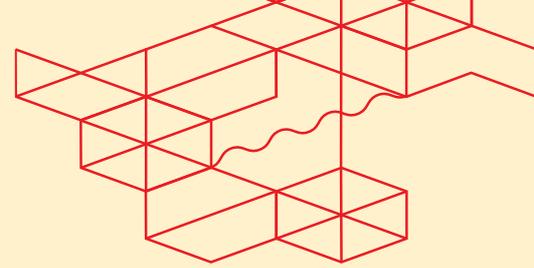


Managed Private Cloud FLEX (MPC) – Service Description

Version 1.3, March 2025

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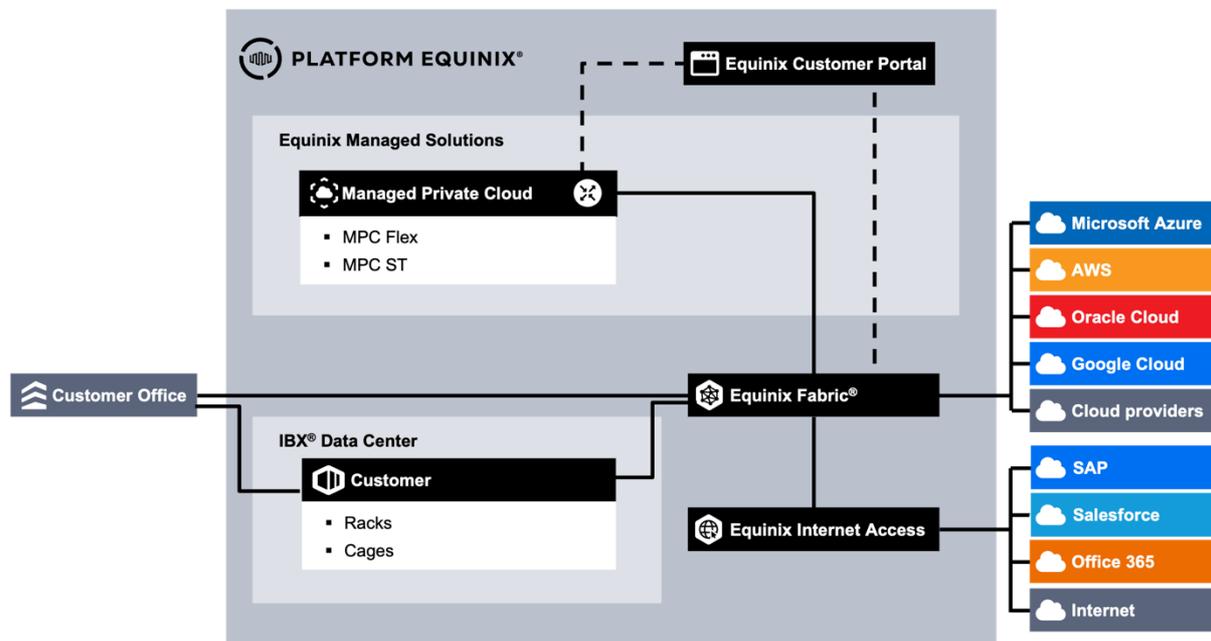
1. Managed Private Cloud

Managed Private Cloud (MPC) is an Infrastructure as a Service (IaaS) platform delivered by Equinix Managed Solutions (EMS).

With MPC, customers can purchase computing resources hosted in an Equinix IBX data center to enable Multi- and Hybrid Cloud solutions. Equinix Fabric® integrates MPC with the customer's environment (On-Prem, Colo) and other Cloud- and SaaS Service Providers such as AWS, Azure, Google Cloud, Oracle Cloud, Salesforce, SAP and more.

MPC includes compute, storage and networking resources, managed from the MPC Operational Console. In this portal, customers can create and manage virtual machines with compute and storage resources and configure virtual networks and security policies.

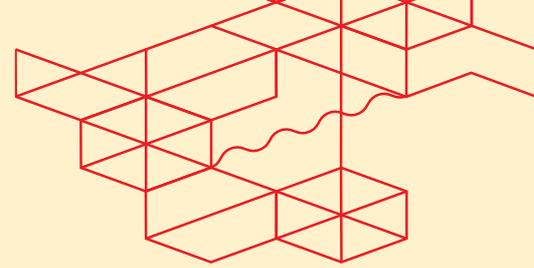
MPC is available in a select number of IBXs globally, providing geographic advantages for customers' applications and systems.



MPC is available in three service variants: Multi-Tenant and Single Tenant. Single Tenant is available in two types of resource management.

MPC VARIANT	RESOURCE UNITS	RESOURCE MANAGEMENT / PORTAL
FLEX (MULTI-TENANT)	vCPU and vRAM	VMware Cloud Director
ST (SINGLE-TENANT)	Host	VMware Cloud Director
CORE (SINGLE-TENANT)	Host	VMware vCenter

This Service description covers MPC FLEX.



1.1 MPC Flex

MPC FLEX offers a multi-tenant compute environment deployed as an Organization Virtual Data Center (OVDC) with logical separation between tenants, offering flexible scalability and control.

An OVDC provides compute resources, vCPU and vRAM, and storage resources to create Virtual Machines. Combine multiple OVDCs in different variants and sizes for different purposes. Configure security policies on the virtual networks and interconnect. Manage compute, storage and networking resources from the MPC Operational Console.

1.1.1 MPC Compute

MPC Compute consists of Processing Capacity in vCPU available for the OVDC.

vCPU

Processing capacity is available in vCPU. There are two vCPU variants that can be selected per OVDC.

- Optimized: balances the CPU capacity within the OVDC for an optimized performance
- Full: provides 100% of the CPU capacity.

vCPU recommended utilization are shown in the table below:

VCPU VARIANT	USE (EXAMPLES)
OPTIMIZED (DEFAULT)	<ul style="list-style-type: none"> • Generic production servers • OTA servers
FULL	<ul style="list-style-type: none"> • Terminal servers • High-load application servers • Latency-sensitive application servers

1.1.2 MPC Memory

MPC Memory consists of Memory in GB vRAM available for the OVDC.

vRAM

Memory in the OVDC is available in vRAM with 100% of its capacity and measured in GB.

