



RELEASE NOTES

SERVERware 4.8.0



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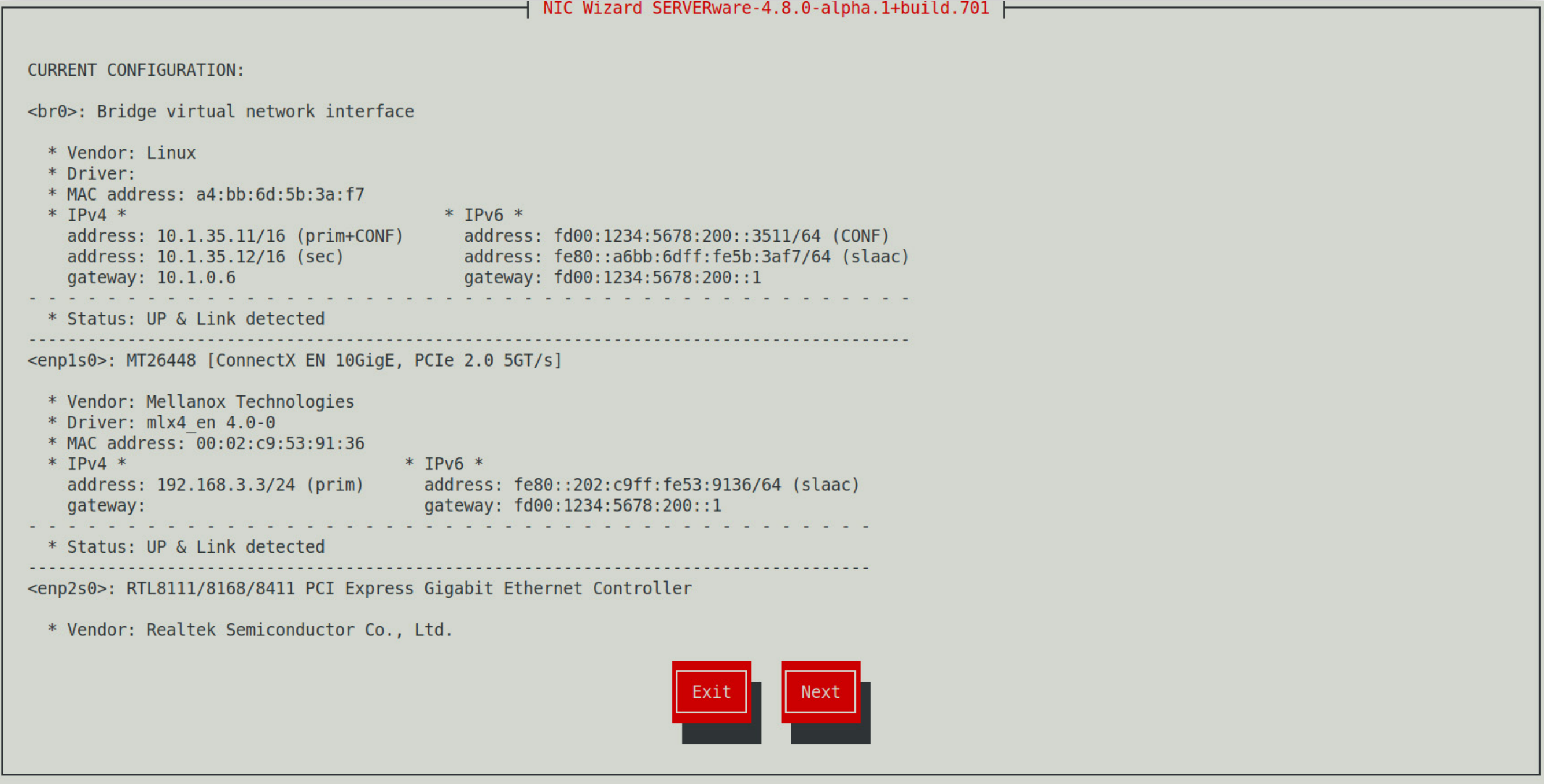
IPv6 Addressing

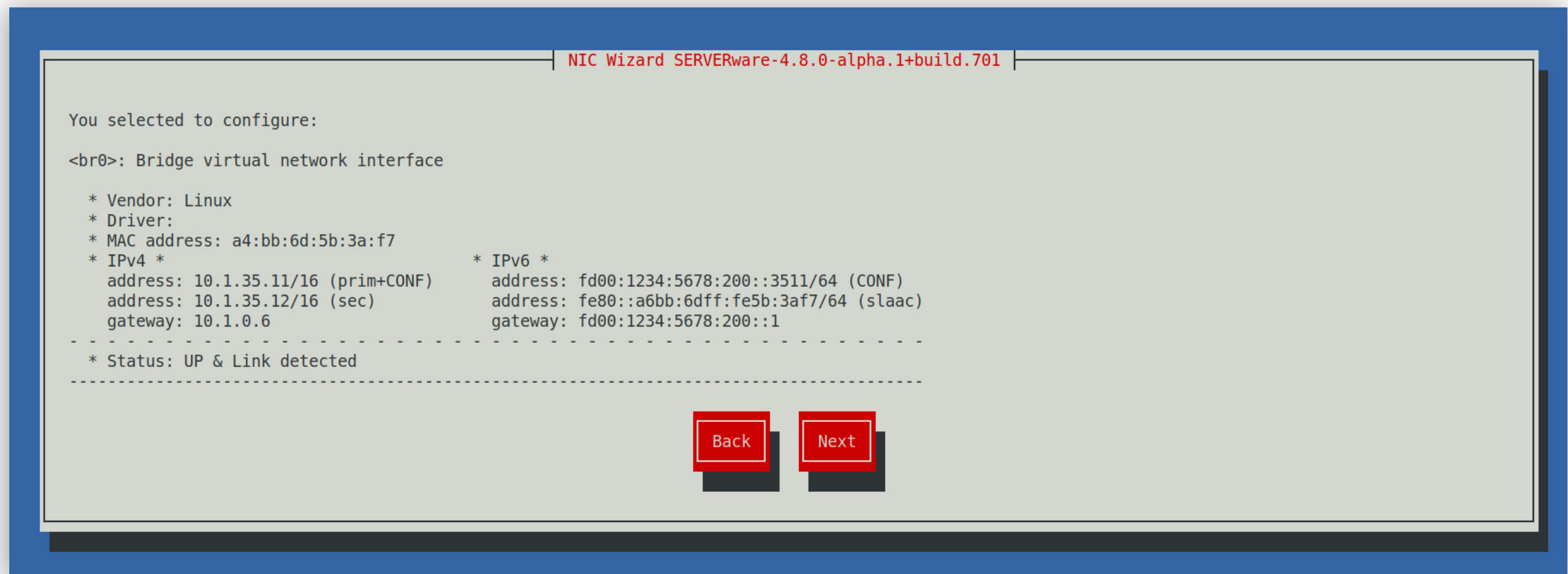
In an effort to combat IPv4 address exhaustion and correlating issues caused by address translation for SIP traffic, SERVERware now supports IPv6 addressing for all its core elements. This means that administrators will be able to assign IPv6 addresses to hosts and VPSs, use IPv6 addresses as alternate addresses for GR, assign and resolve AAAA records, and have sipPROT detect and block attacks from IPv6 addresses.

As of now, it's possible to assign only static IPv6 addresses.

