PRODUCT OVERVIEW
SERVERware

bicom
SYSTEMS

WHAT IS
SERVERware?

The only virtualization platform specifically designed for Hosting Telephony & Cloud-based UC. It helps deliver a wide range of IP services aimed at maximizing service uptime, availability and overall stability.

It is a core tool in Bicom Systems' arsenal that prioritizes data integrity with its own fault-tolerant backup system and data replication options.

SERVERware allows you to run multiple different communications services at the same time with the use of OCI imaging and KVMs, the lynchpin of a business looking to scale up.

It is available in a variety of different editions depending on the needs of your business: Standalone, Mirror and Cluster.

Foundation for Business Data Integrity

SERVERware serves as the foundation for hosting telephony and cloud-based Unified Communications (UC) services. It prioritizes data integrity by offering fault-tolerant backup systems and data replication options.

Editions Catering to Different Business Needs

SERVERware provides three editions: Standalone, Mirror, and Cluster. These cater to businesses of varying sizes and operational requirements, ensuring a suitable package for different needs.

Key Features and Benefits

SERVERware offers essential features such as support for the PBX platform, geo-redundancy, built-in backup, DNS & NAPTR/SRV integration, OCI image support, KVM support, partitioning, sipPROT firewall, SSL settings, virtual networks, VPS management, system dashboard, and storage stability. These features enhance data security, redundancy, and efficiency for businesses.

Data Integrity and Business Continuity

SERVERware's core feature, geo-redundancy, ensures business continuity by replicating data to a separate site, reducing downtime and minimizing data loss in case of disasters or outages. It provides infrastructural flexibility and reduces business risk. Additionally, built-in backup and advanced storage solutions like OpenZFS contribute to data integrity and reliability.

Choose Your Edition

The three editions of SERVERware each cater to businesses of different sizes and operating requirements, ensuring an ideal package for affordable prices. Choose from:
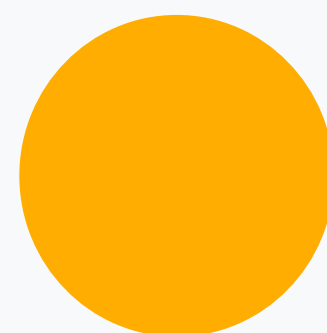
Standalone Edition

Perfect for independent operations and small enterprises.

Mirror Edition

Enhance redundancy and data security with mirrored configurations.

Cluster Edition

Optimize performance and reliability with clustered setups for larger enterprises.

Essential Unified Communications Features & Benefits

BUILT TO SUPPORT THE PBX PLATFORM

While SERVERware does house a suite of incredible features, it was primarily built to act as a foundation for the PBXware platform and is optimized for voice call functionalities.

GEO-REDUNDANCY

One of SERVERware's core features is geo-redundancy, allowing companies to have a separate site that replicates data from the main site and serves as a backup option in case the main one fails due to natural disasters, power outages or similar.

This ensures minimal service downtime and, depending on the frequency of the data replication, minimal data loss.

