

Release Notes for Netman 208

APP Version 1.6 / SYS Version 1.4

(September 2024)

Brief

This update for Netman 208 introduces some features from Cybersecurity policies and rules other than other fixes and improvements for the behaviour of web interface and the system. Implementation of some new features may change deeply some previous habits and settings with the Netman 208 card and this is the reason of this Release Notes. The aim is to show the changes with more impact at first User sight.

Instructions for this update

Please note that this update:

- clears **all the passwords saved** in the configuration
- clears the **Date/Time/NTP configuration** saved

so remember to save separately the password and the Date/Time settings necessary before the update execution. After the update you will proceed to re-type again those passwords and settings.

Update instructions

Please follow this order for the update:

- goto Upload/Recovery mode
- load **SYS version 1.4**
- then load **APP version 1.6**
- then reboot to normal mode
- after login with “**admin**” user please re-insert all the passwords and the Date/Time settings

If you have problems rebooting to normal mode (every reboot gets always to Recovery mode):

- from Upload/Recovery mode
- load the **JVM version 1.0**
- then reboot to normal mode

Brief list of New Features and changes

Here follows the list of the most impact changes for the user.

] Reset password from Service [

When “**admin**” tries to login with wrong password, a new RESET PASSWORD procedure can be called:

The image shows two screenshots of the Netman web interface. The left screenshot shows the 'LOGIN WITH' section with a dropdown menu set to 'Local authentication'. Below it are fields for 'Username' (containing 'admin') and 'Password' (masked with dots). A red error message box at the bottom states: '! LOGIN FAILED. CLICK HERE IF YOU FORGOT THE PASSWORD.' with a red 'X' icon. The right screenshot shows the 'Password Reset' page. It has an 'INSTRUCTION' section with a long alphanumeric 'REQUEST CODE'. Below this is an 'INSERT RESET CODE' section with a large text area for pasting the code and a 'SUBMIT' button.

The User must copy and send (by email) the REQUEST CODE to the Service then wait for RESET CODE.

The new procedure implements a ciphered requests (more secure than before) that allows to reset the password restoring the default password (“**admin**”) for the “**admin**” user.

] HTTP / HTTPS [

When the Netman is configured with HTTPS web settings enabled, the browser searching for HTTP it will be redirected to the correct HTTPS web service and port.

e.g.:

`http://netman6309xxyy.local` → (auto-redirection) → `https://netman6309xxyy.local`

This redirection is available for both **IPv4** and **IPv6**.

] Users [



The local users are as before:

- **admin**
- **power**
- **view**

By default only “**admin**” user is active, “**power**” and “**view**” user must be activated.

The big difference is that now “**view**” user requires a password as well the other users:

The image shows three identical login form templates side-by-side. Each form has a 'LOGIN WITH' section with a dropdown menu set to 'Local authentication'. Below this are fields for 'Username' and 'Password'. The first form shows 'admin' as the username and a masked password. The second form shows 'power' as the username and a masked password. The third form shows 'view' as the username and a masked password.

Username: admin Password: admin (default)	Username: power Password: <the password set>	Username: view Password: <the password set>
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The previous “**View**” button (accessing without password) in the Login page has been removed indeed.



] User Roles [



User “**admin**” has full functionalities by default and is always available.

Users “**power**” and “**view**” are non activate by default and must be enabled in the configuration.

All the users “**admin**”, “**power**” and “**view**” needs a password.

The roles for these users now can be configured only from the “**admin**” user and allows to select multiple specific functions in a more flexible way. E.g.: the “**view**” user may be able to reboot the Netman with “M-reboot” function flagged.


Only the “**admin**” user has full power with all the functions enabled.

Change local password

ADMIN USER

Password

Retype Password


 Admin credentials grant the right to manage Netman and also the device, including shutdown

SAVE

POWER USER

Password

Retype Password

 Power credentials grant the right to manage Netman but may not full operate the device

SAVE

It is possible to revoke access to Power user just clicking the button. After this action, Power user can't login. For restoring the access a new password must be set.

REVOKE ACCESS

Functions:


- ✓ A - General info (always active)
- ✓ B - Detail info
- ✓ C - Network status
- ✓ D - View/Download logs
- ✓ E - Service Log download
- ✓ F - Ups config
- ✓ G - Ups command config
- ✓ H - Ups command execution
- ✓ I - System/Network config
- ✓ J - Services/Functionalities config
- ✓ K - Advanced config
- ✓ M - Reboot

SAVE

VIEW USER

Password

Retype Password

 View credentials grant the right to only view some values of the Netman (no action is possible)

SAVE

It is possible to revoke access to View user just clicking the button. After this action, View user can't login. For restoring the access a new password must be set.