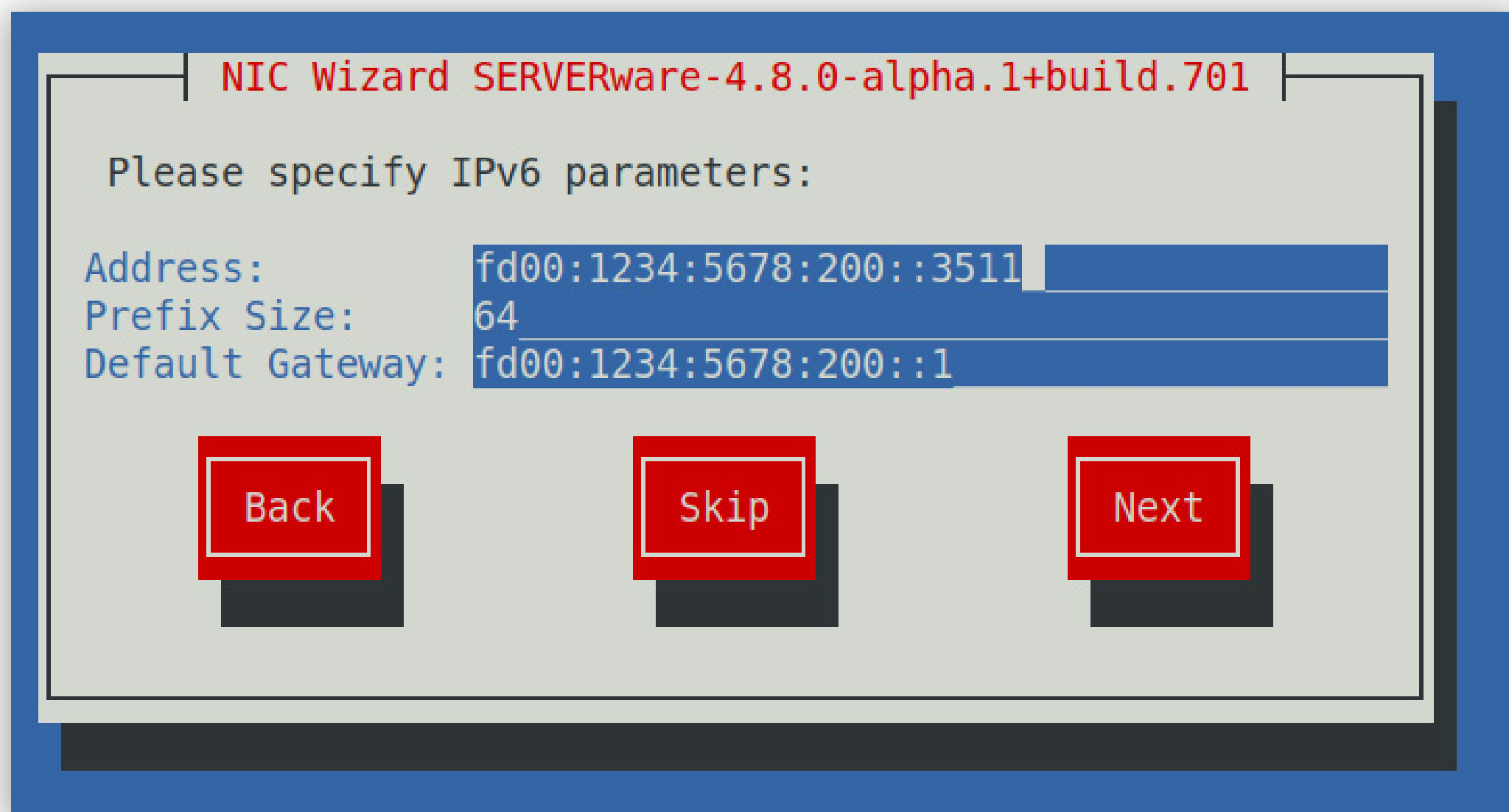
IPv6 Addressing for Hosts

SERVERware supports dual stack network configuration, meaning host interfaces can have both IPv4 and IPv6 addresses assigned.

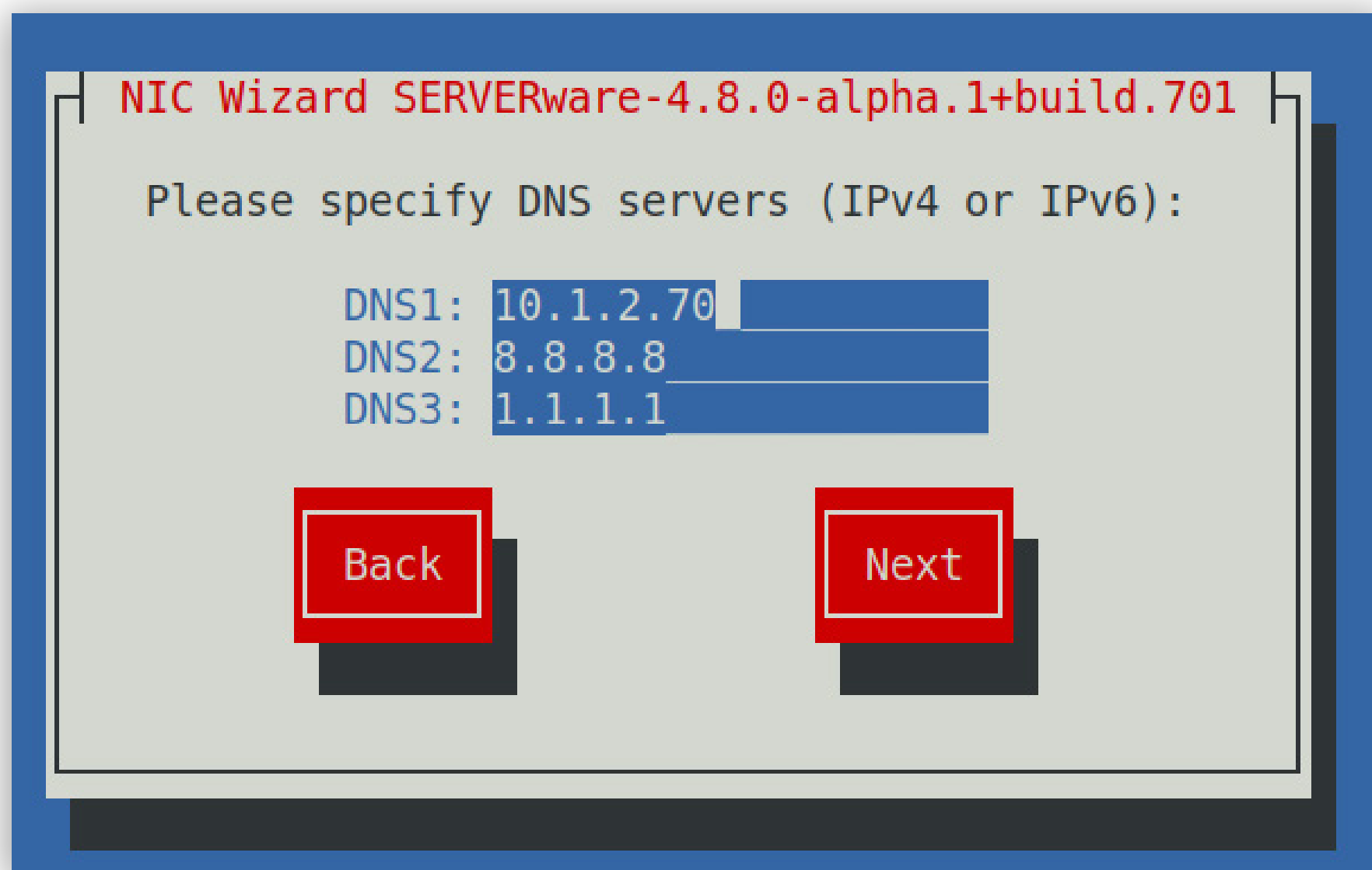




The network wizard supports assigning static IPv6 addresses to hosts, and their correlating network information, including subnet prefixes and gateway addresses.

