

SLA and SLO Document

LIVEWIRE
CLOUD

Applies to Livewire's Cloud offering Available from all Tier3 and Tier1 Datacenters

Service Level Agreement (SLA)

Service Level Objective (SLO)

Service Level Agreement

The following presents Livewire Cloud Group. ("Livewire") standard Service Level Agreement ("SLA") applicable to the sale of its Cloud products and services ("Products and Services"). When used in this Service Level Agreement, "You" and "Your" refer to the individual entering into an agreement arranging the sale and use of the Livewire's Cloud Products and Services (when entering into this agreement on behalf of yourself) or the entity entering into an agreement arranging the sale and use of the Livewire's Cloud Products and Services (when entering into this agreement as an authorized representative on behalf of such entity).

1. Overview.

The purpose of this Service Level Agreement is to set forth the service levels at which Livewire Cloud Group is to provide certain Services to You. You agree that the remedies set out herein are the sole and exclusive remedy for Livewire's failure to meet a Service Level Guarantee. This Service Level Agreement applies only when Your account is in good standing.

This SLA lists certain Livewire standards for provision of the Services, and it offers customer promised Service Credit (as defined below) for any failure to meet those standards.

This SLA also lists several non- credit service standards that Livewire strives to meet, even though they're not guaranteed or subject to credits, and customer will not face any failure in service if these are not met by Livewire support teams. For an example a support ticket with non-critical priority is responded back on next business day.

These non-credit standards are listed alongside the credit standards below, for informational purposes only, to provide a sense of Livewire's commitment to excellence. (Each listing of a standard below states whether it's a credit standard or a non-credit one.)

2. Definitions.

"Service Level Agreement" or "SLA" means, with respect to a specific Service, a level of performance at which Livewire is contractually obligated to deliver the Service to you and which, depending on the specific Service ordered, is established with reference to one or more of the following metrics:

3. Availability

Livewire will use technically and commercially reasonable efforts to ensure that, during any given billing month of the Service Term / Warranty, Availability of each component of the Service Offering ("service component") meets the "Availability Commitment" specified in the table below.

Service Component that qualifies for Credit Standards	Availability Commitment
Production vSphere Cluster	99.99%
Production Storage Availability	99.99%
Production Storage Performance	99.99%
Backup Storage	99.5%
Cloud Management Services	99.9%
Datacenter Networks and Internet Circuits	99.99%

If the Availability of the service component is less than the associated Availability Commitment, then you may request an SLA Credit. Availability in a given billing month is calculated according to the following formula:

$$\text{“Availability”} = \frac{([\text{total minutes in a billing month} - \text{total minutes Unavailable}] / \text{total minutes in a billing month}) \times 100}{100}$$

Availability Calculation Example

$$\frac{\text{Total Minutes in Billing Month (43,200)} - \text{Total Minutes Unavailable (5)}}{\text{Total Minutes in a billing Month (43,200)}} \times 100 = 99.98\%$$

4. Unavailability and SLA Events

A service component will be considered “Unavailable”, subject to the Service Level Agreement Limitations set forth below, if Livewire’s monitoring tools determine that one of the following events (each, an “SLA Event”) has occurred.

The total minutes that the service component is Unavailable for a particular SLA Event is measured from the time that the SLA Event has occurred, as validated by Livewire Support, until the time that the SLA Event is resolved.

If two or more SLA Events occur simultaneously, the SLA Event with the longest duration will be used to determine the total minutes Unavailable.

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4.1.1 vSphere Cluster – Availability SLA - 99.99%

SLA Events: Each of the following will be considered an SLA Event for the vSphere Cluster Implementation:

- All of your virtual machines ("VMs") running in a cluster do not have any connectivity consecutively for **4 minutes and 22 seconds**.
- None of your VMs can access storage and therefore halted consecutively for **4 minutes and 22 seconds**.
- None of your VMs can be started consecutively for **4 minutes and 22 seconds**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.99% but equal to or greater than 99.9%	25%
Less than 99.9% but equal to or greater than 99.7%	50%
Less than 99.7%	100%

SLA Requirements:

- For local high availability in vSAN cluster, you must have a minimum configuration for all VM storage policy Numbers of Failures to Tolerate (FTT) = 1 when the cluster has 3 or more hosts
- For a stretched cluster across more than one datacenter, in addition to the above condition, you must have a minimum configuration for all VM storage policy Site Disaster Tolerance = Dual Site Mirroring.
- The storage capacity for the cluster retains slack space of 25% available (as described in the [VMware vSAN™ storage guide](#))
- There must be sufficient capacity on the cluster to support starting a VM.