REVOKE ACCESS

Functions:

- ✓ A - General info (always active)
- ✓ B - Detail info
- ✓ C - Network status
- ✓ D - View/Download logs
- ✓ E - Service Log download
- ✓ H - Ups command execution
- ✓ M - Reboot

SAVE

] Stronger User Login check and retries [



A new mechanism for the login failed has been added: a User has limited retries before being locked and a certain customizable time to wait before any retry.

Default values for the retries are:

- max **5** retries
- **60** seconds between each retry

and can be customized.

After the max retries with login failed the user is beign locked and only the admin user can unlock it from its web configuration. Remember that the the “**admin**” user will never be locked.

Login rules

IN CASE OF LOGIN FAILURE

Login retry max

5

retry

Login min interval before retry

60 seconds

When USER exceeds all the retries with wrong password, it will be locked: only the ADMINISTRATOR can unlock the user again.

SAVE

CLEAR LOGIN RULES TO DEFAULT

UNLOCK USERS

Administrator can reactivate user locked because wrong password retries.

CHECK LOCKED USERS

Locked users:	Locked at time:	
power	04/09/2024, 14:14:55	UNLOCK

] Password complexity [



New custom definition for Password Complexity for the “**admin**”, “**power**” and “**view**” users: by default the complexity is strict with the following settings (can be customized):

Password complexity

RULES

Min password length

8

chars

Max password length

40

chars

Min Lowercase chars requested
(a,b,c,...,z)

1

chars

Min Uppercase chars requested
(A,B,C,...,Z)

1

chars

Min digit chars requested
(0-9)

1

chars

Min special chars requested
(, . _ + : @ % / -)

1

chars

SAVE

CLEAR RULES TO DEFAULT

] Expert Shell via Web [



Now the previous “SSH Expert Shell” is available in the Web section (only for “admin” user). It allows to manage the internal parameter from the Web, without accessing the SSH command line interface.

Expert Shell

WARNING ! SOME PARAMETERS ARE CRITICAL AND MAY MIS-CONFIGURE THE NETMAN CHANGING ITS BEHAVIOUR OR WITH RISK OF LOSING CONNECTION WITH IT.

Parameter:

Value:

⇒ GET

⇐ SET

✕ DELETE

This section is available only from the “**admin**” user and is used only rarely with special configurations. Please remember that managing the parameters without any reason may lead to malfunctions with the Netman.

] Network connections [



A new section in Web is now available for checking the **Internet Connectivity** and some socket **Connections Active** in the Netman understanding the services and the connections active in the Netman.

Internet Connectivity

Allows to check Internet Connectivity querying Gateway, DNS and network permissions.
Press the button to start the check:

[CHECK INTERNET CONNECTIVITY](#)

OK, Full connectivity (Internet) allowed and working

Active Network Connections

Allows to check current Active Connections to the Netman.
Press the button to check and show the connections:

[CHECK ACTIVE NETWORK CONNECTIONS](#)

Protocol	Local	Remote	State
TCPv4	0.0.0.0:21	0.0.0.0:*	LISTEN
TCPv4	0.0.0.0:22	0.0.0.0:*	LISTEN
TCPv4	0.0.0.0:443	0.0.0.0:*	LISTEN
TCPv4	0.0.0.0:502	0.0.0.0:*	LISTEN

] JSON file upload via Web [

[CONFIGURATION](#) → [YOUR NETMAN](#) → [JSON](#)

For the JSON configuration, now the “**licence file**” of the JSON service can be uploaded via web.

(OPTIONAL) UPLOAD A NEW LICENSE FILE FOR JSON (FILE *.TXT)

Drag & drop here your 'license.txt' file

User can drop a file with some text data; the content of this file will be written in the JSON field “**license**” as simple text:

```
[{
  "timestamp": 1682497583,
  "license": "<CONTENT_OF_LICENSE_FILE>",
  "io_conf": 1,
  "status": [0, 8, 0, 6, 0, 0],
  "measures": {
    "vin1": 230,
    ...
    "tsys": 23
  }
}]
```

] Various Security improvements [

The security of the Netman 208 has been improved with:

- HTTP/HTTPS security improvements (cookies/sessions)
- Fields in the Web pages (input check validation with chars allowed and length validation)
- SSH Service warning if active (SSH can be used but is no more a full-safe service - *please consider disable it if not necessary*)
- “admin” default password warning if the password is left as default (it should be changed after first login)
- Other bugfixes and CVE fixes

] Others minor improvements [

- Auto-logout improved (time of autologout showed)
- Enviromental Sensors update (fix for some reading problems reported and web page updates for email alarms and management)
- BACNET address range extended to 4194302
- NUTANIX fix (internal keys management)
- General system and user messages improvement