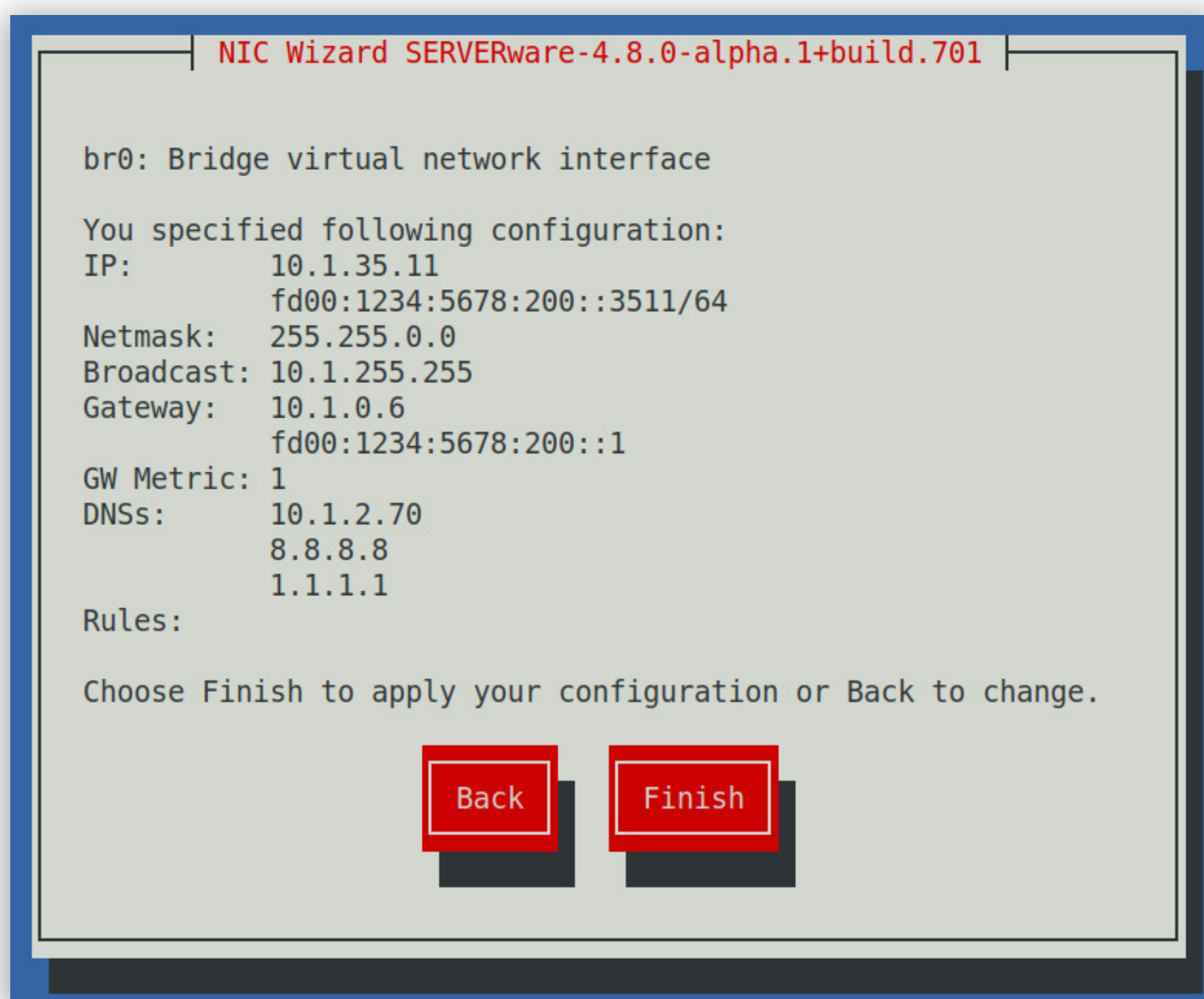


The DNS server configuration view has been separated into its own section in the network setup wizard.



SERVERware automatically performs conflict checks to prevent IP conflicts in case the assigned IPv6 address is already in use in the network.

Once the necessary information has been filled in, the netsetup wizard will display an overview of all the addresses, subnets, etc. before finalizing the network configuration files.



Networking

The Networking section in the SERVERware user interface now contains a new tab for adding IPv6 subnets.

Edit Subnet

Name:LAN

Type:MIXED

☒ Use this subnet for VPS Networking

Bridge:br0

IPv4

IPv6BETA

Routing prefix:fd00:1234:5678:200::

Prefix length:64

Gateway:fd00:1234:5678:200::1

Cancel

Update

Once added here, both IPv4 and IPv6 addresses will be available when reserving address space for Partition resources and configuring the VPS network interfaces.

Please note: The beta tag was added to inform SERVERware users that this feature is experimental.

Settings / Networking

Logical Subnets DNS

Logical Subnets

Subnet	Type	Address	Gateway	IP Pool	Public Net	
<div>IPv4</div> <div>IPv6</div> LAN	MIXED	10.1.0.0/16 fc00::/64	10.1.0.6 fc00::1	Enabled	N/A	✕ ⚙️ 📄
<div>IPv4</div> RAN	MIRROR	192.168.2.0/24	N/A	Disabled	N/A	✕ ⚙️ 📄
<div>IPv4</div> <div>IPv6</div> virtnet	VIRTNET	15.15.15.0/16 fd00:8e17:3ee1:c65a::/64	15.15.15.1 fd00:8e17:3ee1:c65a::1	Enabled	Enabled	✕ ⚙️ 📄

IPv6 Addressing for VPSs

Under the networking tab within the Create VPS/Edit VPS dialog, administrators will be able to assign IPv4 and IPv6 addresses. As with earlier versions of SERVERware, the administrator will be able to choose the logical subnet that will be connected to a VPS, including the newly added IPv6 subnet.

Edit VPS: PBXIPv6

General Security Resources Networking Environment DNS SRV

Select the logical subnet to which you want to connect this VPS:

Select a subnet in the list...

Interface: eth0

Network: LAN

MAC: ba:7b:b8:d6:42:11

IPv4

IPv6 BETA

Subnet: 10.1.0.0/16	Subnet: fd00:1234:5678:200::/64	✕ 📄
Address: N/A	Address: fd00:1234:5678:200::ad0a	
Ext Address: N/A		

Cancel

Save

When an address is added, SERVERware will automatically validate the entered IPv4 and IPv6 subnets to make sure the IPs belong to the selected subnet.

Geo Redundancy and IPv6

Administrators can configure VPSs to have both IPv4 and IPv6 as alternate IP addresses under Geo-Redundancy settings.

This will ensure that the IPs will be added to the VPS on the geo-redundant site once the VPS is taken over.

IP Address Management

Interface	Local Address	Alternate Local	External Address	Alternate External
eth0	IPv4: 10.1.35.17	N/A	N/A	N/A
	IPv6: fd00:1234:5678:200::cece	fd00:1a2b:3c4d:6070:200::acca		

Cancel

Save

DNS Resolving

SERVERware’s Controller handles DNS queries and supports resolving AAAA records for IPv6 addresses.

In case the address changes, the new IPv6 address will be propagated immediately.

sipPROT and IPv6

Boosting the security of systems protected by sipPROT, sipPROT can now detect attacks coming from IPv6 addresses. This also extends to the dynamic blocking functionality, meaning that sipPROT will temporarily, then permanently block an IPv6 address, according to the configured settings.

