

zadara

zCompute Release Notes

Release 24.03

Zadara

Feb 24, 2025

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This page documents product updates to Zadara Compute Cloud (zCompute).

These release notes contain important information available at the time the release, noting new or updated features, important bug fixes, known limitations and deprecated functionality.

ENHANCEMENTS CHANGELOG REVISION HISTORY KNOWN ISSUES SOFTWARE
LIFE-CYCLE If you have any question regarding the latest Zadara software version, please contact [Zadara Support](#) and one of our team members will reach out.

Latest zCompute Version: 24.03

KEY ENHANCEMENTS

Release 24.03 is a major version, that includes new features, scalability, security and usability improvements, and bug fixes.

1.1 Backup to Object Storage

zCompute 24.03 introduces [Backup to Object Storage \(B2OS\)](#).

zCompute Backup to Object Storage (B2OS) extends backup and restore capabilities beyond local block storage. It enables backing up and restoring VMs and volumes that are protected by protection-group to and from Zadara Object Storage systems.

These Zadara Object Storage systems can also reside in different physical locations than the source zCompute cloud, allowing recovery to any zCompute cloud in the event of a site-level failure.

On top of this capability, from zCompute v24.03, Protection Groups also provide VM-level crash-consistent backups. Backup snapshots are taken as an atomic operation on all volumes of a protected VM, treating the VM's volumes as a consistency group.

zCompute B2OS is an integral feature of zCompute. It provides full backup and restore functionality without requiring third-party software or installing software agents on protected VMs.

Protection groups are backup policies that define the backup schedule for protected VMs and volumes, including the backup interval and retention period.

With the introduction of B2OS, you can optionally configure protection groups to back up protected VMs and volumes to Zadara Object Storage.

Tenant admins can now access the **Management > Configuration** tile's **External Endpoints** configuration, required for defining remote Object Storage.

1.1.1 Known limitation

By design, disabling a Protection Group only disables the Protection Group's automatic scheduled backups.

A disabled Protection Group still allows the **Trigger Now** action for an on-the-fly user-initiated backup of the Protection Group's protected resources.

1.2 EKS-D Upgrade

Important: EKS-D deployments currently running on zCompute must be upgraded, before doing the upgrade to v24.03. For all zCompute clouds running v24.08.4, the upgrade machine image is already available in the **Machine Images > Marketplace**.

The main change that requires this upgrade is the way Kubernetes connections to EBS volumes.

Another recommended change is to use Kubernetes instances for running the Kubernetes cluster control nodes, instead of using Auto-Scaling Groups (ASG). See the [README](#) for EKS-D the public Zadara Examples GitHub repository.

1.3 Automatic OS Detection and VM OS Settings

zCompute 24.03 introduces automatic OS detection when creating a VM instance.

In the **Compute > Instances > Create Instance** dialog, the **Operating System** field is automatically populated according to the OS and version detected in the selected source **Image, ISO** or **Volume**. The **Operating System** field is read-only, and cannot be overwritten by users.

1.4 zCompute UI Features and Improvements

zCompute 24.03's new UI features and improvements include localization for zCompute supported languages:

- English (default)
- German
- Japanese
- Korean
- Portuguese
- Spanish

The **major** UI features and improvements include:

1.4.1 Storage Classes Utilization Visualization

MSP Admins can benefit from an improved visualization of utilization per Storage Class:

- The **Monitoring > Overview** screen:
 - The **Storage Classes Consumption** tile displays a graphic utilization summary for each Storage Class.
 - The **Storage Availability & Health** tile displays each Storage Class as a color-coded summary status.
Selecting a Storage Class in this tile redirects to the **Storage Management > Storage Classes > [Storage Class]** detailed utilization screen.
- The **Storage Management > Storage Classes** screen displays a summary table of utilization per Storage Class.
Selecting a Storage Class displays detailed utilization information for that Storage Class.

1.4.2 AWS Instance Type Aliases

zCompute 24.03 introduces the **Compute > Instance Type Aliases** screen that displays a table listing each zCompute Instance Type's AWS Alias, number of vCPUs and RAM capacity, and number of VM instances per Instance Type.

1.4.3 Placement Rules

From zCompute 24.03, via the **Compute > Rules** screen, MSP Admins can create, simulate (test VMs for rule compliance), apply and remove rules for placing VMs with specified VM tags on nodes with specified node tags.

1.5 V2Z alignments for v24.03

The V2Z utility in Toolbox Fedora 2.3.5 has several improvements including:

- Different Windows VirtIO drivers can be used in the V2Z migration process.
See [Replacing Toolbox Windows VirtIO Driver](#) for further details.
- The V2Z command line now supports VM and volume names that contain spaces, by enclosing the VM or volume name between single quotes.

1.5.1 Notable fixes

The V2Z utility in Toolbox Fedora 2.3.5 includes the following fixes:

- **NK-11267**
A V2Z migration case was discovered, where an invalid parameter resulted in a late fail.
This has been resolved with added initial validation checks rendering a fast fail when invalid.
- **NK-11575**
V2Z preflight checks were failing for minimal permission users.
This has been resolved so that the V2Z preflight checks succeed for users with the minimal required permissions.

1.5.2 Known limitation

V2Z migrates all VMs as UEFI

V2Z migration always migrates VMs to boot in UEFI mode, even if the source VM is in BIOS mode.

As a workaround to update the migrated VM to boot using BIOS, after completion of the VM migration run the following `symp` command:

```
vm update --hw-firmware-type bios <vm-id>
```

1.6 Instance Types

Version 24.03 extends the number of VM Instance Types, introducing the Z16 and ZP16 types for memory-intensive use cases.

For more details, see [Instance Types](#):

- [Z16 Instance Types](#)
- [ZP16 Instance Types](#)
- [ZD16 Instance Types](#)
- [ZD16A Instance Types](#)

1.7 OS Support and new Marketplace Images

The zCompute 24.03 Marketplace includes the upgraded Toolbox Fedora version 2.3.5, along with updated and newly added OS and tool images.

See [Machine Images Marketplace](#), or go to the **Machine Images > Marketplace** screen in the UI to see latest available image versions for download.

1.8 Direct Subnets in VLANs Management

1.8.1 Known limitation

Direct Subnet in VLAN Management via CLI/API only

On completion of [Creating a Direct Subnet](#), the Direct Subnet is immediately available on the specified VPC, but it is not displayed in the **Account Networking > VLANs Management** screen.

However, the Direct Subnet's `network_id` can be viewed using the symp `vlan-pool vlan get <id>` command. For example:

```
vlan-pool vlan get 1a8cd9e6-0d7d-4ada-ac5b-0bad3fdd291e
+-----+-----+
| id          | 1a8cd9e6-0d7d-4ada-ac5b-0bad3fdd291e |
| name        | none                                   |
| account_vlan_pool_id | 93cb6144-7f28-44c3-9492-0b46d13da88d |
| created_at  | 2024-11-18T11:47:50Z                  |
| guest_network_pool_id | 684703f5-d641-4ddb-be82-62b81a024509 |
| network_id  | cecc1054-538a-467e-a615-83e750ce04b4 |
| project_vlan_pool_id | adb0d5ba-7927-4813-aea7-d0f0d568d808 |
| updated_at  | 2024-11-18T11:47:51Z                  |
| vlan_tag_id | 40                                     |
+-----+-----+
```

1.9 DVS and VLAN Management Granular Policies

From zCompute 23.04, tenant admins can now provide users with new granular access policies for VLAN management and DVS network management:

- `DVSReadOnlyAccess`
- `DVSEFullAccess`
- `VlanMgmtReadOnlyAccess`
- `VlanMgmtAccountsAssignAccess`
- `VlanMgmtFullAccess`

To apply access policies to users, see [Managing Users Permissions](#).

1.10 Windows KMS with AD / VPC DNS

Windows VMs can now participate in an AD domain, regardless of whether their license is provided from a central Windows KMS.

1.11 Large Cluster Systems (LCS) live upgrade

In zCompute versions prior to version 24.03, LCS upgrades involved coordinating a maintenance window for scheduled downtime. LCS clusters can now be upgraded live, eliminating the need for downtime, and without payload disruption.

✓ **Note:** LCS upgrades are implemented solely by Zadara Support, and must be coordinated in advance.

For more information on LCS, see [Large Cluster Systems \(LCS\)](#).

CHANGELOG

The following section will breakdown the additions and updates to the Zadara Compute Cloud platform (zCompute).

2.1 Version 24.03

Release 24.03 is a major version, that includes new features, scalability, security and usability improvements, and bug fixes.

It is highly recommended to upgrade to the latest version, to improve supportability.

- For the purpose of planning an upgrade, see [Supported upgrade paths](#).
- Refer to [Zadara End-Of-Support \(EOS\) policy and Releases support status](#).

For the **main** additions and updates to zCompute, see [Key Enhancements](#).

2.1.1 Notable fixes

Version 24.03.0

The V2Z utility in Toolbox Fedora 2.3.5 includes the following fixes:

- **NK-11267**

A V2Z migration case was discovered, where an invalid parameter resulted in a late fail.

This has been resolved with added initial validation checks rendering a fast fail when invalid.

- **NK-11575**

V2Z preflight checks were failing for minimal permission users.

This has been resolved so that the V2Z preflight checks succeed for users with the minimal required permissions.

2.2 Version 23.08

Release 23.08 is a major version extended by service packs 23.08.1, 23.08.2, 23.08.3 and 23.08.4, that includes new features, scalability, security and usability improvements, and bug fixes.

2.2.1 Version 23.08.4

Taikun machine image in Marketplace

From version 23.08.4, the new Taikun image is downloadable from zCompute's [zCompute Machine Images Marketplace](#). This machine image provides an advanced managed Kubernetes service, with multiple cluster management from a single pane of glass.

✓ **Note:** This image requires zCompute 23.08.4 (or later), and [Volume types](#) block storage.

For more information, see:

- [Kubernetes Application Delivery with Taikun and Zadara](#)
- [Video - Deploying & Managing Kubernetes Clusters & Applications on Zadara Edge Cloud with Taikun CloudWorks](#)

For more information on Machine Images and the [zCompute Machine Images Marketplace](#), see [zCompute Machine Images Marketplace](#) in the Compute Guide.

VPC Peering for Zadara Edge Clouds

From version 23.08.4, zCompute provides a pfSense machine image in the [zCompute Machine Images Marketplace](#) that enables routing network traffic between VPCs in separate zCompute clouds, using private IPv4 addresses.

This implementation uses IPSec technology for securing private connections between instances communicating with each other in a Zadara Edge Cloud.

For more information see [VPC Peering for multiple Zadara Edge Clouds](#) in the Networking guide.

VPN Service for Zadara Edge Clouds

From version 23.08.4, zCompute provides a pfSense machine image in the [zCompute Machine Images Marketplace](#) that enables remote access to a VPC.

The implementation uses OpenVPN technology for securing private connections between remote clients and Zadara Edge Cloud resources.

For more information see [VPN Service for Zadara Edge Clouds](#) in the Networking guide.

2.2.2 Version 23.08.1

Language support in zCompute UI

From version 23.08.1, the zCompute UI supports the following languages:

- English (default)
- German
- Japanese
- Korean
- Portuguese
- Spanish

For more information, see [zCompute UI Language support](#) in the Compute Guide.

Oracle Linux OS support

zCompute 23.08.1 has been extended to support the following OS types and versions for VM images:

Type	Distribution	Version
Linux	Oracle	7
Linux	Oracle	8
Linux	Oracle	9

For other supported OS types and versions for VM images, see [New OS types and versions](#).

ECDSA key support

From version 23.08.1, zCompute supports use of ECDSA keys for VMs. It is possible to import and successfully use a public key in SSH or RSA (PEM) formats.

Known issues and limitations

- For Windows password recovery (**Get Windows Password** dialog), the UI only accepts keys in RSA (PEM) format.
- In version 23.08.0 and earlier, zCompute does not accept keys for VMs in SSH formats, but only in RSA (PEM) format.

Toolbox Fedora 2.3.1

The new Toolbox Fedora 2.3.1 VM is available in the zCompute UI's **Machine Images > Marketplace**. This is a Fedora VM that includes the option to migrate VMware VMs, using the V2Z migration utility. See [Migrating VMware VMs to zCompute](#) in the Compute Guide.

Tag support in Subnet creation

From version 23.08.1, zCompute supports the addition of tags in a Subnet creation operation. See [Creating a Subnet](#) in the Networking Guide.

This is useful mainly with Terraform and auto-deployments with EKS-D.

2.2.3 Version 23.08.0

Packaged zCompute EKS-D image

EKS-D is Amazon's open-source implementation of its Elastic Kubernetes Service (EKS).

zCompute 23.08 provides customers with the ability to deploy and use the prepackaged Kubernetes solution in zCompute clusters.

The zCompute EKS-D image is downloadable in the zCompute UI at **Machine Images > Marketplace**.

The zCompute 23.08 EKS-D solution is verified, and certified by Kasten (acquired by Veeam). Thus, zCompute 23.08 can also provide a backup, recovery and migration solution for Kubernetes over zCompute.

For more information and examples, see the EKS-D [README](#) in Zadara's examples repository in GitHub.

Distributed Virtual Switch (DVS)

Distributed Virtual Switch (DVS), is a zCompute networking model which provides layer 2, VLAN-based networking functionality for VMs running on zCompute.

The idea behind DVS is to provide customers who are more familiar with legacy virtualization platforms (for example, VMware, Hyper-V, Nutanix, etc.) with a networking environment similar to the simplified networking model found in such legacy environments.

DVS provides simple OSI layer 2 VLAN-based switched networking functionality for VMs. DVS networks can be used to interconnect VMs attached to them, as well as for connecting these VMs with other network entities that reside in the hosting data center (servers, routers, storage devices, etc.).

The DVS model provides physical switching L2, VLAN-based connectivity, whereas VPC provides a rich IP networking platform (route-tables, subnets, security groups, Internet gateways, DNS, Elastic IPs, etc.) alongside other cloud-native services that are independent of physical switching configuration, such as auto-scaling groups, load-balancers, etc.

Zadara zCompute supports both VPC and DVS networking modes in coexistence: A single zCompute account (tenant), can have multiple VPC-based projects alongside DVS-based projects.