The sales volume for MPC FLEX has a default ratio for Compute and Memory:

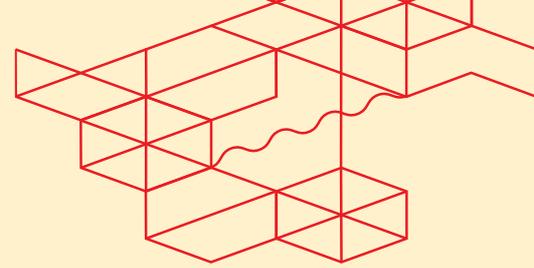
- MPC FLEX Optimized: 1 vCPU: 4 GB vRAM
- MPC FLEX Full: 1 vCPU: 16 GB vRAM

Compute purchase units

Purchase MPC Compute in units (PUs) of vCPU and GB vRAM with Baseline and Overage charges (Calculation Types).

Baseline represents the committed volume of PUs with a fixed monthly recurring charge. Overage covers the additional consumed volume above Baseline, metered and calculated monthly.

PURCHASE-UNIT & UOM*	CPU VARIANT	CALCULATION TYPE	DESCRIPTION
vCPU	<ul style="list-style-type: none"> • Optimized • Full 	Baseline	Committed volume of PUs
		Overage	Additional consumption above baseline.


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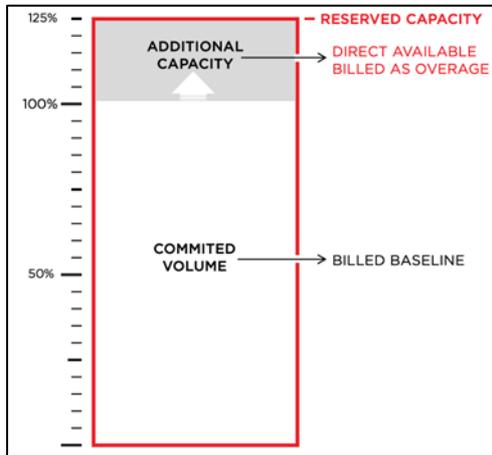
PURCHASE-UNIT	UOM*	CALCULATION TYPE	DESCRIPTION
GB vRAM	GB vRAM	Baseline	Committed volume of PUs
		Overage	Additional consumption above baseline.

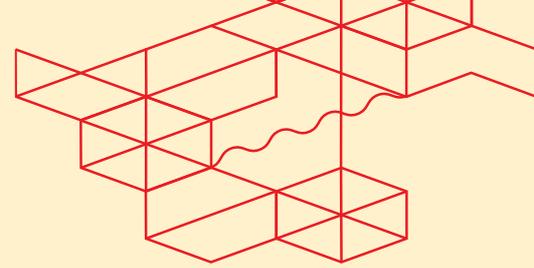
The default ratio of combined compute purchase units is one vCPU plus four GB vRAM (1vCPU+4GBvRAM).

Consuming Overage

OVDCs are provisioned with an additional capacity available for flexible consumption.

The size of this additional available capacity is calculated as a percentage of the Baseline volume with a maximum of 25%.





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1.1.3 MPC Storage

MPC Storage offers two performance tiers represented in storage policies. The storage capacity links to a specific OVDC.

You can create a virtual disk for the virtual machine (VM) within the customer-assigned storage capacity on the storage policy (performance level) that matches the VM's workload. OVDC's can have multiple storage policies so VMs in one OVDC can have different storage policies.

The table below depicts an overview of the storage policies.

STORAGE POLICY	USE
HIGH PERFORMANCE	Database, Logs RDS/SBC, VDI Low latency beneficial workloads
PERFORMANCE (DEFAULT)	Generic VMs, Applications / Web services, High performance File services / Object storage

Features of MPC Storage

The following features apply to the use of storage policies within the MPC environment:

- Storage capacity is allocated per policy per OVDC
- The MPC Storage features encryption at Rest

MPC Storage per VM:

- The recommended virtual disk size per VM is between 40 GB and 8 TB.

MPC Storage Purchase Units

MPC Storage is rated in purchase units (PUs) of 1 TB per storage policy with Baseline and Overage charges (Calculation Types).

Baseline represents the committed volume of storage with a fixed monthly recurring charge. Overage represents the additional consumed volume that exceeds Baseline, metered and calculated monthly.

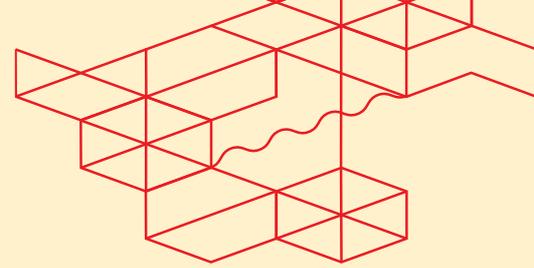
PURCHASE-UNIT	TIER	CALCULATION TYPE	UOM	DESCRIPTION
MPC Storage	• High Performance	Baseline	1 TB	Baseline charge for the committed storage quantity in whole TBs
	• Performance	Overage	1 TB	Charge for the usage of storage that exceeds the Baseline quantity in TB with 3 decimals

Note: Storage capacity is calculated based on the following assumptions: 1TB = 1000GB
Storage capacity is not transferable to other OVDCs

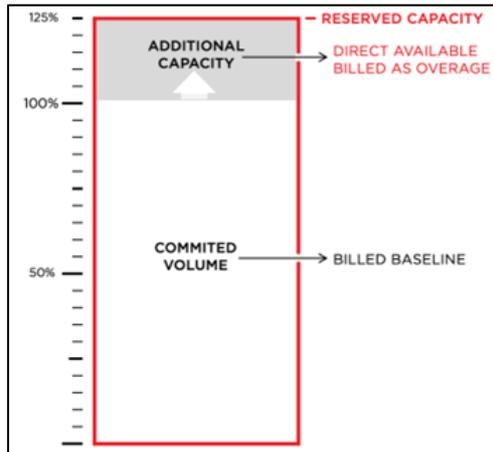
Consuming Overage

MPC Storage is provisioned per Storage Policy with additional capacity available for flexible consumption.

The size of this additional available capacity is calculated as a percentage of the Baseline volume with a maximum of 25% or 10TB.