sipPROT

Dashboard

Attack Logs

Allowlist

Denylist

Dynamic Denylist

Settings

Manage Dynamic Denylist

Remove

Search

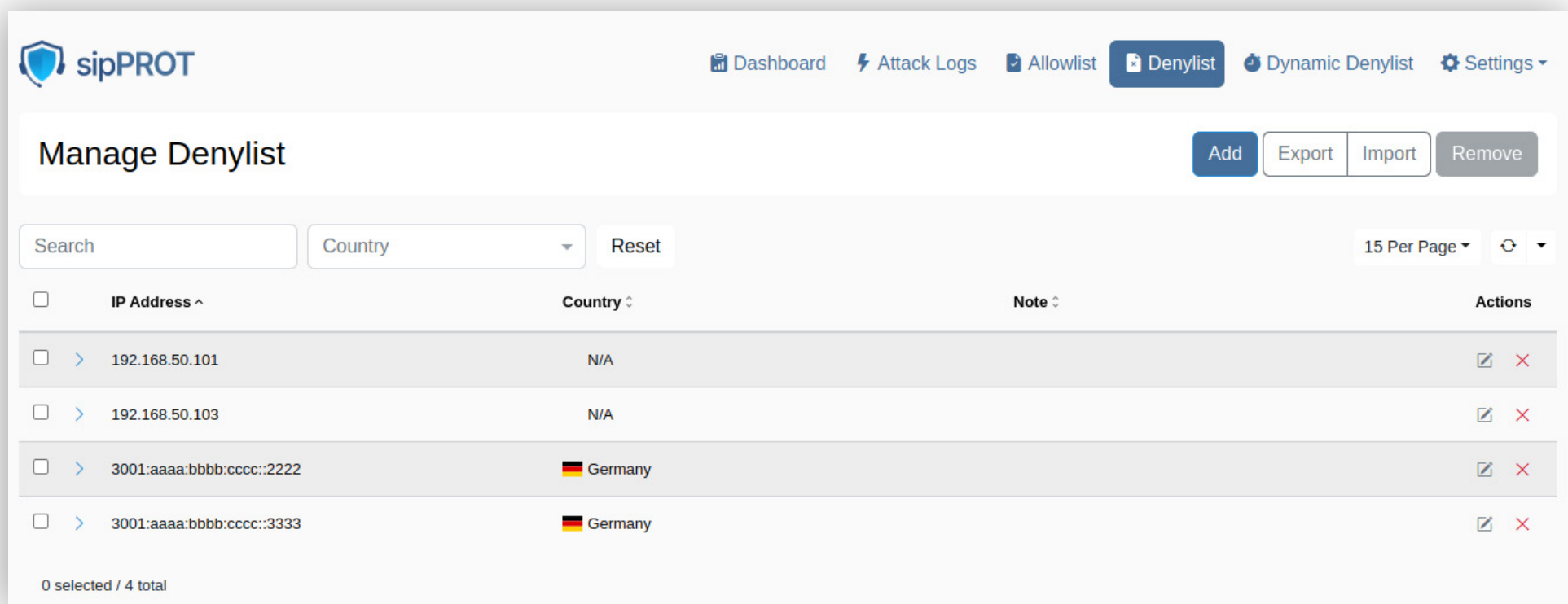
Country

Reset

15 Per Page

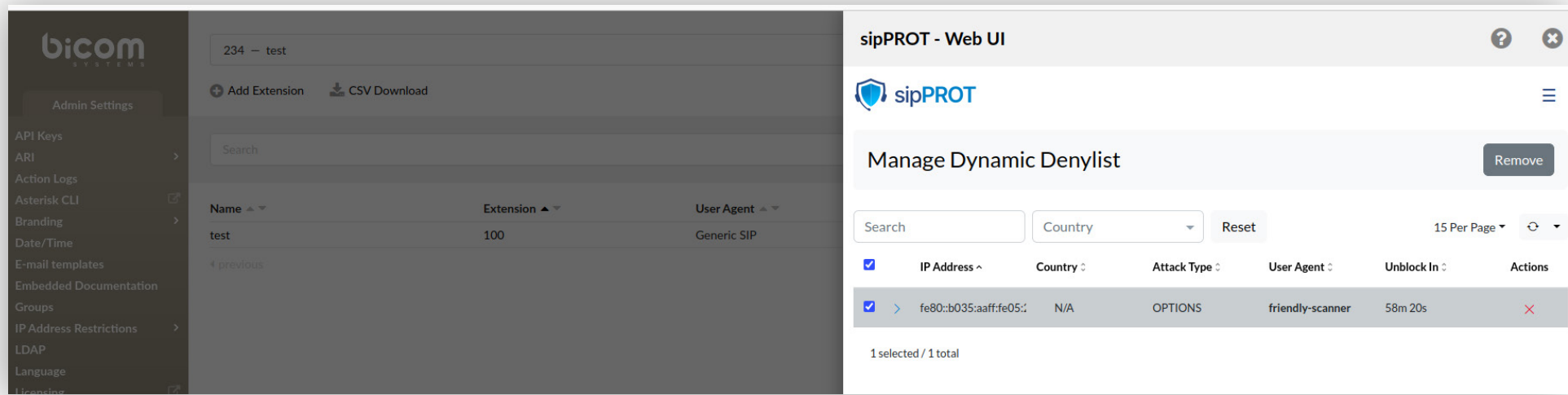
<input type="checkbox"/>	IP Address ^	Country ^	Attack Type ^	User Agent ^	Unblock In ^	Actions
<input type="checkbox"/>	> 3001:aaaa:bbbb:cccc::2222	Germany	OPTIONS	friendly-scanner	59m 18s	<div></div>

0 selected / 1 total



All attacks will be documented in the attack logs.

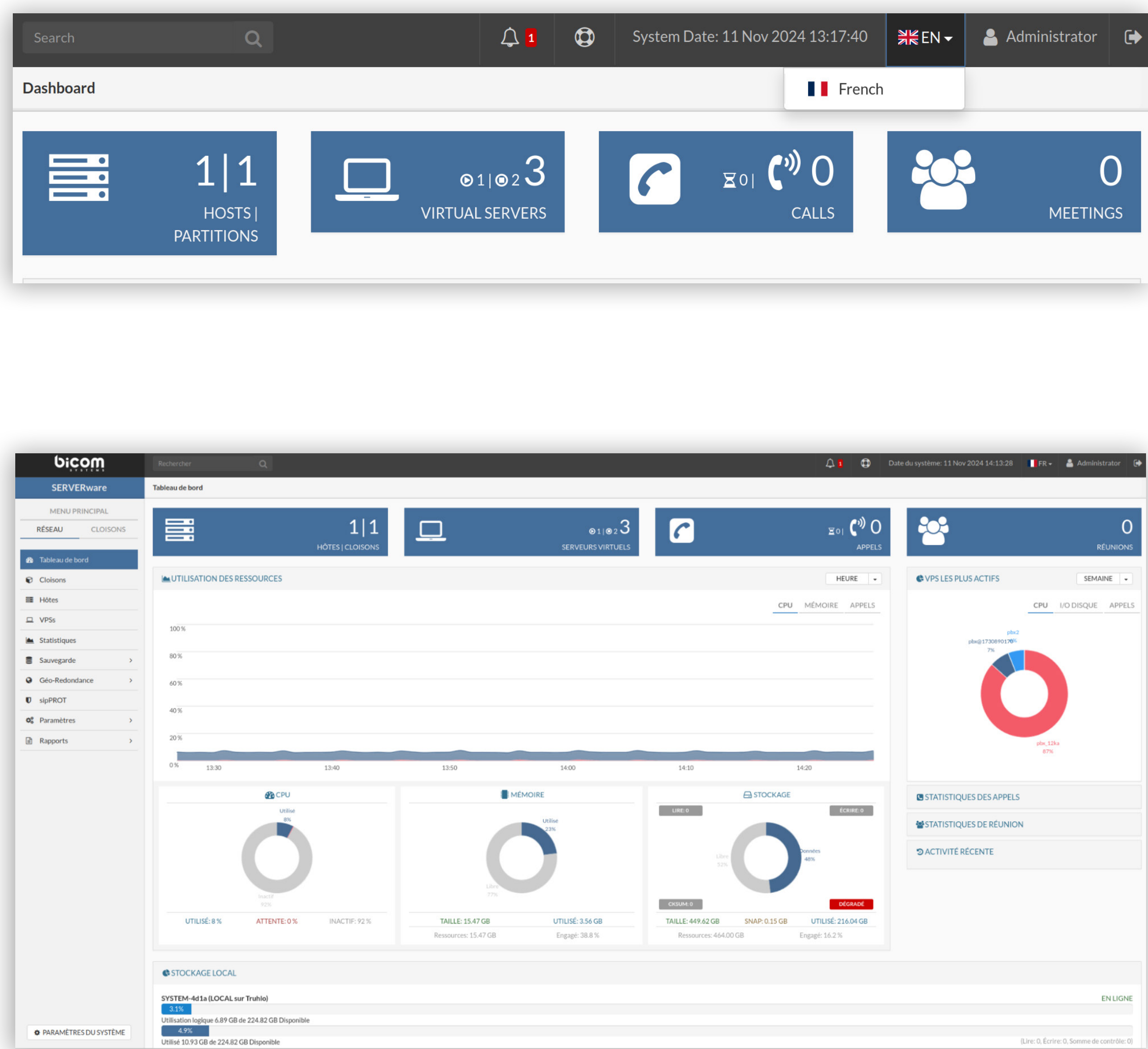
The changes are reflected in sipPROT standalone as well.



