use a <a href="#">template override</a>, be sure to update your template.</b>
Feature	Added support for WHMCS 8.6 & PHP 8.1.
Feature	It is now possible to override the default Windows username (used in the welcome mail & 'Username' product field).
Feature	Added an option to show the group name on the "Server Management" admin page. And the product name does contain now a link to the edit product page.
Feature	(Only relevant for IPMI Proxies) Added an option to use the "Trusted Proxies" settings for detecting the client IP, instead of depending on the <code>\$_SERVER['REMOTE_ADDR']</code> variable.
Improvement	Auto fix tasks now also check for servers that are assigned to deleted products. If such a server is detected, the server will be moved into the 'Unassigned' group.

## Updated documentation pages:

- [Module Settings - Other Options](#)
- [Module Settings - Server Provisioning Automation](#)
- [Proxy Installation Guide](#)

## Version 2.5.2

Released: 07.03.2022

Type	Information
Bugfix	Under certain circumstances, the network graphs were not displayed in the clientarea if the customconfig.php file existed.
Bugfix	In rare cases, the owner of the server was incorrectly detected, which may resulted in incorrect automatic provisioning.

### Version 2.5.1

Released: 28.01.2022

Type	Information
Bugfix	Customers can again delete the RDNS entries by entering an empty value.

### Version 2.5.0

Released: 03.12.2021

Type	Information
Info	<b>This release contains template changes. If you use a <a href="#">template override</a>, be sure to update your template.</b>
Feature	Added option to stock control to exclude servers which are marked as "Disabled" for automated provisioning.
Feature	For developers: Added bandwidth graph override function.
Feature	Added option to customconfig.php to hide bandwidth graphs at the WHMCS admin client service page.
Bugfix	Under certain circumstances, automatic provisioning of multiple servers in one order did not work correctly.
Improvement	This version contains several minor code-side optimizations which result in a faster TTFB especially for slow or unoptimized database servers.

### New documentation pages:

- [Custom Network Graphs](#)
- [Disable Admin Network Graphs](#)

### Updated documentation pages:

- [Module Settings - Other Options](#)

### Version 2.4.4

Released: 27.08.2021

Type	Information
Improvement	Better handling when an IPMI proxy is unreachable.
Improvement	Improved support for HP iLO and Supermicro KVM sessions via IPMI proxy.

### Version 2.4.3

Released: 13.08.2021

Type	Information
Feature	Until now, the 1:1 NAT proxy mode could only be activated globally. The 1:1 NAT mode can now be enabled individually per ACL group. If you are currently using 1:1 NAT, the module will automatically enable the mode for all groups. After updating the module you can remove the variable "\$proxy_direct_traffic" from the customconfig.php file.
Feature	For Developers: Implementation of <a href="#">Custom Output Data</a> function.
Improvement	If you use NOC-PS in conjunction with a reverse proxy due to the <a href="#">TLS issue</a> and also have the KVM proxy in use, it may not be possible to open KVM sessions. The module now rewrites the internal domain of NOC-PS so that the KVM session can be queried correctly even if a reverse proxy is used.

### New documentation pages:

- [Custom Output Data](#)

### Updated documentation pages:

- [1:1 NAT](#)

Bugfix	After deleting the primary IPMI & KVM proxy, another proxy was not automatically marked as the primary proxy. Now the module automatically selects the next available proxy as primary.
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### Version 2.4.2

Released: 15.07.2021

Type	Information
Feature	Server Management page: Added compact mode. The compact mode reduces the size of the page by hiding configurable options. The compact mode can be enabled/disabled directly from the server management page, or in the module settings.
Feature	A version check for the IPMI proxies has been added. If an updated version is available, a notice will be shown in the overview page of the proxies and in the proxy detail page.
Bugfix (RDNS Plugin)	On recent PowerDNS versions, the MySQL table change_date does not exist anymore. Adjustments have been made so that this field is also no longer required by the PowerDNS RDNS plugin.
Bugfix (RDNS Plugin)	Prevent multiple jQuery event bindings when creating new PowerDNS zones.
Bugfix (RDNS Plugin)	If the server was assigned in a subnet smaller than /24 according to NOC-PS, the RDNS entry could not be set in the WHMCS client area.

### IPMI Proxy Update

To update your IPMI proxy, just press the "Redeploy" button at the module admin page. The configuration of the private IPs is retained. If manual changes have been made to the proxy (which should not be the case in general), they may be overwritten.