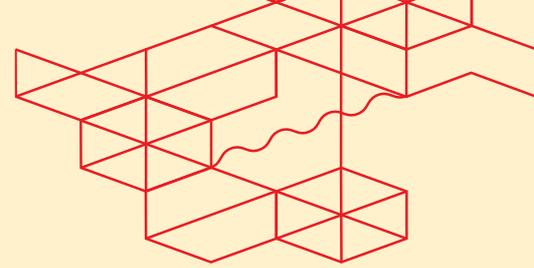
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MPC Storage consumption

The storage consumption per policy is measured as allocated capacity for:

- VM Disks
- VM-swap files
- Snapshots
- File in a Library (vApp templates and ISOs)



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1.1.4 MPC Connectivity

External Connectivity

To make MPC an integral part of customers (multi) cloud architecture, it can be easily connected to the following :

1. Equinix Colocation
2. Equinix Network Edge
3. WAN Providers
4. Cloud Service Providers (CSP)
5. MPC environment in another Metro
6. Equinix Internet Access (EIA) via Equinix Fabric

Connectivity is offered in combination with Equinix Fabric (Virtual Circuits) only, other connectivity into MPC is not supported. See [<link>](#) for details on Connections.

Connectivity Type

The network requirements determine the way customer network is connected to an MPC Organizational Virtual Datacenter (OVDC).The following connectivity types are available:

- Connectivity Routed routing by Equinix
- Connectivity Customer Routed routing by Customer
- Managed Private Firewall (MPF) routing by Equinix

Multiple OVDCs

Each OVDC has it's unique connectivity type, when multiple OVDC's are used combinations of connectivity types are possible, see [<link>](#) for supported combinations.

Connectivity Types

Connectivity Routed

This Connectivity Type offers layer-3 connectivity to the MPC OVDC for connectivity.

This option provides the customer with a ready for use and built-in routing engine. Configurable via the operational console. Each MPC internal (routed) network created is automatically part of the customer routing domain.

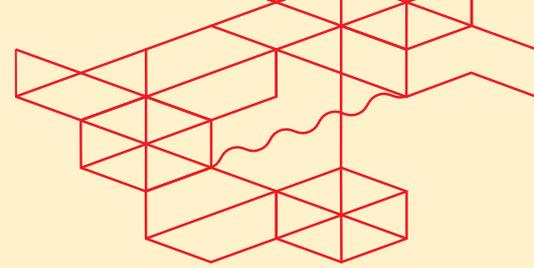
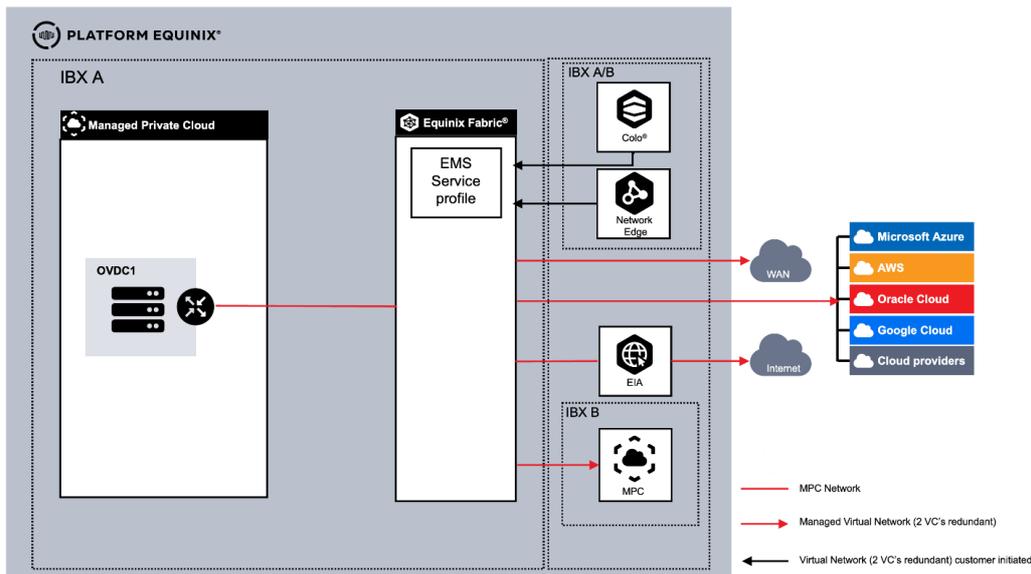

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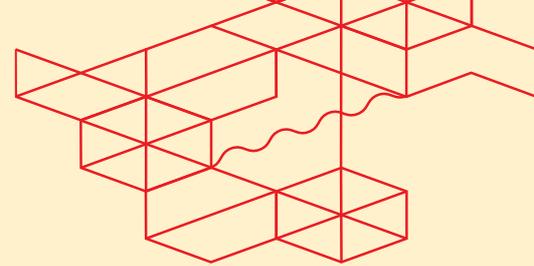
Figure 1 Overview Connectivity Routed

Connectivity Customer Routed

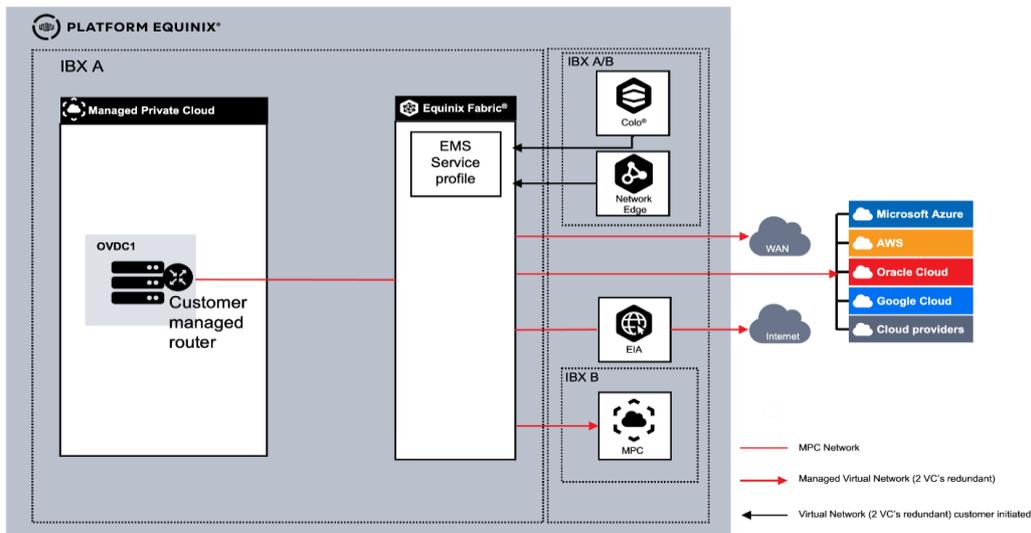
This option provides the customer with a self-provided, installed and managed virtual routing appliance (VM) within MPC as routing engine. All ordered external networks will be made available in the Operational Console as an external network by Equinix. Additional external networks can be ordered separately. External networks must be connected to the virtual routing appliance.