Having geo-redundancy as a backup option allows for more infrastructural flexibility and reduced liability and risk for your business, making it a solid choice.
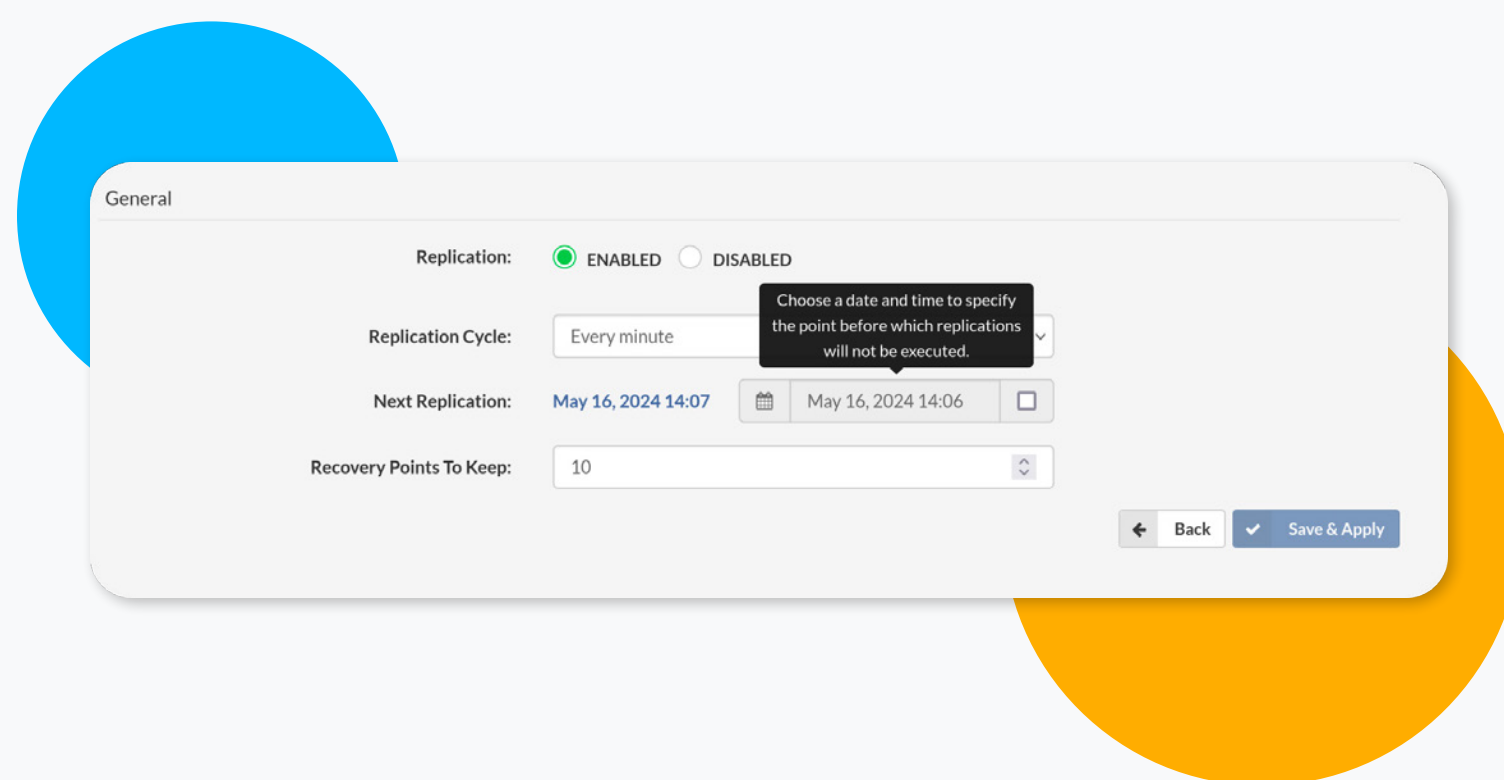