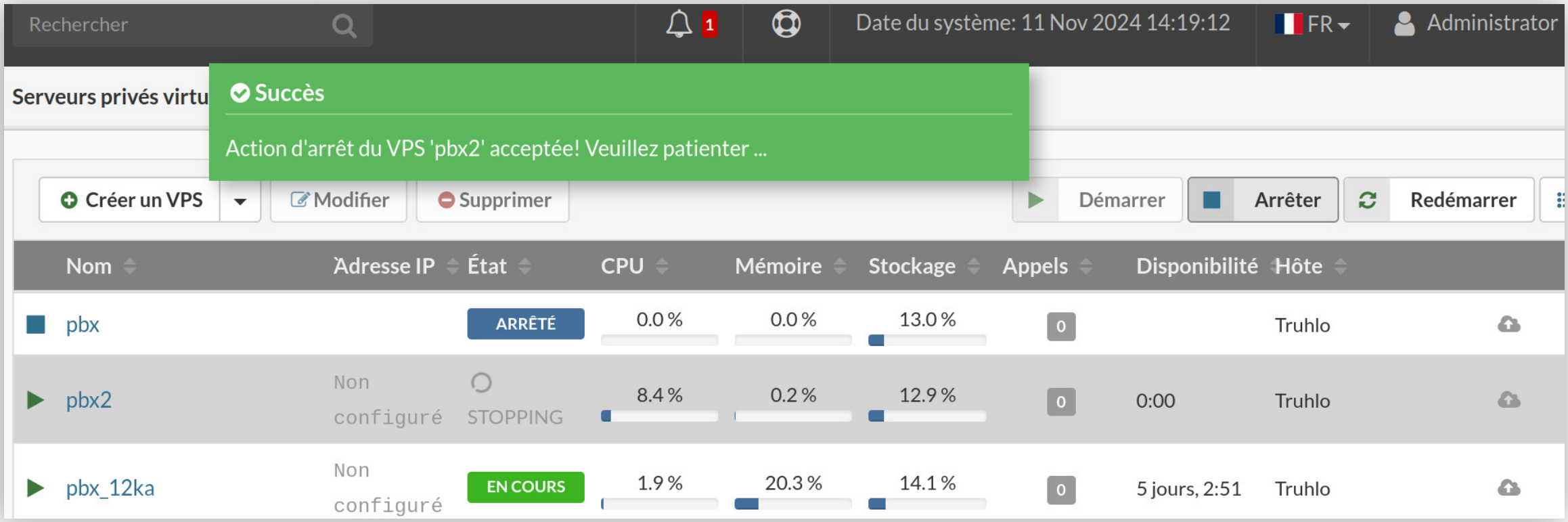
Internationalization of the SERVERware GUI

With the aim to reach an even wider audience, SERVERware’s user interface can now be translated to other languages thanks to the integration with the Weblate platform.

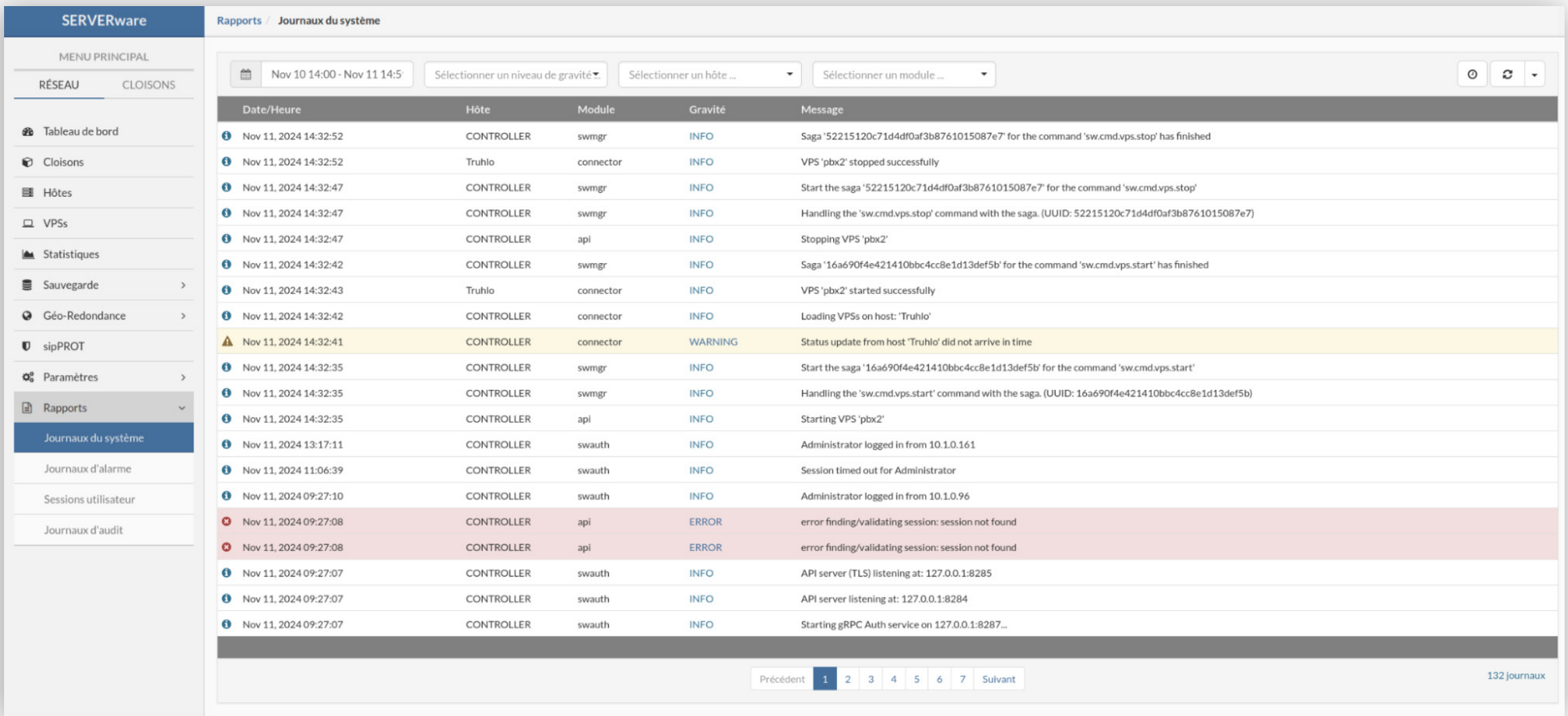
To change the language of the user interface, simply click on the flag item in the navbar to select the desired language.



Backend messages that are presented as a result of user interaction with the user interface are also translated. Those messages are the success or error messages visible on top as a popup notification.



However, to ensure faster and easier troubleshooting, which might require the assistance of our Support and Dev teams, the system logs will remain in English.



CNAME DNS Records for VPSs

SERVERware now supports assigning and resolving CNAME records to VPSs that are running on SERVERware.

It is possible to create multiple CNAME records for a single VPS, with different DNS names that will still be resolved to the same IP address by the SERVERware Controller.

The existing DNS SRV tab has been redesigned to offer a clearer and more intuitive way of adding DNS records to a VPS, with the option to edit existing records.

