

SERVICE SCHEDULE

MANAGED LOAD BALANCER

This is a Service Schedule as defined in the Conditions. Where the Services set out in this Service Schedule form part of the Services to be supplied under a Contract (as defined in the Conditions), this Service Schedule forms part of the Contract.

In this Service Schedule, references to Clauses are to Clauses of the Conditions, and references to paragraphs are to the paragraphs of (i) this Service Schedule or (ii) whichever other document is specifically referred to.

1 Additional Definitions

In this Service Schedule the following words and expressions shall have the following meanings:

- 1.1 **“High Availability Pair”, “High Availability Stack”** – A pair or group of two or more identical Load Balancers configured to work together such that on the failure of one device a second device automatically continues to provide a seamless Service.
- 1.2 **“Load Balancer”** — A physical or virtual component of an IT networking solution, intelligently routing connection requests between the various elements of the infrastructure; though always referred to as a single device herein, the Load Balancer may be multiple devices configured to act as a single High Availability Pair or Stack.
- 1.3 **“Load Balancing”** — The function performed by a Load Balancer.
- 1.4 **“Pulsant Service Description - Managed Load Balancer”** — The document which sets out the scope and description of the Services being provided by the Supplier.
- 1.5 **“Pulsant Enterprise Cloud”** — A cloud infrastructure platform managed by the Supplier and hosted in the Supplier’s datacentres, described in the document “Pulsant Service Description – Enterprise Cloud”.

2 Managed Load Balancer — Service Scope and Description

- 2.1 The Managed Load Balancer Service (as described in the “Pulsant Service Description - Managed Load Balancer” document) provides the Customer with Load Balancing functionality within their infrastructure, through the use of a dedicated or shared physical or virtual Load Balancing appliance managed by the Supplier.
- 2.2 The management scope of the Services being provided by the Supplier is illustrated in the “Pulsant Service Description - Managed Load Balancer” document, which also contains recommended specific considerations under the section “Service Dependencies and/or Related Services”. The Customer confirms that it has considered and accepts full responsibility for all scenarios relating to any failure conditions and functionality of each related or dependent service where those services are not provided by the Supplier.
- 2.3 The Managed Load Balancer Service is provided to the Customer for so long as the Contract remains in force in accordance with the terms of the Contract and the Supplier’s acceptable use, security and access policies and procedures.
- 2.4 The Managed Load Balancer Service is subject to payment by the Customer of the Supplier’s Charges for installation and support services, as set out in the Order Form or as subsequently agreed between the parties from time to time.
- 2.5 The Supplier retains ownership of the Load Balancer, providing it to the Customer for use on a subscription basis.
- 2.6 The Managed Load Balancer Service is offered as a fully hosted solution where the Load Balancer is housed in one of the Supplier’s own datacentres.
- 2.7 The Service will perform Load Balancing functionality for a specified server infrastructure.
 - 2.7.1 The Supplier will configure the Load Balancing Service to connect to the server infrastructure as set out in the Order Form or in such Service design documents as may be provided by the Supplier.
 - 2.7.2 Management of the connected server infrastructure is not included within the scope of the Managed Load Balancer Service.