Type	Information
Software	Updated to latest nginx release.
Feature	Support for websocket HTML5 KVM consoles.
Improvement	Improved support for Dell iDRAC.

### Version 2.4.1

Released: 07.06.2021

Type	Information
Bugfix	Since WHMCS v8, WHMCS logs all PHP warnings into the database. The module generated several PHP warnings when opening the module admin page (depending on the number of configurable options relatively many, because the warning was generated in a foreach loop). The problem was fixed.
Improvement	This release includes several optimizations in the code to increase the performance of the module.

### Version 2.4.0

Released: 26.02.2021

### New documentation pages:

- [Update Proxy](#)

**This release was preceded by several betas and release candidates. Only changes since the last release candidate are mentioned.**

**To gain insight into all changes, please read the previous changelogs, starting with version 2.4.0-b1.**

Type	Information
Info	The changelog only contains changes since version 2.4.0-rc1.
Bugfix	In the Module Debug Log of WHMCS v8 the API Responses were not logged. This problem only occurred from WHMCS v8 onwards.
Bugfix	If the "NOC-PS Server Description" was changed via the WHMCS admin client service page, the spinner behaved incorrectly. This problem also only affected WHMCS v8 and higher.

### Version 2.4.0-rc1 (RELEASE CANDIDATE)

Released: 18.01.2021

**This release is a release candidate.** This means, the module should be tested in a developer environment and not in production. If you should test the module in production and find fatal bugs, you can simply delete the module and upload the last stable version. No settings will be lost.

Type	Information
Info	This release contains template changes.
Info	Restored WHMCS v6 compatibility.
Feature	Reinstallation of operating system and rescue boot is now possible via WHMCS admin client service page.
Feature	Plugin: <a href="#">Reseller API (paid plugin)</a> . You can find information about the plugin on the module page.
Improvement	Admin client service page: Load power status by AJAX to reduce TTFB.
Bugfix	HTML input pattern validation did not work for the root password.

### Version 2.4.0-b3 (BETA)

Released: 07.01.2021

**This release is a beta release.** This means, the module should be tested in a developer environment and not in production. If you should test the module in production and find fatal bugs, you can simply delete the module and upload the last stable version. No settings will be lost.

Type	Information
Info	This release contains template changes.
Info	This release contains language changes.
Feature	Added support for WHMCS v8.1 + Bootstrap 4. "Manager v3" theme must be used when using Bootstrap 4. "Manager v3" is now also the new default theme on new installations.
Feature	For Reseller API clients: RDNS management via reseller API is now available.
Feature	For developers: Get <a href="#">NOC-PS API instance</a> via tblservers.id. Previously, only tblhosting.id was supported.
Improvement	Stricter validation of RDNS entries.
Improvement	Several improvements on the admin RDNS management page.

Improvement	API requests / responses are now logged into the WHMCS module log (if logging is enabled).
Improvement	The exception stack trace was sometimes included in the error log. Now, only the clear error message is logged.
Bugfix	Module admin page "Server Management": If there was an apostrophe in the name of a configurable option, there was a javascript error causing display problems.
Bugfix	Stock Monitor: Fixed incorrect behavior when the NOC-PS API was unreachable (amount of stock was wrong).

### Version 2.4.0-b2 (BETA)

Released: 18.10.2020

**This release is a beta release.** This means, the module should be tested in a developer environment and not in production. If you should test the module in production and find fatal bugs, you can simply delete the module and upload the last stable version. No settings will be lost.

Type	Information
Info	This release contains template changes.
Info	This release contains language changes.
Feature	Release of the v3 client area template. Due to the usage of Font Awesome 5, WHMCS v7.6 or higher is required.
Feature	v3 client area template supports officially the Lagom WHMCS template.
Improvement	The Activity Log page was graphically revised.
Improvement	RDNS changes are now logged.
Bugfix	Client area: If the customer changed the name of the operating system, the new OS logo was not dynamically loaded.

### Version 2.4.0-b1 (BETA)

Released: 07.10.2020

### Additional Information:

- [Screenshot #1 of v3 template](#)
- [Screenshot #2 of v3 template](#)

### New documentation pages:

- [Plugins](#)
- [Plugin: Reverse DNS Management](#)



For several months we have been collecting feedback from customers via a feedback form. We would like to thank everyone who participated. This has given us an excellent insight into what our customers want and where we need to make improvements.