The data replication and takeover settings can be initiated manually, or set up to be performed automatically, depending on your preferences.
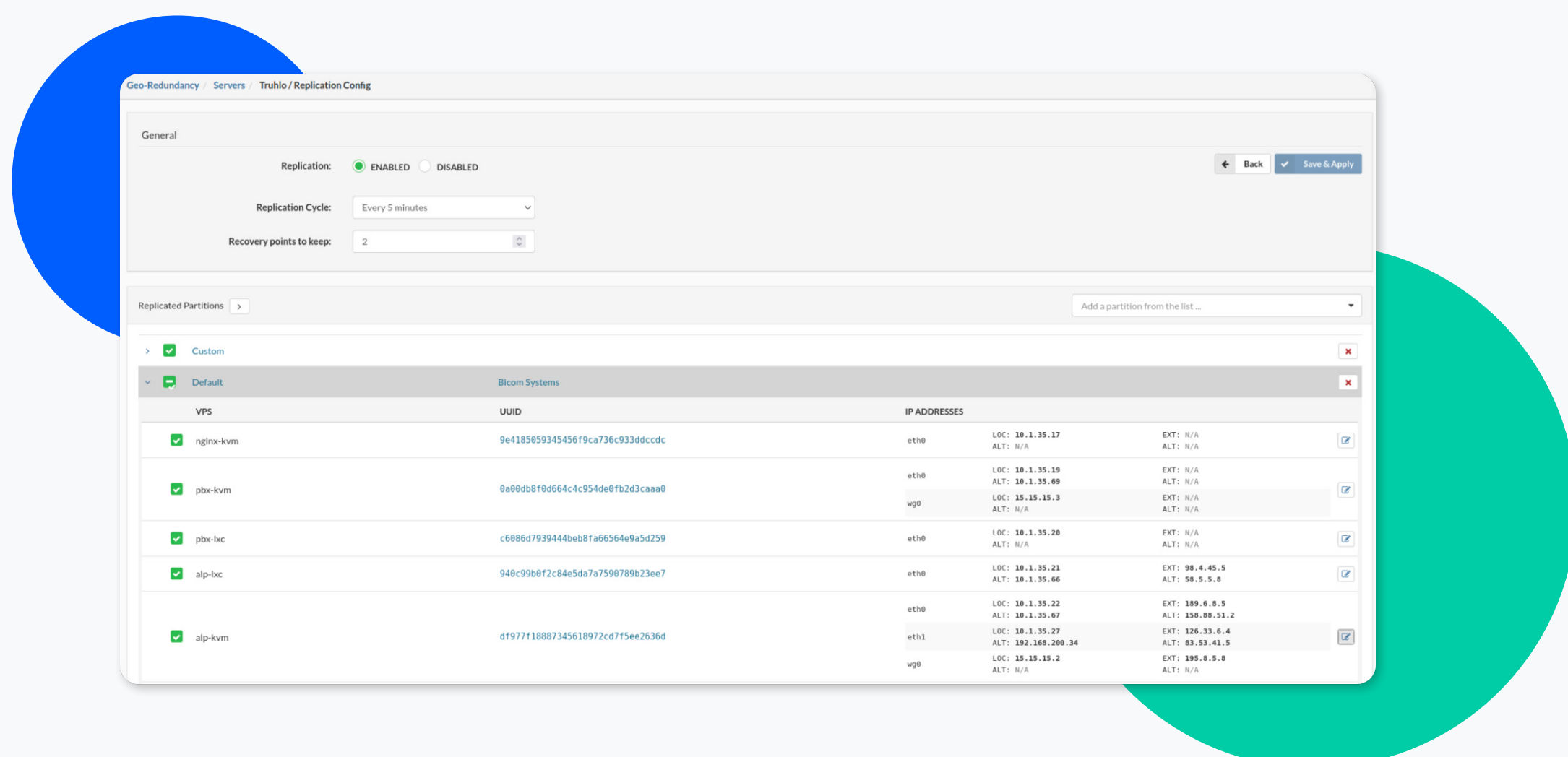
REPLICATION AND BACKUP FROM LOCAL STORAGE ON PROCESSING HOSTS

