



SCHEDULE DOCUMENT

N4CLOUD SERVICES

PUBLIC
NODE4 LIMITED
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SCHEDULE

Additional terms, Service Description & Service Level Agreement for n4Cloud Services.

1. SERVICE DESCRIPTION

The Node4 n4Cloud Service provides the Customer with access to server, storage and other related infrastructure. The service is hosted in Node4 data centres which provide security and resilient power and cooling. There are various components to the n4Cloud service and the customer may take any number of these as part of the solution:

- n4Compute: Server infrastructure for running virtual machines by selecting processor and memory requirements.
- n4Store: Storage infrastructure for storing data available on a per GB basis
- n4Backup: Storage infrastructure for backing-up data available on a per GB basis
- n4Balance: Load balancing infrastructure
- n4Protect: Firewall infrastructure available on a per port or per dedicated virtual appliance basis
- n4Shield: DDoS mitigation service to offer additional protection from DDoS attacks available in addition to internet bandwidth on a per Mbps basis
- n4HA: High availability options as either a single site or dual site service
- n4Portal: on-line web portal for managing and administrating various parts of the service
- Transit: bandwidth for connecting services and to the internet
- Licences: licences from various vendors including Microsoft, Citrix, VMware and Symantec
- Support: support arrangements with varying levels of cover and including adds, moves and changes.

It should be noted that n4Backup whilst part of the broad "n4Cloud" product has its own schedule document and is not covered by this document.

2. DEFINITIONS

"Additional Terms" means this Schedule 2 forming part of the Master Agreement, which describes the Products and/ or Services to be provided and the relevant service levels;

"Business Hours" means Monday to Friday, 9am to 5pm, excluding Bank and other Public Holidays;

"Charges" means charges as described in this Schedule 2 and where relevant set out in the Order Form, and shall be payable by the Customer in accordance with Clause 3 of Node4's Standard Terms and Conditions (Schedule 1);

"Customer Responsible Faults" means in the event that a Service Affecting or Non-Service Affecting Fault is identified as being attributable to Customer Provided Equipment, Premises, Customer power supplies, or the action of the Customer, employees or agents of the Customer, the fault shall be deemed the responsibility of the Customer. Any downtime shall not be included in service availability measurements and does not qualify for compensation.

"Contracted Support Hours" Bronze, Silver, Silver Plus and Gold support levels as identified in the Fault Reporting and Management handbook.

"Equipment" means, without limitation, any equipment, machinery, and apparatus provided by Node4 as part of the Services, and/or used in order to make available the n4Cloud Services to the Customer;

"Fault Ticket Number" means the unique number issued when logging a fault with Node4.

"Installation Charge" means charges payable by the Customer for the installation of the n4Cloud Services as provided in the Order Form;

"Monthly Review Period" means the calendar monthly periods commencing on the 1st of each month during the Term, over which Service performance measurements are calculated, provided that the first Monthly Review Period will commence on the Service Commencement Date;

"Network Management System" means Node4's network integrated fault management system;

"Node4 Network" means the network wholly owned and managed by Node4;

"Non-Service Affecting Fault" means a fault or condition which is not a Service Affecting Fault.

“Planned Outage” means in maintaining the service provided, Node4 may with reasonable notice require a temporary outage in service. Wherever possible Node4 will agree the outage with you in advance of the required work. Any planned downtime shall not be included in fault or service reliability measurements.

“Professional Service Charges” means the professional service charges detailed on the Order Form or otherwise agreed in writing between the Parties in accordance with Clause 4 below;

“Service Affecting Fault (SAF)” means any failure of Node4 Network, equipment or service, which, in our reasonable opinion causes a loss of a customers service. In all such cases the service shall be deemed unavailable and the length of downtime recorded by Node4 from when the fault is registered by Node4 and a fault ticket number allocated.

“Service Availability” means the time for which a Node4 service is usable, expressed as a percentage of the total time in a given Service Measurement Period. The Node4 service shall be deemed available for the purposes of calculating Service Availability if it is not usable due to an event outside our reasonable control, a Customer Responsible Fault, a Third Party Attributable Fault or is due to a Planned Outage.

“Service Commencement Date” means the date when Node4 provides the Service tested and ready for use;

“Service Measurement Period” means a calendar month for which the Service is available.

“Standard Setup” for n4Compute means the configuration of the customer account on the Portal and the allocation of CPU, memory, basic storage, IP addresses and VLANs to the customer account. The Customer will configure the virtual machines.

“Standard Setup” for n4Protect means the configuration of firewall rules, basic IPS, Protocol Agents, QoS, and HA features on the virtual firewall appliance based on a customer document defining those rules. This does not include IPSec, Antivirus, Web Filter or Antispam features.