Edit VPS: PBXware1

GeneralSecurityResourcesNetworkingEnvironmentDNS

Select a DNS zone to add a DNS record for this VPS:

test-zone.com

Add DNS record

Record Type	Host	Record	Actions
SRV		<div>Service: _sip</div> <div>Protocol: _udp</div> <div>Priority: 1</div> <div>Weight: 10</div> <div>Port: 5060</div> <div>Target: PBXware1.test-zone.com</div>	<div></div> <div></div>

CNAME

Host: mt1

Target: PBXware1.test-zone.com

Cancel

Save

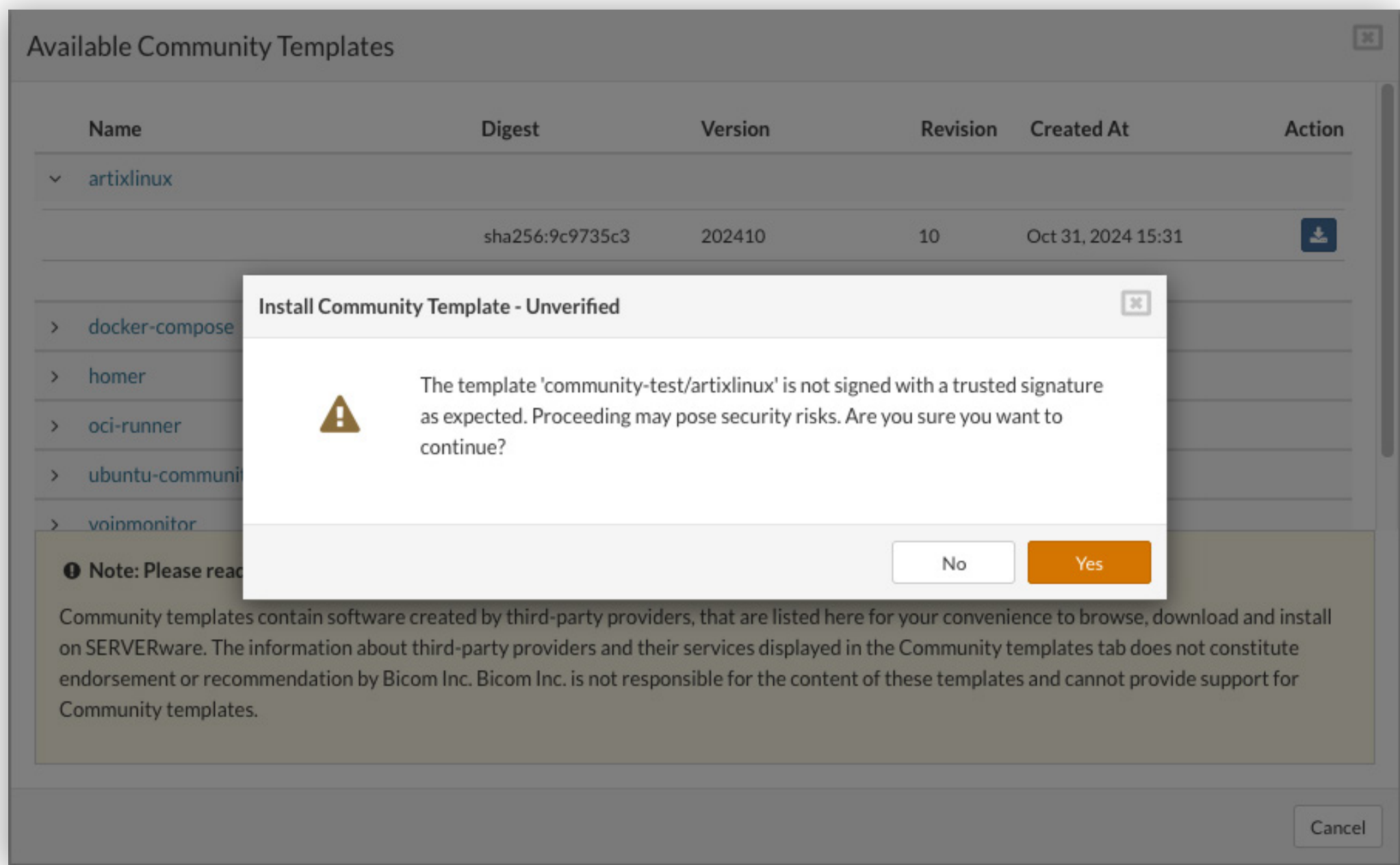
Secondary DNS Zone Persistence

For SERVERware sites that depend on the Controller’s ability to respond to DNS queries, the DNS zone information will remain reachable even in case the primary DNS zone is down.

The information is stored in a file that is stored on the site that is configured as the secondary DNS zone and it will respond to DNS queries if the primary zone is down.

Signed Official and Community Templates

All Official and Community templates are now automatically signed with an encrypted private key after they are built and published to the official Bicom Systems registry. SERVERware will verify the signature upon template installation and warn the user in case the selected template is not signed with the appropriate key, or signed at all.



API Documentation

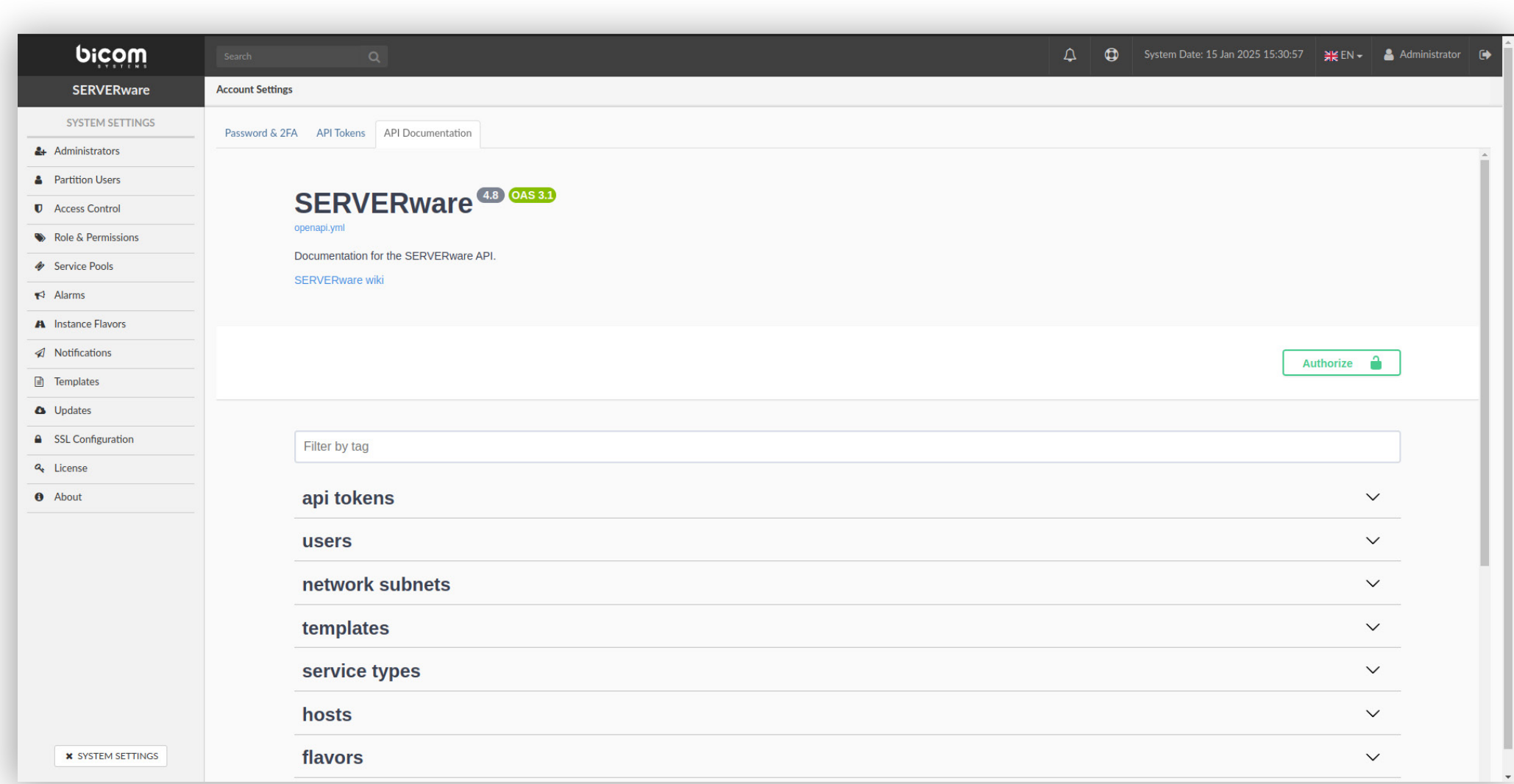
SERVERware's UI now contains detailed documentation for APIs, specifically targeted towards managing VPSs, meaning developers will be able to:

- perform create, read, update and delete operations, which will allow for creating new VPSs, starting, stopping, or restarting a VPS, enabling or disabling backups for a particular VPS, and more.
- handle network interfaces assigned to a VPS, DNS zones and records, OCI environment variables,
- extend or shrink the VPS volume,
- control snapshots.