Exclusions:

- Does not constitute single incident which is lasted for less than 4 minutes 22 seconds in calendar month.
- Does not constitute multiple incident of smaller durations that accumulate to total duration 4 minutes 22 seconds in calendar month.

4.1.2 Production Storage – Availability SLA - 99.99%

This SLA applies to the availability of production storage in vSAN cluster. Production storage is a term used in this SLA that refers to all flash storage in production cluster environment. Any Service interruption that results from unavailability of primary storage which may lead to downtime of services that lasts more than 4 minutes and 22 seconds in any calendar month is a 'Production Storage - Availability SLA Event' constituting a failure to achieve this specific SLA.

SLA Events: Each of the following will be considered an SLA Event for the Primary / Production Storage:

- All of your virtual machines ("VMs") running in a cluster are in halted state consecutively for **4 minutes and 22 seconds** due to unavailability of production storage.
- None of your VMs can be started due to storage unavailability consecutively for **4 minutes and 22 seconds**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.99% but equal to or greater than 99.9%	25%
Less than 99.9% but equal to or greater than 99.7%	50%
Less than 99.7%	100%

SLA Requirements:

- For local high availability in vSAN cluster, you must have a minimum configuration for all VM storage policy Numbers of Failures To Tolerate (FTT) = 1 if the cluster has 3 or more hosts
- For cross datacenter DR across more than one datacenter, in addition to the above condition, you must have a minimum configuration for all VM storage policy Site Disaster Tolerance = Dual Site Mirroring.
- The storage capacity for the cluster retains slack space of 25% available (as described in the [VMware vSAN™ storage guide](#))
- There must be sufficient capacity on the cluster to support starting a VM.

Exclusions:

- Does not constitute single incident which is lasted for less than 4 minutes 22 seconds in calendar month.
- Does not constitute multiple incident of smaller durations that accumulate to total duration 4 minutes 22 seconds in calendar month.

4.1.3 Production Storage – Performance SLA - 99.99%

This SLA applies to the performance of production storage in vSAN cluster. Production storage is a term used in this SLA that refers to all flash storage in production HCIaaS | PCaaS | IaaS cluster environment. Any Service interruption that results from performance issue of production storage which may lead to downtime of services that lasts more than 4 minutes 23 seconds in any calendar month is a 'Production Storage – Performance SLA Event' constituting a failure to achieve this specific SLA.

SLA Events: Each of the following will be considered an SLA Event for the HCIaaS | PCaaS | IaaS – Primary / Production Storage:

- c) All of your virtual machines ("VMs") running in a cluster are in halted state consecutively for **4 minutes and 23 seconds** due to performance issue of production storage.
- d) All of your virtual machines ("VMs") running in a cluster are facing greater than 20 ms latency consecutively for **4 minutes and 23 seconds** due to performance issue of production storage.
- e) None of your VMs can be started due to storage performance issue consecutively for **4 minutes and 23 seconds**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.99% but equal to or greater than 99.9%	25%
Less than 99.9% but equal to or greater than 99.7%	50%
Less than 99.7%	100%

SLA Requirements:

- e) For local high availability in vSAN cluster, you must have a minimum configuration for all VM storage policy Numbers of Failures To Tolerate (FTT) = 1 if the cluster has 3 or more hosts
- f) For cross datacenter DR across more than one datacenter, in addition to the above condition, you must have a minimum configuration for all VM storage policy Site Disaster Tolerance = Dual Site Mirroring.
- g) The storage capacity for the cluster retains slack space of 25% available (as described in the [VMware vSAN™ storage guide](#))
- h) There must be sufficient capacity on the cluster to support starting a VM.

Exclusions:

- Does not constitute single incident which is lasted for less than 4 minutes and 23 seconds in calendar month.
- Does not constitute multiple incident of smaller durations that accumulate to total duration of 4 minutes and 23 seconds in a calendar month.

