

Effective: March 6, 2020

MANAGED SERVICES- INFRASTRUCTURE AS A SERVICE (IaaS)

1. Services

- 1.1 This Service Description shall form part of the Terms and Conditions of the Service Order (“Order”) which is governed by our MCA, GTC and or MSA (“the Agreement”).
- 1.2 This Service Description sets out the parties’ obligations in respect of Equinix’s ‘IaaS’ service (which, for the purposes of this Service Description, is hereafter referred to as the “Service(s)”).

Definitions

The following terms and phrases have the following meanings:

- “**Compute Host**” means a physical server providing physical compute resources (CPUs and RAM);
- “**Hypervisor**” means software installed on Compute Host(s) (for example VMware ESXi or Microsoft Hyper-V), that generates and manages Virtual Machines;
- “**Virtual Machine**” means a virtual server, comprising a collection of virtual compute and storage resources, including virtual CPU(s) (“**vCPU(s)**”) and virtual RAM (“**vRAM**”), which emulates the behaviour of a physical server;
- “**Primary Site**” means Services provided at a primary Equinix data centre site, as detailed in an Order;
- “**Runbook**” shall have the meaning as out in the Monitoring and Maintenance Service Description document;
- “**Sites**” means Equinix data centres as detailed in an Order;

Shared IaaS Definitions:

- “**Committed Rate(s)**” means the rate(s) set out in an Order;
- “**Committed Level**” means the quantity of each individual Resource set out in an Order;
- “**Current Resource Level**” means, at any one time, the higher of the Overage Level or the Committed Level;
- “**Overage Fees**” means, for the duration that any Overage Level exceeds the relevant Committed Level, the extent of such excess multiplied by the relevant Overage Rate;
- “**Overage Level**” means the level to which the Committed Level is increased (if at all), in accordance with paragraph 7.1(a)
- “**Overage Rate(s)**” means the relevant Committed Rate(s) multiplied by a factor of 1.2, and/or any other overage rate(s) as specified in an Order;

“Resource” means any of the Shared IaaS compute or storage resources set out in an Order, and “Resources” shall have the equivalent meaning;

“Storage” means an amount of disk space made available to Compute Hosts from one or more storage devices to the Customer, which may be dedicated or shared;

VM Backup Service & VM Replication Service Definitions:

“Actual Storage Size” means the total size of the information held on behalf of the Customer at end of every calendar month pursuant to Equinix providing a VM Backup Service (as de-duplicated and compressed);

“Backup” means the Customer Data; or the Customer Data as changed or amended at the time Equinix copies a Change pursuant to paragraph 4.1(b) below;

“Backup Network” means Equinix’s private backup network;

“Backup Repository” means the Equinix storage device, remote to the Customer’s Virtual Platform, used to store the Backup

“Changes” means any changes to the most recent previous Backup or Replication which are evident at the time that Equinix copies and stores the Change pursuant to paragraph 5.2 (a) or 4.2 (a) below;

“Committed Storage Size” means the amount of VM Backup storage set out in an Order; and

“Customer Data” means data from a specified and agreed part of the Virtual Platform, in the form it is in when retrieved by Equinix in accordance with paragraph 4.2(a) and 5.2(a) below.

“Overage Storage Size” means the amount by which the Actual Storage Size for any month exceeds the Committed Storage Size, if at all.

“Replication” means the Customer Data; or the Customer Data as changed or amended at the time Equinix copies a Change pursuant to paragraph 5.1(b) below;

2. Infrastructure as a Service (IaaS) - Service Operation

In providing the Service, as either a Shared IaaS or a Private IaaS solution, Equinix shall:

2.1 Shared IaaS

- (a) manage and maintain physical IT infrastructure from within an Equinix data centre (the **“Infrastructure”**);
- (b) set up and manage a virtualised platform (the **“Virtual Platform”**) on the Infrastructure using:
 - i. Compute Hosts which are shared between Equinix and Customers receiving Shared IaaS services, and/or;



- ii. a number of Compute Hosts which are dedicated to the Customer with a chosen Hypervisor; and
 - iii. allocated Storage, as specified in an Order;
- (c) provide Virtual Machine(s) (each one being a “VM”) from the Virtual Platform.