Add processing hosts from remote locations (and even different networks) with ease without disrupting server operations.

VPSs running on remote processing hosts will use the processing host's local storage for all generated data while still enjoying the geo-redundancy and backup capabilities that SERVERware offers.

BACKUP

SERVERware also provides a built-in backup feature for hosted VPSs. Backup servers are set up for the purpose of data restoration in the event of a major issue with the main server.

DNS & NAPTR/SRV

SERVERware comes with an integrated DNS server, allowing it to function as an authoritative server for DNS zones.

When hosting a DNS zone, it becomes the authoritative server for the names in that zone, giving it the ability to answer queries for any of them.

Each VPS hosted on SERVERware will be assigned a name in the zone and can be reached using its partition name rather than its IP address, giving SERVERware system administrators the ability to manage DNS/NAPTR records for all VPSs hosted on SERVERware through the same UI.

An additional benefit comes in the form of defining DNS zones, so in case of a take over to a remote location, your records will automatically be repointed to another IP address.

OCI IMAGE SUPPORT

SERVERware has adopted the Open Container Initiative (OCI), allowing the use of third party OCI images for software templates, removing the hassle of needing to generate one from scratch, making setup and management that much easier.

This is further streamlined by the fact that all SERVERware templates conform to the OCI standard.

This further expands SERVERware's hypervisor functionalities, allowing it to smoothly run a number of different communications services and thrive in a varied number of software ecosystems, as well as further improve security and ease of management.
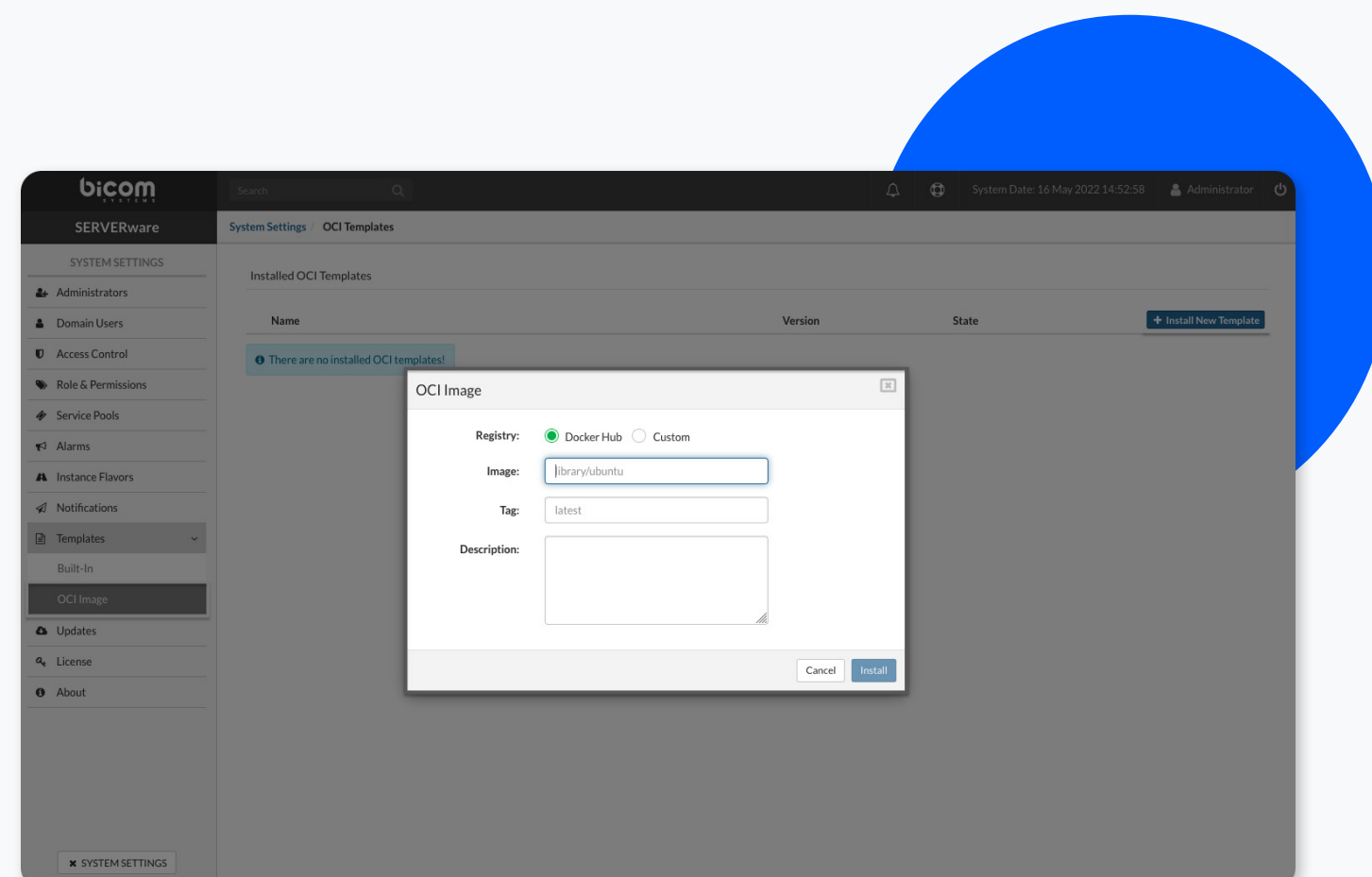
MODERNIZED TEMPLATE STRUCTURE

SERVERware's streamlined software template structure separates templates into three categories: official, community, and third-party.

The official ones are sourced directly from Bicom Systems' repository and are ones that receive direct support from Bicom Systems in terms of upgrades and maintenance.

Third-party templates, as the name implies, come from an outside source not officially supported by Bicom Systems, and the user installs them at their own discretion.

The difference between them and Community templates is that the latter can be found on Bicom Systems' repository and are often ones that are deemed useful for Bicom's partners, like different VoIP monitoring tools and software.

KVM SUPPORT

Thanks to KVM, SERVERware has the capability to power their VPSs to become a standard VM alternative that can run on the Linux kernel, helping enhance data security.

KVM-generated VPSs can either be PBXware or Docker containers that are fetched as OCI images from various repositories like Docker Hub and similar.