DVS was introduced in zCompute 22.09. In version 23.08, the DVS infrastructure was enhanced with improved management of VLANs for the purpose of creating guest networks. Cloud admins allocate VLANS to an account's VLAN pool. Tenant admins can allocate VLANs from the account's VLAN pool to a DVS project pool. **Member**-role users can now create VLAN-type guest networks by allocating VLANs from a DVS project's VLAN pool.

For more information about DVS, see [Distributed Virtual Switch \(DVS\)](#) in the Networking Guide.

Migrating to a DVS project

VMware VMs that are migrated to zCompute using the V2Z migration process result in VMs in a rich VPC networking type project, rather than in the simpler DVS networking alternative.

Tenants who prefer the simpler DVS networking model can further migrate their newly migrated zCompute VPC VMs to a DVS project.

To migrate VMs to a DVS project, see [Migrating a VM to a DVS project](#) in the Compute Guide.

Volume types

From version 23.08, zCompute simplifies storage management with volume types that provide users with a range of options to meet their storage requirements, balancing factors such as performance, cost, and specific workload demands.

By abstracting the underlying storage infrastructure, volume types simplify storage management and allow users to focus on selecting the appropriate type for their zCompute needs.

Different volume types offer varying levels of input/output operations per second (IOPS) and throughput, which determine the storage performance.

Auto-scaling group tags propagation to VMs

For easier classification of VMs, tags can be created and applied to auto-scaling groups. Based on the auto-scaling group configuration, tags can be automatically propagated to VM instances during their launch.

✔ **Note:** In zCompute 23.08, tag propagation is available using Symp APIs and AWS APIs. In later versions, the UI will support tag propagation.

For more information, see [Auto-Scaling Groups](#) in the Compute Guide.

VM Instance Types

VM instance types are templates defining the resources used by a VM instance. A VM's instance type is determined by selecting one of the permitted types, during the creation flow of the VM instance.

zCompute 23.08 has been enhanced with support for a large number of new Zadara instance types.

✔ **Note:**

- New custom instance types can only be created after receiving Zadara approval, and after getting pricing.
 - Amazon instance types are available as aliases, mapped to the closest zCompute instance type. VMs created with Amazon instance types display their Instance Type as the zCompute Instance Type, and the Amazon instance type as the VM's Instance Type Alias.
-

For more information, see [Instance Types](#) in the Compute Guide.

VM network interface, Route Table, and Network Reset

zCompute 23.08 introduces soft and hard reset support for VM network interfaces, route-tables and networks.

- A **soft reset** rebinds all ports, and is available to admins, tenant admins and members.
- A **hard reset** resets the service, and is limited to admins and tenant admins.

In the Networking Guide, see:

- [Subnet Operations](#)
- [Route Table Operations](#)
- [Network Interfaces](#)

VPC DNS status reporting improvements

In zCompute 23.08, the UI is enhanced with detailed VPC DNS status information, with key benefits such as:

- Reducing time to resolve VPC DNS issues
- Logging events of CoreDNS VM status and DNS health status changes

When DNS is enabled for a VPC, its DNS VM status and DNS health status are checked once per minute and reported for the VPC.

See [VPC DNS status](#) in the Networking Guide.

Instance Profile

An instance profile is a container for an AWS IAM role. It can be used to pass role information to an EC2 instance when the instance starts. When an AWS IAM role, embedded in an instance profile, is attached to an instance, its credentials become permanent.

In zCompute 23.08, the UI has been enhanced with support for [Instance Profile](#) management (IAM Guide), and implementing instance profiles in the **Config** tab of [Creating VM Instances](#) (Compute Guide).

API Audit Trail for Admin/Tenant-Admin

zCompute 23.08 has been enhanced by a security auditing feature, and provides API capability for integration with 3rd-party solutions. Admins and tenant admins can query API calls logging POST, PUT, PATCH and DELETE calls for a 60-day retention period.

See [api-trail](#) in the Symp CLI reference.

✓ **Note:** Sensitive information, such as passwords, tokens, secret access keys, IODC client secrets, metadata and user data in VM metadata are excluded from the logging and audit.

VPC Endpoint

From zCompute 23.08, a VPC endpoint allows a VM to access the system APIs using an internal VPC IP address.

The API is available on the internal IP addresses 169.254.64.2 and 169.254.64.3, assuming that the cluster has more than 2 nodes. The system also provides a DNS record resolvable to these IPs when the VPC DNS service (coredns) is up, and a valid certificate is installed.

The DNS name:

- When a valid certificate with a wildcard CN is used, the DNS name is: `cloud.<parent-domain>`.

For example, the DNS name for CN `*.example.com` is `cloud.example.com`.

- When a valid certificate with a regular CN is used, the DNS name is the same as the CN.

For example, the DNS name for CN `test.example.com` is also `test.example.com`.

The cluster's DNS name is returned in the `cluster_url` property of the VM's metadata response. For example, for a cluster with a certificate with the CN `*.example.com`:

```
curl -s http://169.254.169.254/openstack/latest/meta_data.json | jq -c .cluster_url  
"https://cloud.example.com"
```

✓ Note:

- For new VPCs, the update of the DNS records is immediate.
 - For existing VPCs, the update of the DNS records can take up to 24 hours.
-

GRE traffic over EIPs

From zCompute 23.08, Generic Routing Encapsulation (GRE) traffic over Elastic IP addresses (EIPs) is supported.

GRE Tunneling is a tunneling protocol that encapsulates network layer protocols inside virtual point-to-point links over an Internet Protocol network. The tunnel source and tunnel destination addresses on each side identify the two endpoints. GRE packets travel directly between the two endpoints through a virtual tunnel.

GRE via NAT gateways - known limitation

GRE via Network Address Translation (NAT) gateways is not supported.

VM BIOS auto-reboot

Until zCompute 23.08, there was an issue of Windows VMs getting stuck after BSOD and reboot, due to no boot device available at the time of the restart.

zCompute 23.08 delivers an enhanced configuration for the VM's BIOS to keep auto-rebooting the VM if no boot device is found after 10 seconds.

✓ **Note:** After auto-reboot is applied on a cluster, a maintenance window must be planned and scheduled for stopping and restarting the VMs, for the auto-reboot to take effect.

New OS types and versions

zCompute 23.08 has been extended to support the following OS types and versions for VM images:

Type	Distribution	Version
Linux	Alma	9
Linux	Alma	Other
Linux	Rocky	9
Linux	Rocky	Other
Linux	Debian	11
Linux	Fedora	34
Linux	Fedora	35
Linux	Fedora	36
Linux	Fedora	37
Linux	RHEL	9
Linux	Ubuntu	22.04
Windows	Windows Server	2022

V2Z utility improvements

The V2Z utility supports easy migration from supported virtualization platforms to zCompute projects.

In zCompute 23.08, the V2Z utility has been extended to support [VM Instance Types](#) and [Volume types](#) instead of storage pools.

V2Z custom instance types - known limitation

In the V2Z utility, custom instance types are not allowed for most users.

Security

In zCompute 23.08, an updated zCompute Toolbox Fedora image (version 2.3.1) has been released with enhanced security hardening. The Toolbox image is downloadable in the zCompute UI at **Machine Images > Marketplace**.

2.2.4 Notable fixes

Version 23.08.4

- **NK-10748:**

A rare edge case was discovered that could theoretically cause a data corruption.

This was resolved despite the unlikely probability of it occurring in any current production implementation.

Version 23.08.3

- **NK-9822:**

Fixes related to ASG behavior:

- Cases were reported where scaling up or down stopped after an upgrade.
- VMs rebooted during an LCS upgrade.

These issues are resolved.

- **NK-9297:**

VSC migration failed due to an error calculating reserved capacity limits. This is resolved.

- **NK-9638:**

The api-trail was accumulating high volume of events before clearing them. This is resolved, so that garbage collection is triggered according to event count or time interval, whichever is reached first.

- **NK-9967 and NK-10039:**

Japanese and Korean localizations in the UI are updated with corrections.

Version 23.08.1

- **NK-8656:**

For tenants that have LDAP configured, the only local zCompute user account that should be usable is the tenant admin account (for break-the-glass scenarios.) In a rare case that was discovered, when the LDAP disconnected, the local tenant admin was unable to sign on. This is now resolved.

2.3 Version 22.09

Release 22.09 is a major version extended by service packs 22.09.1, 22.09.2, 22.09.3 and 22.09.4, that include new features, scalability, security and usability improvements, and bug fixes.

The following section will breakdown the **main** additions and updates to the Zadara Compute platform (zCompute).

2.3.1 AWS ELB-compatible APIs in zCompute

Previously, zCompute's LBaaS supported one certificate per listener.

From release 22.09.4, zCompute supports multiple TLS / SSL certificates for a single listener on the same TCP port servicing HTTPS. This feature is currently supported in Symp and AWS API. It will be introduced into the zCompute UI at a later date.

2.3.2 Large Cluster Systems (LCS)

With this version of Zadara zCompute, Zadara takes a leap into new use cases that require much larger clusters at the Edge. To support larger applications, especially data analytics, a new deployment topology was added that allows for 75 physical nodes and upwards (exact numbers to be published in the future). Until now, the maximum official cluster size was 16 nodes, with engineering exceptions for specific customers to extend to 24 nodes. This is referred to as the standard configuration.

✓ **Note:**

- Any standard configuration cluster can be transformed into an LCS.
 - The transition from an LCS back into a standard configuration is not supported.
-

Moving to an LCS cluster requires a minimal cluster size of 16 nodes, and three additional nodes that serve as control nodes. Control nodes can't be used to run instances. This has an impact on the floor, but not on the instance pricing. Zadara's solution architect will recommend whether to use the standard or LCS configuration per system, based on customer needs.

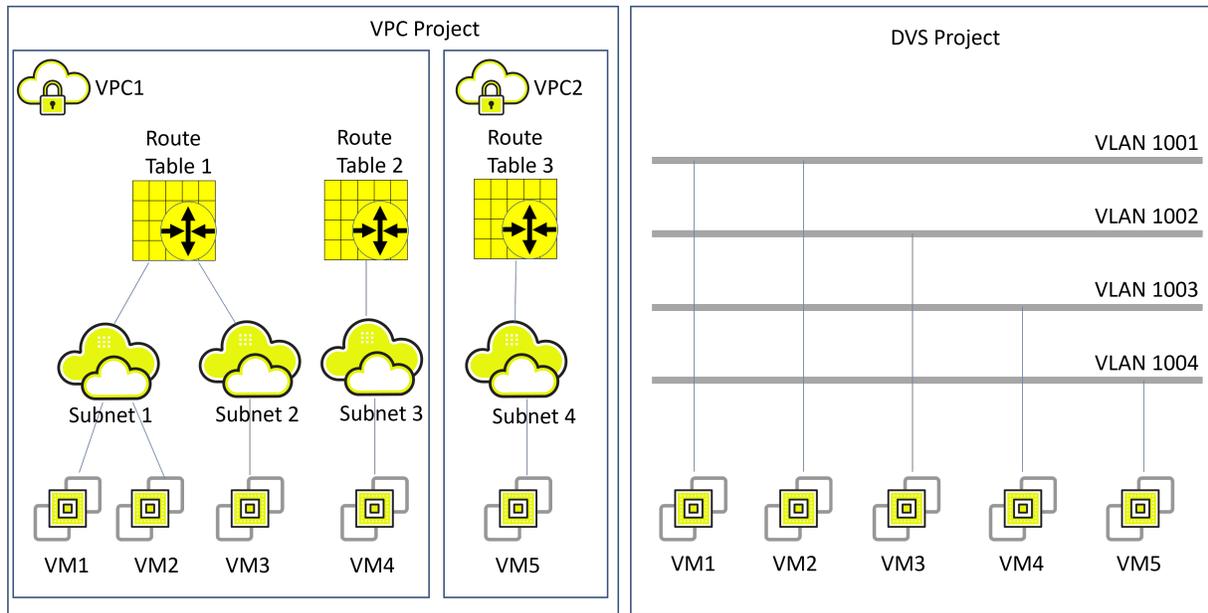
2.3.3 Distributed Virtual Switch (DVS) mode

Release 22.09 introduces a new simplified network model which gives our customers the ability to place virtual machines (instances) directly on a VLAN-based mode which extend to the data center switches. This is similar to other common data center virtualization solutions, (such as VMWare, HyperV, etc.).

Essentially, tenants can regard DVS mode projects as a single virtual switch with uplinks to the data center switches. Tenants see networks that are set up by the cloud admin, and when choosing to create a network interface for the VM on the network, the system automatically adds them to a VLAN-tagged port on the virtual switch.

A network in a DVS mode project represents a VLAN-tagged L2 network. The VLAN tag itself is hidden from the users. It's the admin's choice whether to disclose the VLAN tag ID to users via the network name or description. VMs will get a network interface with a MAC address, but without an IP. Tenants may assign an IP address manually or via a DHCP server (connected to their physical network).

Differences between VPC mode and DVS mode projects:



Cloud admin capabilities

Admins can create a project in DVS mode.

Admins can create a VLAN-based network providing the VLAN tags. Note that the VLAN tags provided must match the physical switches configuration in the data centers (tagged ports, etc.).

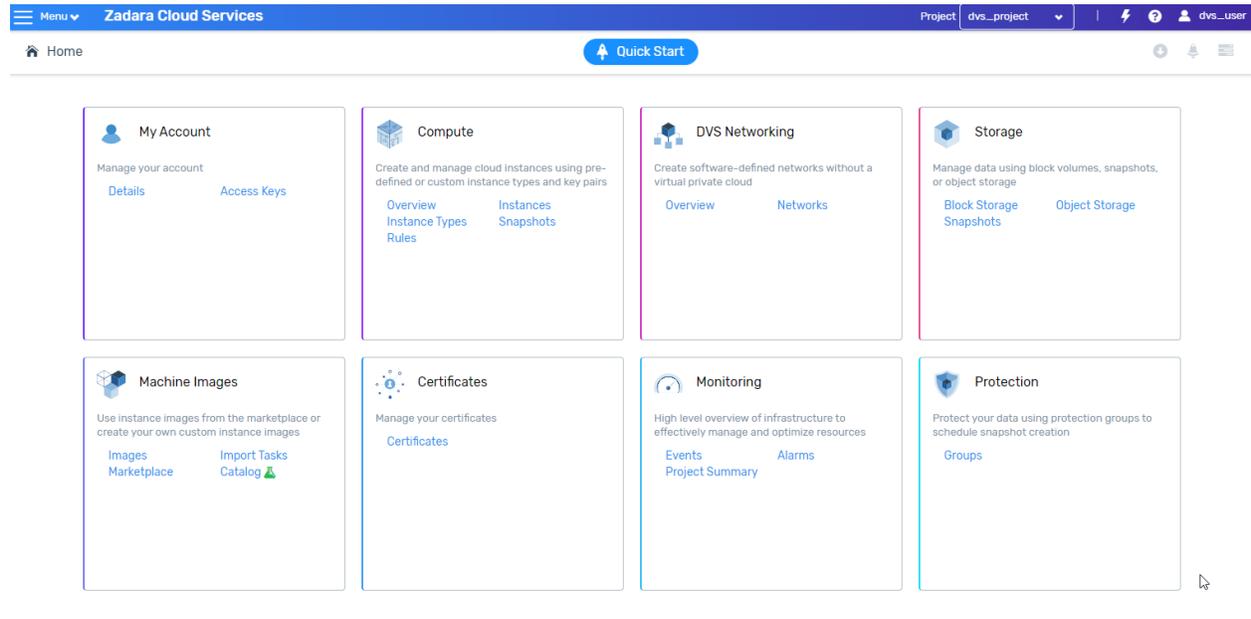
When creating a zCompute account for tenants, the default project is a VPC project. Tenants that require a DVS project must open a ticket to Zadara Support or to their MSP system admin to create a DVS project and the desired networks.

