

1.1 SERVICE DESCRIPTION

The service is designed in a way that will minimize Advania's operational involvement. Advania administrates the cloud platform and provides a self-service UI console for customers to administrate their network and cloud servers.

The service does not include backup, however backup clients can be installed on a virtual instance to back up the instance to an external location. Users are also able to take snapshots of their instances to minimize recovery time.

The option to white-label the console's interface is available by adding Virtual Private Cloud. With this feature users are also able to use their own legal external IP address ranges to provision on their own servers. However, this feature is not available in self-service and will require a workflow of task performed by the service provider. To enable these features a service request must be submitted by the customer. The task will be completed in time relative to the number of tasks in the queue.

The platform is multi-tenant and will be used by more than one customer. Each customer is separated from other customers on the IP layer and with authentication such that information cannot leak between customers.

Service key features:

- Easy-to-use self-service web console for compute and storage
- API support (EC2 and S3)
- Built in hourly usage metering
- Browser based VM console access
- User and team thresholds and quotas
- Team and project isolation for networking, gear and quotas
- Virtual routers, firewalls and load balancers
- Can hook into any monitoring solution
- White labelling

Included in service:

- Internal IP address
- Default gateway for Internet access
- Virtual instance snapshots possibility

Advania responsibilities:

- Advania provides all hardware needed to provide the service within the scope of SLA
- Advania maintains the VM platform and provides all necessary software licenses for the platform
- Advania maintains the web console where customers administer their systems
- All other services not mentioned herein will be charged separately

Linux servers:

VM is created from a standard template with Linux operating system. The VM is charged according to size and usage by the hour. Advania provides a four tier option of storage with each VM and so storage is not included in the base fee for each VM. A tier choice is necessary for each VM.

Microsoft Windows servers:

VM is created from a standard template with Windows server operating system. The VM is charged according to size and usage by the hour. Advania provides a four tier option of storage with each VM and so storage is not included in the base fee for each VM. A tier choice is necessary for each VM.

For reference, Microsoft has not yet issued support for certain software that is operated on platforms based on cloudstack. This will prevent the customer from seeking support from Microsoft directly for that software.

Storage:

For each VM a choice of storage tier is necessary. Storage is provided in preconfigured bundles according to the chosen VM template. Reserved storage is charged by the hour whether or not the VM is on.

The following table shows the storage tiers available:

Tier	Description
Platinum	No IOPS restriction
Gold	IOPS < 1200
Silver	IOPS < 400
Lead	Low performance

Snapshot

A snapshot feature for VMs is available in the web console. VMs can be restored from a snapshot as long as the snapshot is stored.

Snapshots take up storage like any other data and are charged accordingly.

The platform provides an automatic snapshot feature. Timings and frequency is preconfigured according to the customer demands.

Snapshots do not replace regular backups since the snapshots are stored on the same storage as the VMs.

Template

Custom templates can be configured. Templates take up storage like any other data and are charged accordingly.

Network traffic (Bandwidth)

All outgoing bandwidth is charged by each traversed GB.

1.2 ADDITIONAL FEATURES

1.2.1 VIRTUAL PRIVATE CLOUD (BRANDED SERVICES)

Virtual private cloud provides a branded user interface on the web console. An individual unit within OpenCloud supplies the private console. The branded console is monitored and administrated by Advania.

Advania responsibilities:

- Advania administrates and monitors the web console
- Branding of the web console
- All other services not mentioned herein will be charged separately

1.2.2 PUBLIC IP ADDRESS

Public IP addresses are provided by Advania. Each reserved IP address is charged by the hour.

1.3 SERVICE LEVEL

1.3.1 CONTACT ADVANIA

Notification of faults, inquiries about providing services or requests for additional services are received by the Service Desk in the following ways:

By phone: +354 440 9112

By email: support@advania.com

Or by contacting your designated account manager.

1.3.2 SERVICE HOURS

Regular service hours are Monday through Friday from 08:00 – 17:00 (GMT+0), apart from Icelandic national holidays.

Outside of regular service hours, the shift operators log requests to be handled during regular service hours. The shift operators assess criticality of incidents reported from customers or alerted through the monitoring system and have the authority to activate the appropriate procedures. Services rendered outside of regular working hours are charged appropriately as part of an agreement or by the hour.

1.3.3 MAINTENANCE WINDOWS

Ongoing maintenance of the IT environment, infrastructure and network (including updating of service pack, security patches, version upgrades, etc.) that may affect operation must take place during defined service windows. Facility management is subject to higher level change management.