- 2.7.3 The Service does not require that any infrastructure other than the Load Balancer is hosted in the Supplier's datacentre; the Supplier will configure the Load Balancer to connect with infrastructure in Supplier's datacentre, on the Customer's premises, or in a third-party datacentre, as required.
- 2.7.4 The Service does not require that the Supplier manages any part of the server infrastructure.
- 2.8 The Customer will be provided with one of the following, as set out in the Order Form.
 - a) Virtual Load Balancer
 - b) Shared Physical Load Balancer
 - c) Dedicated Physical Load Balancer
 - d) Pulsant Enterprise Cloud Load Balancer.
- 2.9 Within the scope of this Service, the Supplier will:
 - 2.9.1 Supply the Customer with a Load Balancer, which may be shared or dedicated, physical or virtual, as specified on the Order Form.
 - 2.9.2 Configure the Load Balancer as a High Availability Pair or Stack, if required.
 - 2.9.3 Supply any IP addresses required for connection to the Load Balancer, if not supplied by the Customer.
 - 2.9.4 Supply any SSL certificates required by the Load Balancer, if not supplied by the Customer.
 - 2.9.5 Perform initial Load Balancer configuration, including:
 - 2.9.5.1 Allocating IP addresses.
 - 2.9.5.2 Connecting servers.
 - 2.9.5.3 Setting Load Balancing rules (for example, round robin, weighted connections).
 - 2.9.6 Perform changes to the Load Balancer configuration on request, including:
 - 2.9.6.1 Adding new IP addresses.
 - 2.9.6.2 Connecting to additional servers.
 - 2.9.6.3 Changes to the Load Balancing rules (for example, changing the connection limit value for a server to change how connections are allocated to it in a "weighted least connections" configuration).
 - 2.9.7 Perform on-going management of the Load Balancer, including:
 - 2.9.7.1 Firmware upgrades of the device or its management components, as recommended by the vendor.
 - 2.9.7.2 Software upgrades of the device or its management components, as recommended by the vendor.
 - 2.9.7.3 Diagnose faults with the device.
 - 2.9.8 Monitor the health and performance of each Load Balancer, measuring:
 - 2.9.8.1 CPU usage.
 - 2.9.8.2 Memory usage.
 - 2.9.8.3 Bandwidth usage.
- 2.10 The Supplier will not:

2.10.1 Perform diagnosis of issues that involve infrastructure not managed by the Supplier.

2.10.2 Provide education around the use of the device or management interfaces.

2.11 Where the Supplier does not manage the servers that connect to the Load Balancer, the Supplier's attempts to diagnose issues with the Service will halt at the Supplier providing reasonable proof that the fault lies with a server and not with the Load Balancer.

2.12 Where the Supplier does not also manage the Customer's server infrastructure, the Customer will:

2.12.1 Provide the Supplier with all necessary information to connect the Load Balancer with the infrastructure.

2.13 Where the Customer has supplied IP addresses or SSL certificates, it is the Customer's responsibility to ensure that they are renewed in a timely manner.

3 Service Levels

3.1 The Supplier will use its reasonable endeavours to deliver the following Response Times as set out in the table below.

Event Type	Service Hours	Response Time
Critical	24/7/365	Within 15 minutes
Service Affecting	24/7/365	Within 30 minutes
Routine	Business Hours	Within 30 minutes, measured during Business Hours

3.2 The Supplier will use its reasonable endeavours to deliver the following Service Levels in respect of the Services as set out in the tables below.

3.2.1 The below table defines the SLA for the Managed Load Balancer service:

Measure	Description	Value
Service Hours	The hours during which the service and SLA is provided.	24/7/365
Availability	% of the service hours during which service availability is guaranteed (excluding planned maintenance in paragraph 5 below).	Single device: 99.84% High Availability Pair or Stack: 100%
Hardware Fix	Period of time to action hardware replacement after diagnostics confirm that hardware replacement is required.	4 hours or next business day, as specified on the Order Form

4 Fee Credits

4.1 Any Fee Credits which fall due pursuant to this paragraph 4 are payable subject to and in accordance with Clause 5 of the Conditions.

	Service Hours	Target Availability	Fee Credits
Managed Load Balancer — Single Device	24/7/365	99.84%	Pro rata proportion of the Monthly Charges for any Non-Availability Period
Managed Load Balancer — High Availability Pair or Stack	24/7/365	100%	Pro rata proportion of the Monthly Charges for any Non-Availability Period

A pro rata proportion shall be calculated according to the number of complete minutes in the relevant calendar month and the number of complete minutes of Non-Availability in that calendar month.

"Non-Availability" means a period of time during which the relevant Service is unavailable in breach of the Availability Service Levels set out in paragraph 3.2 above.

5 Planned Maintenance

- 5.1 Save in situation which is an Event of Force Majeure or in the case of an emergency, where the Supplier considers (in its sole discretion) that it is necessary to carry out maintenance activities that will affect or can reasonably be expected to affect the Customer's operations, the Supplier shall notify the Customer at least 48 hours in advance of the commencement of the works detailing the nature of the work to be carried out and the timetable for completion of the works. These works will be carried out in accordance with the Supplier's standard procedures which are available upon request by the Customer. In the case of an Event of Force Majeure or an emergency, no advance notice is required.
- 5.2 During the period of Planned Maintenance, the SLAs will not apply.