✓ **Note:** Since most of the system services and networking capabilities of zCompute depend on zCompute controlling the IP stack, these services are not available for projects in DVS mode. The following services will be disabled:

- EIPs
- Routers
- Advanced services, such as DNS, NAT Gateway, LoadBalancers, Auto-scaling groups etc.
- AWS API (Terraform is not supported)
- Marketplace is available, but cloud machine images that make use of Cloud-init and Cloudbase-init won't work

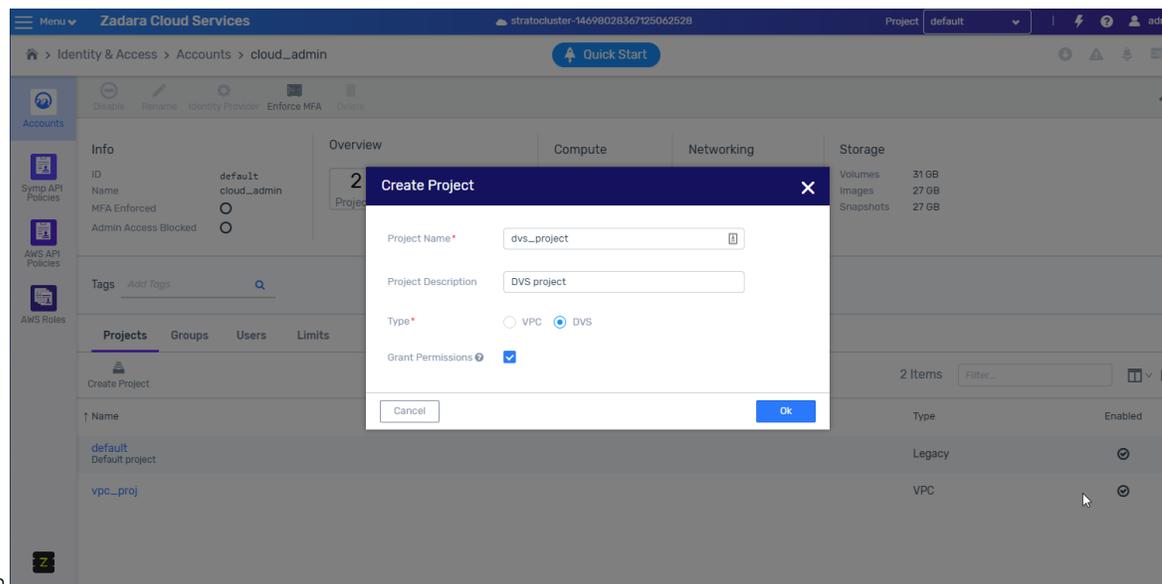
DVS project overview

DVS projects have limited features and options in the tenant UI:



DVS project and network creation

DVS project and network creation are restricted to admins only, and are included here solely for informative and completeness purposes.



- DVS project creation

- DVS network creation

DVS - known issues

- **NK-3898:** On DVS projects, users are not able to set project level tagging that later propagates to virtual machines. Workaround: Once the VM has been created, users can navigate to the VM and add the tag.
- **NK-4598:** The DVS instance tab shows the key pair option while restoring the snapshot backup, even though key pairs are not supported in this version.
- **NK-4606:** The DVS networks overview displays a warning message to clear the filters, even though no filter is applied. Click **Clear Filters** to display the overview.

2.3.4 Premium instance types

Release 22.09.2 introduces premium instance types in heterogeneous hardware clusters, based on the 3rd-Gen Intel Xeon Platinum 8362 processor. This is applicable to both NVMe and non-NVMe instances. Please contact sales for more information.

2.3.5 Direct subnet external router

A direct subnet is an IP subnet in a VPC that spans out of a zCompute system over a VLAN to the datacenter network. Direct subnets allow communication between physical-network and VPC entities, for example, VMs within a VPC connected to a VPSA.

In many cases, the tenant may provide a data center router for VMs in the VPC, including VMs attached to the direct subnet, to access data center subnets that are not on the direct subnet.

Until now, there was a workaround that required manually creating a network interface to represent the external router, so the user can set the proper routes in the VPC route tables. Now the administrator can add the IP of the external router during the creation of the direct subnet, and the system will be able to route to this router.

The screenshot shows the 'Create Direct Subnet' form in the Zadara Cloud Services interface. The form is titled 'Create Direct Subnet' and is located in the 'Region Networking > Direct Subnets' section. The form includes the following fields:

- Name: Subnet1
- Description: Direct Subnet 1
- Project: vpc_proj
- VPC: Default VPC for bfdb5f7fc7a14268988a...
- Node Network: network-2
- VLAN ID: 102
- Subnet (CIDR): 192.168.101.0/24
- VPC Internal Router IP: 192.168.101.1
- External Router IP: 192.168.101.2 (highlighted with a red box)

Below the form is an 'Allocation Pools' section with an 'Add' button. A note states: 'The allocation pools cannot contain: • The VPC Router IP • The first or last IP address of the CIDR block'. The 'Allocation Pool' field is currently empty.

The screenshot shows the 'Zadara Cloud Services' interface. The breadcrumb navigation is 'Region Networking > Direct Subnets > Subnet1'. The left sidebar contains navigation icons for Guest Network Pools, Edge Networks, Direct Subnets (highlighted), Node Networks, Virtual IPs, and Region DNS. The main content area is titled 'Direct Subnet' and has tabs for 'Overview', 'Events', and 'VMs'. Below the tabs is a table with the following data:

ID	b37d2c8d-69d7-4f0f-8ac3-820e57d7af23
Name	Subnet1 Direct Subnet 1
Node Network	network-2
VLAN	102
MTU	8950
CIDR	192.168.101.0/24
VPC Internal Router IP	192.168.101.1
Allocation Pools	Start: 192.168.101.3 End: 192.168.101.100
Account	cloud_admin
Project	vpc_proj
VPC	Default VPC for bfdb5f7fc7a14268988a227ba05bea28
External Router IP	192.168.101.2
Network Interface	9c7a7bf4-2290-4244-915e-12222f7a1642

The system now creates the ENI that can be used for routing rules, making it easy to add a route towards an external network using ENI.

The screenshot shows the 'Zadara Cloud Services' interface with the breadcrumb navigation 'VPC Networking > Route Tables > direct-subnet'. A 'Create Route' dialog box is open in the foreground. The dialog has the following fields and values:

- Destination CIDR: 200.200.200.0/24
- Target Type: Network Interface
- Network Interface: Direct Subnet External Router | 192.168.101...

The dialog also has 'Cancel' and 'Ok' buttons. In the background, the 'Route Tables' page is visible, showing a table with columns for Destination, Target, type, and Status. Two routes are listed:

Destination	Target	type	Status
172.20.0.0/16	Local	Local	Active
192.168.101.0/24	Local	Local	Active

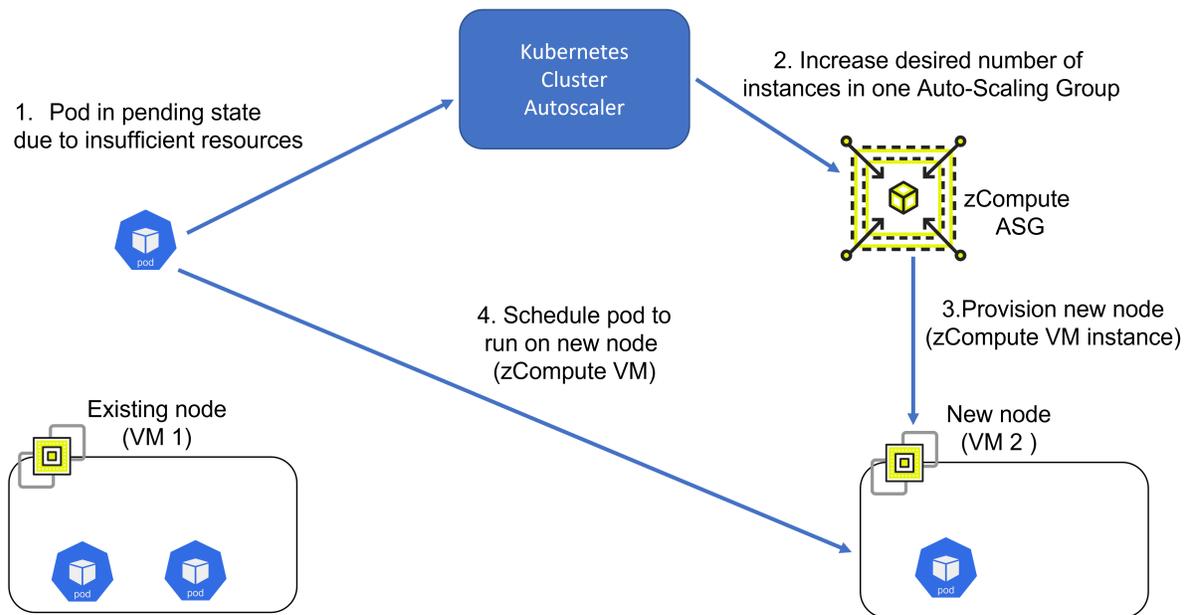
✓ **Note:** It is important to note that even though the route seems explicit to an IP, upon update of the external router IP, the system automatically creates a new ENI with the new IP, and updates the route in the route tables.

2.3.6 Auto-Scaling Groups: Added missing compatibility with AWS API

This version supports the Cluster Autoscaler in Kubernetes setup through the zCompute Auto-Scaling Groups. Cluster Autoscaler is a tool that automatically adjusts the size of the Kubernetes cluster when one of the following conditions is true:

- There are pods that failed to run in the cluster due to insufficient resources. In this case, zCompute ASG provisions a new node (zCompute VM instance), and schedules the failed pods to run on it.
- There are nodes (zCompute VMs) in the cluster that have been underutilized for an extended period of time, and their pods can be placed on other existing nodes (zCompute VMs).

Cluster Autoscaler utilizes zCompute Instance Auto-Scaling Groups to manage node groups. Cluster Autoscaler typically runs as a deployment in your cluster.



2.3.7 LDAP self-service enhancement

This version supports LDAP self-service. Tenants who wish to use their LDAP to login to their account can now set up their own LDAP connection without opening a ticket to Zadara Support to do it for them.

As part of the self-service, the account now supports a “local”/”Break glass” tenant-admin that can configure and enable the LDAP connection.

- All other users should come from LDAP.
- LDAP users can’t add more local users or groups. Only the local tenant admin user is allowed to do so.

How to connect LDAP to your tenant account

✓ **Note: Prerequisite:** The system must have a route to your LDAP server. If the LDAP server is located outside of your account and the system has no access to it, contact Zadara Support for assistance.

1. Log into your account as tenant admin.
2. Click the “Identity Provider” and follow the instructions to fill in the details.

zCompute also enhanced the user lists. Now, the lists are split into tabs:

- **Users:** list of local users.
- **LDAP Users:** list of LDAP users.

The screenshot shows the 'Zadara Cloud Services' interface for a tenant account. The breadcrumb navigation is 'Identity & Access > Accounts > account'. The 'LDAP' tab is highlighted in the 'Overview' section. The 'Users' tab is selected in the 'Users' section, and the 'LDAP Users' sub-tab is highlighted. The 'LDAP Users' sub-tab is highlighted in red. The 'Users' section shows a list of users with the following data:

Projects	Groups	Users
1	8	918

The 'Compute' section shows the following data:

VMs	vCPUs	RAM
1	1	2 GIB

The 'Networking' section shows the following data:

Networks	Floating IPs	Security Groups
1	0	2

The 'Storage' section shows the following data:

Volumes	Images	Snapshots
57 GB	34 GB	54 GB

2.3.8 Protect admin password change

Admin users won't be able to set a new password for themselves using the `user update` API. This is to prevent someone from hijacking an open session and changing the password without knowing the old password. If admins want to change their own password, they can use the `user change-password` API, that requires them to provide the old password in order to proceed with the change.

2.3.9 Disabling the VPC DNS allows direct connection to the tenant DNS

In a Microsoft Active Directory (AD) environment, the AD maintains the DNS and VMs cannot use the VPC DNS. With this feature, tenants can provide the AD DNS to the Windows VMs via the DHCP protocol.

When using zCompute in VPC mode with a VPC DNS service enabled, the instances are configured to access the internal VPC DNS which serves as a caching DNS for external resolvers, in addition to adding the VPC entries. In this mode, VMs can't be auto-registered to the external DNS. This specifically impacts Windows AD environments, where virtual machines are registered to the domain DNS while joining the domain.

Until now, disabling the VPC DNS only disabled the VPC level DNS, but still provided a subnet level DNS. The only solution for Windows domain DNS was to statically configure the Windows OS to point to the domain DNS instead of the value provided by zCompute DHCP server.

Now, when disabling the VPC DNS, the name server entries added to the DHCP options will be passed directly to the VMs, so they can stop using the workaround.