Service windows for planned shutdown or service interference are between 21:00 and 6:00 (GMT+0) every Monday and Wednesday and every other Sunday.

If Advania intends to utilize the time for service windows, Customer must be notified of this no later than 48 hours prior to the planned maintenance. If maintenance is likely to cause more than 2 hours

of downtime or interference Advania will notify the Customer with one week notice unless there is a case of emergency.

1.3.4 RESPONSE AND PRIORITY

Advania handles any kind of requests as soon as possible in cooperation with its customer.

Advania may have to prioritize requests by importance and impact. Following goals are for reference:

Description	Response goal <i>Timing referencing when supplier has accepted the request</i>	Resolution goal <i>Timing referencing when supplier has marked the request as finished</i>
Emergency	1 hour – 24/7	8 hours
Important	3 hours – standard service time	Next business day
Standard	6 hours – standard service time	Within two days
Planned	Next business day	Planned and dated

Goals for each service are defined in the appropriate chapter referencing the description in the table here above.

1.3.5 ADVANIA OPENCLOUD

Category	Action / Situation
Emergency	Bug/error in VM environment that causes instances to be inoperable
Important	Request for support or debugging on a specific instance
Standard	General service request or user questions regarding environment
Scheduled	Consultancy and projects regarding instances as well as maintenance

Advania's virtual environment is built on certified hardware. Advania ensures the availability of resources to allow for agility and enable maintenance on each unit without a drop in performance. The Advania OpenCloud target availability is 99.9%.

- Advania Service desk handles 1st level support (ticketing)
 - The UI is not working properly,
 - Virtual instance is not working properly or cannot be deleted,
 - Rebooting and password reset
- Advania Service desk escalates other tickets to specialists
 - Escalated requests and incidents include templates, VPCs, platform software bugs and hardware faults
 - Escalated tickets may be charged separately
- OpenCloud Software bugs
 - Advania handles software bugs that may occur in the OpenCloud platform
 - Response and resolution is according to best effort

- Platform administration
 - Advania administrates both hardware and software that together form the platform for virtual servers
 - Advania also administrates the web console as part of the platform
 - Advania does not administrate individual server instances as a part of platform administration
- Fee
 - All service not mentioned as included will be charged by the hour
 - An example of a not included service:
 - Changes to the customers network
 - Custom templates
 - Disk tier changes
- Platform load
 - Target for maximum hardware load is:
 - Physical RAM <= 80%
 - Physical CPU <= 60%
 - CPU Ratio (vCPU:pCPU) < 8:1
 - Total storage usage <= 90%
 - If the platform reaches the maximum load then a purchasing procedure is activated

Customers are able to contact Advania via support@advania.com for support related to any and all cloud service where the request will be categorized and placed in the relevant queue and processed accordingly.

1.3.6 ADVANIA OBJECT STORAGE

Category	Action / Situation
Emergency	Any fault resulting in service being non-responsive or off line
Important	Request for support or analysis
Standard	General service request or user questions regarding environment
Scheduled	Consultancy and projects

Advania's Object storage solution built on certified hardware from well-known vendors. Advania ensures adequate environment capacity in order to maintain each unit without degradation of service.

Uptime goal for object storage is 99.9%.

- Advania Service desk escalates other tickets to specialists
 - Escalated requests and incidents regarding platform software bugs and hardware faults
 - Escalated tickets may be charged separately
- Software bugs
 - Advania handles software bugs that may occur in the platform
 - Response and resolution is according to best effort

Customers are able to contact Advania via support@advania.com for support related to any and all cloud service where the request will be categorized and placed in the relevant queue and processed accordingly.

1.3.7 VIRTUAL PRIVATE CLOUD

Category	Action / Situation
Emergency	Any fault resulting in the web console being non-responsive
Important	Request for support or analysis
Standard	General service request or user questions regarding environment
Scheduled	Consultancy and projects

The VPC target availability is 99.9%.

Advania's VPC is built on top of OpenCloud hypervisor technology. Advania ensures adequate environment capacity in order to maintain each unit without degradation of service.

- Advania Service desk escalates other tickets to specialists
 - Escalated requests and incidents regarding VPC software bugs and general faults
 - Escalated tickets may be charged separately
- Software bugs
 - Advania handles software bugs that may occur in the platform
 - Response and resolution is according to best effort

Customers are able to contact Advania via support@advania.com for support related to any and all cloud service where the request will be categorized and placed in the relevant queue and processed accordingly.