“Technical Support Centre” means Node4’s fault management centre, which operates the Node4 Network Management System;

“Third Party Attributable Faults” means in the event that a Service Affecting or Non-Service Affecting Fault is identified as being attributable to a third party this measurement period shall not be included in service availability measurements. Such faults do not qualify for rebates or compensation. Node4 will endeavour to resolve and rectify such Third Party Attributable Faults as soon as possible.

“Time To Resolve Fault (TTRF)” means the length of time from the issue of the fault ticket number to repair and resolution or the service circuit and/or associated equipment.

“Web Portal” means a website Customer may use to view online service reports.

3. CHARGES

3.1 CHARGES PAYABLE BY THE CUSTOMER

Charges may comprise any or all of the following charges including a set-up charge and a monthly or annual service charge.

3.1.1 SET-UP CHARGES

Any applicable set-up charges for the implementation of the service shall be detailed on the purchase order.

3.1.2 RENTAL CHARGES

Rental charges are paid either monthly or annually in advance based on the options taken and any other related service and are identified on the purchase order.

3.1.3 BANDWIDTH CHARGES

Bandwidth is charged based on either guaranteed bandwidth (per Mbps), or data transferred (per GB). Some Services have optional burst capacity and Services with this capability are charged using the 95th percentile method, as described in paragraph 5.5 below. Some Services may include a bandwidth allowance, in which case this will be indicated on the Order Form. Bandwidth charges are identified on the Order Form

3.1.4 ADDITIONAL PROFESSIONAL SERVICES

A full range of Professional Services are available to the customer in addition to what is provided as part of the standard service. The Professional Service Charges include but are not limited to:-

- Installation and configuration
- Remote services
- Management
- Server / Application Migration
- Virtualization-Ready Audits

The Professional Services are subject to the price list below. Specific rates for large or repeat orders can be agreed on a case by case basis in writing.

All incremental expenses incurred during these Professional Services will be passed directly to the customer. Provisioning costs such as cabling will be discussed and agreed with the customer and detailed on the order form.

Tasks undertaken by Node4 at the request of the customer or activities undertaken by the customer which require the remote support of Node4 personnel will be charged at the hourly rates shown below.

Time support required:	Per hour	Per day
Mon – Fri business hours	£60.00 per hour	£480.00
Mon – Fri other times	£100.00 per hour	POA
Saturday	£100.00 per hour	POA
Sunday	£100.00 per hour	POA

Time is charged by the hour. These rates are for a trained technician and are subject to an annual review by Node4. For advanced engineers with MCSE or CCIE status or for on-site services please contact Node4 for pricing.

3.1.5 MINIMUM COMMITMENT

The service is subject to a minimum contract term as identified on the order form. For termination of the services, there is a minimum notice period of 90 days written notice the earliest of which can be given at the end of the minimum contract term. Details of minimum commitment terms for additional services shall be detailed in the order form.

4. PROVISION OF N4CLOUD SERVICES

4.1 FAULTS

Node4 will provide assistance in the event of a service failure. Faults will be dealt with as described in section 6

4.2 SOFTWARE UPDATES & PATCHES

As part of the service software updates and patches will be applied to the Node4 managed elements of the service when they are required due to software defect (bug) or security vulnerability.

The Customer will be responsible for patching their virtual machines.

4.3 HARDWARE MAINTENANCE

Any fault relating to hardware failure on the n4Cloud platform is covered by hardware maintenance which is provided as part of the service.

n4Cloud can be used in conjunction with Colocation. In this event the Customer is responsible for maintaining their own hardware in accordance with the Schedule Document for Colocation Services.

4.4 ADDS, MOVES & CHANGES

Node4 provides a moves, adds and changes (MACs) as part of the standard service. This service will cover configuration changes and addition or deletion of users. The service includes 5 MAC tickets per month, with each Standard request for a MAC using 1 ticket. A standard MAC request is defined as a change which can be completed within 30 minutes by a support engineer during the contracted support hours. MAC tickets cannot be combined or carried over to the next month. Non-

standard changes requests will be charged at the appropriate Professional Services rates.

4.5 MONITORING

Node4 monitor the service elements managed by Node4 as standard via the Node4 monitoring system to provide pro-active fault management by Node4 during the contracted support hours. As standard we monitor device response time/device availability, interface statistics (utilisation & errors), CPU and Memory usage. In the event the device stops responding, or a monitored threshold is exceeded, Node4 Technical Support will pro-actively investigate the issue during the contracted support hours. n4Cloud is a managed service, as such Node4 capacity manage the service to ensure it meets all SLA targets – visibility of this monitoring is not necessary for a customer using the service and therefore will not be provided as standard.

Additional monitoring services (including monitoring of virtual machines) can be provided to give the customer increased visibility on service performance. This may incur an additional charge and will be identified on the order form if taken.