2.2 Private IaaS

- (a) make available the dedicated hardware specified in an Order (the “Infrastructure”);
- (b) install and deploy the private Infrastructure within a specified Equinix data centre, and, to the extent agreed with the Customer, configure it within the Customer’s existing computer infrastructure therein (the “Customer’s System”);
- (c) set up and manage a private virtualised platform on the Infrastructure (the “Virtual Platform”) using a number of Compute Hosts with a chosen Hypervisor and provide VMs from the Virtual Platform;

3. Virtual Machine Operating System Management (Optional Extra Add-on)

Where a Virtual Machine (“VM”) is a “Managed VM”, or where VM operating system management is provided to a particular VM, as specified in an Order Equinix shall:

3.1 Set-up

- (a) deploy the VMs specified in an Order from the Virtual Platform;
- (b) install, set up and configure the VM operating system (“OS”) specified in an Order on the applicable VMs, in accordance with good industry practice, and such other common applications (for example VMware Tools or Hyper-V Integration Services) as Equinix would in its discretion usually include as part of that OS install;
- (c) set up remote access via the internet to the VM for the Customer, to enable the Customer to use the VM for such purposes as a virtual server can be used for.

3.2 Equinix Obligations

In providing the Service Equinix shall:

- (a) provide reasonable troubleshooting assistance and administrative assistance on request, for the VM, the VM’s OS, and the applications installed by Equinix pursuant to paragraph 3.1(b) above, for up to 4 hours of Equinix engineers’ time per VM per month. (Further assistance shall be provided subject to engineer availability but Equinix reserves the right to refuse to provide assistance for time substantially in excess of this limit, and/or charge for all such excess assistance in accordance with Smart Hands);
- (b) monitor VM operation, monitoring various resources (such as the vCPU, memory and drive space or other applicable and agreed fundamental performance criteria of the specific VM) in accordance with the Device Monitoring Service
- (c) if expressly agreed in a Runbook, alerting the Customer where VM resources fall above or below agreed levels; and
- (d) if expressly agreed in writing by both parties, presenting reports to the Customer at agreed intervals or on request, showing the history of the performance of VM



resources. (Reports of historical data will be less detailed for distant periods of time compared to recent periods of time); and

3.3 Further Service Options

3.3.1 To the extent agreed in writing between Equinix and the Customer only, Equinix shall

- (a) install and/or manage any other application or functionality to a VM (for example Microsoft SQL installation and Active Directory installation in accordance with good industry practice);
- (b) subscribe to patching updates as Equinix in its sole discretion deems appropriate and relevant to the applicable OS and patch according to the Patching Service contained in the Monitoring and Maintenance Service Description.
- (c) Equinix shall have no liability for any potential adverse effects of any patching.

4. **VM Backup Service (Optional Extra Add-on)**

Where a VM includes the VM Backup Service, as specified in an Order, Equinix shall:

4.1 Set-up

- (a) consult with the Customer to ascertain backup configuration information;
- (b) for Private IaaS only, install and configure:
 - i. backup software on the Customer's System, and
 - ii. a link from the Customer's System to the Backup Network;

4.2 Backup Service operation

- (a) copy via the Backup Network:
 - i. the Customer Data (such retrieval to take place within an agreed time window either on or after the Service Commencement Date); and
 - ii. the Changes (such retrieval to take place within an agreed time window each day after the Service Commencement Date (or as otherwise set up), and also upon reasonable ad-hoc Customer requests);
- (b) store information referred to at paragraph 4.2 (a)) above:
 - i. in unencrypted format unless otherwise agreed, or otherwise configured by the Customer;
 - ii. in de-duplicated and compressed format; and
 - iii. on a primary Backup Repository and upon Customer request separately on a geographically-distinct secondary Backup Repository such geographically-distinct backup shall incur additional Fees for which the Customer shall be liable.