MPC internal (isolated) networks created must be connected to the routing appliance.

- Note1 – Within this option no routed internal networks are available. Only isolated internal networks in self-service are used to connect customer VMs to the virtual routing appliance.*
- Note2 – External networks must be used to connect the virtual routing appliance for external connectivity (2 VCs per connection).*
- Note3 – Although the MPC platform has a high availability, we recommend to have an HA setup and use 2 VMs as a customer virtual routing appliance(s).*
- Note4 – We highly recommend to use vmtools on any appliance/VM to support graceful management.*



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Connectivity Managed Private Firewall

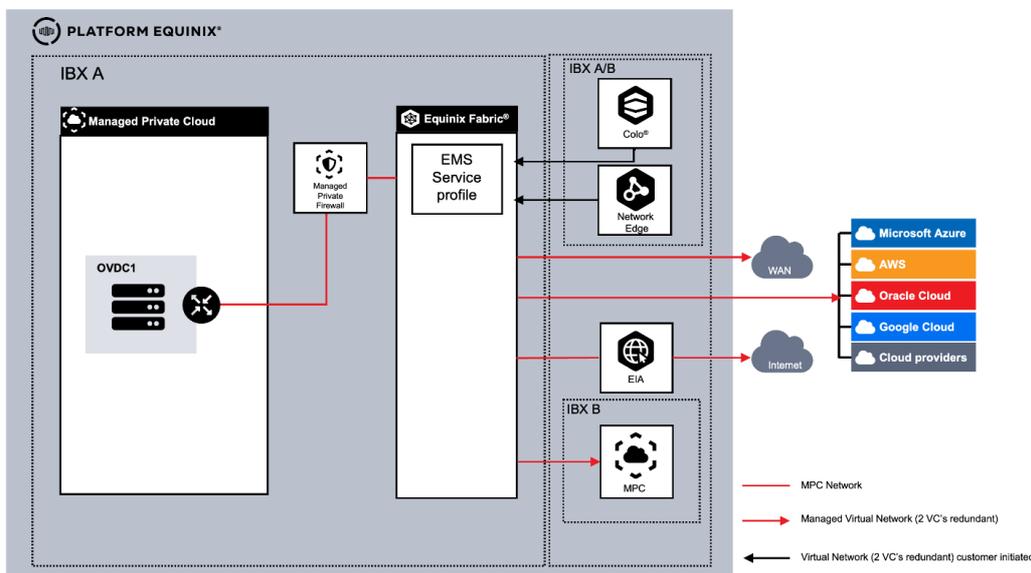
When using the Managed Private Firewall (MPF), as an additional service for extra security including routing and logging. All external connectivity is terminated at MPF. MPF is connected to the built-in MPC routing.

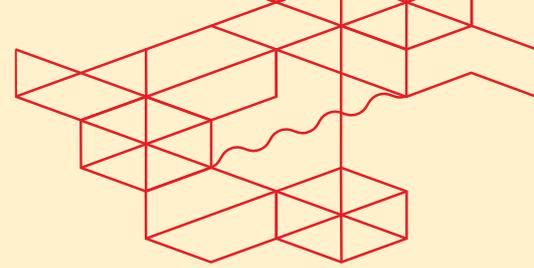
In this combination of MPF and MPC routing north-south traffic is processed first by MPF and further MPC, also MPC provides east-west routing.

This option provides the customer with a high secure ready for use and built-in routing engine consisting of 2 elements.

- MPF routing which is configured by Equinix
- MPC routing configurable via the operator console

Each MPC internal routed network created is automatically part of the customer routing domain. Internal isolated networks are not. For more information on internal networking see below [link](#)





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Figure 3 Overview Connectivity Managed Firewall

Networking with Multiple OVDC's

When using multiple OVDC's in a Metro, customers can use different Connectivity type combinations. As a Connectivity Type is related to the OVDC. Each scenario comes with different capabilities.

Multiple OVDC's with Connectivity Routed

When using multiple OVDC's in one Metro customer can choose to use a dedicated Gateway per OVDC (Figure 1) or use the same Gateway instance for both OVDC's (Routed Joined) (Figure 2). When a network needs to be available in multiple OVDC's and you use the connectivity option Customer Routed, you can use the External Network functionality to make external networks available in both OVDC's by using a Datacenter group.

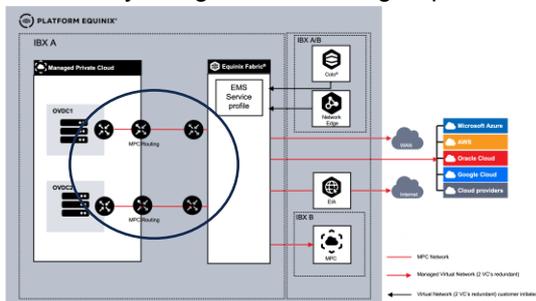


Figure 1 Dedicated Routing per OVDC

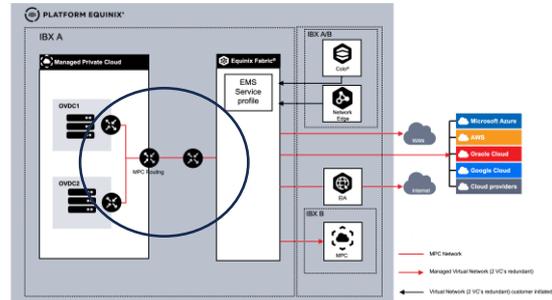


Figure 2 OVDC's with Joined Routing

Multiple OVDC's with Connectivity Routed and Customer routed

When using multiple OVDC's in one Metro customer can choose to use a combination of Routed for one OVDC and Customer Routed for the other. Customer will have two options for implementation

1. The OVDC's with connected OVDC's
2. The OVDC's are not connected

In the case of scenario 1 there will be a VLAN between the Customer Routed and the Routed Gateway.

