

# CONTRACTS

## MANAGED STORAGE POLICY

August 31, 2020

This Managed Storage Policy ("Policy") complements and provides additional terms and conditions for the Customer's use of Managed Storage, as described in the relevant Equinix Order. Any terms not defined in this document are defined in the Equinix Order, MCA, or other similar document.

### 1. Product Description

Managed Storage product involve providing secure, available Storage data capabilities to customers. Managed Storage offerings are billed through a monthly recurring charge (MRC) for the use of net capacity and performance and a non-recurring charge (NRC) for the initial installation.

Product benefits include:

- Optimized use of available Managed Storage capacity
- Easy-to-maintain environment
- Managed Storage capacity offered as a service, facilitating the scalability of the environment
- Availability and performance guaranteed in contract

#### Product Enablement

Equinix is responsible for initial product installation, making the volume available to the Customer. The Customer will receive an email regarding Managed Storage product availability and instructions for use of the services. From that point forward, the Customer shall be exclusively responsible for the configuration, installation, operation, technical support, and administration of the operating system and/or any other development programs (software) or applications that may be installed.

#### Basic Support

Equinix offers 24x7 support for Managed Storage product. The following services may be ordered by opening a ticket with the Equinix Service Desk, by phone or online, at no additional charge:

- Investigate and solve service failure
- Product information

#### Additional Support

Equinix offers Additional Support, it is not included in the Managed Storage product. All services are listed in the Equinix Service Catalog. Requested through the Managed Services Portal and it will be charged additionally with Technical Hours, with non-recurring information (NRC).

### 2. Customer Responsibilities

The Customer shall: (i) provide the email address and phone

number for a primary and an operational contact and ensure information is up-to-date 24 hours a day; (ii) purchase 2 (two) Infrastructure Ports products in order to provide connection redundancy in case the client is hosted on one of the Equinix datacenters; (iii) provide all materials, equipment or facilities required to use Managed Storage product, and be responsible for all equipment, software, services, and Customer components not provided by Equinix, including selection, compatibility, monitoring and troubleshooting; (iv) provide all required information during product enablement; (v) allow Equinix, without any liability or notice to the Customer, to allow duly authorized employees, agents, or state or federal police authorities to install equipment, make changes to Managed Storage product, or intercept any information to the extent permitted by law; (vi) the customer will have 48 (forty-eight) business hours, counted from when the message is sent by Equinix, to express themselves on any failure or defect in the service enablement. After such period, if the Customer has not expressed otherwise, the services shall be considered fully enabled with retroactive billing from the date the enablement communication enablement was sent.

The Customer may not: (i) conduct any activity that may interfere with or harm any other Customer's service; (ii) take any action in order to circumvent payment to Equinix for the use of the Managed Storage product.

### 3. Service Level Agreement (SLA)

The purpose of this Service Level Agreement ("SLA") is to set measurable performance levels for the Managed Storage product and specify the discount available to the Customer if Equinix cannot achieve those levels.

For Brazil, the SLA is met if each LUN (Logical Unit Number) is available for accessing data 99.90% of the time for the Block or Object modes, 99.95% of the time for the Block with Inter-IBX Protection and 99.50% of the time for the SMB or NFS modes during the billing month ("SLA Threshold"). The Customer shall be entitled to credits set out in the table below as the only and exclusive discount for any failure to comply with the SLA Threshold.

For the purpose of this SLA, and subject to the final paragraph of this section, "Unavailability" is defined as the length of time that failure of any Managed Storage product component results in failure



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to access Customer data, measured from when Equinix is notified of the incident by the Customer or the actual start of the incident as mutually agreed upon between the parties, until the time that the service is no longer unavailable as confirmed by Equinix .

COUNTRY	SERVICES	MAXIMUM TIME FOR CRASH RECOVERY (CONTRACT MONTH)	MRC CREDIT FOR EACH LUN
BRAZIL	Block / Object	45 minutes	Discount equivalent to 1 (one) day of service.
	Block with Inter-IBX Protection	22 minutes	Discounts equivalent to 1 (one) hour of service for each outage period of 15 (fifteen) minutes following the maximum agreed time
	SMB / NFS	3 hours and 39 minutes	

The maximum credit that Equinix will issue for each billing period is one (1) monthly MRC for each LUN directly impacted by outages. The Customer must report unavailability and request a credit by contacting the Equinix Service Desk. Equinix may investigate and isolate the cause of unavailability during parsing of the request.