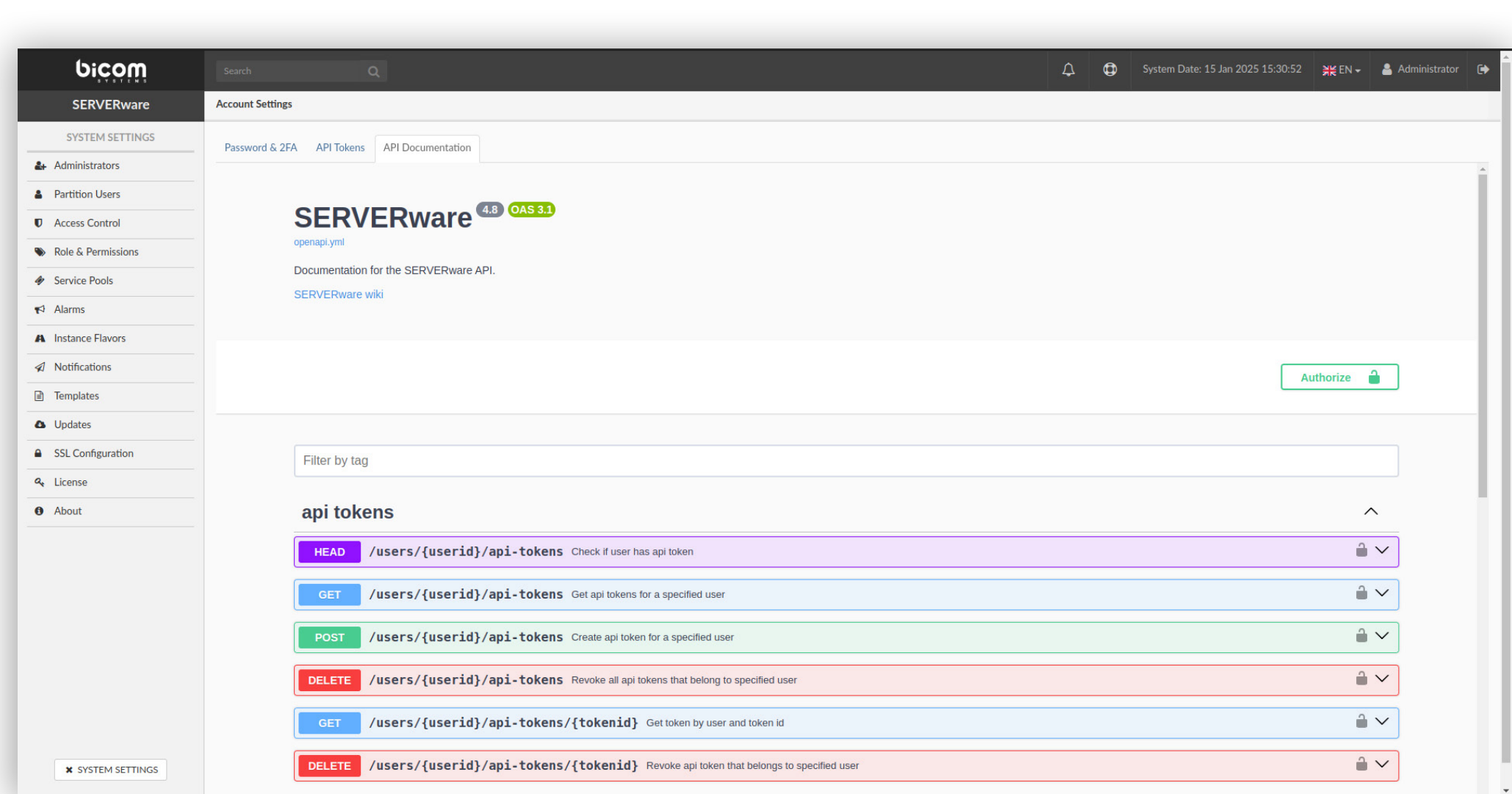
Considering that deploying a new VPS is an action that requires coordination of various other components, the documentation also includes actions performed over:

- hosts,
- network subnet types,
- service types,
- templates,
- users,
- API tokens,
- flavors,
- partitions.

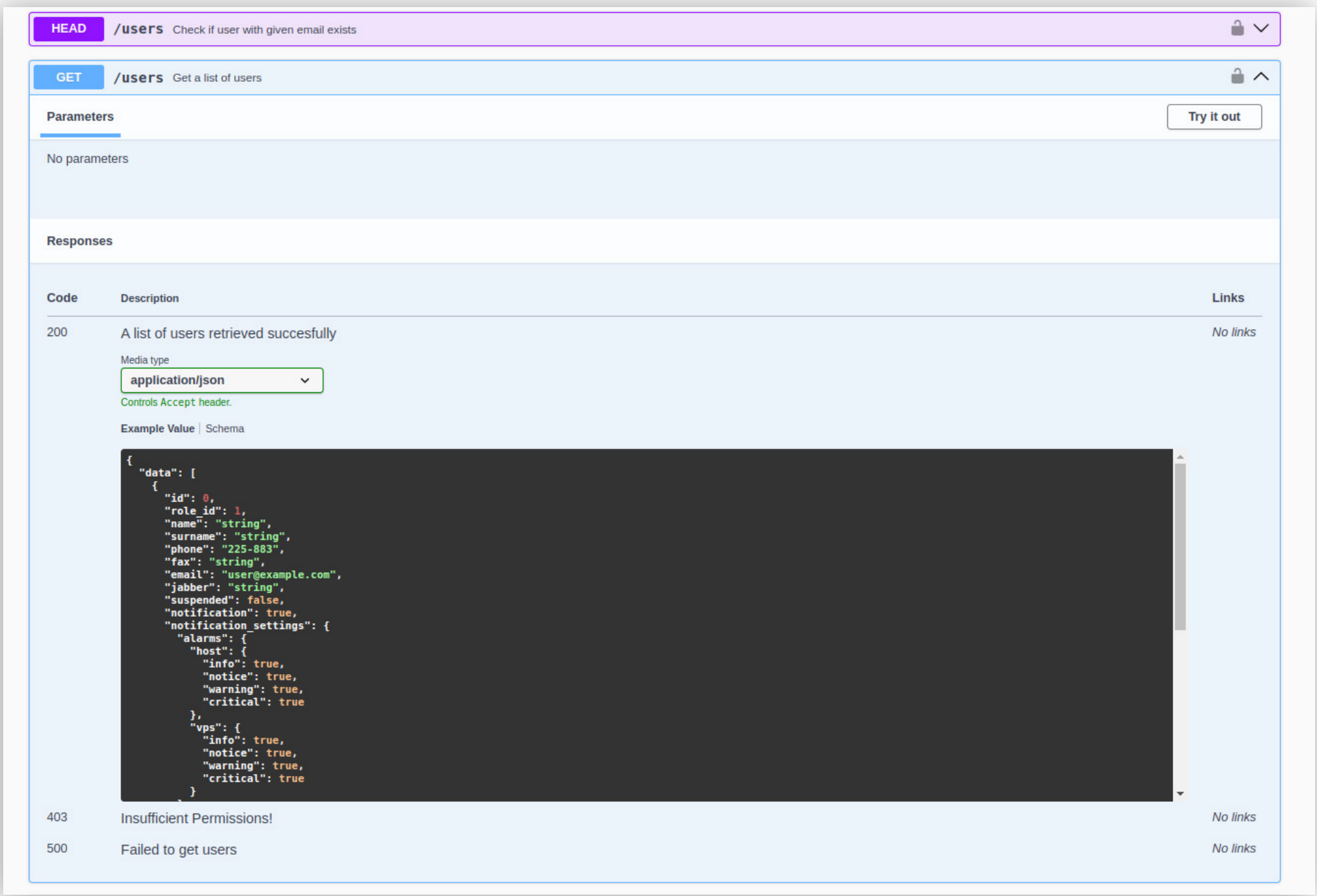
API Documentation can be found on the dedicated tab under Account settings.



SERVERware’s API documentation adheres to the OpenAPI specification, and is stored in the YAML format.