Users can distribute and package service software through the use of open tools and standards collaborations.
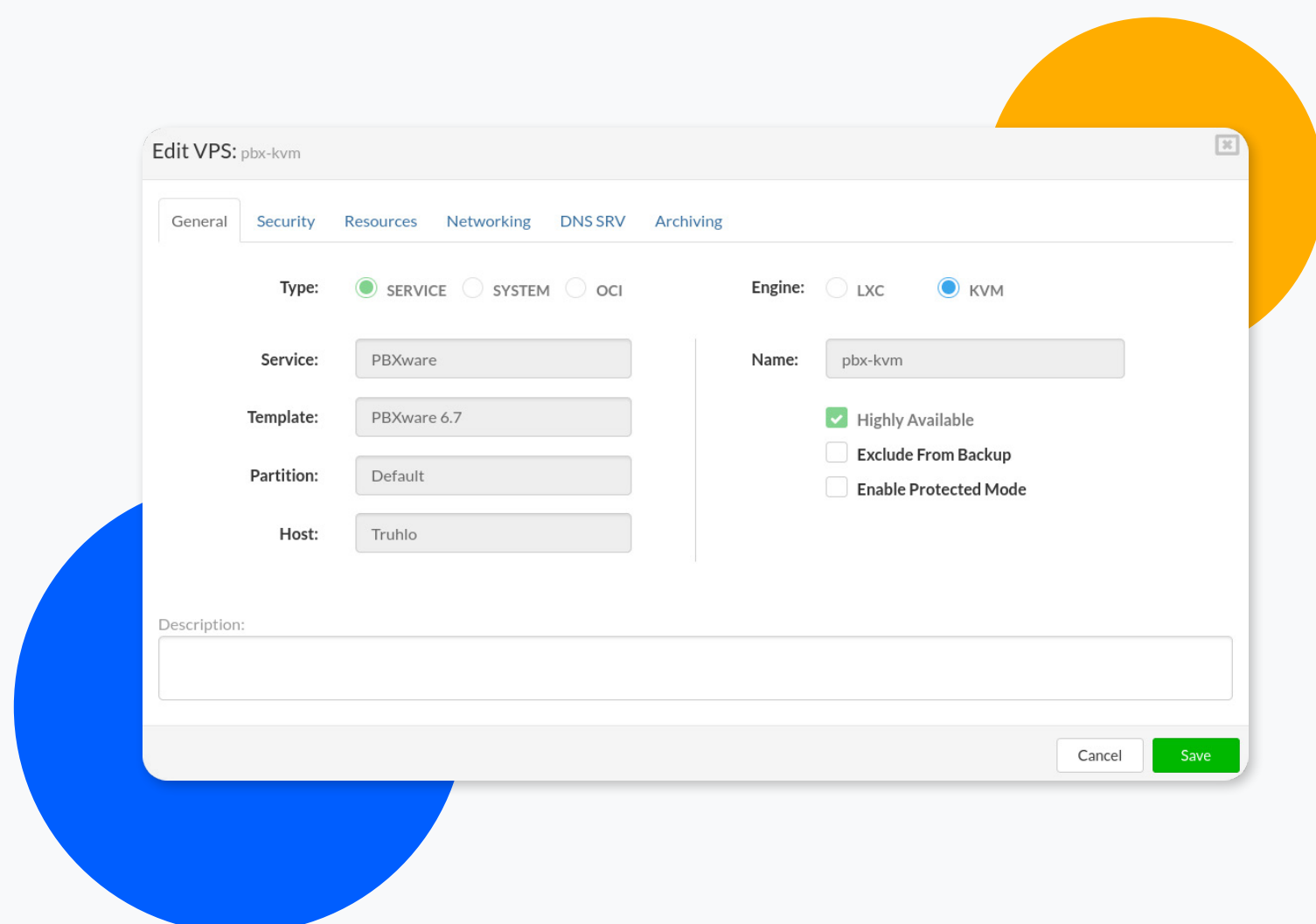
PARTITIONS

In order to improve administrative use in regards to data security, SERVERware lets you use partitions to better organize your server infrastructure.

These partitions can then represent specific departments or positions within the company, each with their own designated resources and permissions.

Alternatively, it also provides users access to different operating system environments and allows them to create separate resource management and allotment templates within them.

Members of a partition consist of partition Administrators, VPS Administrators, and VPS Owners, where each user has different permission levels, allowing resource management and monitoring. The SERVERware Virtualization Platform allows you to allocate and extend the IP pool in a LAN subnet and then split the IP pool per partition.