4.3 Restores



- (a) subject to paragraph 4.4 (a) below on Customer request, restore a Backup directly from the Backup Network onto the Virtual Platform;

4.4 Security and Service Restrictions

- (a) subject to paragraph 4.4 (b) below, Equinix will configure the Backup Network such that full Backups from more than 14 days prior to the then-current date shall be rendered irretrievable from the Equinix Backup Repositories by any person, regardless of any termination or expiry of the VM Backup Service;
- (b) Equinix will not configure the Backup Network such that 14 days after termination or expiry of the VM Backup Service (or such earlier date notified in advance by the Customer to Equinix) all Customer Data and Changes shall be deleted (and all Backups shall be rendered irretrievable by any person) from the Equinix Backup Repositories;
- (c) Equinix will not, and shall not be obliged to, restore any Backup from more than 14 days prior to the date of the restoration (including upon termination of the Service for any reason) unless otherwise expressly agreed in writing;
- (d) Equinix will not restore any Backup to removable media or to any computer infrastructure or device which is different to the infrastructure or device from which the Backup was taken, whether before or after any termination or expiry of the VM Backup Service, unless otherwise agreed between the parties in writing. (Additional charges may apply as part of such agreement);
- (e) procure that the Customer Data, any Changes, and any Backup, shall only travel through the Backup Network in an encrypted format;

4.5 Reporting

- (a) provide automatic reports by email regarding the success or failure of copying and storing a Change the size of each successfully copied Change, and the size of each month's Actual Storage Size;

4.6 Support

- (a) provide troubleshooting support with regard to the VM Backup Service on Custom request, as soon as practicable; and

4.7 In the event that in any month there are 5 or more Changes the size of which are individually 50% or more of the size of the first Backup of that 14 day period, or in the event that any Actual Storage Size is materially in excess of the Committed Storage Size, the Customer shall take out an additional Order for increased Committed Storage Size.

5. **VM Replication Service (Optional Extra Add-on)**

Where a VM includes the VM Replication Service, as specified in an Order, Equinix shall:

5.1 Set-up

- (a) consult with the Customer to ascertain replication configuration information;

5.2 Service operation - Replication

- (a) copy via the Backup Network, or unless otherwise agreed and detailed in an Order, via another Customer private network:



- i. the Customer Data (such retrieval to take place within an agreed time window either on or after the Service Commencement Date); and
 - ii. the Changes (such retrieval to take place within an agreed time window each day after the Service Commencement Date (or as otherwise set up), and also upon reasonable ad-hoc Customer requests);
- (b) store information referred to at paragraph 5.2 (a) above:
 - i. on separate and remote Customer virtual platform, and
 - ii. as a (“Replica VM”) in a powered off state;

5.3 Service operation – Restores of Replication

- (a) on Customer request or as agreed, perform a failover test of a Replica VM;
- (b) Security and service restrictions
 - i. procure that the Customer Data, any Changes, and Replication, shall only travel through the Backup Network in an encrypted format;

5.3 Reporting

- (a) provide automatic reports by email regarding the success or failure of copying and storing a Change; and

5.4 Support

- (a) provide troubleshooting support with regard to the VM Replication Service on Customer request, as soon as practicable.

6. **Customer Dependencies**

6.3 The provision of the VM Replication Service is dependent on the following (and Equinix shall not be obliged to provide any relevant part of the VM Replication Service to the extent that the following is not in place):

- (a) the Customer’s network remaining functional and relevant parts of the Virtual Platform remaining operational, compatible and ‘on-line’;
- (b) the Customer maintaining and not amending the Customer’s network settings or configuration, or operating system platform or configuration, unless with Equinix’s prior knowledge and consent and subject to any reasonable technical or other conditions that Equinix may impose; and
- (c) the Customer maintaining and not amending the configuration of any relevant VM Replication Service software installed on the Virtual Platform.

6.2 The Customer will not be able to use the Service, where it specifically is provided as Shared IaaS, unless it has an appropriate connection to the Service. Connectivity may be via a cross connect cable, via a local area network extension service connection (‘LES’) or via the Equinix Connect service; provision of such connection may require an additional Order or one-off fee.