Steps:

1. Create a DHCP option, and configure a DNS domain with an external address.

Create DHCP Options [X]

Details 1 | Servers 2 | Netbios 3

Name *

Description

Project *

DNS Domain

Create DHCP Options [X]

Details 1 | Servers 2 | Netbios 3

DNS Servers

Server 1 *

2. Disable DNS in the VPC, by unchecking the check box.

Modify VPC [X]

Name *

Description

Project

CIDR

DNS Enabled

DNS VM Subnet

3. Attach this DNS option to the VPC.

Zadara Cloud Services | stratocluster-14698028367125062528

VPC Networking > VPCs > Default VPC for bfdb5f7fc7a14268988a227ba05bea28

Modify **Attach DHCP Options** Detach DHCP Options Peer VPC Set Default Upgrade DNS Delete

Info **Available** | DNS **Active Healthy**

Name: Default VPC for bfdb5f7fc7a14268988a227ba05bea28 (172.31.0.0/16)
 CIDR: 172.31.0.0/16
 Creation Date: 2:20:09
 DHCP Options: (no name)
 Edge Network: edge
 User: admin
 Project: vpc_proj
 Account: cloud_admin
 ID: a4d6ef34-661b-4da8-9b3f-37aef3b871

DNS Domain: symphony.local
 DNS Servers: 10.16.0.111
 CoreDNS VM: coredns-a4d6ef34

Attach DHCP [X]

DHCP * +

2.3.10 UI now warns about volumes that are not connected to any VM

As with many other cloud services, there are many scenarios when deleting a VM that data disks are not deleted with the VM, since volumes are entities that at any given time may be detached from one instance and connected to another. Volumes can also be detached from the VM and remain in the account as long as needed.

In some cases, customers forget to delete volumes after deleting the VMs, and then are billed at the end of the month. To avoid surprises, the system now informs when there are unattached volumes, so that customers may go and delete them if they were not intentionally kept.

Possible scenarios where volumes remain unattached:

- Using the APIs, and forgetting to delete the data volumes after deletion of the VMs.
- Using Terraform, and Terraform encountered a failure during the teardown process.
- Using the GUI to delete a VM or multiple VMs, and forgetting to delete their data volumes.

The top screenshot shows the 'Block Storage' page in the Zadara Cloud Services GUI. A red warning box at the top states 'There are non attached Volumes'. Below this, a table lists two volumes:

Name	Size	Pool	Status	Health	Attached VM	Creation Date	IO/s
block_store1	1 GB	test-pool	Ready	Healthy	Not attached to any VM	9:46:44	
coredns-a936083a Boot volume #1 of VM e2721a	4 GB	test-pool	Ready	Healthy	Coredns-A936083a	5:51:57	4.83 IO/s

The bottom screenshot shows the 'Compute > Instances' page. A red warning box at the top states 'There are non attached Volumes'. Below this, a purple dragon mascot is displayed with the text 'There are no virtual machines'.

Volumes that are not connected to any VM - known issue

- **NK-4242:** ‘Default volumes’ are impossible to delete. We are experiencing difficulties in deleting what appear to be “non attached volumes”. Although the UI does not show the attachment, the volumes are still attached to the host.

2.3.11 Enhanced remote DNS status validation

Until now, the validation only checked that the name server provided to the VPC DNS is responding to queries. Now there is a validation that the DNS can resolve a known destination (default is google.com).

If the provided DNS server can’t resolve this well-known address, the DNS is reported as degraded.

Enhanced remote DNS status validation - known limitations

- The DNS status for VPCs without a valid route to an IGW will always be “Degraded” when the default DHCP option with the google DNS is used.
- If tenants set their own name server in the VPC’s DHCP options, and their name server is unreachable via the VPC gateway or it can’t resolve google.com, the VPC state will degrade.

2.3.12 Ubuntu 22.04 LTS image in Marketplace

Release 22.09.2 provides the Ubuntu 22.04 LTS OS image for download from the zCompute Marketplace.

To download the image, in the UI go to **Machine Images > Marketplace**.

2.3.13 Enhanced support utilities

This release contains enhanced utilities allowing Zadara Operations to improve maintenance automation flows, time to resolution of incidents, and to take more proactive measures to prevent incidents. It is highly recommended to upgrade to this version to improve supportability.

2.3.14 Notable fixes

- **NK-6332:** zCompute’s AWS-compatible `DescribeNetworkInterfaces` API returned the `status=in_use` (with an underscore) instead of `status=in-use` (with a hyphen). This has been resolved, in alignment with the AWS status value.
- **NK-6498:** An edge case was discovered where a user created incorrect values for DHCP options that caused the DNS to stop working. This has been resolved with a fix, preventing creation of incorrect values for DHCP options.
- **NK-3744, NK-3928:** Fix for Windows clock offset In previous versions, virtual machine migrations sometimes caused time changes in the guest. This is now fixed. In order for the fix to apply, users must set the Windows OS type in the VM properties, or use a Windows image for which the Windows OS type has already been set.

Security and non-functional fixes

- **NK-4847, NK-4848, NK-4406, NK-4785, NK-5238, NK-5293:** Some minor security and non-functional issues were resolved.

2.4 Version 22.02

Release 22.02 is a major version extended by three service packs (SP1, SP2 and SP3), that includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the **main** additions and updates to the Zadara Compute platform (zCompute).

2.4.1 Premium instance types

Zadara now offers premium instance types based on Intel Gen 3 Platinum 8362. Please contact sales for more information.

2.4.2 NVMe instance types

Zadara now offers instance types with NVMe based on the premium types. Please contact sales for more information.

✓ **Note:** NVMe storage is a local passthrough device, meaning:

- VMs using NVMe disks cannot be migrated for maintenance.
 - NVMe devices are ephemeral.
 - Zadara only offers complete NVMe devices and does not partition a device between VMs.
-

2.4.3 SAML SSO Support

Limited availability of SAML SSO support, for large installations. Please contact Zadara ops/sales, if required.

2.4.4 New zCompute Toolbox Fedora image including the V2Z utility (from Version 22.02-SP2)

A new zCompute Toolbox Fedora version is available. It includes the following changes:

- Moved from CentOS 7.9 to Fedora 36.
- User changed from Centos to Fedora.
- New Symp client, compatible with Fedora.
- Now comes pre-installed with the V2Z tool for VMWare/Hyper-V VM imports.
- No default login user. Instead use the cloud-init procedure to change the user password
- Known issues:
 - **NK-3835:** The zCompute Toolbox Fedora shows the old version for members in the Marketplace. This means that tenants will still continue to download the older version if using the Marketplace. Instead look for a pre-downloaded image in the image list. If it's not there, please ask Zadara ops or your cloud administrator to download it for you and make it publicly available in the system.

- **NK-4055:** zCompute Toolbox Fedora is missing the Symp offline pip dependencies. This means that the python dependencies installation requires you to be online (internet) when running symp-update.

2.4.5 Load Balancer API

Added compatibility with AWS fixed-response and redirect action types.

2.4.6 Control over VPC subnet MTU

Users can now view and change MTU values per virtual network.

- **The relevant networks are:**
 - Edge networks (for MSP administrators only)
 - Direct networks(subnets)
 - VPC subnets
- The minimum allowed MTU value is 1450 for standard VPC subnets or 1500 for direct subnets or edge networks.
- The maximum allowed MTU value depends on the global MTU configured in the cluster (e.g. 9000 or 1500). If the global MTU configured in the cluster is 9000, the maximum allowed MTU value for all virtual networks will be limited to 8950.
- If a VM experiences MTU related connectivity issues and it resides on a public network (connected via a route-table to an internet-gateway), then it is recommended to set that network MTU to no more than 1500.
- **LIMITATION:** It is not possible to create a direct subnet in the GUI with desired MTU. However, the MTU can be updated post-creation.

Modify Edge Network [X]

Network 1 | Subnets 2

Name *

Description

Advanced Properties

Node Network *

Shared

VLAN ID * Untagged

MTU *

Edge Router

Public IP

Modify Direct Subnet
✕

Name*

Description

Project*

VPC

Node Network*

VLAN ID*

Subnet (CIDR)*

MTU*

Gateway IP*

Allocation Pools
Add

Note:

The allocation pools cannot contain:

- The router IP
- The first or last IP address of the CIDR block

Allocation Pool -

Cancel
Finish

Modify Subnet
✕

Name*

Description

MTU*

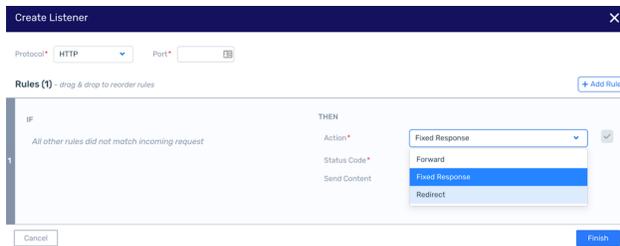
Cancel
Ok

✔ **Note:** This feature only changes the MTU as reported to the user VMs via DHCP, it does not change the actual MTU of the virtual network. VMs that use MTU value from DHCP will be updated only after the DHCP lease is renewed.

2.4.7 New Load Balancer Service Version

In order to support Kubernetes integration with the managed load balancer service, the functionality and APIs were enhanced to support fixed-response and redirect action types that are compatible with their AWS equivalents.

- **Fixed-response:** Return a custom HTTP response
- **Redirect:** Redirect requests from one URL to another



- An example terraform script that create a Kubernetes cluster that uses zCompute APIs for persistent volumes and a load balancer service type is available at: <https://github.com/Neokarm/neokarm-examples/tree/master/k8s>.

• **Known issues:**

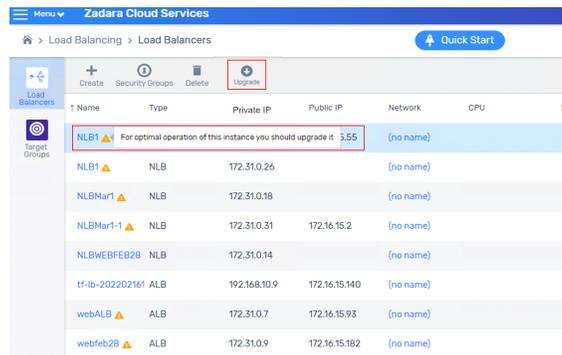
- **NK-2921:** Getting an **Action Failed** status when trying to create a listener in the ALB on an cluster upgraded to version 22.02-SP1, but with the previous LBAAS engine.

Workaround: Upgrade the LBAAS engine before creating a new load balancer.

- **NK-3247:** zCompute officially supports Terraform 2.47. Terraform AWS Provider versions higher than 3.33 fail on LBAAS ARN validation.

Important: The new action types are applicable only after a cluster is upgraded to version 22.02.1, and then the load balancer engine is upgraded.

After your zCompute account has been upgraded, all new load balancer instances will be created using the new engine image. The upgrade of already running load balancer instances is opt in. Users should upgrade their existing load balancer in order to receive the new functionality.



The new load balancer target-group types (fixed-response, redirect) in older images are not supported and require upgrade.

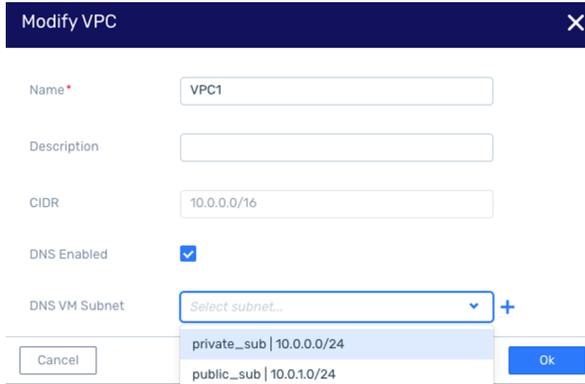
2.4.8 Creating DNS VM in any VPC network (from Version 22.02-SP2)

In this release, Zadara introduces the option for the user to select the subnet range to create a CoreDNS within a specified subnet range. This will allow accessing the CoreDNS VM from outside the VPC when using a VPN or VPC Peering, and forward DNS requests to it.

- By default, the DNS is created with IP address 169.254.64.253, which is only routable inside the VPC.



- In this release, the user will have the option to select from which of the VPC subnets to allocate the DNS IP.



- Users can modify a VPC and switch the VM DNS Subnet. This operation is multi-step operation: First disabling the DNS, then changing the VPC network, and finally re-enabling the DNS. The GUI does this sequence automatically, so it is recommended to use the GUI for this operation.

2.4.9 Custom policies support

IAM admins and tenant admins can now upload custom symp and AWS policies and then apply them to users, using the new symp APIs or AWS API.

- Known issues:
 - **NK-3786:** Terraform is not supported at the moment, since it uses the AWS CreatePolicyVersion API, which is not supported.
 - Creation of a new policy is only available via APIs and not from the GUI. Once the new policy has been created, the admin can apply it to users using the GUI.

2.4.10 Fixes (Versions 22.02-SP2 and SP3)

Versions 22.02-SP2 and SP3 each include a collection of minor fixes.

2.4.11 Notable fixes (Version 22.02-SP1)

- **NK-2374:** Fixed sporadic slow response times on volume operations.
- **NK-2767:** Fixed an issue with Windows VM sometimes hanging on migration.
- **NK-2814:** Fixed an issue with no connectivity between VMs with EIPs and other VMs with EIPs on the edge-network subnets. Effectively this meant that VMs between different VPCs could not connect over elastic IPs without Zadara ops intervention.

- **NK-3144:** Fixed issues on local routes delete in route tables, usually leading to UDP packets stop working after removing their elastic IP.

2.4.12 Notable fixes (Version 22.02)

There is limited availability of version 22.02, and it should not exist anymore in the field. All changes are listed under version 22.02-SP1.

2.5 Version 21.12

Release 21.12 is based on the 21.10 version. The version includes various core changes in order to significantly improve the guest operating system performance (primarily Microsoft Windows).

2.6 Version 21.10

Release 21.10 is a major release which includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the **main** additions and updates to the Zadara Compute platform (zCompute).

2.6.1 Support multiple subnet ranges for Elastic IPs

It is now possible to add multiple non-contiguous subnets to the same Elastic IP pool. Each may have its own gateway. This is aligned with the way site operators purchase public IP ranges. As part of the change Zadara added the following enhancement:

- The ability to add multiple subnet ranges to the same Elastic IP pool
- Each subnet may have its own default gateway
- Virtual Routers will not consume Public IPs anymore, instead a single public IP will serve the entire edge network. This IP is required to access external name servers.

