

# Release Notes for Netman 208

## APP Version 1.7

### (October 2024)

### Brief

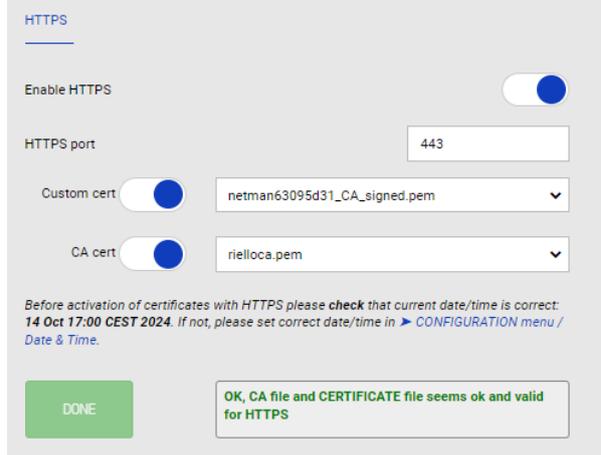
*It is always recommended to upgrade to the latest available version of the firmware.*

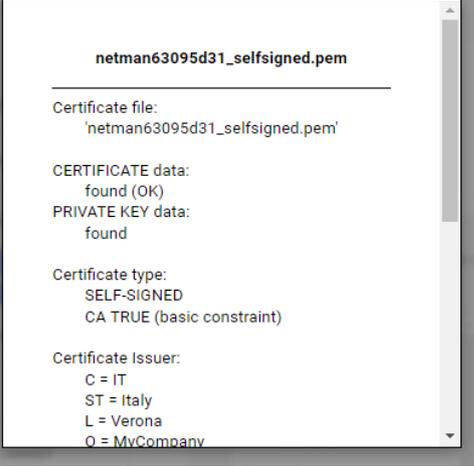
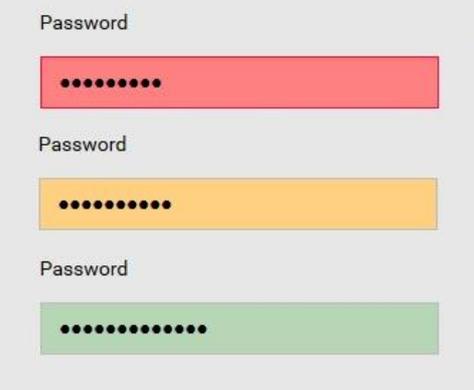
*This update for Netman 208 includes only optimizations, improvements and bug fixes that do not have a severe impact on the usage over version 1.6.*

*If upgrading from a version below 1.6 please also read the section “Release Notes for Netman 208 APP Version 1.6/ SYS Version 1.4”.*

### Brief list of New Features and changes

Here follows the list of some changes:

<p><b>HTTPS Certificate test</b> Added a manual pre-check for HTTPS certificates before application ans Save operation.</p> <p>It allows to check the HTTPS configuration checking for its validity, both with single certificate and with CA.</p>	 <p>The screenshot shows the 'HTTPS' configuration page. It includes a toggle for 'Enable HTTPS' which is turned on. Below it, the 'HTTPS port' is set to 443. There are two rows for certificates: 'Custom cert' with a toggle and a dropdown menu showing 'netman63095d31_CA_signed.pem', and 'CA cert' with a toggle and a dropdown menu showing 'rielloca.pem'. At the bottom, there is a green 'DONE' button and a green message box that says 'OK, CA file and CERTIFICATE file seems ok and valid for HTTPS'. A warning message above the buttons states: 'Before activation of certificates with HTTPS please check that current date/time is correct. 14 Oct 17:00 CEST 2024. If not, please set correct date/time in ► CONFIGURATION menu / Date &amp; Time.'</p>
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<p><b>View Certificates</b> It shows some data of the loaded certificates.</p> <p>It allows to check some data and validity of the certificates loaded.</p>	
<p><b>Password strength suggestions with colors</b> (red, orange, green).</p> <p>Some password fields are checked against common passwords usage: <b>red</b> is very common or guessable, <b>green</b> is a good password.</p>	

Some other minor improvements:

- JSON TRAP (internal improvement)
- Datalog fix for RielloConnect service (internal improvement)
- Communication with some UPS and operations (internal improvement)
- Enhanced read/write capabilities for MODBUS and some UPS devices
- LDAP optimization for AD (internal improvement)
- FTP settings (internal improvement)
- other web pages improvements

# 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 displays two side-by-side screenshots of a web application interface. The left screenshot shows a login form titled 'LOGIN WITH'. It features a dropdown menu set to 'Local authentication', a 'Username' field containing the text 'admin', and a 'Password' field with masked characters. Below the form is a red error message box that reads: '! LOGIN FAILED. CLICK HERE IF YOU FORGOT THE PASSWORD.' The right screenshot shows the 'Password Reset' page. It has an 'INSTRUCTION' section with a long alphanumeric request code and an 'INSERT RESET CODE' section with a text area 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://netman6309xyyy.local` → (auto-redirection) → `https://netman6309xyyy.local`

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

## ] Users [

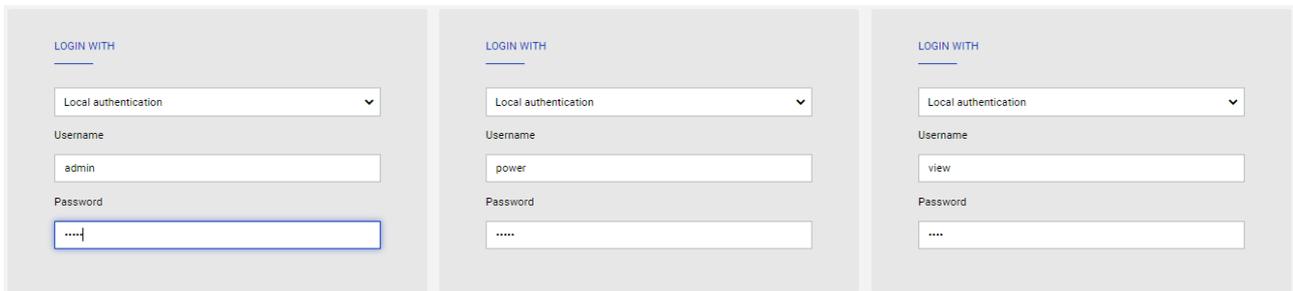


The local users are as before:

- **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:



Username: <b>admin</b> Password: <b>admin</b> (default)	Username: <b>power</b> Password: <b>&lt;the password set&gt;</b>	Username: <b>view</b> Password: <b>&lt;the password set&gt;</b>
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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 being 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:  retry

Login min interval before retry:

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

**UNLOCK USERS**

Administrator can reactivate user locked because wrong password retries.

Locked users:	Locked at time:	
power	04/09/2024, 14:14:55	<input type="button" value="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:  chars

Max password length:  chars

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

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

Min digit chars requested (0-9):  chars

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

## ] Expert Shell via Web [

CONFIGURATION → YOUR NETMAN → Expert Shell

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:

(parameter name)

Value:

(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 [

CONFIGURATION → YOUR NETMAN → Connectivity

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 [



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
  }
}]
```

### **] Variuous 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