

STACKIT GmbH & Co. KG Stiftsbergstraße 1 | 74172 Neckarsulm

# Service Certificate – STACKIT Compute Engine

#### **Service Name**

STACKIT Compute Engine

### High level service description

STACKIT Compute Engine ("Compute Engine") provides Virtual Machines ("VM") consisting of a combination of processor ("vCPU") and memory ("RAM"). The customer can choose the optimum VM for its application from a wide range of prefabricated variants ("Flavors"). The provision, management and deletion of the VM is carried out by the customer itself. Either the STACKIT Portal or the STACKIT API can be used for this purpose.

## **Key Features**

- Creation, usage and deletion of VMs according to individual requirements.
- Use of the service in self-service using a graphical interface in the STACKIT Portal and using the STACKIT API.
- One or more Availability Zones (AZ) for provisioning VMs in different availability classes.
  - Each Availability Zone is separated in power supply, cooling and local network connectivity from the other Availability Zones.
  - Several Availability Zones can be located in the same building.

#### **Service Plans**

The service plans are generally provided with (Table 1 & 2) and without (Table 3,4 & 5) CPU overprovisioning. The following Flavors are currently available. The current list can be taken from the STACKIT Portal or viewed via STACKIT API. The version is marked accordingly in the flavor (e.g. "c1a"). The hardware on which the VM is based (e.g. processor type) is specified and described in the additional documentation (STACKIT docs) and can be viewed there by the customer.

The current list can be taken from the STACKIT Portal or viewed via STACKIT API.

Table 1: CPU overprovisioning Intel Gen1

Туре	Name	vCPU	RAM in GB	Local disk in GB
Small, specific instances	t1.1	1	0,5	_
Small, specific instances	t1.2	1	1	_

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Туре	Name	vCPU	RAM in GB	Local disk in GB
Processor-optimized instances	s1.2	2	2	_
Processor-optimized instances	s1.3	4	4	_
Processor-optimized instances	s1.4	8	8	_
Processor-optimized instances	s1.5	16	16	
Processor-optimized instances	s1.6	32	32	_
Processor-optimized instances	c1.1	1	2	_
Processor-optimized instances	c1.2	2	4	_
Processor-optimized instances	c1.3	4	8	_
Processor-optimized instances	c1.4	8	16	_
Processor-optimized instances	c1.5	16	32	_
General instances	g1.1	1	4	_
General instances	g1.2	2	8	_
General instances	g1.3	4	16	_
General instances	g1.4	8	32	_
General instances	g1.5	16	64	_
Memory-optimized instances	m1.1	1	8	_
Memory-optimized instances	m1.2	2	16	
Memory-optimized instances	m1.3	4	32	_

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Туре	Name	vCPU	RAM in GB	Local disk in GB
Memory-optimized instances	m1.4	8	64	_
Memory-optimized instances	m1.5	16	128	_
Large, memory-optimized instances	b1.1	1	16	_
Large, memory-optimized instances	b1.2	2	32	_
Large, memory-optimized instances	b1.3	4	64	_
Large, memory-optimized instances	b1.4	8	128	_
Others	m1.amphora	1	1	2

Table 2: CPU overprovisioning Intel Gen2

Туре	Name	vCPU	RAM in GB	Local disk in GB
Small, specific instances	t2i.1	1	1	_
Processor-optimized instances	c2i.1	1	2	_
Processor-optimized instances	c2i.2	2	4	_
Processor-optimized instances	c2i.4	4	8	_
Processor-optimized instances	c2i.8	8	16	_
Processor-optimized instances	c2i.16	16	32	_
General instances	g2i.1	1	4	_
General instances	g2i.2	2	8	

Туре	Name	vCPU	RAM in GB	Local disk in GB
General instances	g2i.4	4	16	-
General instances	g2i.8	8	32	_
General instances	g2i.16	16	64	_
Memory-optimized instances	m2i.1	1	8	_
Memory-optimized instances	m2i.2	2	16	_
Memory-optimized instances	m2i.4	4	32	_
Memory-optimized instances	m2i.8	8	64	_
Memory-optimized instances	m2i.16	16	128	_

Table 3: Without CPU overprovisioning AMD Gen 1

Туре	Name	vCPU	RAM in GB	Local disk in GB
Processor-optimized instances	s1a.2d	2	2	_
Processor-optimized instances	s1a.4d	4	4	_
Processor-optimized instances	s1a.8d	8	8	_
Processor-optimized instances	s1a.16d	16	16	_
Processor-optimized instances	s1a.32d	32	32	_
Processor-optimized instances	s1a.60d	60	60	_
Processor-optimized instances	c1a.1d	1	2	_