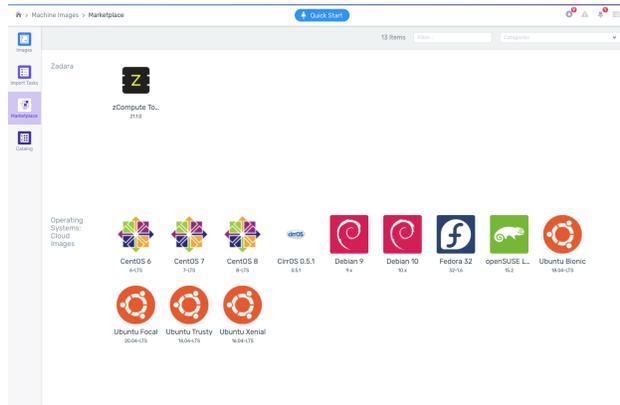
Current limitations:

- Implicit DNAT Functionality is deprecated and will stop working in one of the next releases. This means: a VM without an EIP will not be able to reach an external destination. If such a flow is required, customers should use the explicit NAT GW service to implement this functionality. Also note that certain OS (e.g. Ubuntu, Windows) configuration for Zeroconf will overlap and interfere with the edge routers subnet address range - VM using DNAT cannot access VM using EIP.
- Can't retire a subnet from the edge network without removing all the EIP from this subnet that is in use by instances. The Edge network DNS servers that are configured for the edge network must be accessible from all edge subnets. If multiple edge subnets are configured, then all of them must be configured with the same DNS servers. configuring different DNS servers for different subnets will cause unexpected behavior
- These features require additional upgrade procedures for existing VPCs as external connectivity will be temporarily disrupted.

Site operators, for more info please contact Zadara support

2.6.2 CentOS 8 has been added to the zCompute Machine Images Marketplace

Following customer requests, we added a link to download CentOS 8 to our marketplace.



2.6.3 Customize the system TLS certificate

MSPs that have cloud administration rights can now easily update the web service TLS certificate via the API or UI, without the need to contact Zадара Support.

Go to configuration -> Cluster certificates. You'll see the default self signed certificate. To upload the certificate just click the + button and upload the public certificate and private key.

Certificate - The certificate file is the end-user certificate for your domain which you received from the certificate authority. Drop the certificate file in the designated area, -or- Browse to the location.

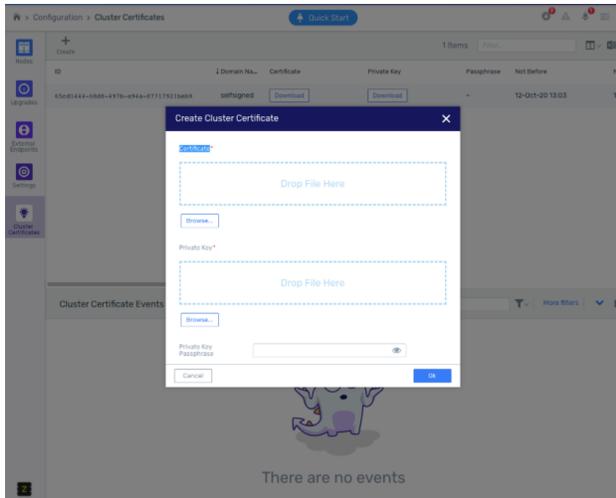
Private Key - The private key file is the file which contains the private key which matches your certificate. Drop the private key file in the designated area, -or- Browse to the location.

Private Key Passphrase - In case the private key is encrypted by password, the passphrase should be specified in this field, otherwise the field should be omitted.

On certificate creation the cluster will validate that the certificate is not expired. After creating the certificate, it can be installed by selecting it and clicking "Install".

Known issues: The certificate can't be updated while there are nodes in maintenance or in failed states and therefore unreachable. There is a GUI validation to prevent certificate change in these cases.

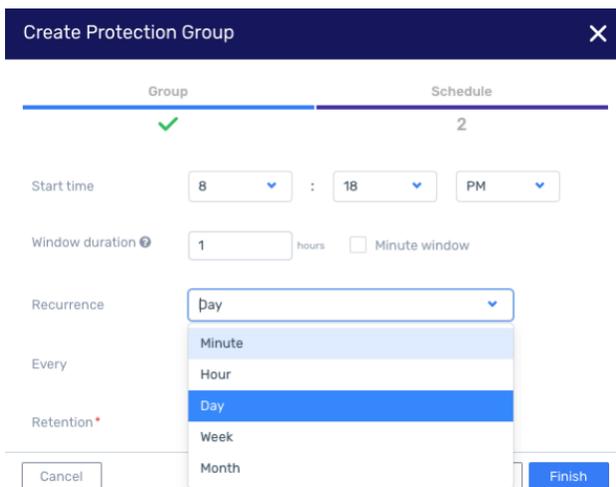
Cluster certificate operation validates nodes are active before starting



2.6.4 Load balancer can be created without the internal Security Group

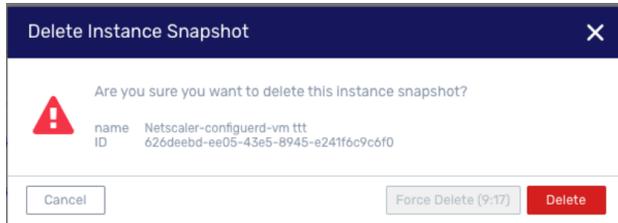
In the past, the system automatically opened the ports to any source. This is very convenient for applications that are service web applications but may be insufficient for tighter security control. Now, upon creation of a Load Balancer instance the user can select whether to keep the mentioned behavior, or like in other clouds, to have full control of the security group by attaching user controlled security groups for the instances. Note: If configured without an Internal Security Group controlled by the platform the access to listener ports is blocked by default. The user must add their own security groups to enable traffic.

2.6.5 The granularity of the protection plan can now be set in minutes



2.6.6 Force delete VM snapshot with timer based on snapshot creation

The UI now contains a force delete button action to terminate stuck snapshots. Note that when creating a snapshot between different storage pools is an operation that may take a long time. To prevent premature attempts to delete snapshots that may succeed the button is grayed out until a 10 minute timer has been completed.



2.6.7 Clear indication added for incompatible instance sizes

Users are now allowed to create an instance type of any size, even when the size is larger than the node's size (RAM or CPU). However, both the UI and API indicate the instance type is incompatible with the hardware size.

2.6.8 Ibaas-manager and Core DNS image updates

A new load balancer and core DNS engine images have been created to account for bug fixes that were carried out. Once the first phase of the upgrade is done, the admin needs to go to the upgrade panel and click upgrade all engines (no screenshot attached). Once image upgrade is done and the engines are updated all the users that have LBaaS and core DNS instances will see that updates are ready

Service Upgrades	
Networking	
Engine ID	Coredns 82c232c1-4715-47a0-ae99-3fd63d8672b8
Name	Default VPC for 7400bba59f044b168b5abbe612a07c
Engine ID	Coredns 964327b9-cb07-45cc-bd94-89949ef6c855
Name	Default VPC for 089f2feb402b4112a11cc66ce595d0c
Engine ID	Coredns 59400a86-7c43-4b79-bbc5-9909b1c58334
Name	Default VPC for 3ab808a3dfdb4af9b5d77ec6faeb5fc
Engine ID	Coredns ef5bcfec-3ac8-4ce6-8961-faf82911a7c8
Name	Default VPC for e9e017dd164e466cb9bbe4ce15984e
Engine ID	Coredns a7f9e321-a1e7-4434-a198-6ce156d56d2b
Name	Default VPC for 01fa4c2d2e0c456e86b210c3e94012
Engine ID	Coredns e6be16e0-687b-4245-b195-c194e1dfa3bc
Name	simondemo
Engine ID	Coredns 2d07b40d-955e-4a08-ab14-c5cf6e782509
Name	Default VPC for ed89b27fb32743e994893fd687ea93
Engine ID	Coredns 5b225d28-4326-441c-99ac-f18d67447eab
Name	citrix_vpc
Load Balancer	
Engine ID	LBAAS d6e15d7e-a701-4ed4-b871-79fa3f555db7
Name	simon

Networking > VPCs > Default VPC for 7400bba59f044b168b5abbe612a070bd Quick Start

Overview Modify Attach DHCP Options Detach DHCP Options Peer VPC Set Default Upgrade DNS Delete

Info Available	DNS Active Healthy
Name: Default VPC for 7400bba59f044b168b5abbe612a070bd (172.31.0.0/16)	DNS Domain: symphony.local
CDR: 172.31.0.0/16	DNS Servers: 10.16.0.11, 8.8.8.8
Creation Date: 23-Dec-20 14:32:59	CoreDNS VM: coredns-82c232c1
DHCP Options: (no name)	CoreDNS Version: Coredns 1.0 (94004b)

For optimal operation of the DNS you should upgrade it

Load Balancing > Load Balancers > simon

Security Groups Map DNS Delete Upgrade

Load Balancers

Info Active Upgradable

Private IP	172.31.0.31
Public IP	10.44.17.11
Internal DNS	elb-d6e15d7e-a701-4ed4-b871-79fa3f555db7.simon.local
External DNS	elb-d6e15d7e-a701-4ed4-b871-79fa3f555db7.elb.services.symphony.public
Instance	lb-simon
Subnet	(no name)
Security Groups	SG_LB_d6e15d7e-2e2d8403
Creation Date	7-Mar-21 12:38
VPC	Default VPC for ed89b27fb32743e994893fd687ea93ed
ID	d6e15d7e-a701-4ed4-b871-79fa3f555db7

2.6.9 DHCP to Pass user configured DNS when default VPC is disabled

By default the system created a VPC DNS service which is a forwarding DNS for the user's configured DNS in the DHCP options while at the same time it's the authoritative DNS for the VPC entities. Hence the instances are configured to point to the VPC DNS. Before the change, if the user chose not to use VPC DNS (example, when using an Active Directory) then the system did not pass through the user configured name server directly to the VMs as the user expected. Now when the user disables the VPC DNS the system will provide the configured DNS all the way to the VM via DHCP.

2.6.10 Direct-Subnet allocation pools can be updated while attached

It is now possible to update allocation pools while the direct network is attached.

2.6.11 Fixed an issue where trying to restore from previous version snapshot failed

Due to fields that were updated in later releases, VM snapshots restored from previous versions that didn't include the `os_type` field failed. This has now been addressed.

2.6.12 After refresh on the account page, the Enforce MFA appeared unenforced

What was fixed

The status now always reflects the actual setting

2.6.13 After a long network disconnect, DNS and LBaaS go into an error state

What was fixed Fixed issue where after a long disconnect, managed services fail to refresh state and lose the state. Relevant for CoreDNS (VPC) and LBaaS

Workaround for pre-R8 In order to fix it in the field, identify the VMs supporting the service and restart the service VMs from the `symp` CLI.

2.7 Version 21.4

2.7.1 VPSA based VM and Volume DR

zCompute can now orchestrate the protection and restore of individual Instances and Volumes between two zCompute systems connected to different VPSAs. The data transfer is done using VPSA volume mirroring between sites, and zCompute has enhanced the protection plans capability to support setting of mirroring on the volumes and to place the required metadata for restoration on an NFS share on the destination VPSA.

2.7.2 Self service password reset

Users can reset their passwords directly from the login page using the “Forgot your password?”.

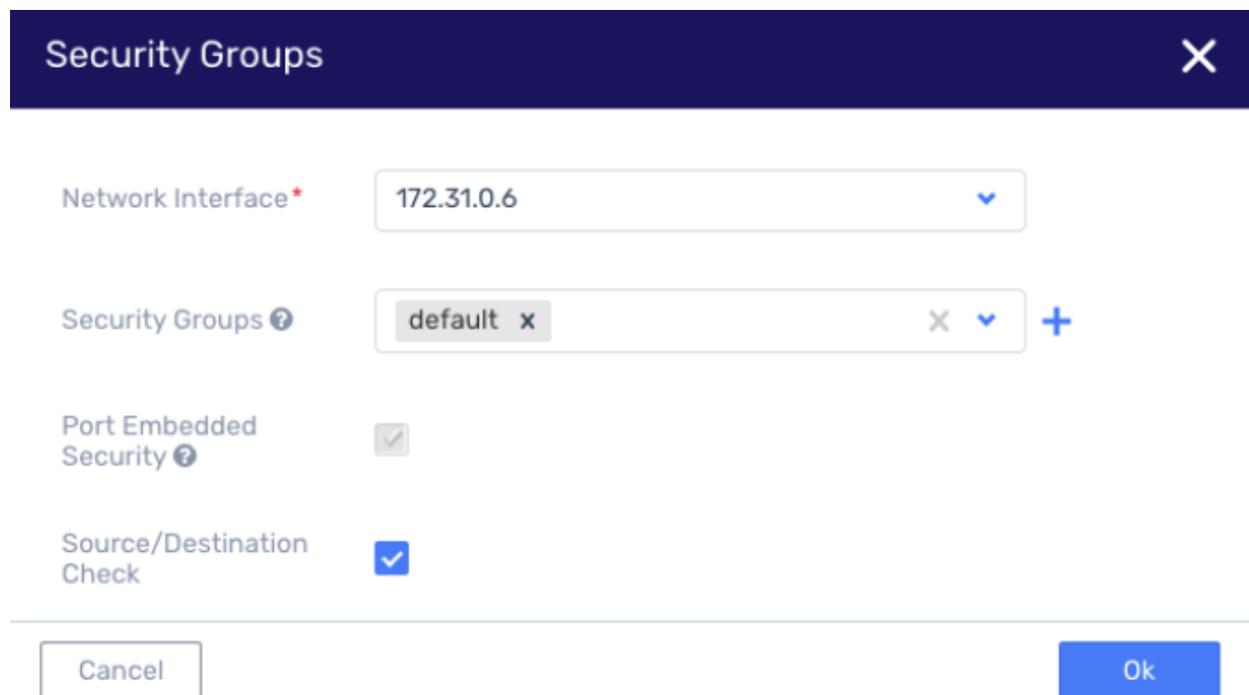
2.7.3 Added support for virtual network appliances within a VPC

Some virtual network appliances are either a virtual firewall that requires full control of the traffic coming in/out of the interface, or may be a VPN appliance that has extra IPs representing the client endpoints.

To support the above, there are now two new settings:

1. Enable/Disable Source/Dest Check - which only controls the L3 IP check. Item 3 above. (This operation can be done by any tenant member)
2. Enable/Disable Port security. This one can only be set by MSP or Cloud admins.