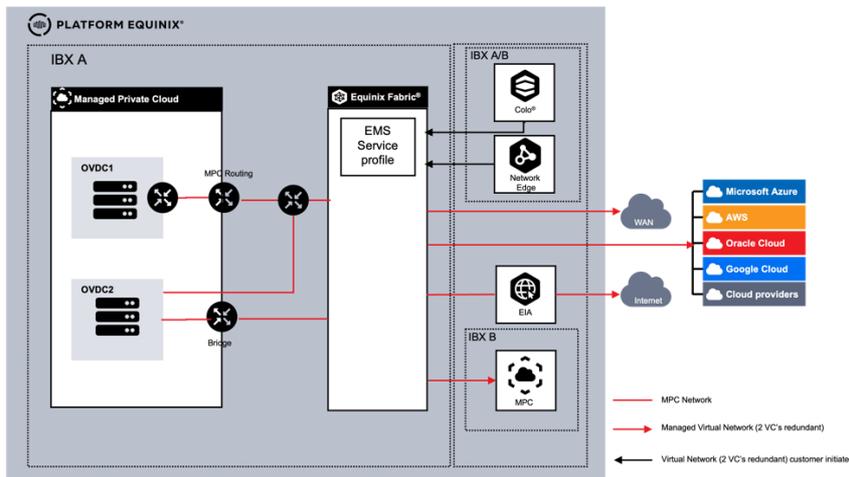
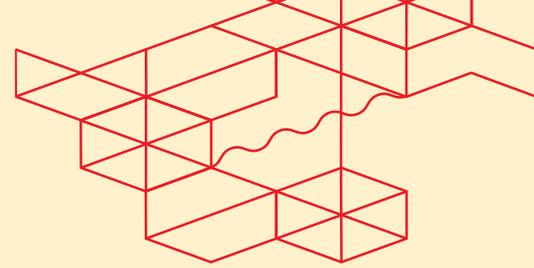


Figure 1 Connectivity Routed and Customer routed with shared network



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In this scenario customer can create networks between the 2 different OVDC's.

In Scenario 2 where there is no connectivity between the two OVDC's the OVDC's work as a stand-alone environment.

Connections

The following connections are possible.

VIRTUAL CONNECTION OPTIONS

CONNECTION	#	TYPE	DESCRIPTION
Equinix Colocation	1	Self-Service VC	Customer created and managed connection. Via Equinix Fabric Portal. Using an EMS Service Profile / Service token.
Equinix Network Edge	2	Self-Service VC	Customer created and managed connection. Via Equinix Fabric Portal. Using an EMS Service Profile / Service token.
WAN Providers	3	Managed VC	Equinix created and Managed connection. Part of the MPC order
Cloud Service Providers (CSP)	4	Managed VC	Equinix created and Managed connection. Part of the MPC order
MPC environment in another Metro	5	Managed VC	Equinix created and Managed connection. Part of the MPC order
Equinix Internet Access (EIA) via Equinix Fabric	6	Managed Internet Access	Equinix created and Managed connection. Part of the MPC order

Self-Service VC

With a self-service VC customers initiates VCs via the Equinix Fabric portal. Equinix Managed Solutions will contact you to configure the connection on MPC side. Each connection requires a pair of VCs to be ordered.

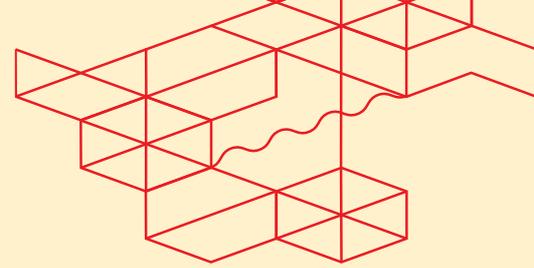
Managed VC

With a managed VC, the VC is part of an MPC order where Equinix initiates the VC configuration. During fulfillment Equinix will contact you for the parameters to configure the VCs.

Note: Every connection needs two (2) Virtual Circuits for redundancy reasons. Both for Self-Service & Managed VC.

Internet Access

If customer requires Internet as part of the MPC environment, Managed Internet Access needs to be ordered, Managed Internet Access makes use of Fabric Internet Access (EIA), it is configured with Fixed Bandwidth and no bursting options. EIA supports up to 10 Gbps bandwidth to MPC, IP-spaces need to be ordered as a separate item. For Internet access customer can also choose to contract a third-party solution with availability on Equinix Fabric. In this case customer need to contract the Internet service yourself.



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Note: For third-party internet provider, customer need to order two connections for redundancy reasons.

1.1.5 MPC Virtual Networking

The MPC platform offers various virtual network functionalities that a customer can configure in the MPC Operational Console, the table below shows the list of functions and if the functions are part of the service or separate charged.

FUNCTION	CHARGE TYPE	ROUTED AND MANAGED FIREWALL	CUSTOMER ROUTED
STANDARD FIREWALL	Included	Y	N
DISTRIBUTED OR ADVANCED FIREWALL	Charged	Y	Y
ROUTING, IPV4 STATIC AND DYNAMIC (BGP)	Included	Y	N
ROUTING IPV6	Included	Y	N
NAT	Included	Y	N
DHCP	Included	Y	N
VPN (LAYER-2)	Included	Y	N
VPN IPSEC LAYER-3 SITE TO SITE	Included	Y	N
ROUTE ADVERTISEMENT	Included	Y	N

Internal Networks

You can create internal networks for an OVDC via self-service in the MPC Operational Console. The MPC Networking service offers a maximum of 1000 internal networks per OVDC. Internal networks can also be configured over multiple OVDCs within the same Equinix IBX when the OVDC is configured with a datacenter group.

Within Internal Networks 2 types can be distinguished:

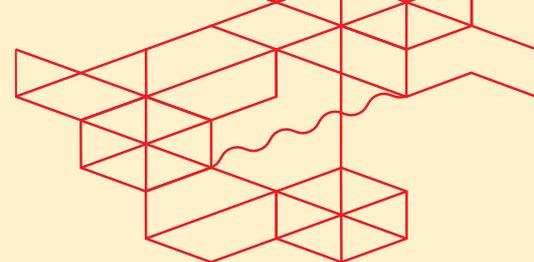
- Routed, this allows VMs to be connected to a network that uses the Edge Gateway as the router and give access to the WAN, Colocation, CSP's or Internet and is available to all VMs and vApps within the OVDC.
- Isolated, these networks are known as isolated as they aren't connected to a network that has access to WAN, Colocation, CSP's or Internet, unless you attach it to a self-managed router in the connectivity option "Customer Routed".

Routed networks are only available for Connectivity Type "Routed".

Inter Site Networks

MPC comes in multiple Datacenters; you can connect 2 MPC sites in different datacenters by requesting a Managed Virtual Circuit between the 2 sites. Based on the Connectivity Type the network will be configured. The connectivity between 2 datacenters will be charges as Managed Virtual Circuit, see 1.1.4 and further for details about the Connectivity Types and Managed Virtual Circuits.

Connectivity between more than 2 datacenters is supported but requires a Fabric Cloud Router (FCR), Equinix Fabric IPWAN and 2 Virtual Connections from the MPC Zone and the Fabric Cloud router.