The SLA shall not apply (and Equinix will have no responsibility) if Unavailability: (a) is caused by circumstances beyond Equinix's reasonable control; (b) occurs during a scheduled maintenance window. The Equinix will ideally notify the Customer at least 15 (fifteen) days prior to any maintenance window, and at least 48 hours prior to imminent situations, and will make reasonable operational efforts to minimize the duration and impact of maintenance windows.

In addition, Equinix shall take the necessary measures to diagnose and fix any Managed Storage product-related emergencies in order to restore the environment, and will make reasonable operational efforts to notify the Customer if an emergency might cause an outage.

Equinix reserves the right to make the necessary adjustments to ensure the stability and quality of services to all Customers, avoiding improper use or misuse of the product.

#### 4. Modes

##### SMB / NFS

Consists of providing file Managed Storage for the exclusive use of Customers hosted on the Equinix datacenter. The volumes can be used as a mapped network drive or logical drive directly connected to the Customer's server, without guarantee of performance.

Managed Storage volumes can be presented through the following protocols:

- SMB (Server Message Block) 2.0 or higher for Windows servers. In this module, Managed Storage can be accessed by more than 1 (one) server
- Network File System (NFS) v3 or higher for Linux servers. In this module, Managed Storage can be accessed by more than 1 (one) server
- iSCSI (Internet Small Computer System Interface) for both types of systems.

##### Block

Consists of providing block-level Managed Storage that is distributed and configured in layers of disks with different functionalities for the exclusive use of customers hosted on the Equinix datacenter. The distribution of logical volumes among the disk layers is set automatically according to usage profile and volume access by the customer's systems and/or equipment.

The Block mode is purchased as per the performance level defined in the IOPS (Input/Output Operations per Second) guarantee. The IOPS guarantee is configured and set according to the server capacity. Three performance levels are offered in this mode:

- TIER I: High performance level, with 4.6 IOPS guaranteed per Gigabyte purchased
- TIER II: Medium performance level, with 1.2 IOPS guaranteed per Gigabyte purchased
- TIER III: Low performance level, with 0.1 IOPS guaranteed per Gigabyte purchased

The customer may purchase the Block with Inter-IBX protection option, which enables higher data availability with redundancy between Equinix's IBXs. This declared redundancy shall be guaranteed according to the following assumptions:

- The Customer can choose the primary and secondary sites during the product procurement period
- Data replication will be asynchronous, that is, the replication mode in which the primary node update is completed when the update is written to the replicator Managed Storage. All completed updates (data writings) are then replicated
- asynchronously in secondary Managed Storage with some replication ranges (RPO):

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PROTECTED VOLUME	RPO	INCREMENTAL COPIES
1 to 20 Terabytes	2 hours	Up to 1 TB
21 to 40 Terabytes	4 hours	Up to 2 TB
41 to 60 Terabytes	6 Hours	Up to 3 TB

This declared performance shall be guaranteed according to the following assumptions:

- Default usage profile of 70% (seventy percent) for reading requests and 30% (thirty percent) for writing requests
- Parameterized archival system for use of up to 64k (sixty-four kilobyte) blocks
- Multipath Software configured with balancing between fiber optic channels (round-robin)
- Server operating system, driver, BIOS, and firmware versions as well as their optical fiber interfaces connected to the Managed Storage product shall comply with the compatibility matrix published by the vendors and by Equinix itself.
- Identification of purchased space is done through LUNs (Logical Unit Numbers) that represent allocated Managed Storage volume
- The usage configuration on the servers shall comply with the exact volume purchased and the equivalent performance. Changes in this configuration directly affect the performance of the service.

- Equipment configuration and design have a maximum limitation per LUN (Logical Unit Number) presented up to 25TB for Block TIER I and 64TB for Block TIER II and 16TB for Block TIER III (iSCSI). If the project requires larger logical volumes, complementary LUNs can be delivered to the client, respecting the established limit, so that it is possible to concatenate the volumes on the server, where it is necessary to assess whether it is possible to perform this activity in the filesystem managed by the operating system.

### Object

Consists of providing unstructured data Managed Storage based on REST objects in a highly scalable infrastructure that provides 99.999999999% durability of data stored.

Only one performance level is offered in Object Managed Storage mode and can be purchased with access via HTTP or HTTPS (purchase option is limited to sale with capacity of up to 100 Terabytes) or via purchase of Service Infrastructure Port product, with unlimited access through URLs, via API REST to all Managed Storage classes (PUT, COPY, POST, GET, LIST and DELETE) included in the product.

### 5. Miscellaneous Provisions

This Policy and the Service Order requested by the Customer represent the complete agreement and understanding of the parties with respect to the subject matter herein and in the agreement, and supersede any other agreement or understanding, written or oral.