4.6 BANDWIDTH

Bandwidth to the internet is available on either guaranteed bandwidth (per Mbps), or data transferred (per GB). Some services have optional burst capacity and services with this capability are charged using the 95th percentile method using the following calculation:

Node4 record the inbound and outbound data transfer for the Customer's connection at 5 minute intervals over a 1 month period. We do this by measuring the data transferred divided by the sampling length in seconds to obtain a MBit/Sec value for each 5 minute interval. At the end of the month we order the data collected from highest to lowest and discard the top 5 percent of the readings. Therefore in a 30 day billing cycle, the top 5% (36 hours) of peak traffic are not taken into account. This equates to 65 minutes per day. Node4 then take the remaining data set and use highest measurement as the billable utilisation for that month. We calculate the 95th percentile for inbound and outbound traffic separately, and take the higher of these two values as the billable

utilisation. This value is then rounded to the nearest Mbit/Sec for billing purposes.

All internet usage is subject to the Acceptable Use Policy

4.7 POWER

Power to the n4Cloud service is provided using dual feeds. UPS and Generator back-up is also provided with a minimum N+1 configuration.

4.8 INTERNET SECURITY

Node4 provide n4Cloud customers with public internet access. Internet Security and Virus Protection is the responsibility of the Customer. All internet usage is subject to the Acceptable Use Policy. Firewall and virus protection options are available as part of the service on request at an additional charge.

The n4Cloud service is managed from an internet accessible Portal. Node4 have secured this by placing it behind a firewall and using SSL encryption from the portal to the Customer. In order to obtain access Customers are allocated per person usernames and passwords. Furthermore the portal provides role based authorization, so control of what a particular user can do is also available.

4.9 DATA BACK-UP

It is the Customer's responsibility to ensure their data is backed-up. Node4 provide a back-up to SAN service at an additional cost through the n4Backup platform. This is covered in a separate schedule document.

Should the Customer take this service they must specify the storage intervals and retention policy on the order form.

4.10 IP ADDRESSES

The number of public internet routable IP addresses assigned will identified on the Order Form. IP address usage is monitored and reported to RIPE database. The use of IP addresses must be justified. It is the Customer's responsibility to use their assigned IP addresses. Use of non-assigned IP addresses will result in immediate disconnection from the Node4 Network.

Because the n4Cloud service is a shared platform that will involve elements managed by the

Customer and elements managed by Node4 the Customer must agree the IP addressing scheme with Node4.

4.11 SERVICE INSTALLATION AND PROVISIONING

Standard set-up is provided. For more complex configurations a technical scope document will be agreed and any relevant charges are identified on the order form.

4.12 SITE SECURITY

The following security measures are in place at Node4 data centres:

- Perimeter fencing with electric gates
- Access via photo swipe card system
- CCTV with 24 hour recording both external and internal to the data centre
- Access Control Procedure
- Data Centres are manned 24 hours a day.

4.13 DATA CENTRE ACCESS

Customer access to the data centre by appointment only and by adhering to the procedure outlined in the Data Centre Access Process document which is available on request or can be found at www.node4.co.uk. Access to the data centre is not necessary for n4Cloud services as they are managed by Node4.

Where the Customer has chosen to merge a Colocation Service with the n4Cloud service access will be provided to the Colocation elements as discussed in the Schedule Document for Colocation Services.

4.14 CUSTOMER SUPPORT

Bronze level support, as identified in the fault management and reporting handbook is provided as standard on n4Cloud. Options are available for Silver, Silver Plus and Gold support levels.

Node4 provides the service direct to the Customer. The Customer commits to fully manage all their customers and suppliers directly. Node4 will not interface directly with any third parties working with the Customer. If the Customer requires Node4 to provide their customers with a customer care or NOC service this is available on request and subject to Professional Service Charges. Node4

shall not be liable in respect of any contract, agreement or relationship that Customer may have with any third party. If a dispute arises between Customer and a third party involving Node4's n4Cloud Service, Node4 shall provide the Customer with reasonable information and assistance (to the extent that such is not adverse to Node4's interests to Customer (at Customer's expense)) in the resolution of such dispute.

4.15 SUSPENSION OF SERVICE

Node4 shall be entitled to suspend the Support service:

- In a life or property threatening emergency
- If required to do so by any governmental or regulatory authority; or
- Where the Customer is in breach of this Agreement,

4.16 WARRANTY

The Customer warrants that it will not use the Products or Services or permit the same to be used:

- For the transmission of any material which is defamatory, offensive or of an abusive or obscene or menacing nature; and/or
- To cause annoyance, inconvenience or needless anxiety or any improper use; and/or
- Except in accordance with any relevant legal or regulatory requirements, and operating instructions notified by Node4 from time to time; and/or
- In a manner which constitutes a violation or infringement of the right of any person; and/or
- Contrary to the procedures set out in the Customer Handbook and the terms of this Agreement.