### Important to know

Even if there have been major code changes, the module still works with the same functional scope as before. There are no breaking changes.

### New plugin system

In this release a plugin system was integrated and parts of the code were reorganized and rewritten. The plugin system allows us to deliver new features faster and gives us a certain flexibility. Even though the changelog doesn't look big, a lot has changed code-wise. Due to the complexity of the changes, we will first release a beta version. There will be several more changes until the stable version is released and we would be happy if you participate in the beta test and report any bugs.

### Extensibility of the module

The independent expandability of the module was always important to us. For a long time now, the module supports different possibilities to intervene in the code technically [via hooks](#) and [via various PHP functions](#). With the new plugin system the possibilities are extended even more, since it is possible that users of the module can integrate plugins themselves.

The documentation for creating your own plugins will be published at a later date.

### First Plugin: Reverse DNS Management

In our survey the possibility to manage reverse DNS records was one of the most requested features. This has been integrated in this release, via the mentioned plugin system.

### Roadmap until the release of the stable version

We will release another beta soon, which includes more template changes. The template of the client area will be reworked to better integrate the reverse dns management and also the module admin page will be improved.

After the 2nd beta has been released, a release candidate will be released after sufficient tests. It is planned to release the stable version within the next 60 days. We want to take enough time to ensure that a flawless stable version is released.

The creation of more detailed documentation regarding the new functions is being worked on. These will be published when the stable version is released.

**This release is a beta release.** This means, the module should be tested in a developer environment and not in production. If you should test the module in production and find fatal bugs, you can simply delete the module and upload the last stable version. No settings will be lost.

Type	Information
Info	This release contains template changes.
Info	This release contains language changes.
Feature	Implementation of a plugin system (see above for information)
Plugin	Release of reverse DNS management plugin (only IPv4 at the moment)
Improvement	The ACL group page was graphically revised.
Improvement	To minimize the amount of text, IP Manager and Server manager will no longer show the company name of the customer but only firstname and lastname.
Bugfix	On the server management page, clicking on "ACL Group: <name>" displayed an empty popover. This has been fixed, now the permissions of the respective ACL are displayed again.

### Version 2.3.2

Released: 30.09.2020

Type	Information
Improvement	Possibility to test bandwidth accounting and improved logging.
Bugfix	Workaround for WHMCS bug CORE-15299. WHMCS doesn't delete old configurable option group assignments from the database. This workaround validates that the module queries the correct configurable option. The bug can cause the module to detect an incorrect bandwidth limit if you use a bandwidth configurable option group and you replace the option group later with a newly created configurable option group.
Bugfix	The module automatically detects when you move a dedicated server between 2 NOC-PS servers. This is recorded as "Instance Movement" in the module log. Due to an error, this did not always work, so the automatic provisioning of servers might failed when using multiple NOC-PS servers.

## New documentation pages:

- [Troubleshooting: Wrong bandwidth limit](#)
- [Troubleshooting: Test proxy election](#)

### Version 2.3.1

Released: 25.08.2020

Type	Information
Bugfix	This version fixes an issue where under certain circumstances on the "Server Management" page a wrong server owner was shown.

### Version 2.3.0

Released: 01.08.2020

Type	Information
Info	No template changes
Feature	Support for multiple IPMI/KVM Proxies
Feature	VPS: Set amount of CPU, RAM, Diskspace and IP-addresses via configurable option
Feature	Bandwidth data collection function for developers
Improvement	Added update resistant way to customize power status detection strings
Bugfix	Under certain circumstances the loading time of the IP Manager was slow. This has been fixed.

## New documentation pages:

- [External Bandwidth Collection](#)
- [Configurable VPS Resources](#)
- [Proxy Assignments](#)

## Updated documentation pages:

- [Virtual Server - VPS](#)
- [Powerstatus Detection](#)

### Version 2.2.0

Released: 12.06.2020

Type	Information
Info	<a href="#">This release contains language changes</a>
Info	No template changes
Improvement	This release brings a number of small improvements to the code. Under the hood, several changes have been made which may lead to a much better performance
Feature	Stock Monitor: A system to automatically update the quantify of available servers
Feature	Settings: Added option to automatically clear old activity log entries
Feature	Added option to override API call timeouts

## New documentation pages:

- [Stock Monitor](#)
- [Increase API Timeouts](#)