- 6.3 The Customer must provide or separately order (and pay for) space within its Licensed Space to colocate Private IaaS hardware and allow Equinix physical access to the Licensed Space from time to time in order to maintain the Private IaaS hardware.
- 6.3.1 Customer is responsible for ensuring the number of VMs on the Virtual Platform, and the performance of those VM(s), does not jeopardise, obstruct, interfere with, or otherwise affect the incident-free performance of the Infrastructure or the Virtual Platform (which may in turn affect the performance of VM(s));
- 6.3.2 The Customer shall ensure that the Infrastructure and the Virtual Platform has sufficient resources for Equinix to comply with its obligation at paragraph 9.1.

7. Service Flexibility (Shared IaaS only)

- 7.1 Equinix will provide the following flexibility to the Customer's Service:
- 7.2 The Customer shall be able to increase the Committed Level of any Resource on request to Equinix, subject to Equinix's veto for any relevant reason in Equinix's sole opinion. (A relevant reason may include but is not limited to the capacity of the Infrastructure).
- 7.3 The Customer shall be able to decrease an Overage Level of any Resource down to any level, but not lower than the Committed Level.
- 7.4 Where Equinix provides VM resources from the Virtual Platform as defined in paragraph 2.1(b)(i) the Customer shall be able to allocate and change the allocation of the Current Resource Level of each Resource reasonably between VMs as it sees fit during the duration of the provision of the Services, subject to the following conditions and acknowledgements:
- i. each VM must have at least 1 and not more than 4 vCPUs at any one time, unless otherwise agreed;
 - ii. each VM either has VM OS management (and is a Managed VM) or not;
 - iii. some allocations and changes require input from Equinix representatives and some can be carried out by the Customer via the Portal with no such Equinix input;
 - iv. VMs will need to be in a shut-down state for changes to the VM specification to take effect (unless there is a relevant OS hot-plug in place); and
 - v. the length of time for changes to take effect will depend on the change requested.
- 7.5 The Customer is not, at any time, obliged to use or allocate all of the Current Resource Level of each Resource, but the Customer shall not use or allocate more Resources than the then-current Current Resource Level.
- 7.6 Equinix shall be entitled to charge for, and the Customer shall pay for, any Overage Fees.

8. On-going Service and Support

- 8.1 The Customer shall be able to view, via any internet connection, accurate descriptions of its VMs via a portal website run by Equinix (subject to username & password authentication,

unique to the Customer), and the Customer shall have additional controls over the Virtual Platform which shall be agreed in writing between the Parties.

- (a) provide the Hardware Support Service for the Virtual Platform as required;
- (b) provide the Device Monitoring Service for the Infrastructure;
- (c) assign an account manager to provide account management and support to Customer regarding the Services.

9. **Miscellaneous**

9.1 The Customer accepts that where Equinix provides a Virtual Platform as defined in paragraph 2.1 (b) (ii) or 2.2.; Equinix shall be entitled to set up, manage and use dedicated virtual machines from the Virtual Platform, as required, for Equinix's use in providing and managing the Service.

10. **Service Level Objectives**

10.1 **Service Level Objective for Virtual Platform**

For the purposes of this Service Description the following words and phrases shall have the following meanings:

"Application" means the application or website used by Customer which is installed by or on behalf of Customer upon the Services.

"Service Availability" means the amount of time during a month, expressed as a percentage of the total time during the month, during which there is no Service Outage.

"Service Outage" means an outage for the duration that it causes the Virtual Platform in a single Site to fail or be materially adversely affected and which is not responding to the Device Monitoring Service.

"Non-Equinix Device Outage" means an outage which is not considered a Service Outage and will not attract service credits if it is caused by any one or more of the issues listed below:

- (a) The Application, or any part of the application layer of the Virtual Platform hosted upon the Services, and / or any problem or issue with the Application or such application layer.
- (b) If the Virtual Platform provided to Customer under an Order does not have appropriate capability or sufficient capacity to manage the volume or type of traffic flowing through the Service.
- (c) Any request, act or omission of Customer.
- (d) Any act or omission of any Third Parties other than direct Equinix suppliers (for example but without limitation, a hack, virus attack or presence of other malware, or a DDoS attack; or if a Customer supplier interferes with the Service etc).
- (e) A Suspension.
- (f) Downtime to the Service due to Maintenance being carried out. For the avoidance of doubt this applies to both Scheduled and Emergency Maintenance.