4.1.4 Backup Storage – Availability SLA - 99.5%

This SLA applies to the availability of Backup Storage for storing backup files / archival data. Backup storage is a term used in this SLA that refers to shared hybrid / shared disk based / dedicated hybrid / dedicated disk based storage presented via NFS / iSCSI to production cluster in Livewire environment. Any Service interruption that results from unavailability or performance issue of backup storage which may lead to downtime of relevant services such as backup and restore and that lasts more than **3 hours 39 minutes** in any calendar month is a 'Backup Storage SLA Event' constituting a failure to achieve this specific SLA.

SLA Events: Each of the following will be considered an SLA Event for the Backup Storage:

- All of your virtual machines ("VMs") backup jobs are halted for **3 hour 39 minutes** consecutively due to unavailability / performance issue on backup storage.
- None of your VMs can be restored either using file level restore / cannot be virtualized to primary storage due to unavailability / performance issue of backup storage consecutively for **3 hour 39 minutes**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.5% but equal to or greater than 99.0%	10%
Less than 99.0%	30%

SLA Requirements:

- Backup storage must be used only for storing backups / replicating cold data. This SLA does not imply if backup storage is used to run production workloads.
- Backups must be configured for production workloads with desired retention policy.
- There should be at least 25% free space on datastore to accommodate collapsing and consolidation of backup images. (as recommended by backup vendors)
- There must be sufficient capacity / resources on the cluster to support starting a VM.

Exclusions:

- Does not constitute single incident which is lasted for less than committed uptime value.
- Does not constitute multiple incident of smaller durations that accumulate to total duration of 3 hours 40 minutes in calendar month.
- Does not constitute failure of single / partial VM recovery due to software bug, corrupt backups, unsupported methodology of restore.

4.1.5 Cloud Management (vCenter, vROPs, VBR) – SLA Uptime 99.9%

This SLA applies to the availability of cloud management components namely, vCenter, vCloud Tenant Portal, vROPs and VBR Management UI in a VMware cluster environment. Any Service interruption that results from unavailability or any other infrastructure issue which may lead to downtime of these components and eventually management services that lasts more than **43 minutes and 49 seconds** in any calendar month is a 'Cloud Management SLA Event' constituting a failure to achieve this specific SLA.

SLA Events: Each of the following will be considered an SLA Event for the Cloud Management Services:

- a) You are unable to access your vCenter, vCloud Tenant Portal, vROPs, Veeam Backup and Replication (VBR) UI consecutively for more than **43 minutes and 49 seconds**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.9% but equal to or greater than 99.0%	10%
Less than 99.0%	30%

Exclusions:

- Does not constitute single incident which is lasted for less than 43 minutes and 49 seconds in calendar month.
- Does not constitute multiple incident of smaller durations that accumulate to total duration of 43 minutes and 49 seconds in calendar month.

4.1.6 Datacenter Network and Internet Circuits – SLA Uptime 99.99%

This SLA applies to the availability of Datacenter Network and Internet Circuits. Any Service interruption that results from the complete unavailability of above said services that lasts more than **4 minutes and 22 seconds** in any calendar month is a 'Datacenter Network and Internet Services SLA Event' constituting a failure to achieve this specific SLA.

SLA Events: Each of the following will be considered an SLA Event for the Datacenter Networks and Internet Services:

- a) Complete unavailability of datacenter networks / internet circuits for consecutive for **4 minutes and 22 seconds**.
- b) All of your virtual machines ("VMs") running in a cluster are unable to connect to the internet for more than **4 minutes and 22 seconds**
- c) All of your virtual machines ("VMs") running in a cluster are unable to connect to each other in same private network for consecutive **4 minutes and 22 seconds**.
- d) All of your virtual machines ("VMs") running in a cluster experiencing slow network speed (below specified value in this section) on private network within same vLAN for consecutive **4 minutes and 22 seconds**.

SLA Credits:

Monthly Uptime Percentage	SLA Credit Percentage
Less than 99.99% but equal to or greater than 99.9%	25%
Less than 99.9% but equal to or greater than 99.7%	50%
Less than 99.7%	100%

Assured Network Performance on Private Network:

- ✓ Packet loss < 0.2%
- ✓ Latency < 10ms
- ✓ Jitter < 0.1ms within any 15 minutes' period

Maximum Jitter: 20 milliseconds within any 15-minute period.