## Updated documentation pages:

- [Setting page: Other Options](#)
- [Page: Server Management](#)

Bugfix	Under certain circumstances servers located in another NOC-PS instance were not recognized by the automatic provisioning
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## Version 2.1.0

Released: 13.12.2019

Type	Information
Info	<a href="#">This release contains template and language changes</a>
Info	From now on, changes in the documentation will be noted in the right column next to the changelog
Feature	IPMI Proxy: Ability for 1:1 NAT
Feature	It is now possible to run a pre-profile before installing the operating system. This allows, for example, to delete the metadata on the hard disks and prevent conflicts during the operating system installation. If you enable this option, make sure that the recovery systems are correctly defined in the module settings. Otherwise, the pre-installer will also be executed on recovery boots.
Feature	Option to disable the KVM availability checks on the client area page
Feature	Option to disable automatic provisioning of server if the server is currently online
Feature	Option to disable automatic provisioning of server if the server is currently being installed via NOC-PS. This prevents servers that have just been terminated from being delivered before the NOC-PS wipe profile is completed.
Feature	A new option is available in the module settings, which allows old installation logs to be automatically deleted from the database after a certain number of days
Improvement	Due to the SSL-Checker of WHMCS the AJAX requests were slow under circumstances. The AJAX requests are now sent to another address so that the SSL Checker is not executed. This only affects the client area.
Improvement	Some special characters are not processed by NOC-PS. The clientarea template was extended by an HTML5 input pattern. If the customer enters invalid characters during a new installation, a corresponding message appears now.
Improvement	If an error occurs when opening KVM, the error is now better logged in the module log
Improvement	It is now ensured that the boxes on the "Server Management" page are the same size. Before, it could happen that there is too much vertical space between the boxes
Bugfix	If a setting was changed in the module settings, the change was only visible the next time the page was reloaded. This caching bug has been fixed.

## Version 2.0.9.6

Released: 16.09.2019

Type	Information
Info	No template changes
Feature	Ability to programmatically set the bootloader
Feature	It is now possible to modify the language file of the Admin interface or to add additional languages for the admin backend
Improvement	Accept capital letters when adding IPv6 subnets in the IP Manager
Improvement	The rendering of the select boxes on the "Server Management" page should now work a bit faster

## New documentation pages:

- [Pre-Run Profile before OS Installation](#)
- [NOC-PS API Class](#)
- [IPMI/KVM Proxy: Introduction of 1:1 NAT](#)
- [Disable KVM Availability Checks](#)

## Updated documentation pages:

- [Setting page: Server Provisioning Automation](#)
- [Setting page: Notifications and Automation](#)
- [Setting page: Other Options](#)

## New documentation pages:

- [Programmatically set the bootloader](#)

Bugfix	Do not route VNC console of virtual servers over IPMI proxy
Bugfix	Under certain circumstances, the module could not recognize the correct language of the client and used the English language file as fallback

## IPMI Proxy Update

To update your IPMI proxy, just press the "Redeploy" button at the module admin page. The configuration of the private IPs is retained. If manual changes have been made to the proxy (which should not be the case in general), they may be overwritten.

Type	Information
Software	Updated to latest nginx release
Improvement	Mainboards like the C9X299-PGF handle the .jar files differently. The .jar file downloader is now extended to support such mainboards
Bugfix	Under some circumstances, the renewal of Lets Encrypt certificates failed. This has been fixed

## Version 2.0.9.5

Released: 04.06.2019

Type	Information
Info	No template changes
Feature	Added hook <a href="#">"hook_before_create"</a>
Feature	Added option to reuse the same IP on re-creating a VPS. <a href="#">This option is not enabled by default and must be enabled manually.</a>
Improvement	Several general quality improvements in the code. Among other things, MySQL queries are now better cached

## Version 2.0.9.4

Released: 29.04.2019

Type	Information
Info	No template changes
Improvement	Improve connection handling to the NOC-PS API. This results in a quicker page load time if NOC-PS is hosted in an other datacenter with a higher latency
Improvement	The modules autofix functions to ensure the consistency between NOC-PS, WHMCS and the configurable options has been improved. Depending on the system, this can lead to a better overall performance
Bugfix	In some cases, the IPMI virtual media tool did not worked if KVM was opened over the KVM proxy