The options were added to the security groups settings of the interface



The screenshot shows a dialog box titled "Security Groups" with a close button (X) in the top right corner. The dialog contains the following settings:

- Network Interface***: A dropdown menu showing "172.31.0.6" with a blue downward arrow.
- Security Groups?**: A dropdown menu showing "default" with a grey "x" button, a blue downward arrow, and a blue "+" button to the right.
- Port Embedded Security?**: A checkbox that is checked, with a grey checkmark icon.
- Source/Destination Check**: A checkbox that is checked, with a blue checkmark icon.

At the bottom of the dialog, there are two buttons: "Cancel" on the left and "Ok" on the right.

2.7.4 Improve VNC console security

Starting of R7 version, users must explicitly allow Zadara administrators or MSP administrators to connect to the VM VNC, otherwise only users from the same project can access the VM VNC.

2.7.5 Auto-populate instance name as a DNS record

When creating a new instance from the Management user interface, the DNS name field in the VM creation wizard will auto populate the VM name as the DNS name.

2.7.6 VPC deletion wizard

A VPC is a construct with many sub resources and/or attached resources. A VPC deletion wizard was added to easily delete a VPC and it's related resources as long as there are no running workloads in the VPC.

2.7.7 Allow user to set VPC as default VPC

The user is now able to change the default VPC by setting a new VPC as the default one.

2.7.8 Additional changes and bug fixes

- **NK-1103** - Clone image operation to allow creation of an image with IDE devices or extra data disks
- **NK-1082** - Add the option to export filtered event list to CSV from the management user interface
- **NK-1108** - Delete project now deletes all the default resources created with the project
- **NK-797** - Fixed an issue where Compute Overview's "Top VMs" sort worked only with CPU

2.8 Version R5 (V21.1.0)

- **NK-227** - Managed resources (like: ENI, EIP, Security Groups,etc...) are now hidden by default and need to explicitly toggle to see them in all views
- **NK-294** - Added a capability to the GUI to change Direct Network IP addresses allocation pool
- **NK-470** - An issue if a wrong error when extending volume on a live instance was resolved
- **NK-502** - VM snapshots are now restored to the requested pool
- **NK-594** - MFA is now supported using authenticator application on a mobile device (e.g. Google Authenticator), for both Console and CLI login
- **NK-771, NK-777** - The system now allows admins and tenant_admins to create instance types and also specify the CPU topology over sockets
- **NK-795** - A network mini-graph was added on the nodes list view
- **NK-809** - Added clear indication and system alarm to the cloud admin when running out of EIP per IP pool
- **NK-831** - Prevent deletion of ENI from the GUI
- **NK-865** - Ability to export filtered lists as CSV file was added to all GUI tables
- **NK-897** - GUI and Sym/AWS web shell now work even if firewall is forwarding different public port to 443
- **NK-904** - Snapshots and volumes are now deleted when deleting image from the marketplace
- **NK-906** - Tenant Admin gets all the permissions of a member
- **NK-913** - Images and Marketplace Images now have an Operating system field The Operating system is inherited by the Instances created out of these images

- **NK-955** - The reboot button was removed from the instance view
- **NK-967** - A new inspector command was added that can be used to validate the MTU of all network interfaces after changing the MTU in the cluster

2.9 Version R4 (V5.5.4)

2.9.1 Improvements to the VM Creation dialogue

NK-733 - Instance creation wizard Steps are according to functionality

Step1 - Compute

Step2 - Storage

Step3 - Network

Step4 - Config

The screenshot shows the 'Create Instance' dialog box with the 'Compute' step selected. The dialog is divided into four tabs: Compute (1), Storage (2), Networking (3), and Config (4). The 'Compute' tab contains the following fields and options:

- Name ***: Input field with 'newwiz' entered.
- Project**: Dropdown menu with 'default' selected.
- Create From**: Radio buttons for 'Image' (selected), 'ISO', and 'Volume'.
- Image ***: Dropdown menu with 'ubuntu-18.04-server-cloudimg' selected.
- Instance Type ***: Table with columns 'Name', 'CPU', and 'RAM'. The selected instance type is 'z4.2xlarge' with '8 vCPUs' and '32 GiB' RAM.
- Key Pair**: Dropdown menu with 'There are no key pairs' selected.
- Options**: Checkboxes for 'Power Up' (checked), 'High availability' (checked), and 'Protect from deletion' (unchecked).
- Create Multiple**: Toggle switch (checked) and input field with '3' entered.

Buttons for 'Cancel' and 'Next' are located at the bottom of the dialog.

2.9.2 Show the VPC virtual router IP on the direct subnet

NK-668 - It is, now, easier to set the static routes in the external routers in case that VMs on non direct VPC subnets need to be accessed via the direct subnets or need to access entities on the direct subnet that are outside of the direct subnet allocation pool

The screenshot shows the 'Direct Subnet' configuration page in the Zadara Edge Cloud interface. The breadcrumb navigation is 'Region Networking > Direct Subnets > directsubnet'. The main content area has tabs for 'Overview', 'Events', and 'VMs', with 'Overview' selected. A table lists the following details for the Direct Subnet:

ID	ab105801-cc68-49bf-bcde-94f191405807
Name	directsubnet
Node Network	network-2
VLAN	1975
CIDR	13.12.11.0/24
Router IP	13.12.11.100
Allocation Pools	Start: 13.12.11.100 End: 13.12.11.109
Account	demo
Project	demoproj1
VPC	Default VPC for 3ab808a3dfdb4af9b5d77ec6faeb5fc6

2.9.3 Additional changes & bug fixes

- **NK-234** - An issue, where direct-network was not listed as route in route-table, was fixed
- **NK-444** - Improved Resource Consumption tile to make it easier to understand
- **NK-546** - create default VPC operation was added to the GUI
- **NK-621** - When attaching Elastic IP, if there is only one network available, it's now selected automatically
- **NK-648** - The issue of Load Balancer creation with elastic IP that belong to an instance was resolved
- **NK-661** - Basic event filtering was fixed, and now working as expected
- **NK-663** - Project delete is now possible even if a NAT gateway still exists in the project but in a deleted state
- **NK-681** - AWS compatible API now support import from snapshot
- **NK-703** - CoreDNS VMs removed from the network topology diagram. Clicking the VPC shows if DNS is enabled
- **NK-729** - When creating key pair for a VM the keys are automatically download, to prevent inaccessible instance
- **NK-730** - Neokarm Policies were renamed Symp Policies
- **NK-739** - Cleanup of aging images from the marketplace
- **NK-800** - The "default" security group is properly displayed even if a load balancer is configured in the same VPC

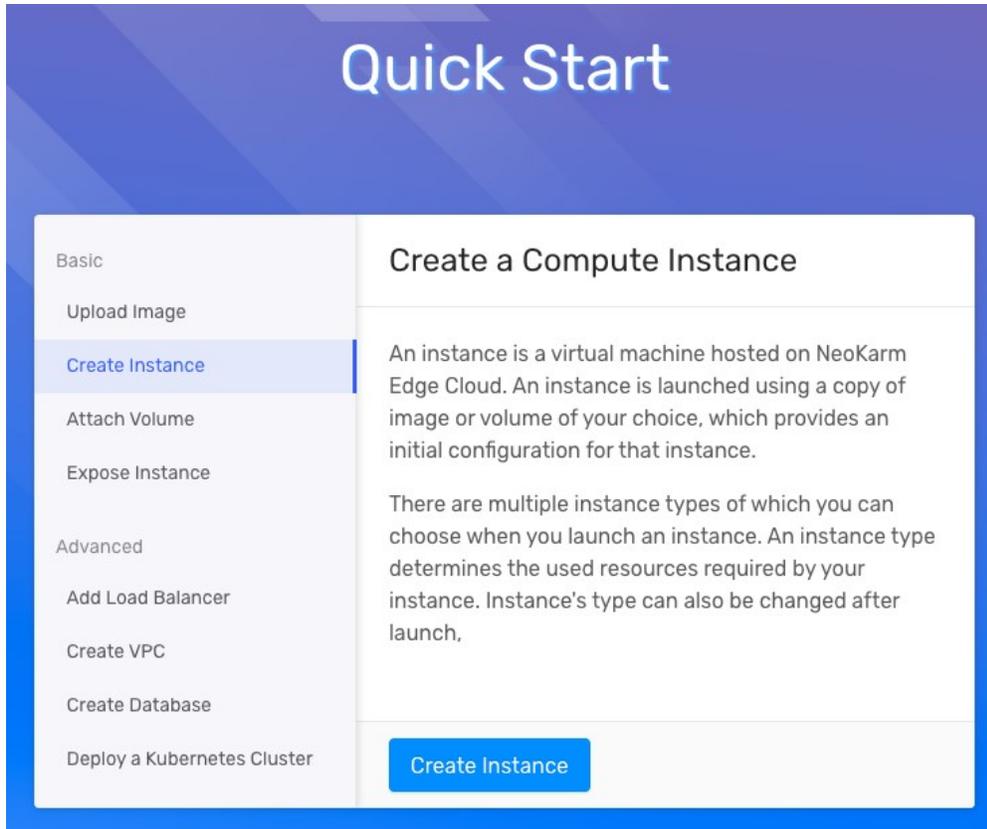
2.10 Version R3 (V5.5.3)

2.10.1 Quick start button and screens

Look for the quick start button on the main navigation bar

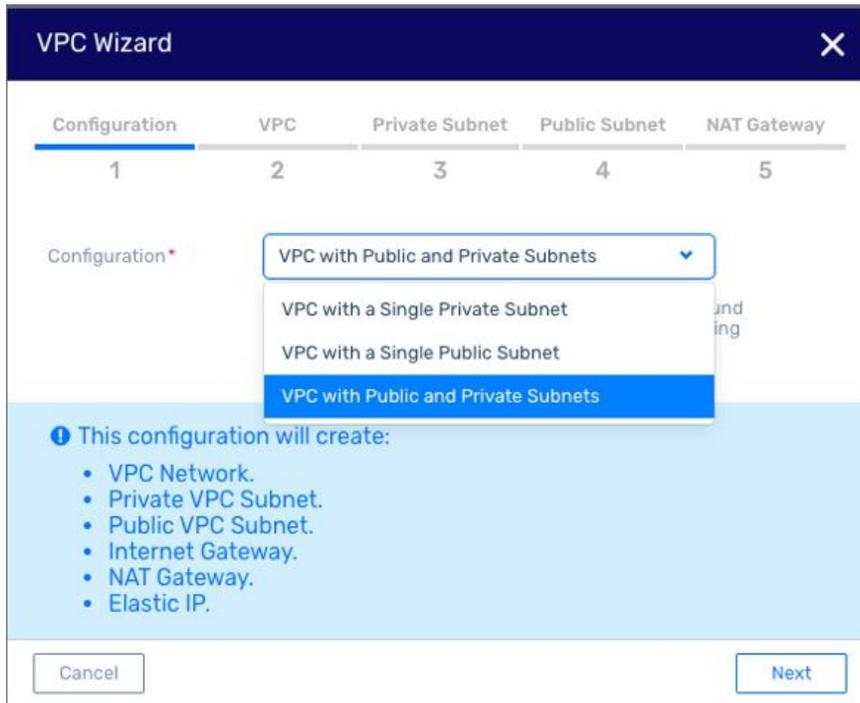


It will easily guide you via the most common tasks such as creating VM instances, attaching storage volumes, etc...

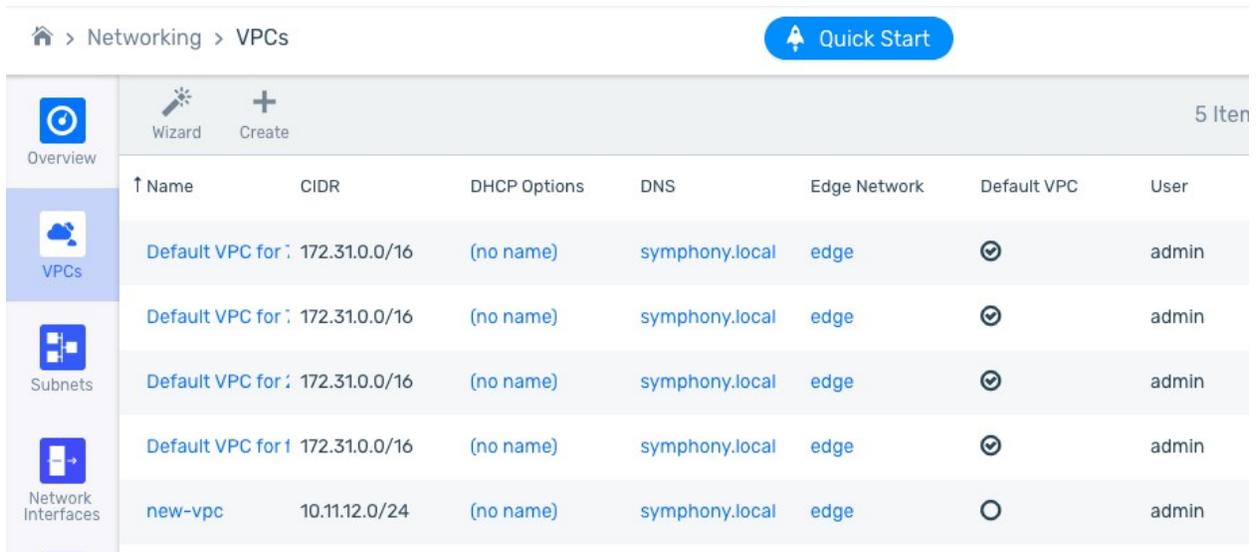


2.10.2 New VPC creation wizard

A wizard was added to assist you with creating the 3 common topologies of VPCs with private or public subnets



The Wizard can be activated from the Quick Start and from the VPCs pane



2.10.3 Elastic Network Interfaces

A new screen was added to manage Network Interfaces. Network interfaces may be attached and detached from an instance and may even move between instances or be a route target. Until now, you could only create it implicitly when connecting an instance to a subnet. Now it has its own screen that exposes the full functionality.

A user can now Create/attach/detach/add security groups and update the name of any network interface.