Exclusions:

- Does not constitute single incident which is lasted for less than 4 minutes 22 seconds in calendar month.
- Does not constitute multiple incident of smaller durations that accumulate to total duration of 4 minutes 22 seconds in calendar month.
- This SLA does not cover (without limitation): network performance from your onsite location or internet access point (such as a local DSL/cable modem) at onsite; or failures due to denial of service attacks inside virtual machine.

- This SLA does not cover outage due to denial of service attack on customer's workload / customer's firewall but rather assures the ability to detect those and mitigate them by offloading data floods to offsite locations of our IDS providers.

5. Non-Credit Standards

This SLA also lists several non-credit service standards—standards of quality Livewire strives to meet, even though they are not guaranteed or subject to credits, and even though You might not notice any failure in services when it occurs. These non-credit standards are listed for informational purposes only, to provide a sense of Livewire's commitment to excellence.

6. Service Level Objective

6.1.1 Support Services

This SLO (Service Level Objective) applies to the support standard and quality of service provided by Livewire support teams. This includes front end support teams, namely cloud support, migrations, vAdmins and Presales team. Although the breach of support deliverables does not constitute to any type of Service Credit, we at Livewire are always open to work with customers to solve any issue up to their satisfaction which is defined within our support scope. For more details on support deliverables we refer to Livewire Support Guide on the documentation portal.

6.1.2 Support | vAdmin Team – Response Times

	First reply time		Next reply time		Resolution time	
No priority set	1	hours	8	hours	2	days
Low	1	hours	8	hours	2	days
Normal	1	hours	8	hours	2	days
High	15	minutes	45	minutes	4	hours
Urgent	15	minutes	45	minutes	4	hours
Minor	1	hours	8	hours	2	days
Major	15	minutes	45	minutes	6	hours
Critical	15	minutes	45	minutes	6	hours

A tracking number will automatically be provided to you promptly after opening of the Case, and a human support engineer will review the support request within the timeframe listed above. Livewire may reclassify any Case misclassified as falling into one of the emergency categories listed above, and such Case will not qualify for emergency treatment. Resolution and repair times vary, and this SLO does not address them.

6.1.3 Sales | Presales | Accounting Team – Response Time

	First reply time	Next reply time	Resolution time
No priority set	3 hours	12 hours	4 days
Low	3 hours	12 hours	4 days
Normal	3 hours	12 hours	4 days
High	1 hours	5 hours	2 days
Urgent	1 hours	5 hours	2 days
Minor	3 hours	12 hours	4 days
Major	1 hours	5 hours	2 days
Critical	1 hours	5 hours	2 days

7. SLA Credits and Credit Request Procedure

Each “SLA Credit” is an amount equal to a portion of the monthly recurring or metered service amount (net of any discounts) for the billing month in which the SLA event occurred.

If an SLA Event occurs for your HClaaS | PCaaS | IaaS Infrastructure, it applies to a cluster within the specific HClaaS | PCaaS | IaaS environment. For each SLA Event for a cluster, you are entitled for SLA Credit for a downtime of workloads within that cluster. For example, for HClaaS | PCaaS | IaaS with Dual DC stretched cluster, where the primary site has 4 hosts and the secondary site has 4 hosts, if there is an SLA Event that affects the primary site, then the SLA Credit would be applied to primary site only with specified percentage of the monthly recurring or metered usage amount (excluding add-ons, and net of any discounts) for the billing month in which the SLA Event occurred.

Within 10 business days of the end of the month in which You were faced with a SLA Event, You need to send an email to credit_requests@Livewirecloud.com, stating your Case number and the Event you were faced with. (Credit Request). In the event that all requirements are met as defined in this document and in relevant sections, you shall be entitled to a reduction of specific % of the monthly recurring fee payable for Services for each such Event that occurred in a given month, up to a maximum 100% of monthly billing within a given month (Service Credit).

Upon receipt of Your Service Credit, Livewire shall apply that Service Credit against any amounts payable by you under the Agreement in respect of Services delivered by Livewire for the following calendar month. Any Service Credit to which You are entitled resulting from Livewire’s failure to meet its SLA in the last calendar month during the term of Your contract shall be paid out to You by Livewire within 30 business days of the last day of the term.