Additionally, it allows you to automatically add users to the partition corresponding to their designated role immediately upon user creation.

sipPROT

To shore up your chosen SERVERware edition, you have the option of grabbing our other product, sipPROT which, alongside SERVERware, helps provide a built-in firewall to both monitor live SIP traffic and react quickly to any abnormalities, updating permissions on the fly to stop them in their tracks.

System admins utilizing SERVERware can easily export and import allowlists and denylists to make further system management and setup easier.

The IP address ranges from entire countries can be blocked too in case of a large-scale DDOS attack.
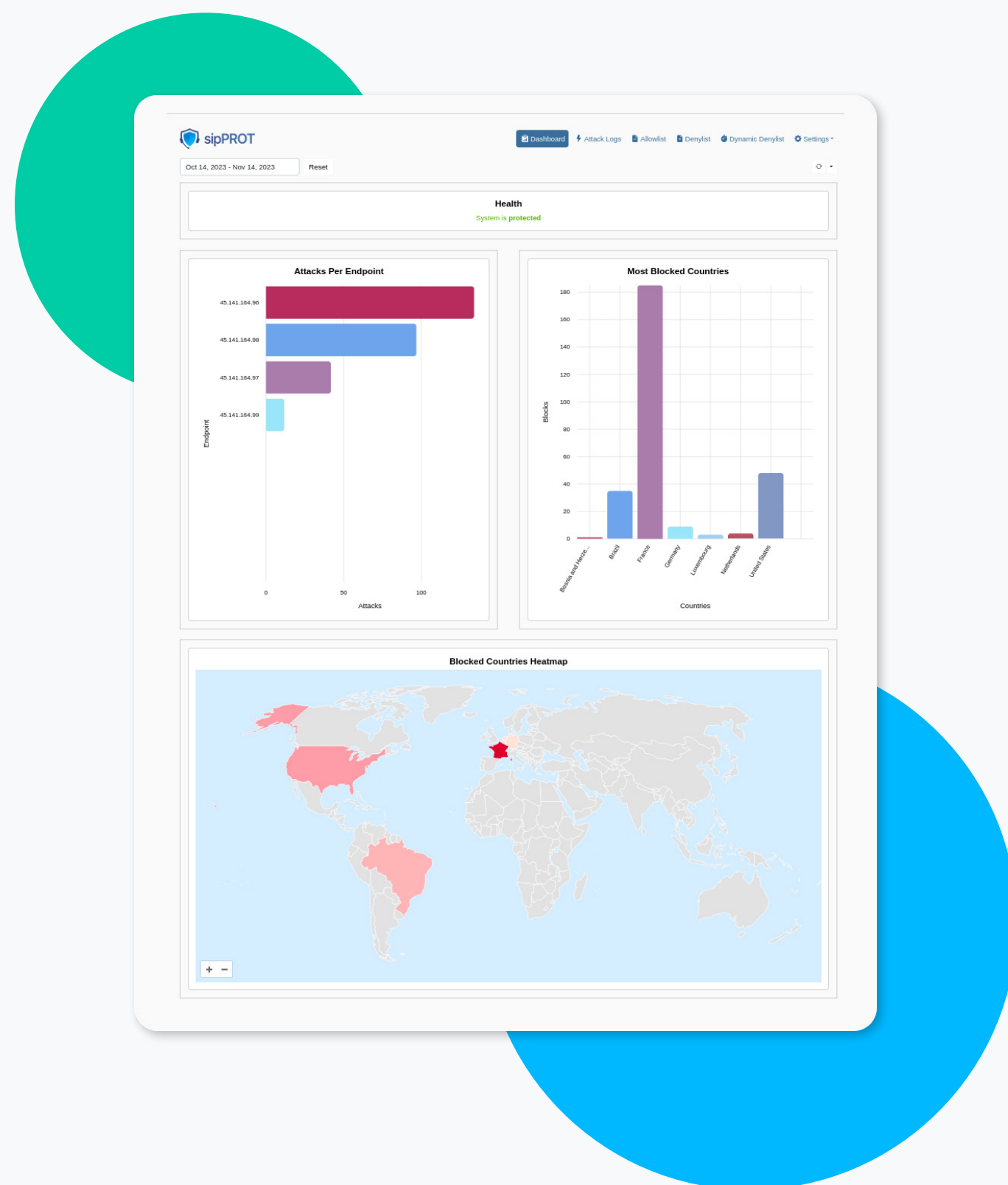

SSL SETTINGS

In order to secure customer information, one needs to utilize an SSL certificate to be able to efficiently encrypt it. This is made easier with SERVERware where you can upload SSL certificates through a dedicated menu in the user interface, either manually with your own private key, or automatically with a certificate from an ACME server.