Name	DNS	IP	MAC Address	Attachment	Subnet	CIDR	VPC	Security Groups	State	Auto Delete
(no name)	host-172-31-0-7...	172.31.0.7	fa:16:3e:5fa:5:80	ubuntu-3	(no name)	172.31.0.0/20	Default VPC for ...	openssh default	In Use	☑
(no name)	host-172-31-0-1...	172.31.0.16	fa:16:3ea:3:d6:02	simonmysql	(no name)	172.31.0.0/20	Default VPC for ...	DBS: simonmys...	In Use	☑
(no name)	host-172-31-0-1...	172.31.0.10	fa:16:3e:d2:15:c6	simon-to-delet...	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.5	fa:16:3e:84:38:79	ubuntu-4	(no name)	172.31.0.0/20	Default VPC for ...	openssh default	In Use	☑
(no name)	host-172-32-2-1...	172.32.2.15	fa:16:3e:3b:7f:73	webs-2	sa-public	172.32.2.0/24	demoforsa	ping-ssh-http...	In Use	☑
(no name)	host-172-31-0-...	172.31.0.21	fa:16:3e:cc:77:42	win2012ci2	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.5	fa:16:3e:b6:94:f5	myfirtvms-6	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.29	fa:16:3e:9da:0:f0	win10-v2v	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.23	fa:16:3e:11:fb:3c	myfirtvms-3	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-192-168-1...	192.168.10.4	fa:16:3e:dd:3a:9e	my_instance_6	Demo subnet	192.168.10.0/24	Demo VPC	allow_all	In Use	☑
(no name)	host-172-31-0-...	172.31.0.30	fa:16:3e:5a:86:4b	fedora_cloud_...	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-1...	172.31.0.12	fa:16:3e:97:58:c4	ununtu-7	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-1...	172.31.0.11	fa:16:3e:fe:0a:64	simon-to-delet...	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.25	fa:16:3e:d3:d0:77	simon-v2v-test1	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.20	fa:16:3e:f0:92:10	ununtu-8	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-7...	172.31.0.7	fa:16:3e:4e:5f:7d	x1-2	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-96-...	172.31.96.10	fa:16:3e:70:57:b9	tesdns	private	172.31.96.0/20	Default VPC for ...	default	In Use	☑
(no name)	host-172-31-0-...	172.31.0.23	fa:16:3e:59:c6:f5	simon	(no name)	172.31.0.0/20	Default VPC for ...	allow_ping_and...	In Use	☑
(no name)	host-172-31-0-1...	172.31.0.10	fa:16:3e:0b:c3:c6	win2012cloudinit	(no name)	172.31.0.0/20	Default VPC for ...	default	In Use	☑

2.10.4 Toolbox

A VM with client tools available on the marketplaces Toolbox v5.5.0. The images contain the Symp CLI, AWS CLI, Python 2.7, Boto3 and Terraform. The instance should be created with an SSH key pair.

2.10.5 Additional changes & bug fixes

- **NK-386** - Added Storage Pool update mechanism
- **NK-405** - The GUI was fixed to allow subnet name change
- **NK-422** - The GUI was fixed to enable detach security groups from a network interface
- **NK-467** - Account members can now generate Access keys
- **NK-468** - All the networking related tabs are now merged into the networks tab Under instance view. EIP, Security groups and Interfaces operations are done from the same place.

KNOWN ISSUES AND LIMITATIONS

3.1 Version 24.03

3.1.1 Upgrade notes

See [zCompute Software Life-Cycle](#) for the Zadara life-cycle policy, supported upgrade paths and details for scheduling an upgrade.

3.1.2 EKS-D Upgrade

Important: EKS-D deployments currently running on zCompute must be upgraded.

Before upgrading to v24.03, all EKS-D clusters currently running on zCompute must be upgraded to either the new EKS-D 1-28-33 image or the EKS-D 1-29-22 image from the **Machine Images > Marketplace**, otherwise the new Persistent Volume attachment will fail.

For all zCompute clouds running v24.08.4, the upgrade machine image is already available in the **Machine Images > Marketplace**.

The main change that requires this upgrade is the way Kubernetes connects to EBS volumes.

Another recommended change is to use Kubernetes instances for running the Kubernetes cluster control nodes, instead of using Auto-Scaling Groups (ASG). See the [README](#) for EKS-D the public Zadara Examples GitHub repository.

3.1.3 Disabled Protection Group still allows Trigger Now

By design, disabling a Protection Group only disables the Protection Group's automatic scheduled backups.

A disabled Protection Group still allows the **Trigger Now** action for an on-the-fly user-initiated backup of the Protection Group's protected resources.

3.1.4 V2Z migrates all VMs as UEFI

V2Z migration always migrates VMs to boot in UEFI mode, even if the source VM is in BIOS mode.

As a workaround to update the migrated VM to boot using BIOS, after completion of the VM migration run the following `symp` command:

```
vm update --hw-firmware-type bios <vm-id>
```

3.1.5 Automatic OS Detection and VM OS Settings

zCompute 24.03 introduces automatic OS detection when creating a VM instance.

In the **Compute > Instances > Create Instance** dialog, the **Operating System** field is automatically populated according to the OS and version detected in the selected source **Image**, **ISO** or **Volume**. The **Operating System** field is read-only, and cannot be overwritten by users.

3.1.6 Direct Subnet in VLAN Management via CLI/API only

On completion of [Creating a Direct Subnet](#), the Direct Subnet is immediately available on the specified VPC, but it is not displayed in the **Account Networking > VLANs Management** screen.

However, the Direct Subnet's `network_id` can be viewed using the `symp vlan-pool vlan get <id>` command. For example:

```
vlan-pool vlan get 1a8cd9e6-0d7d-4ada-ac5b-0bad3fdd291e
```

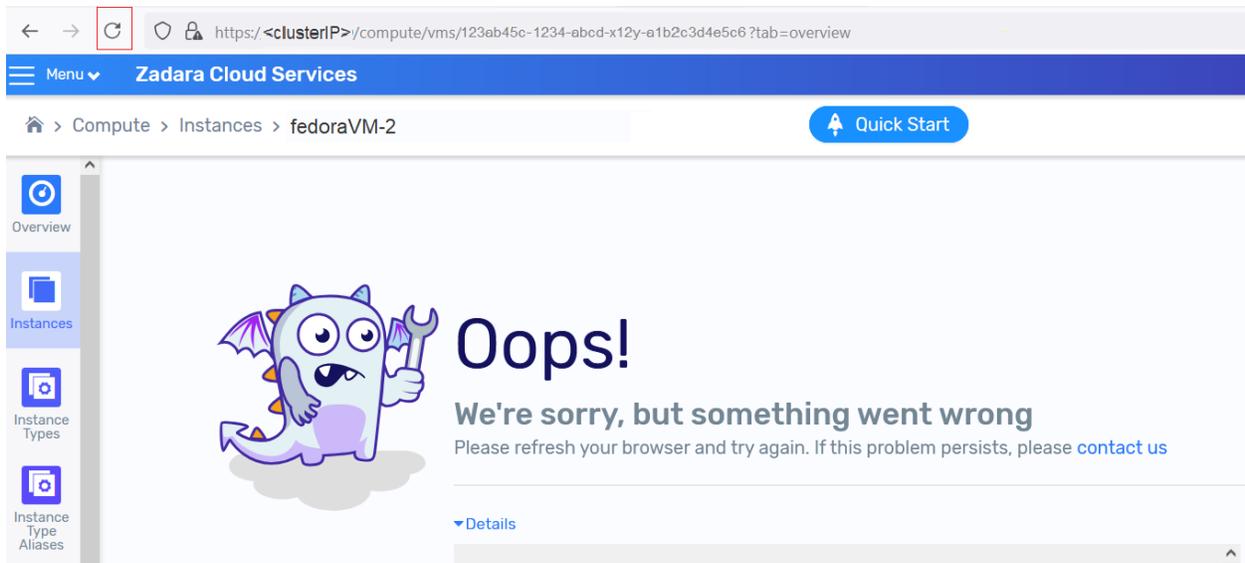
id	1a8cd9e6-0d7d-4ada-ac5b-0bad3fdd291e
name	none
account_vlan_pool_id	93cb6144-7f28-44c3-9492-0b46d13da88d
created_at	2024-11-18T11:47:50Z
guest_network_pool_id	684703f5-d641-4ddb-be82-62b81a024509
network_id	cecc1054-538a-467e-a615-83e750ce04b4
project_vlan_pool_id	adb0d5ba-7927-4813-aea7-d0f0d568d808
updated_at	2024-11-18T11:47:51Z
vlan_tag_id	40

3.1.7 Browser exception in UI during VM instance snapshot

A scenario has been discovered when taking a VM instance snapshot from **Compute > Instances > [VM instance] > ...More > Snapshot > Create Snapshot**. This might cause a browser exception in the UI, displaying the **We're sorry, but something went wrong** message followed by detailed exception trail listing.

Although the snapshot creation succeeds, the browser halts user interaction in the session.

To continue, click the browser refresh button, typically the circular arrow button  at the left of the URL bar.



(NK-13036)

3.1.8 Deprecations

zCompute Storage APIs

From zCompute 23.04, the zCompute Storage v2 and v3 APIs are deprecated.

VM import from OVA

From zCompute 23.04, it is no longer possible to import a VM from an OVA file.

3.2 Version 23.08

3.2.1 Upgrade notes

See [zCompute Software Life-Cycle](#) for the Zadara life-cycle policy, supported upgrade paths and details for scheduling an upgrade.

3.2.2 Key pairs - limitations

- For Windows password recovery (**Get Windows Password** dialog), the UI only accepts keys in RSA (PEM) format.
- In version 23.08.0 and earlier, zCompute does not accept keys for VMs in SSH formats, but only in RSA (PEM) format.

3.2.3 Supported DNS services

zCompute supports DNS services at VPC and Private Hosted Zone levels.

zCompute does not provide public-facing DNS hosted zones.

3.2.4 Custom instance types

New custom instance types can only be created after receiving Zadara approval, and after getting pricing.

The available instance types, sizes and pricing are calculated for optimal use of Zadara's hardware resources.

V2Z custom instance types - known limitation

In the V2Z utility, custom instance types are not allowed for most users.

3.2.5 NK-5234 Extended volume size not updated on instance volume

3.2.6 Protection groups snapshots and start date

- Protection group configuration may start creating snapshots only 24 hours after creation.
- The protection group **Start Date** is set to the following day.

3.2.7 GRE via NAT gateways

GRE via Network Address Translation (NAT) gateways is not supported.

3.2.8 OpenOTP users don't appear in the UI

Although it is possible to sign-on with an OpenOTP user, the OpenOTP users are not displayed in the UI (Users tab).

3.3 Version 22.09

3.3.1 Upgrade notes

This version upgrades from the official zCompute releases:

- V22.02.2 (22.02-sp2)
- V22.02.3 (22.02-sp3)

Customers that have a zCompute version prior to the two upgradable versions will be upgraded in two steps, which may require a longer maintenance window. Relevant customers will be contacted by Zadara Operations.

During the maintenance window, customers may experience sporadic API request failures or brief instances of network disruptions.

3.3.2 NK-6930 UI allows creation of instance types which aren't available on the cloud

In zCompute v22.09.x, the UI might display instance types that require a CPU model which is not available on that cloud. For example, Premium instance types on a non-premium cluster, such as zp4.* instance types on a cluster with standard nodes only.

It is possible to create a VM with such an instance type, but the VM would fail to start.

3.3.3 NK-4852 Identity manager hangs because of too many warning messages

On deletion of an account, the identity manager service was hanging during the user update process, while issuing warning messages for each of the users in the deleted account. The identity manager could not restart successfully. As an interim workaround, in zCompute release 22.09.2, these warning messages are converted to info-level messages. This issue will be fixed in a future release.

3.3.4 NK-3335 UI exception when attaching security groups to a load balancer that is not ready to use

The load balancer service may take time to be initiated. Users will experience a UI exception while trying to attach a security group on a load balancer in the spawning state. Users can attach the security group after the load balancer is in the available state.

3.3.5 NK-4637: Only the 'Reset password' email is sent successfully

It is impossible to receive SMTP for events from zCompute, with one exception: Only the 'Reset password' email is sent successfully. This means that setting custom alerts will not send emails, but will only display in the GUI.

3.3.6 DVS - known issues

- **NK-3898:** On DVS projects, users are not able to set project level tagging that later propagates to virtual machines. Workaround: Once the VM has been created, users can navigate to the VM and add the tag.
- **NK-4598:** The DVS instance tab shows the key pair option while restoring the snapshot backup, even though key pairs are not supported in this version.
- **NK-4606:** The DVS networks overview displays a warning message to clear the filters, even though no filter is applied. Click **Clear Filters** to display the overview.

3.3.7 Volumes that are not connected to any VM - known issue

- **NK-4242:** 'Default volumes' are impossible to delete. We are experiencing difficulties in deleting what appear to be "non attached volumes". Although the UI does not show the attachment, the volumes are still attached to the host.

3.3.8 Enhanced remote DNS status validation - known limitations

- The DNS status for VPCs without a valid route to an IGW will always be “Degraded” when the default DHCP option with the google DNS is used.
- If tenants set their own name server in the VPC’s DHCP options, and their name server is unreachable via the VPC gateway or it can’t resolve google.com, the VPC state will degrade.

3.4 Version 22.02

3.4.1 NK-3883 Cannot modify ASG max capacity via UI

When attempting to modify the ASG max capacity or desired capacity using the zCompute UI, validation begins on the first entered digit and can throw an error. For example, on changing the value from 20 to 30, on entering the “3” the UI displays an error indicating that the new max capacity value is lower than the current value (3 is less than 20). For example:

The screenshot shows the 'Modify Auto-Scaling Group' dialog with three tabs: 'Group Setup', 'Scaling Policy', and 'Advanced'. The 'Group Setup' tab is active. Fields include Name (asg_1), Description, Size Limit (Min: 10, Max: 30), Desired Capacity (3), Network (nw_1), and Launch Configuration (lct). A red error message is displayed at the bottom: 'New desired capacity is below current threshold. Instances may be terminated.'

This issue occurs only when modifying the max or desired capacity in the UI, but the symphony CLI is not affected. If the max or desired capacity is updated via the CLI, then the UI will display the correct updated value. For example:

The screenshot shows the same 'Modify Auto-Scaling Group' dialog. The 'Desired Capacity' field is now 12, 'Min' size limit is 10, and 'Max' size limit is 20. All these fields are highlighted with red boxes, indicating they are the focus of the update.