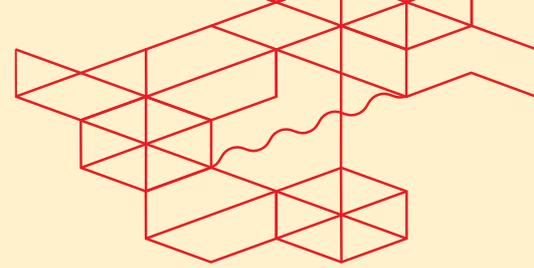

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Note: Ordering and configuring Fabric Cloud Router and IPWAN, is outside the Managed Solutions scope.

Purchase Units Connectivity

Units per Single OVDC:

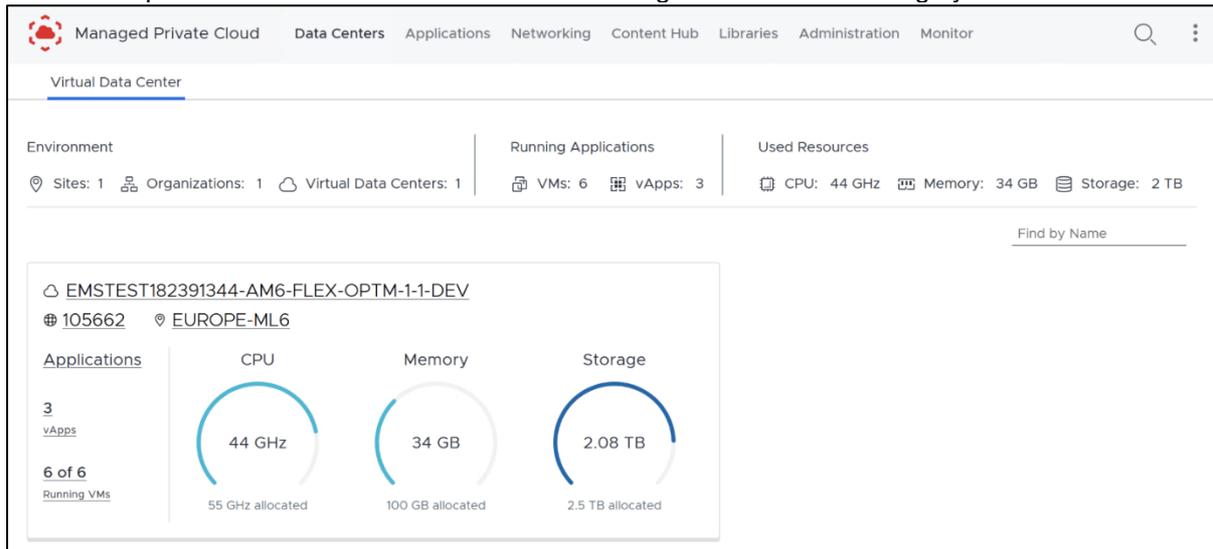
PURCHASE ITEM	UOM	CALCULATION TYPE	DESCRIPTION
Connectivity Type	ONCE	Baseline	Routing instance per OVDC <ul style="list-style-type: none"> • Routed • Customer Routed • Managed Firewall • Joined Routing
Managed Virtual Circuit	VC	Baseline	Available bandwidth 10/ 50/ 200/ 500/ Mbps or 1,2,5,10 Gbps Two (2) VC's needed per connection for redundancy
Managed Internet Access	Each	Baseline	Internet Access is available in 10/50/100/200/500/Mbps and 1,2,5 and 10Gbps Managed Virtual Circuits are included in Managed Internet Access!
Allocated IP-space	block	Baseline	Supported IPv4 /24 to / 29 and IPv6
Distributed Firewall (DFW)	vCPU Optimized vCPU Full	Baseline Overage	Additional functionality to offer Micro segmentation.



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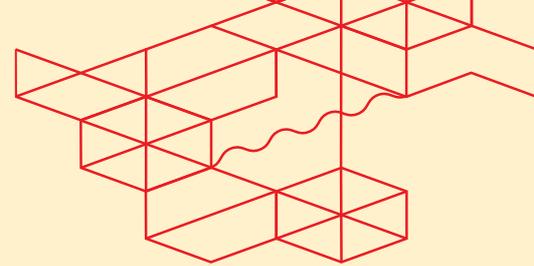
1.1.6 MPC Operational Console

The MPC Operational Console offers automation tooling and an API to manage your MPC resources.



Features offered by the MPC self-service portal are:

- Management of OVDCs across multiple Equinix data centers
- Creation, import and managing VMs and vApps
- Sizing VMs (scale up and down)
- Create VM Snapshot
- Console access to the VM
- Performance statistics
- Creating and filling "Library" with your ISO/OVA files
- Direct access to MPC self-service portal and the VM console via web browser without complex VPN solutions
- Extensive options for scripting & automation (API)
- Separate or group VMs for availability or performance
- Manage firewall rules and micro segmentation
- Create and manage routing rules Static and Dynamic for IPv4
- Create and manage routing rules Static for IPv6
- Create and manage NAT, DHCP and VPN (layer 2)
- Create and managed VPN IPsec layer 3 Site to site "tunnel" based
- Create and manage Route Advertisement (VRF)



2 Service Options

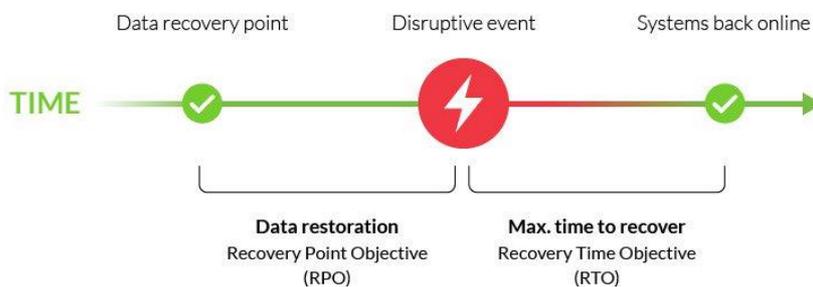
Several service options are available on MPC FLEX. These service options can be ordered separately.

2.1 VM Replication for Disaster Recovery

MPC Disaster Recovery is a self-service service option offering crash consistent VM replication in three customer selectable SLA profiles to support customers disaster recovery plans.

Besides replicating to and from Flex / ST, a mix of both is also supported. The VDC in the secondary datacenter could consist of lower capacity and performance compute or storage but must be enough for the intended workload.