## Version 2.0.9.3

Released: 28.12.2018

Type	Information
Info	No template changes
Improvement	If servers with the installation profile "None" are deployed, WHMCS generates a random username and password in the product by default. This is now emptied
Improvement	Better caching on the module admin page and other optimizations, which lead to faster loading times of the module admin page
Bugfix	If the option "Show Port & Switch IP at admin product page" is activated and several devices are added to the server, it was possible that a port of another device was displayed instead of a switch port (eg the PDU port)

## Version 2.0.9.2

Released: 16.11.2018

Type	Information
Info	No template changes; Language file has been extended by the key <code>\$_LANG['dedic_bandwidthlimit_suspendreason']</code>
Feature	Added option to display switch informations at admin product view ( <a href="#">more informations</a> )
Feature	Added overrides for operating system logos ( <a href="#">more informations</a> )
Feature	Added support for custom page templates ( <a href="#">more informations</a> )
Feature	Added option to automatically take actions when server reaches bandwidth limit ( <a href="#">more informations</a> )
Feature	Added option to automatically start a NOC-PS profile upon server termination (e.g. wipe disks) ( <a href="#">more informations</a> )
Feature	Added support for choosing VPS location via configurable options ( <a href="#">more informations</a> )
Feature	Added hook <code>BandwidthOverusage</code> ( <a href="#">more informations</a> )

## Version 2.0.9.1

Released: 23.09.2018

Type	Information
Info	No template changes
<b>Requirement</b>	<b>From now on ionCube 10 is required.</b>
Improvement	Improve stability on high latency NOC-PS installations
Improvement	Ensure AJAX requests does not lock PHP sessions
Improvement	Added new timeouts for power functions to prevent usage problems if NOC-PS or the server has problems / does not responde
Bugfix	If a "display value" (for example, "Operating Systems   Choose OS") was used in the configurable option name, it was not possible to assign values on the "Server Management" page for configuring the automatic deployment of dedicated servers

## Version 2.0.9

Released: 07.08.2018

Type	Information
Info	<i>This release contains no significant changes. It is primarily intended to be compatible with WHMCS v7.6.</i>
Feature	Add compatibility for WHMCS v7.6 (adjusted fa icons)
Feature	Setting page: Added option " <a href="#">Interval for power status refresh at admin product page</a> "
Improvement	Stability improvements at the IPMI proxy server SSH connection

## Version 2.0.8

Released: 12.06.2018

Type	Information
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Feature	IPMI / KVM Proxy for private IPs. <a href="#">More Informations.</a>
Feature	Admin clientproduct view: Show a link to IPMI
Feature	Setting page: Added option "Update Server Password on Reinstallation"
Feature	Setting page: Added option "Show Bandwidth Usage in GB instead of MB"
Feature	Setting page: Add setting "None" to "Default Operating System" option
Feature	If OS selection is available during ordering, you can now add the option "None" for no automated OS installation. Makes sense when clients want to install the OS over KVM.
Feature	ACL Group Permissions: Added "Show IPMI Link"
Bugfix	If the OS installation was started manually over NOC-PS, the installation process in the clientarea might was empty.
Hook	Added: hook_after_open_ipmi

## Version 2.0.7

Released: 18.04.2018

Type	Information
Info	No template changes
Feature	Added PHP 7.1 / PHP 7.2 compatibility
Feature	Setting page: Added option to not log the execution of <a href="#">hooks</a>
Feature	IP Manager: Global IP search. With this search function all ip blocks can be searched at once.
Improvement	If NOC-PS server is not added correctly, show a better description of the issue at the module admin page
Bugfix	Clientarea: Outbound live traffic value was sometimes not accurate
Bugfix	WHMCS Server Page: If the NOC PS address is not defined, the "Test Connection" function returns falsely success. Fixed

## Version 2.0.6

Released: 24.02.2018

Type	Information
Feature	VPS: The default ACL group can now be overridden by the WHMCS product configuration. <a href="#">Read more</a>
Feature	Module Settings: Subnets can now be blacklisted from the IP Manager. This can be used to hide private subnets.
Feature	IP Manager: The default amount of displayed IPs can now be changed via dropdown.
Feature	IP Manager: Added mass reserve / unreserve via checkbox
Feature	IPv6 support. <a href="#">Read more</a>
Bugfix	Admin Clientproduct page: Under certain circumstances the pre-selected ACL dropdown value was incorrect. Concerned only vps products.
Bugfix	If "Keep NOC-PS Hostname" setting is enabled, ensure that the hostname does not get modified by auto provisioning.