Туре	Name	vCPU	RAM in GB	Local disk in GB
Processor-optimized instances	c1a.2d	2	4	-
Processor-optimized instances	c1a.4d	4	8	-
Processor-optimized instances	c1a.8d	8	16	_
Processor-optimized instances	c1a.16d	16	32	-
General instances	g1a.1d	1	4	_
General instances	g1a.2d	2	8	-
General instances	g1a.4d	4	16	-
General instances	g1a.8d	8	32	-
General instances	g1a.16d	16	64	-
General instances	g1a.32d	32	128	_
General instances	g1a.60d	60	238	-
Memory-optimized instances	m1a.1d	1	8	-
Memory-optimized instances	m1a.2d	2	16	_
Memory-optimized instances	m1a.4d	4	32	-
Memory-optimized instances	m1a.8d	8	64	-
Memory-optimized instances	m1a.16d	16	128	-
Memory-optimized instances	m1a.32d	32	238	-
Memory-optimized instances	m1a.60d	60	476	_

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Туре	Name	vCPU	RAM in GB	Local disk in GB
Memory-optimized instances	m1a.120d	120	952	_
Large, memory-optimized instances	b1a.1d	1	16	_
Large, memory-optimized instances	b1a.2d	2	32	_
Large, memory-optimized instances	b1a.4d	4	64	_
Large, memory-optimized instances	b1a.8d	8	128	_
Large, memory-optimized instances	b1a.16d	16	238	_
Large, memory-optimized instances	b1a.32d	32	476	_
Large, memory-optimized instances	b1a.48d	48	768	_
Large, memory-optimized instances	b1a.60d	60	952	_
Large, memory-optimized instances	b1a.120d	120	1904	-

Table 4: Without CPU overprovisioning ARM Gen 1

Туре	Name	vCPU	RAM in GB	Local disk in GB
General instances	g1r.1d	1	4	_
General instances	g1r.2d	2	8	_
General instances	g1r.4d	4	16	_
General instances	g1r.8d	8	32	_
General instances	g1r.16d	16	64	_

Туре	Name	vCPU	RAM in GB	Local disk in GB
General instances	g1r.30d	30	120	_

Table 5: Without CPU overprovisioning Intel Gen 2

Туре	Name	vCPU	RAM in GB	Local disk in GB
Large, memory-optimized instances	b2i.1d	1	16	_
Large, memory-optimized instances	b2i.2d	2	32	
Large, memory-optimized instances	b2i.4d	4	64	_
Large, memory-optimized instances	b2i.8d	8	120	_
Large, memory-optimized instances	b2i.16d	16	238	_
Large, memory-optimized instances	b2i.30d	30	476	_
Large, memory-optimized instances	b2i.38d	38	952	_

## **Local Disk**

- The local disk refers to the local disk space that is available to the respective VM for the operating system.
  - The local disk is not persistent in the case of individual system failures. It is therefore only suitable for temporary or replicated data.
- If no local disk is available, the customer must use a disk from the separate Block Storage to use the Compute Engine (Block Storage represents a separately obtainable STACKIT Cloud Service, see Service Level Agreement STACKIT Block Storage, "Block Storage").

#### Metric

- Billing per VM per hour or part thereof.
- Calculated Period: Creation of the VM until deletion of the VM minus any shelving periods. Shelving corresponds to stopping the VM with cancellation of resource reservation.
- For other resources used by the customer in conjunction with a VM, such as Block Storage and Backup Storage, a separate charge is made according to the conditions specified in the respective Service Level Agreement.

### **SLA Specifics**

- For all VMs which are provided in a single availability zone (single VMs without a highly available system group with several VMs), an availability of 99.5% in the calendar month average is agreed.
- For VMs deployed in a Metro Availability Zone, an availability of 99.8% on a calendar month average is agreed.
- For all system groups, i.e. those which are provided by means of two VMs in two different Single Availability Zones in the same region, an availability of at least one VM of 99.9% in the calendar month average is agreed upon.
- VMs that are waiting for access to their disk due to a Block Storage failure still count as available.
- The availability data refers to the availability of the VMs that are in operation. It does not include configuration or customer-related properties for non-availability (e.g. a shutdown of the VM).

### **Backup**

Backup and recovery of Compute Engine are the responsibility of the customer and are not included in the service. This relates in particular to the following points

- The definition (properties configured by the customer) of the VM itself.
- The data of the possible local disk.
- The data of a disk when using the Block Storage.