For a successful disaster recovery, the VDC and network topology must support connectivity to the internet, on-premises locations and / or cabinet within the secondary datacenter. To make sure failovers work as intended, the testing of VM failovers in self-service is supported.



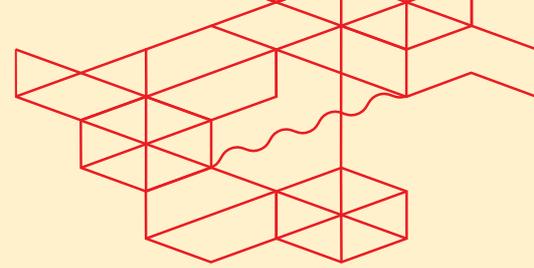
To configure the service, in the Operational Console virtual machines can be made a member of an SLA -profile, when the replication is activated the data will be replicated to the selected secondary VDC.

MPC Service Option Disaster recovery offers the following SLA's:

Parameter	Value	Description
RPO	Gold = 1 hour Silver = 4 hours Bronze = 24 hours	Timeframe in which the replication is finished.
RTO	30 min	Timeframe within the VM must be started in the secondary datacenter, upon customer-initiated failover. *1
# Retention points	Gold = latest + 8 points Silver = latest + 6 points Bronze = latest + 2 points	All profiles consist of latest restore point + amount of automatically stored restore points. Max. restore point age is 2 days

*1: RTO starts after failover is initiated by customer

The technology underneath the Disaster recovery feature is I/O filter (capture) based, by using the filter approach, the performance impact for VM's by using snapshots is prevented.



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Failover

If at any moment a failover should be necessary, the customer is able to failover the workload to the secondary datacenter in the Operational Console. To make failover possible, VM's are replicated according to the selected SLA Profile. Replication networks are operated and monitored by Equinix as part of the service.

Customer related connectivity (which VM's and applications attach to), are setup outside of the MPC Disaster Recovery service option and need to be setup in advance to make connectivity between datacenters, internet, cabinets and on-premises networks possible.

After the primary datacenter has returned to normal operation, the replication direction is reversed by the customer in the Operational Console. When completed, the VM's and applications return to the primary datacenter at a suitable time, chosen by the customer.

Responsibilities

For a successful disaster recovery implementation it is important to know which activities have impact on the performance and capacity and how the responsibilities of the environment are divided between Equinix and customer.

ACTIVITIES	EQUINIX	CUSTOMER
Selecting the suitable MPC compute and storage for the DR-site	I	RAC
Making the selected SLA profile available in the Operational Console		
Configuring the disaster recovery in the Operational Console	I	RAC
Ensure capacity in DR-site is sufficient for disaster recovery	I	RAC
Managing replication infrastructure and connectivity	RAC	I
Configuring customer connectivity and networks during failover	I	RAC

Purchase Units

The MPC disaster recovery feature is procured on a VM per month basis depending on the chosen SLA Profile as Service Option of the Primary Datacenter, pricing includes the replication connectivity and bandwidth.

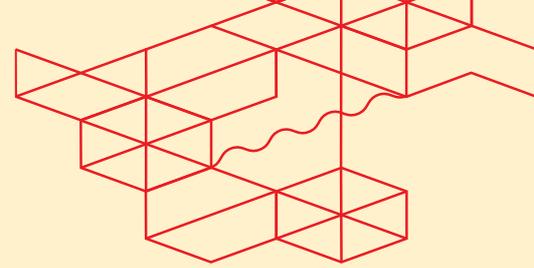
Costs for compute and storage capacity in the secondary datacenter is part of the MPC Service. Multi-site networking connectivity for VM's is additionally required.

PURCHASE ITEM		UOM	CALCULATION TYPE	DESCRIPTION
Service Option Disaster recovery	Bronze	VM	Baseline Overage	Replication of a VM to a selected second MPC VDC in another datacenter according to the selected SLA.
	Silver			
	Gold			

Metering

To determine the amount of replicated VM's for billing, all VM's are counted that were part of a certain SLA Profile on a per day basis.

- If a VM is changed between different SLA Profile within a month, it will be billed accordingly



Relations and dependencies

- MPC service option disaster recovery can only be consumed as part of the MPC Flex and/or MPC ST services
- The Service Option require 2 MPC VDC's in different Datacenters
- The Service option is only available in a selected combination of MPC datacenters

2.2 Back-up & Restore

Back-up & Restore of MPC resources are provided through the Managed Private Backup Service (ordered separately).

The service includes the backup of VM data or application data.

2.3 Software

A Catalog with software ISO's for MPC is available in the Self-service portal. This catalog lists the software that can be used in the VMs that run in the OVDCs. The catalog offers both open source and licensed software.

The licensed software catalog includes:

- **Microsoft SPLA:** Windows Server

Software Licensing Purchase Units

PURCHASE UNIT	TYPE	CHARGE TYPE	UOM	ORDERING AND BILLING
Windows Server per vCPU	• Standard	Baseline and Overage	vCPU	Baseline and Overage model per vCPU for the vCPU of the VM's that are powered-on

Next to the Software available in the MPC software Catalog, Equinix offers a Software license service where different licensed software can be ordered.

Bring Your Own License

If rather than procuring the service, you can choose to “Bring Your Own” software licenses, it will be necessary to validate the software providers license rules.

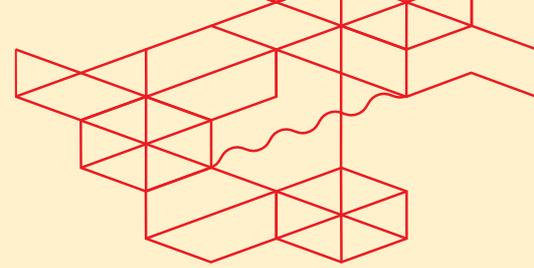
For all licensing the customer is responsible for meeting the software vendor compliance rules.

2.4 Support Plan

With the support plan, you can choose to have an additional service for the charge of additional service requests and other services like additional support, additional reporting, and design support.

Managed Solutions Premier Support Plan is a prepaid program that allows you to purchase a Monthly or Annual (one-time payment) block of Support hours at a discount. Equinix will calculate the provision of the Support hours in increments of fifteen (15) minutes.

Without a prepaid Managed Solutions Premier Support Plan, you will be charged the “Premier Support



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Service” per hour (standard hourly rate). Equinix will calculate the provision of the Support hours in increments of fifteen (15) minutes.