VIRTUAL NETWORKS

Virtual networks in SERVERware allow network administrators new and more efficient options to easily create a network connection between VPSs and greater flexibility in provisioning the network to specific needs and applications. SERVERware uses WireGuard communication protocol to ensure the capacity to move workloads across the network infrastructure without compromising service, security, and availability. Both, IPv4 and IPv6, are supported for virtual networks in SERVERware.
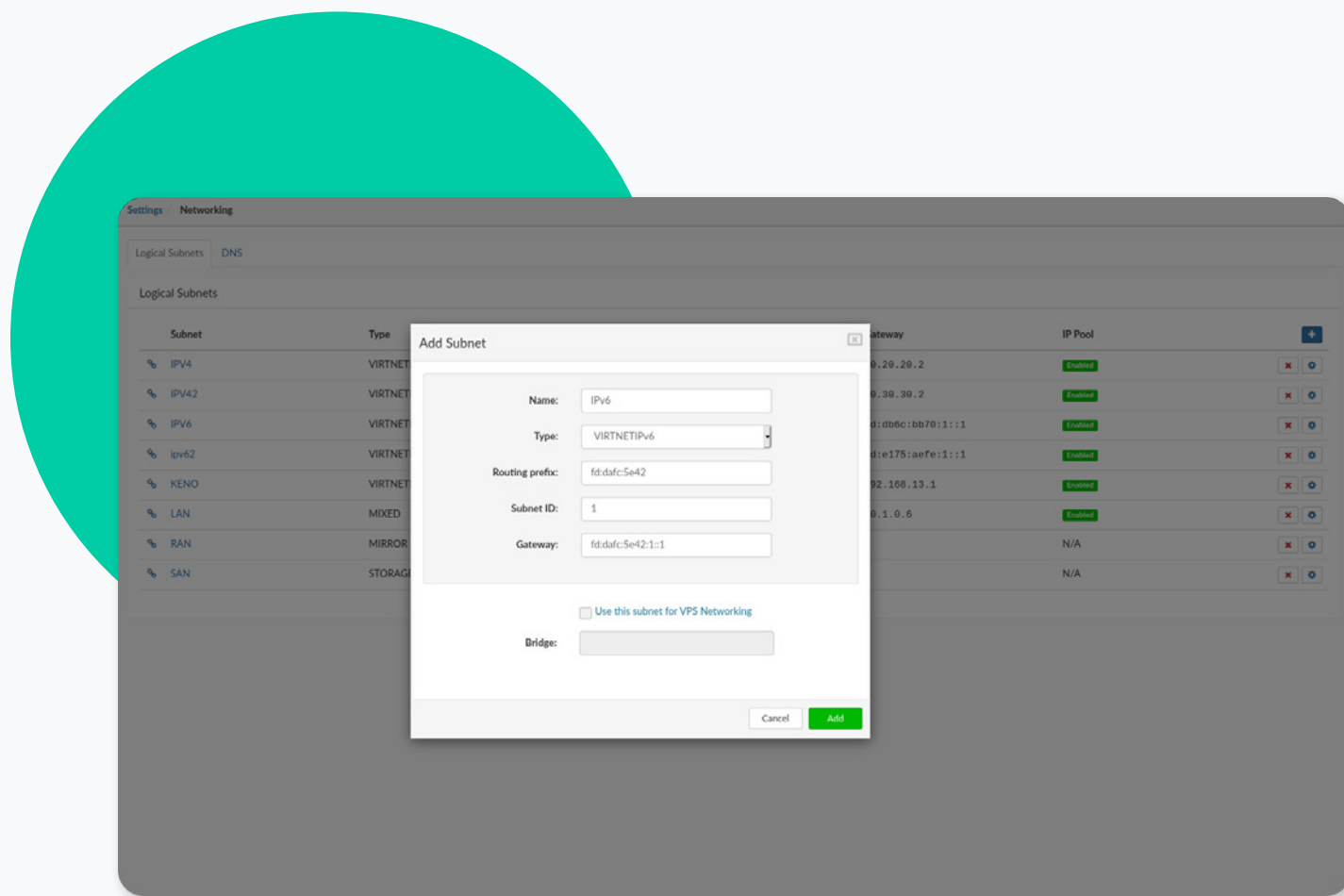
VPS MANAGEMENT

With SERVERware you can easily deploy Virtual Private Servers (VPSs) using pre-allocated resource pools (CPUs, memory, storage, and broadband), but you can also create your own resource templates. SERVERware system administrators can access the command line interface of all VPSs making management and troubleshooting easier.