## Version 2.0.5

Released: 16.02.2018

Type	Information
Feature	Admin Clientproduct page: Refresh power status without site reload using AJAX
Feature	Admin Clientproduct page: Show NOC-PS server description

Feature	Admin Clientproduct page: Edit NOC-PS server description
Feature	Added ISO Manager which allows servers to be booted from an ISO file. <a href="#">Read more</a>
Feature	Clients can boot from ISO and access server via VNC. Works for VPS and dedicated servers
Feature	Module settings: Blacklist additional operating systems for virtual servers (e.g. oVirt, VMware)
Hook	Added: hook_after_isoboot
Hook	Added: hook_pre_open_clientarea
Improvement	Better error handling if the NOC-PS backend is unreachable

## Version 2.0.4

Released: 06.02.2018

Type	Information
Info	<i>This release contains many changes. Only relevant features and improvements are listed</i>
Feature	New Clientarea template is available. At the module configuration you can switch between the old and new template
Feature	ACL Groups can now be also setted directly at the admin client product page
Feature	Full VPS support
Feature	VPS Autoprovisioning
Feature	IP Manager to manage IP assignments
Improvement	Show message on the module admin page if a new version is available
Improvement	At admin client product page all network port graphs are shown now. Before, only the first port was shown
Improvement	Reinstallation and recovery boot is now seperated. Admin can select a list of chooseable recovery OS at module configuration
Improvement	At reinstallation menu the client can use the NOC-PS installation addons. Access to this feature can be limited using the ACL Group Manager

## Version 2.0.3

Released: 04.12.2017

Type	Information
Info	No template changes
Improvement	Extend the check of available sensors via IPMI and ensure that sensor graphs are visible in client area if sensors exists
Bugfix	'Traffic graph "Current Month" to billing cycle graph' option sometimes didn't showed a monthly traffic graph if the next due date was modified. Additional checks has been added to ensure the graph generation

## Version 2.0.2

Released: 06.11.2017

Type	Information
Info	No template changes
Improvement	Improve handling of the BMC Reset feature. Show button at admin & client area only if IPMI is available

Feature	Added a setting on the setting page to not show hidden products at the "Server Management" tab
Feature	Added a setting to allow automated update of the WHMCS hostname field if operating system gets installed with a different hostname
Bugfix	Bandwidth limit has not been applied if the bandwidth limit has been chosen by an configurable option group using a display value (e. g. "20 TB 20 Terabyte" instead of "20 TB")

### Version 2.0.1

Released: 17.10.2017

Type	Information
Bugfix	If WHMCS admin username 'admin' does not exist, noc-ps module admin page fails to load

### Version 2.0.0

Released: 13.10.2017

Type	Information
Info	<i>This release contains many changes. Only relevant features and improvements are listed</i>
Feature	Add BMC Reset at Client area and Admin area
Feature	Bandwidth Accounting and Bandwidth Billing
Feature	Automated Server Provisioning
Feature	Added Hook System to execute own code on events
Feature	Automated Server start / stop on suspend, unsuspend, terminate
Feature	ACL Groups to manage permissions
Feature	Setting Page to control the behavior of the software
Feature	Module Activity Log to keep track of actions
Feature	Functions to manipulate available operating systems per service
Feature	Added Language Override Files
Bugfix	Client area: don't show 'Cancel Installation' button if the installation is already completed
Improve ment	Admin area: don't show empty traffic graphs. Instead show a message
Improve ment	Added file to add valid strings for online / offline detection (like 'chassis power offline', 'offline'). Useful for PDUs, because PDUs returns often other strings than just 'Online'

### Version 1.0.3

Released: 01.08.2017

Type	Information
Info	No template changes
Feature	Add 'Test Connection' Button at WHMCS Server Configuration Page
Improve ment	Improve handling of KVM Console Links at WHMCS Admin Area
Improve ment	Reduce page load time at Admin Area

## Version 1.0.2

Released: 29.07.2017

Type	Information
Info	No template changes
Improvement	Reduce page load time at client area
Bugfix	Irritating error message at WHMCS admin backend was shown if the server was not found at NOC-PS

## Version 1.0.1

Released: 21.07.2017

Type	Information
Bugfix	Shutdown Button at admin didn't work under some circumstances
Bugfix	Don't show invalid sensor values received by IPMI