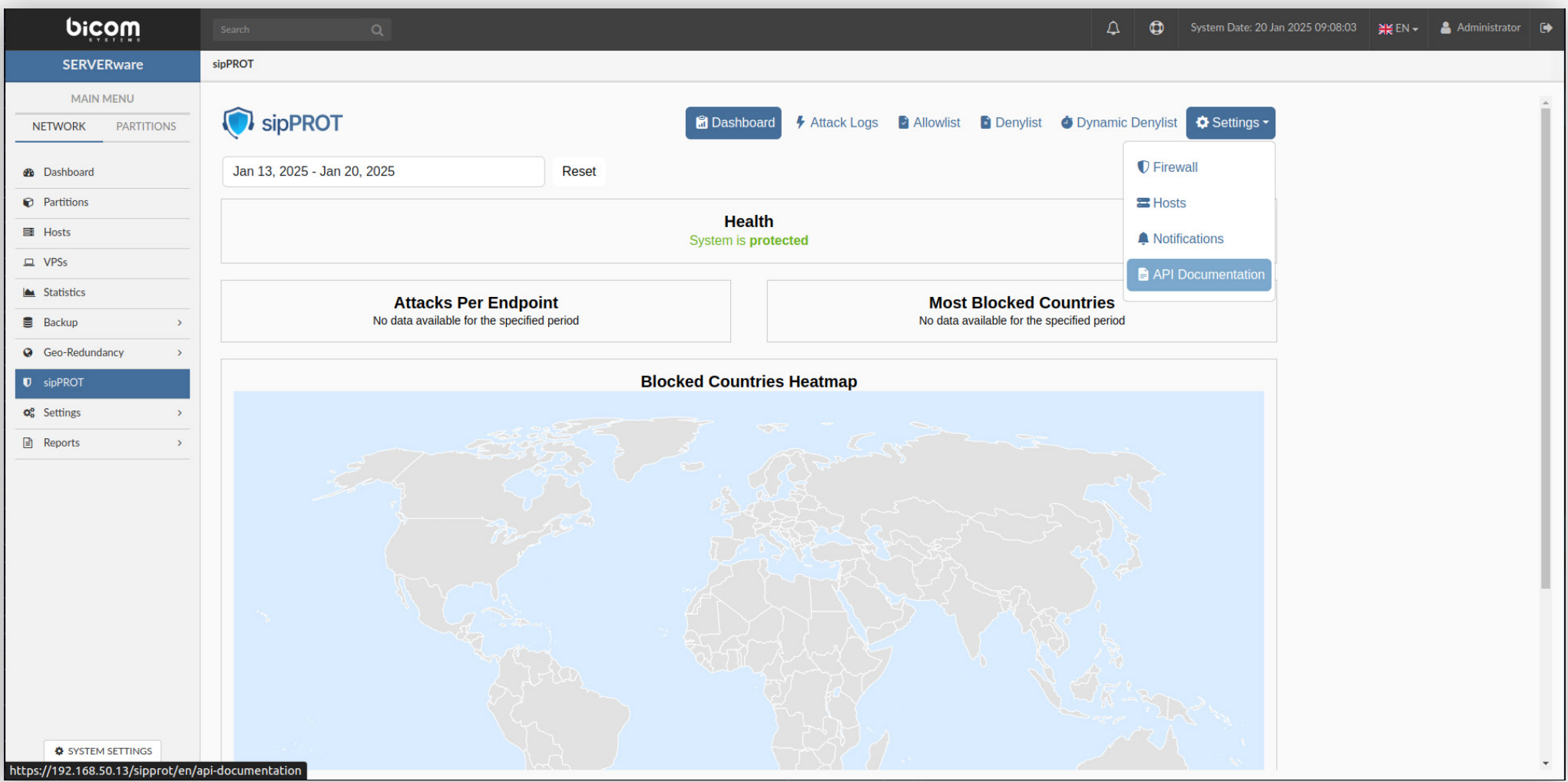


Each API call can be tested directly from the user interface, and has an example output included.

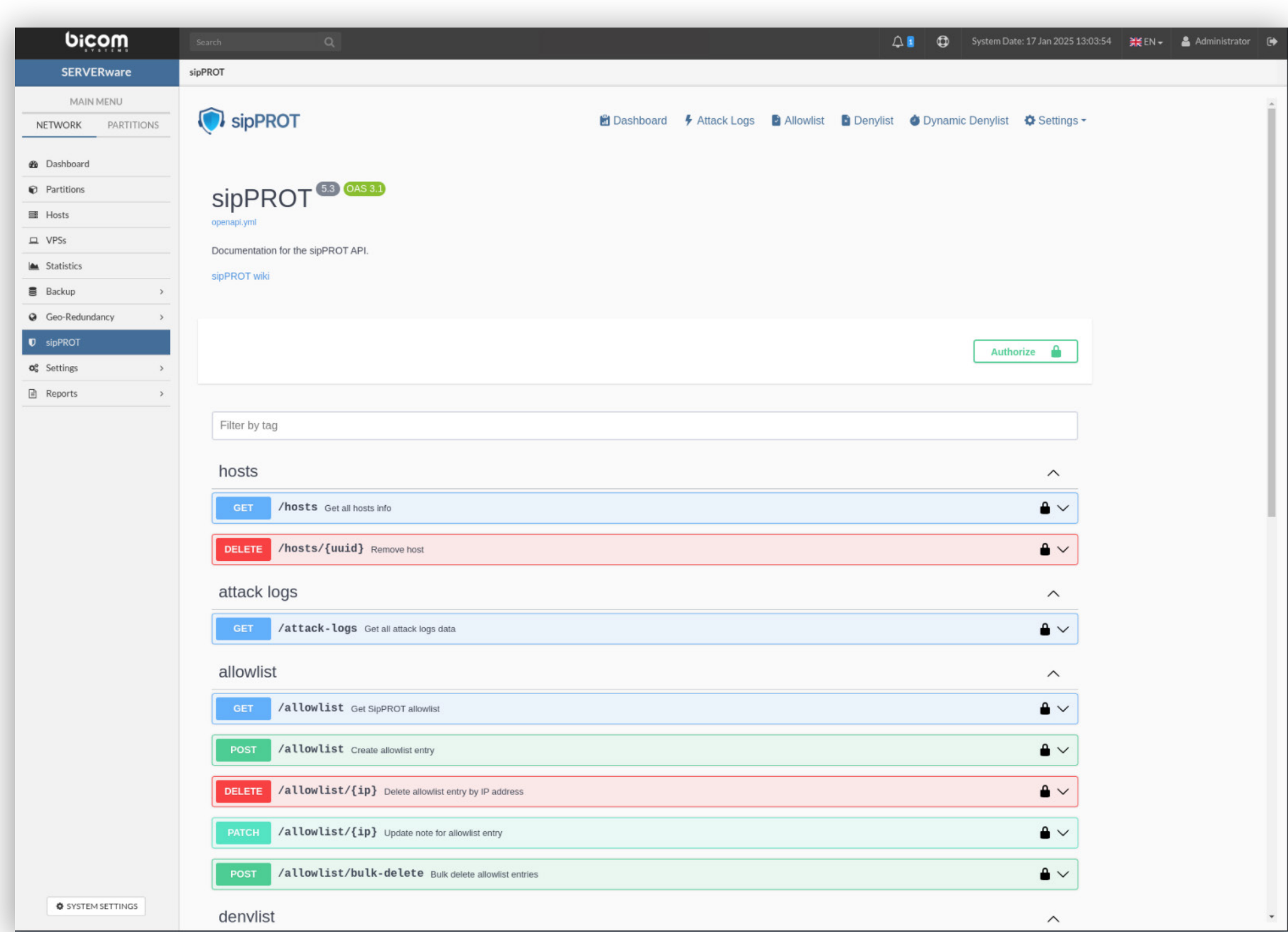


API Documentation for sipPROT

The documentation is expanded to include sipPROT’s APIs for managing IP address lists. The documentation can be accessed from sipPROT’s Settings drop down menu.



Developers will be able to manage and fetch data from the allow and deny lists, including the dynamic denylist.



The documentation also includes calls for getting data from the Attack Logs and sipPROT’s Hosts section.

Note: The API Documentation for sipPROT Standalone will be available with the next sipPROT release.

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