8. SLA Limitations

The following will be excluded from any time-based calculations related to the service component being Unavailable:

- I. Scheduled maintenance where you have been notified at least 24 hours in advance.
- II. Emergency maintenance window which can be call upon when deemed necessary by Livewire Infrastructure Support Team.
- III. Recurring or zero-impact maintenance that is generally applicable to all customers.
- IV. Your misuse of the service offering or a service component.
- V. Force majeure events, denial of service attacks, viruses, or hacking attacks for which there is no commercially reasonable known solution, or any other events that are not within our control or that could not have been avoided with commercially reasonable care,
- VI. Acts or orders of government.
- VII. Packet loss, network or internet problems beyond Livewire's border router supporting our public internet connectivity.
- VIII. Bugs in code or software from cloud software provider for which there is no commercially reasonable known fix (even if there is a known workaround).
- IX. Periods of downtime due to work directed and/or requested by You.
- X. Individual server or network component outages that do not impact the overall availability of the Service due to redundancy in the design.
- XI. Evaluation or approval of new software or hardware for use within Livewire's data center. This includes systems developed outside of Livewire such as third party systems or systems developed by You.
- XII. Since Customers are provided with root access to host and admin access to cluster, any mistake / non supported configuration changes done by customer / their engineer will be excluded from SLA credits.

In addition to the requirements set forth, above, you will not be eligible to receive an SLA Credit if:

- I. Your account has any delinquent payments for the Service Offering
- II. You are in violation of Livewire's Acceptable Use Policy (AUP) of the Terms of Service during the time of the SLA Event
- III. The SLA Event was due to your failure to meet your security responsibilities as set forth in the Agreement.

Livewire's monitoring tools, data, and records will be the sole source of information used to track and validate Availability. Upon request, Livewire will provide to you, within 45 days after a confirmed SLA Event, a copy of the Availability report.

9. Credit Requirements

The following are required for credits:

You must open a support case (a “Case”) during the Failure in question. You will open all Cases through the Support Portal / contacting support via email. In opening a Case, you need to provide complete information regarding the nature of the problem, including any information reasonably necessary for diagnosis and correction, by following the Case opening procedures at the Support Portal / Support and Help Center.

However, at Livewire’s sole discretion, a Livewire representative may open a Case for You and You will need to provide all information required in the preceding sentence to the support representative.

You must provide the information required / asked by support personnel even if Livewire provides managed cloud services.

You must provide Livewire with accurate and complete designated points of contact at Your end who will be working with Livewire technical team.

You must provide Livewire with accurate passwords for maintenance and repair use by Livewire engineers.

Delays or failures caused by Your failure to abide by the requirements OR not providing required information in time do not constitute to SLA breach.

10. Credit Limitations

The minimum period of failure eligible for a credit is as per specific SLA definition and its downtime duration. The maximum credit for any single failure is one month’s Service fees. In the event that multiple periods of failure overlap in time, credits will not be aggregated, and You will receive credit only for the longest such period of failure.

The maximum credit during a single calendar year, for all Service features combined, is three month’s Service fees, regardless of the length of Failure or the number of occurrences.

Credits available pursuant to this SLA apply to future Service delivery / refunds. If You retain a credit balance on termination of the account in question, such credit is forfeited. Notwithstanding the foregoing, credits will be applied against fees for professional services, bundled support, bundled licensing.

Notwithstanding any provision to the contrary in this SLA, the following do not constitute Failures:

“Emergency Maintenance” refers to any corrective action intended to remedy conditions likely to cause severe Service degradation, as designated by Livewire in its sole discretion.

Emergency Maintenance may include but is not limited to actions intended to address hardware or software failures or viruses/DDoS attacks/Orders of Government

Livewire will exercise reasonable efforts to inform You in advance before interrupting the Service for Emergency Maintenance, but such notice is not guaranteed and failure thereof does not constitute Failure.

11. Terms of Service / Terms and Conditions

Terms defined in the Agreement will have the same meaning when used in this SLA. In the event of any conflict between this SLA and the Agreement, the Agreement will govern.

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