- (g) Any managed change requiring downtime to the Services that is agreed to by Customer.

10.2 The following Service Availability percentages in a month shall give rise to the Service Credits specified in the following table, and Equinix shall account to Customer for such Service Credits only in accordance with the provisions of the Agreement. For the avoidance of doubt Service Credits are payable only in relation to the Order containing the Services affected by the service level failure

Service Availability percentage	Service Credit
Less than 99.95%, but greater than or equal to 99.90%	Credit equivalent to 15% of one month's fee in the Order for the IaaS Service in the affected Site
Less than 99.90%, but greater than or equal to 98.70%	Credit equivalent to 20% of one month's fee in the Order for the IaaS Service in the affected Site
Less than 98.70%, but greater than or equal to 90%	Credit equivalent to 30% of one month's fee in the Order for the IaaS Service in the affected Site
Less than 90%	Credit equivalent to 100% of one month's fee in the Order for the IaaS Service in the affected Site

To receive any Service Credit the customer must contact Equinix within 7 days after the end of the month in which the Service Level Objective is not met.

11. Service Level Objective for VM Backup Service and VM Replication Service

11.1 Equinix warrants that the Backup Repository will be available 99.95% of the time. In addition, Equinix will ensure that any VM restoration request will be actioned within 120 minutes of the time the request is logged on Equinix's helpdesk.

11.2 Service Credits: Should Equinix fail to meet the performance criteria stated in clause 11.1 in any month then the customer is entitled to claim a service credit not to exceed the Service Credit limit as stated below. The percentage reduction applies to the monthly fee for the month in which the guarantee is not met. For the avoidance of doubt Service Credits are payable only in relation to the Order containing the Services affected by the service level failure

- (a) Backup Repository availability of greater than or equal to 99.95%

Backup Repository Availability	Service Credit
Less than 99.95%, but greater than or equal to 99.00%	Credit equivalent to 25% of one month's fee payable for the VM Backup Service and/or the VM Replication Service in the Order
Less than 95%, but greater than or equal to 90%	Credit equivalent to 50% of one month's fee payable for the VM Backup Service and/or the VM Replication Service in the Order



Less than 90%	Credit equivalent to 100% of one month's fee payable for the VM Backup Service and/or the VM Replication Service in the Order
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- (b) Managed restoration process commencement within 120 minutes of Customer request being logged on the system:

Managed restoration process commencement after Customer request	Service Credit
Less than 180 minutes, but greater than or equal to 120 minutes	Credit equivalent to 25% of one month's fee payable for the VM Backup Service and/or the VM Replication Service in the Order
Greater than 180 minutes	Credit equivalent to 50% of one month's fee payable for the VM Backup Service and/or the VM Replication Service in the Order

- 11.3 To receive any Service Credit the customer must contact Equinix within 7 days after the end of the month in which the SLA is not met.
- 11.4 The following exclusions (the "**Exclusions**") to the VM Backup and VM Replication Service Level Objective noted above will apply;
- (a) While the backup and replication software takes a snapshot of Customer Data at a point in time, there is no guarantee that the source Customer Data contains valid and uncorrupted data. It is advisable that the Customer requests or performs their own VM restore, as described in paragraph 4.3(a) and/or 5.3 (a), on a regular basis in order to facilitate the Customer testing of the validity of Customer Data. (b) any backup or restoration request where such request falls within a period of Maintenance of the storage infrastructure. Equinix will endeavour to inform the Customer regarding the timing of Maintenance;
 - (c) any act or omission of the Customer which directly or indirectly causes the VM Backup Service or VM Replication Service to be interrupted or unavailable; or
 - (d) any operation of the Customer's Virtual Platform (including any software) that directly or indirectly affect or limits the performance of the VM Backup Service or VM Replication Service.
- 11.5 Should any of these conditions cause Equinix to fail a Service Level Objective, such failures shall not be considered a Service Outage for purposes of measuring Equinix's performance and Service Credits shall not apply.