Additionally, you can shrink VPS storage volumes based on data used, all automatically calculated through SERVERware, but not before stopping the VPS beforehand.
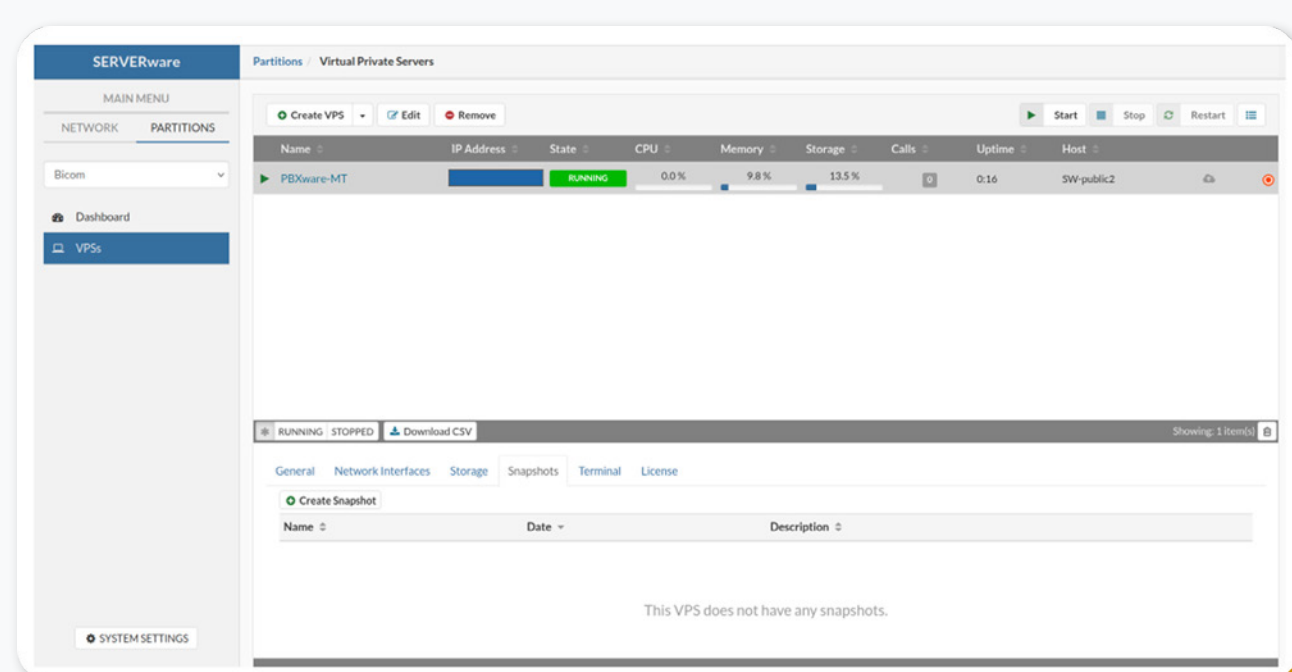
VPS SNAPSHOTS

Create snapshots of VPS datasets to serve as anchor points to return to in case you need to revert back to a previous state due to an unforeseen issue.

Snapshots will not occupy too much storage space and are automatically removed after 15 days for the sake of better organization and maintenance.

SYSTEM DASHBOARD

Monitor your system resources and status of all hosts and VPSs with the SERVERware Dashboard. All relevant system information is contained within a single screen and delivered comprehensively in real-time. Recently triggered alarms are displayed on the dashboard, along with call and Meeting statics from all VPSs, as well as a short action log, containing useful information on most recent actions performed within the user interface.

STORAGE STABILITY

The underlying storage solution in SERVERware is OpenZFS, a next-generation file system technology. Thanks to OpenZFS, SERVERware supports:

- disk redundancy

- expanding storage by adding more drives into the storage pool

- adding hot spares that will automatically replace a failed disk

- monitoring storage health

Expert Support at Your Fingertips

Our highly trained, in-house team of experts are available globally to address any system-related issues or questions that you may have, ensuring seamless operations and peace of mind.

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to find out more about our services

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