3.4.2 NK-3153 Clusters with a mix of standard and premium instance types unsupported

There is no support yet for zCompute clusters with a mix of standard and premium instance types.

3.4.3 NK-2557 Data on NVMe disks is not deleted before VM start

Currently these instance types are only suitable for private clouds.

3.4.4 NK-1106 Data volume should be deleted explicitly by users

zCompute does not offer a checkbox to delete VM data volumes. The VM delete dialog clearly states that data volumes must be deleted by users.

3.4.5 NK-3835 zCompute Toolbox Fedora shows the old version for members in the Marketplace

This means that tenants will still continue to download the older version if using the Marketplace. Instead look for a pre-downloaded image in the image list. If it's not there, please ask Zadara ops or your cloud administrator to download it for you and make it publicly available in the system.

3.4.6 NK-4055 zCompute Toolbox Fedora is missing the Symp offline pip dependencies

This means that the python dependencies installation requires you to be online (internet) when running symp-update.

3.4.7 NK-2921 Getting Action Failed status creating listener in ALB

Getting an **Action Failed** status when trying to create a listener in the ALB on an cluster upgraded to version 22.02-SP1, but with the previous LBAAS engine.

Workaround: Upgrade the LBAAS engine before creating a new load balancer.

3.4.8 NK-3247 zCompute load balancer service officially supports Terraform 2.47

Terraform AWS Provider versions higher than 3.33 fail on LBAAS ARN validation.

Important: The new action types are applicable only after a cluster is upgraded to version 22.02.1, and then the load balancer engine is upgraded.

After your zCompute account has been upgraded, all new load balancer instances will be created using the new engine image. The upgrade of already running load balancer instances is opt in. Users should upgrade their existing load balancer in order to receive the new functionality.

Name	Type	Private IP	Public IP	Network	CPU	Rx
NLB1	NLB	172.31.0.26	(no name)			
NLBMar1	NLB	172.31.0.18	(no name)			
NLBMar1-1	NLB	172.31.0.31	172.16.15.2	(no name)		
NLBwEBFEB28	NLB	172.31.0.14	(no name)			
tf-lb-202202161	ALB	192.168.10.9	172.16.15.140	(no name)		
webALB	ALB	172.31.0.7	172.16.15.93	(no name)		
webfeb28	ALB	172.31.0.9	172.16.15.182	(no name)		

The new load balancer target-group types (fixed-response, redirect) in older images are not supported and require upgrade.

3.4.9 NK-3786: Terraform not supported for custom policies

Terraform is not supported at the moment, since it uses the AWS CreatePolicyVersion API, which is not supported.

3.4.10 Creation of new policies via APIs only (no GUI)

Creation of a new policy is only available via APIs and not from the GUI. Once the new policy has been created, the admin can apply it to users using the GUI.

3.4.11 Creation of direct subnet with desired MTU not possible in GUI

It is not possible to create a direct subnet in the GUI with desired MTU. However, the MTU can be updated post-creation.

3.5 Version 21.10

3.5.1 NK-2476 Download image from URL with Let's Encrypt certificate will fail

The trusted certificate store holds a recently expired Let's Encrypt root certificate. This may be amended per cloud, per customer request, and will be fixed on the next release for all the clouds.

3.5.2 NK-2169 When using Cloud Base Init, user can't retrieve the Windows Admin password for remote connection

This is caused by an internal race in the update of the metadata service.

Workaround:

Either don't use Cloud Base Init to create images, or add a startup script that will accept the initial admin password as user data and set it for the user.

3.5.3 NK-1873 DR: In order to restore a VM the user has to have admin role on the destination project

A user must have an admin or an MSP admin role in order to create a local snapshot from a remote snapshot. A bug has been created where the user needs to have an admin role in the destination project in order to restore a VM to that project. Ideally, the admin should be able to restore into a selected project without having a role on the project.

3.5.4 NK-1903 DR: No indication to user when a remote snapshot is ready

The DR metadata is written immediately to the NFS share while the actual snapshot mirror depends on when the VPASA has finished the transfer. The result is that the user may see a snapshot as ready on the remote site while a restore is not possible yet. Trying to restore the VM will lead to volume error which can be force deleted.

Workaround: Restore from snapshot N-1 or retry later if the original system is still active.

3.5.5 NK-1788 Some attributes are missing when creating an AMI image from a restored VM

When creating an image from a VM that was restored from a VM snapshot, the new image is missing some attributes. Specifically, it is missing the bus_type and disk type. The implication is that any VM created from the image VM won't boot.

Workaround: Do not create images from a restored VM. Create the image from the volume snapshots.

3.5.6 NK-753 Tenant admin unable to see resources of all projects in the account

Tenant admins can create projects and assign users, but are unable to see the resources of these projects unless they give themselves an admin role on the project. This makes the account summary inaccurate, since only the resources from the current project are counted. In this image, you can see an empty project:

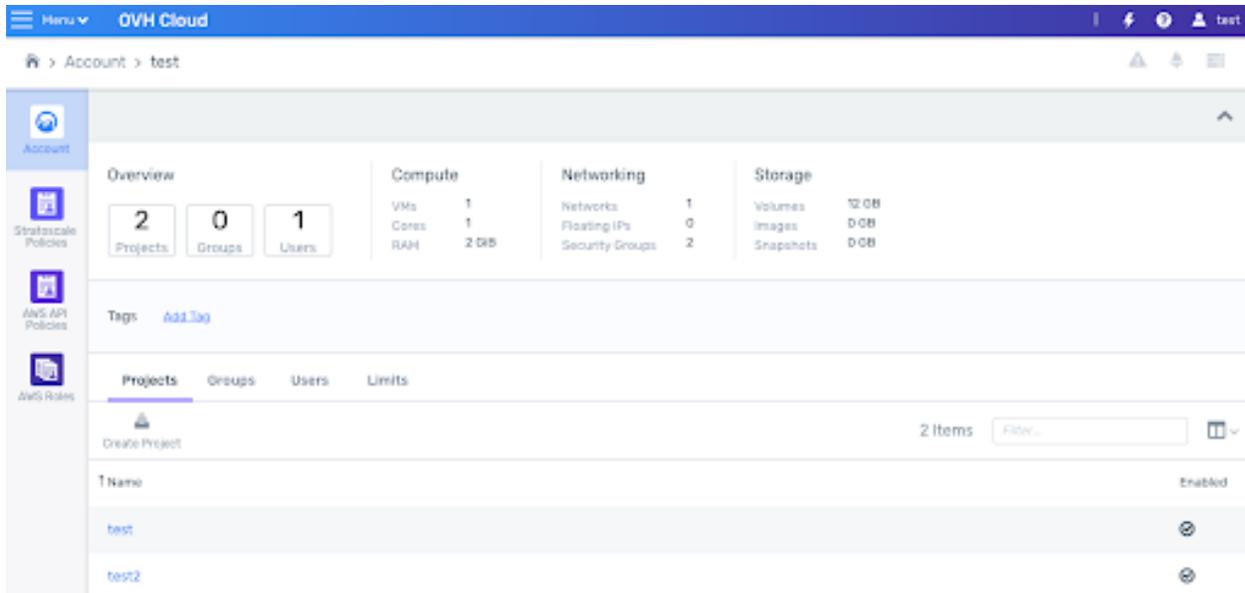
The screenshot shows the Zадara Edge Cloud interface. At the top, the navigation bar includes 'Menu', 'Zадara Edge Cloud', and 'Project: demoproj1'. The breadcrumb trail is 'Account > demo > Projects > simon-to-delete'. A 'Quick Start' button is visible. Below the breadcrumb, there are action buttons: 'Assign User', 'Disable', 'Rename', 'Delete', and 'Create Alarm'. The main content area is divided into several sections:

- Account:** A sidebar on the left with icons for 'Account', 'NewKarm Policies', 'AWS API Policies', and 'AWS Roles'.
- Info:** A table with the following data:

ID	0591c61a40df4d508cbffa5dc72f8290
Name	simon-to-delete
- Resources:** A table with the following data:

Cores	0
RAM	0 MiB
Volumes	0 GB
Images	0 GB
Snapshots	0 GB
- Virtual Assets:** A row of icons for 'Instances', 'Subnets', 'Volumes', 'Floating IPs', 'Security Groups', 'Clusters', and 'DBs', each with a '0' count.
- VPC:** A section for 'IP Pool' with a '-' sign.
- Instances:** A tabbed interface with 'Instances', 'Subnets', 'Volumes', 'Images', 'Snapshots', and 'Limits'. The 'Instances' tab is active, showing '0 Items' and a 'Filter...' input field.

While in this image, at the account level you can only see the default VPC resources from the first project:



3.5.7 NK-1751 DR: Raise an error event when failed to create vm-snapshot

Currently if the system fails to create a VM-snapshot during the asynchronous part of the flow, no indication is given to the user.

3.6 Known issues and limitations introduced in R7

- **NK-1582** - Placing a VM and its volumes into the same protection group causes some snapshots to go into error state
- **NK-1285, NK-1282** - Mirror is not cleaned when detaching a volume from a VM or removing an entity from a protection group

3.7 Known issues and limitations introduced in R5

- **NK-1076** - Reset password for predefined users in disabled accounts succeeds but the message claims failure
- **NK-1082** - There is no export to CSV on Monitoring Events
- **NK-1115** - Windows VM may get data corruption if rebooted from the system

3.8 Known issues and limitations introduced in R4

- **NK-817** - Delete a NAT gateway fails with an error that resources could not be deleted due to dependencies/network associations/routes/etc. User must first delete the route to the NAT GW in the route table.
- **NK-831** - Deletion of ENI is not possible from the GUI

3.9 Known issues and limitations introduced in R3

- **NK-648** - Load Balancer creation menu allows selection of elastic IP that belong to an instance without a warning
- **NK-661** - Basic event filters do not work. Use the advanced mode instead (Click more filters)

3.10 Known issues and limitations introduced in previous releases

- **NK-234** - Direct-network is not listed as route in route-table. When creating a direct subnet, a route is added for local traffic but it is not displayed in the route table.
- **NK-502** - Restoring snapshot of VM always done to the default pool, even if the VM disks are not on that pool or the user explicitly selects a different pool.

REVISION HISTORY

- 24.03, February 2025
- 23.08.4, August 2024
- 23.08.3, June 2024
- 23.08.2, February 2024
- 23.08.1, January 2024
- 23.08, November 2023
- 22.09.4, June 2023
- 22.09.3, February 2023
- 22.09.2, January 2023
- 22.09.1, December 2022
- 22.02-SP3, September 2022
- 22.02-SP2, July 2022
- 22.02-SP1, May 2022
- 22.02, May 2022
- 21.12, December 2021
- 21.10, November 2021
- R7, V21.4.0, April 2021
- R5, V21.1.0, January 2021
- R4, V5.5.4, November 2020
- R3, V5.5.3, October 2020

ZCOMPUTE SOFTWARE LIFE-CYCLE

The following section describes Zadara's software life-cycle policy, designed to guide and govern the development, deployment, and maintenance of our software systems. This policy serves as a cornerstone for Zadara's commitment to deliver high-quality, secure, and feature-rich software to Zadara's clients and partners.

While our platform may already be performing admirably, it is important to acknowledge that the technology landscape is ever-evolving. New features, functionalities, and security enhancements are regularly introduced to address emerging challenges and meet user demands. By upgrading to the latest software versions, we take advantage of these advancements, enabling us to deliver a superior user experience and maintain a competitive edge in the market.

5.1 Zadara End-Of-Support (EOS) policy

- Zadara provides full support for the latest release across both zStorage and zCompute product lines
- Zadara provides security support and bug fixes for the two major releases preceding the latest major release
- Zadara provides at least 6 months notice of deprecations
- Software version downgrade is strictly prohibited
- Any support inquiries for resources running unsupported versions will be addressed via upgrades

5.2 Zadara Version Support Stages

5.2.1 Full Support

During the Full Support stage, bug fixes and security patches may be released on a rolling basis as they become available. At Zadara's discretion, additional features may be provided, generally in the form of a service pack.

5.2.2 Maintenance Support

When a software version enters the Maintenance Support stage, no additional features will be released. As required, high priority bug fixes will be released. Full security support will be provided for releases in the Maintenance Support phase.

5.2.3 End of Support

Upon entering the End of Support phase, customer requests and bug fixes will be addressed via upgrade. In addition, no credits will be extended due to issues that arise from unsupported versions. In the case of failure of unsupported resources, Zadara does not guarantee that the system can be restored and that data can be preserved.

5.2.4 Releases support status

zCompute Release	Support status
24.03	Full Support
23.08	Maintenance Support
22.09	Maintenance Support
22.02 and earlier	End of Support

5.2.5 How to find your version

zCompute administrators can view their version by clicking the **He1p** button in the GUI, and then clicking **About**.

5.2.6 Supported upgrade paths

Source version	Destination version															
	24.03	23.08	23.08.4	23.08.3	23.08.2	23.08.1	23.08.0	22.09.4	22.09.3	22.09.2	22.09.1	22.09.0	22.09.022.02.3 (EOS)	22.02.2 (EOS)	22.02.1 (EOS)	21.12.0 (EOS)
23.08.4	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
23.08.3	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
23.08.2	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
23.08.1	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
23.08.0	☐	☐	☐	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
22.09.4	☐	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
22.09.3	☐	✓	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
22.09.2	☐	☐	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐
22.09.1	☐	☐	☐	☐	☐	☐	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐
22.09.0	☐	☐	☐	☐	☐	☐	☐	✓	✓	☐	☐	☐	☐	☐	☐	☐
22.02.3 (EOS)	☐	☐	☐	☐	☐	☐	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐
22.02.2 (EOS)	☐	☐	☐	☐	☐	☐	☐	☐	✓	✓	✓	☐	☐	☐	☐	☐
22.02.1 (EOS)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	✓	✓	☐	☐	☐	☐
21.12.0 (EOS)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	✓	✓	✓	☐	☐	☐
21.10.3 (EOS)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

5.2.7 How to Upgrade

Zadara's Global Operations team is actively deploying upgrades to ensure our customers and partners around the world are able to continually leverage the latest and greatest Zadara software.

If you would like to book your Cloud upgrade, please contact support@zadara.com and one of our team members will reach out to schedule a day/time that works best for you and your organization. You can also submit a ticket directly to us using the below link (please reference 'Upgrade' in the subject line): <https://support.zadarastorage.com/hc/en-us/requests/new>