#### **Additional Terms**

- The customer may use VMs of the Compute Engine to install and run software licensed separately by customer.
- When creating VMs, public operating system images can be used. An overview of usable operating system images provided by STACKIT is available in the STACKIT Portal and/or the documentation. STACKIT reserves the right to expand or reduce the portfolio of operating system images provided by STACKIT for the creation of new VMs at any time. Existing instances of VMs are not affected. With the provision of the operating system images, STACKIT does not provide any licenses for or on behalf of the customers. By using one of the public operating system images, the customer accepts the license terms of the respective manufacturer applicable at the time of the conclusion of the contract; the license terms for each manufacturer of operating system images provided by STACKIT are listed below separately for each manufacturer ("Third Party Terms"). With regard to the relevant Third Party Terms, an agreement is concluded between the customer and the respective manufacturer.
- The correct licensing of the operating system images or software used on the VMs is the sole responsibility of the customer, unless STACKIT has expressly assumed licensing for the customer as an object of the service. If STACKIT takes over a licensing as part of the contract between STACKIT and the customer, this will be pointed out separately in the respective Service Level Agreement.
- An operating system image selected by the customer does not become an object of performance of the contract between STACKIT and the customer. Accordingly, STACKIT does not assume any warranty for the operating system image selected by the customer and does not make any availability promises in this respect.
- Management of the operating system and other software on the VMs is the sole responsibility of the customer. This includes, but is not limited to, installation, operation, the import of updates and patches, maintenance, backup and support.
- The customer is responsible for the security of its virtual machine.

- The Third Party Terms listed below apply between the customer and the operating system manufacturer, depending on the operating system image selected by the customer when creating a VM:
  - CentOS: https://www.centos.org/legal/licensing-policy/
  - Debian: https://www.debian.org/social\_contract#guidelines
  - Ubuntu: https://ubuntu.com/legal/intellectual-property-policy
  - Fedora: https://fedoraproject.org/wiki/Legal:Licenses/LicenseAgreement?rd=Leg al/Licenses/LicenseAgreement
  - AlmaLinux https://almalinux.org/p/the-almalinux-os-licensing-policy/
  - Rocky Linux https://rockylinux.org/licensing/
- The following additional Third Party Terms apply to the use of Openstack's Web Console
  - o noVNC/LICENSE.txt at master · novnc/noVNC · GitHub

# **Annex: Exportability (Online Register)**

Data Type	Description	Exporta ble (Yes/No)	Form at	Additional notes
Custome r data (Databas e Content)	Data stored by the customer in the database (if available) or within the product/service	No	-	We do not save customer data in the product.
User Accounts & Permissi ons	Information about users and their permissions	Yes	JSON	General access to the STACKIT project can be seen in the "IAM and Management" section in the STACKIT Portal.
System Metrics (Instance s / Resource s in Use)	Performance data of the instance / resource in use (e.g., CPU usage, memory usage)	Yes	JSON	Selected machine types can be exported via API. Performance parameters (e.g. CPU usage, memory usage) from the virtual machine must be evaluated by the customer (this can be evaluated, for example, using operating system tools).
	Sizes and Capacities Capacities of the available resources / instances	Yes	JSON	The resources used / remaining can be queried via quotas (limits for resources) via the API ( <u>laaS-API</u> ) or the STACKIT Portal
System propertie s (Instance s / Resource s in use)	Versions and information necessary to check compatibility	No. Compan y confident ial STACKI T.	-	-
Product / service- related data (product	Configuration data and source code Configuration of IT-	No. Compan y confident ial	-	Generally no - some components we use are open source. In the backend we use e.g. OpenStack which is publicly accesible. Yaook is a public open source project for OpenStack

propertie s)	Systems/rudim ental IT, Settings, Customizing, IP's, VLAN, Interfaces, Software Code, Scripts	STACKI T.		lifecycle management which was founded by STACKIT, besides others.  https://github.com/openvswitch/ovs https://github.com/ovn-org/ovn https://wiki.openstack.org/wiki/Getting The_Code https://gitlab.com/yaook
	Other service- related information	-	-	No other service-related information available
	Log Data (non personalized and personalized) System-status, Technical-events, etc.	No. Compan y confident ial STACKI T.	-	-
	Log Data (non personalized and personalized) Login/Logout of User, User activities	Yes	JSON	Audit Logs

# Version and start of validity

Version 1.5, valid from 12.09.2025