5. FAULT REPORTING AND MANAGEMENT

5.1. FAULT HANDLING

Faults are handled as outlined in the Fault Reporting and Management Handbook Hand book

5.2. MAINTENANCE WINDOW

Where Node4 plans to perform essential works and the changes are service affecting, Node4 will use reasonable endeavours to perform such works between the hours of 00:00 and 04:00 and will use reasonable endeavours to give the Customer at least five (5) days prior notice for network related work and at least ten (10) days prior notice for Infrastructure related work. In the event of an emergency or Service Affecting Fault such notice may be less than 24 hours. This is without prejudice to or limitation of the definition of Planned Outage.

5.3. TIME TO REPAIR

Node4 aims to resolve requests in relation to the Node4 infrastructure causing a loss of service within four (4) hours, with the following response times:

	Description	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Business Hours	Faults & Technical Queries Acknowledgement*	30 Mins	30 Mins	1 Hour	2 Hours	1 Day
	Remedial Engineer Actions Commence	1 Hour	2 Hours	4 Hours	12 Hours	N/A
	Time to Resolve Fault**	4 Hours	4 Hours	24 Hours	72 Hours	5 Days ***

	Description	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Non-Business Hours	Faults & Technical Queries Acknowledgement*	60 Mins	60 Mins	Automated Email Response	Automated Email Response	Automated Email Response
	Remedial Engineer Actions Commence	2 Hours	2 Hours	N/A	N/A	N/A
	Time to Resolve Fault**	5 Hours	5 Hours	N/A	N/A	N/A

Hours of response is dependent on Service Level (Bronze, Silver, Silver Plus, Gold) All category 1 & 2 faults should be raised via the tickets system then followed by a phone call.

* Acknowledgement refers to an automated service which generates a response and alerts engineers of a service failure; or where there is dialogue between the client and the engineer.

** We will use reasonable endeavours to adhere to the TTRF guidelines. Where fault resolution involves third parties, or hardware replacement, then this is subject to the support contracts in place with those parties.

*** Standard Change requests will be completed during the contracted support hours within 2 days where requests are conducted within the support contract. This does not include change requests outside of the support contract, or change request implemented outside the contracted support hours these will be dealt with as chargeable projects.

5.4. FAULT DURATION

All faults recorded by the Network Management System will be reconciled against the corresponding fault ticket raised by the Technical Support Centre. The exact fault duration will be calculated as the elapsed time between the fault being reported to the Technical Support Centre and the time when Service is restored.

5.5. SERVICE CREDITS

Node4 will provide the Customer with service credits, as set out below, for the failure to meet the following targets:

Service Element	Target Availability
n4Compute (without nHA dual Site)	99.9%
n4Compute (with nHA dual Site)	99.99%
n4Store	99.9%
n4Balance	99.9%
n4Protect	99.9%
n4Shield	99.9%
Internet Transit	99.9%

For n4Compute (with nHA dual Site) service credits will only be payable when availability drops below 99.99%.

For every hour or part hour each service element is unavailable beyond the target availability a service credit of 5% of the monthly rental of that service element will be applied.

5.6 CALCULATION OF SERVICE CREDITS

- Where a Monthly Review Period incorporates part of a month, any service credit will apply to a pro-rated monthly Rental Charge.
- Service credits will be calculated monthly, aggregated and credited to the Customer on a quarterly basis.
- If a Service is cancelled during a Monthly Review Period, no service credit will be payable in respect of that circuit for that Monthly Review Period.
- The Customer must claim any service credit due to a failure to meet the Service Levels, in writing, within twenty one (21) Business Days of the date at which the Customer could reasonably be expected to become aware of

such failure, otherwise no service credits shall be payable. The Customer shall not be entitled to any service credits in respect of a claim unless and until Node4 has received notice of the claim in writing in accordance with the above. Should Node4 require additional information from the Customer, the Customer shall assist, and shall not be entitled to any service credits until Node4 has received all the information it has reasonably requested.

5.7 EXCLUSIONS TO PAYMENT OF SERVICE CREDITS

Without prejudice to or limitation of the definition of Service Availability, service credits will not be payable by Node4 to the Customer in relation to the Service Availability for faults or disruptions to the Services caused by any of the following:

- The fault, action or negligence of the Customer, its employees, agents or contractors;
- The Customer failing to comply with the provisions of the Agreement;
- A fault in, or any other problem associated with, equipment connected on the Customer's side of the Node4 Network termination point, except where such fault or problem is directly caused by the fault, action or negligence of Node4, its employees, agents or contractors;
- Any event described in paragraph 8 (Force Majeure) of Node4's General Terms and Conditions;
- Any Planned Outage.

Service credits are not applicable for more than one breach of any targets outlined in this document arising from the same occurrence.