

SERVICE SCHEDULE

MANAGED ROUTER

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 Routers configured to work together such that with the failure of one device a second device automatically continues to provide a seamless Service.
- 1.2 **"Pulsant Service Description Managed Router"** The document which sets out the scope and description of the Services being provided by the Supplier.
- 1.3 **"Router"** A dedicated device for managing traffic on a network and ensuring data is sent down the correct physical or logical link to reach its intended destination. Though always referred to as a single device herein, the Router may be multiple devices configured to act as a single High Availability Pair or Stack.
- 1.4 "Routing", "Network Routing" The function performed by a Router.

2 Managed Router — Service Scope and Description

- 2.1 The Managed Router Service (as described in the "Pulsant Service Description Managed Router" document) provides the Customer with Network Routing functionality within their infrastructure, through the use of a dedicated Router 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 Router" 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 Router 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 Router 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 Router, providing it to the Customer for use on a subscription basis.
- 2.6 The Managed Router Service is offered as either a hosted solution where the Router is housed in one of the Supplier's own datacentres, or an on-premise solution where the Router is housed on premises belonging to the Customer or a third party designated by the customer.
- 2.7 The Service does not require that the Supplier manages any other part of the Customer's infrastructure; using the Service as part of a Customer-managed infrastructure does impose some requirements on the Customer, described herein.
- 2.8 Within the scope of this Service, the Supplier will:
 - 2.8.1 Supply the Customer with a Router, which may be hosted in the Supplier's datacentre or on premises designated by the Customer, as specified on the Order Form.
 - 2.8.2 Configure the Router as a High Availability Pair or Stack, if required.
 - 2.8.3 Perform initial configuration of the router, including:



- 2.8.3.1 Enabling user access.
- 2.8.3.2 Physical interface or virtual network interface configuration.
- 2.8.3.3 VLAN/logical interface configuration (up to 5 as standard).
- 2.8.3.4 Routing configuration (interface routes plus up to 5 additional routes).
- 2.8.3.5 Network/Port Address Translation (one per destination IP address plus up to 5 additional rules).
- 2.8.3.6 Site-to-site VPN configuration (up to 5 as standard).
- 2.8.3.7 Remote Access VPN configuration (single VPN endpoint configuration)
- 2.8.3.8 Two-factor authentication, as described in the document "Pulsant Service Description Two-Factor Authentication".
- 2.8.4 Provide a valid SSL certificate, if required.
- 2.8.5 Perform changes to the router configuration on request, within the configuration limits specified in paragraph 2.8.3.
- 2.8.6 Perform on-going router updates as follows:
 - 2.8.6.1 Firmware upgrades of the router or its management components, as recommended by the vendor and subject to the Supplier's change Management process.
 - 2.8.6.2 Software upgrades of the router or its management components, as recommended by the vendor and subject to the Supplier's change management process.
- 2.8.7 Perform on-going diagnostics as follows:
 - 2.8.7.1 Diagnose faults with the router.
 - 2.8.7.2 Diagnose connectivity (across Supplier managed infrastructure only).
- 2.8.8 Performance basic live performance analysis of:
 - 2.8.8.1 Router throughput.
 - 2.8.8.2 Connection throughput.
 - 2.8.8.3 VPN throughput.

2.9 The Supplier will not:

- 2.9.1 Perform diagnosis of issues that involve infrastructure not managed by the Supplier.
- 2.9.2 Provide education around the use of the device or management interfaces.
- 2.10 Where the Supplier does not manage all parts of the Customer's infrastructure, the Supplier's attempts to diagnose issues with the Service will halt at the Supplier providing reasonable proof that the fault lies within the un-managed infrastructure.
- 2.11 Where the router is not hosted in the Supplier's datacentre, the Customer is responsible for ensuring a hosting environment with:
 - 2.11.1 Redundant power provision adequate for powering the equipment at peak consumption.
 - 2.11.2 Air-conditioning adequate for cooling equipment at sustained peak load including appropriate humidity management.
 - 2.11.3 Physical security.



2.11.4 Permanent out-of-band management connectivity to the equipment from the Pulsant remote management system.

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.

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3.2.1	The below table defines the SLA for the Managed Router service:	

Measure	Description	Value	
Service Hours	The hours during which the service and SLA is provided	24/7/365	
Availability – Hosted Devices	% 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%	
Availability – On-premise Devices	% of the service hours during which service availability is guaranteed (excluding planned maintenance in paragraph 5 below)	The availability is dependent on the environmental factors outside the Supplier's control, such as the provision of reliable power, and therefore the Supplier is not able to offer a guarantee of service uptime.	
Hardware Fix – Hosted Devices	Period of time to replace hardware after diagnostics confirm that hardware replacement is required (dedicated physical device only)	1 Hour	
Hardware Fix – On-premise Devices	The elapsed time required before an engineer attends the site, 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 Router — Single Device, Hosted	24/7/365	99.84%	Pro rata proportion of the Monthly Charges for any Non-Availability Period
Managed Router — High Availability Pair or Stack, Hosted	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.

Non-availability of an on-premise device resulting from factors out of Pulsant's control, such as power and environmental issues, shall not be included in any fee credit calculations.



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.