PURCHASE UNIT	TYPE	CHARGE TYPE	UOM	ORDERING AND BILLING
Technical Support plan	Monthly	Baseline	hour	Monthly reservation of hours for technical support
	Annual	Baseline	hour	Yearly reservation of hours for technical support

The plan applies to all Managed Solutions Products purchased, not to one specific product. If all the hours from the plan are consumed, **additional hours will be charged** at the “Premier Support Service” per hour (standard hourly rate).

Monthly or prepaid Managed Solutions Premier Support Plan hours do not roll over and are forfeited if not used. Prepaid Managed Solutions Premier Support Plan usage beyond the pre-purchased allotted amount will be billed at regular “Premier Support Service” rates unless an upgrade is requested.

The plan is country specific and cannot be linked to a specific IBX data center.

2.5 Migration support

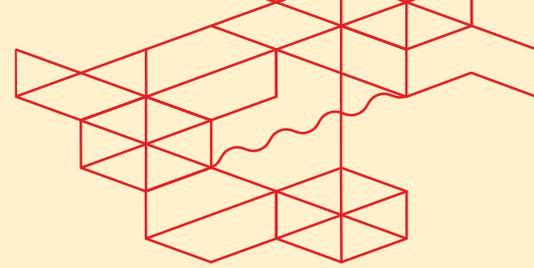
To migrate customers workloads from On Premises to MPC, Equinix provides migration tooling that makes it possible to migrate workloads in Self Service without refactoring the applications. The tooling supports VMware workloads from vSphere or Cloud Director. To enable, customer will receive an appliance that can be installed in customers VMware environment and that will be paired with customers MPC environment. The tooling supports asynchronous replication.

By default the migration tooling supports migration over Internet, on request a private connection can be created over Equinix Fabric, the cost for the Fabric connection are charged via Fabric. For migration over Fabric existing Virtual Circuits cannot be used, they need to be appropriate to the migration. Over internet speeds up to 400Mbps while for a Fabric connection speeds up to 10Gbps are supported.

The use of the migration tooling is Free of Charge, additional support can be requested via the Support plan.

CONNECTION	SPEED	NETWORK CONFIGURATION
Internet	Up to 1Gbps	No
Fabric	Up to 10Gbps	Yes, Setup VLAN's

After the migration has been completed the tooling will be disabled.



3 Service Demarcation & Enabling Services

The border between customer & Equinix environment.

With MPC Equinix offers an Infrastructure as a Service where Equinix provides and manages a platform existing of Datacenter, Datacenter network, Compute, Storage and (Virtual)Network, Equinix Manages the service up to the hypervisor level. Equinix provides the licensing for the platform for the virtualization. The resources are provided to the customer in a logical separated environment. Next to the logical environment MPC offers an Operational Console where customers can manage their environment.

Customer is responsible for managing their own environment, this includes creating and managing VM's, Storage, creating and managing Virtual networks, and security policies, capacity and providing the appropriate licenses for the Operating systems and Applications.

More details about demarcations can be found in the Roles and Responsibilities section of this document and in the [Product policies](#).

3.1 Limitation

MPC FLEX is a Managed Service with limitations on Self-Service and functionality to maintain performance, availability and security.

Generic

- Access to vSphere or vCenter functions is only possible through the MPC Operational Console and API.
- Integrations between vCenter and vSphere is limited to the functionality of the MPC Operational Console.

Compute

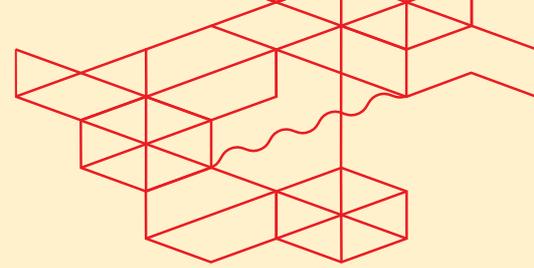
- Creating a Snapshot of a VM is limited to a single concurrent Snapshot.

Virtual Disks

- Moving virtual disks between VMs via the MPC Operational Console and API is not supported. For this, you need to create a ticket through Equinix support desk.
- Sharing a virtual disk between multiple VMs is not supported within the MPC. Therefore, applying Microsoft Windows Server Failover Clustering (WSFC) with shared disks to MPC is not supported.

Network

- Application of Single Root I/O Virtualization (SR-IOV) and physical NIC access from the VM are not supported.



4 Purchase Units

The MPC Service is charged monthly based on Baseline values or Baseline with Overage charge types, in the related topic in the Service Description the functionality of the services is described.

Charge types

Baseline – the specific volume of Unit of Measure of the Service as defined in the Order.

Overage – the quantity of the Service consumed by Customer that exceeds the contracted Baseline Volume.

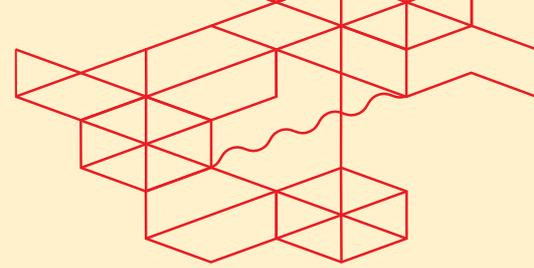
Catalog of Purchase Units

Below are the purchase units of Managed Private Cloud with the unit of measure and the related billing method.

CATEGORY	PURCHASE UNIT	UOM	INSTALL FEE	BILLING METHOD	OVERAGE
MPC Service	Connectivity - Routed	Each		Baseline	
	Connectivity - Customer Routed	Each		Baseline	
	Connectivity - Managed Firewall	Each		Baseline	
	Connectivity - Joined	Each		Baseline	
MPC Compute	vCPU - Full	vCPU		Baseline	Yes
	vCPU - Optimized	vCPU		Baseline	Yes
MPC Memory	vRAM	GB		Baseline	Yes
MPC Storage	High Performance	TB		Baseline	Yes
	Performance	TB		Baseline	Yes
MPC Service Option	Network - Managed Virtual Circuit xx Mbps	Each	Yes	Baseline	
	Network - Managed Internet Access xx Mbps	Each		Baseline	
	Network - Additional IPspace /24/25/26/27/28/29	Each		Baseline	
	Network - External network	Each	Yes	Baseline	
	Network - Distributed Firewall per vCPU - Full	vCPU		Baseline	Yes
	Network - Distributed Firewall per vCPU - Optimized	vCPU		Baseline	Yes
	License - Windows Server per vCPU	vCPU		Baseline	Yes
	Disaster Recovery Gold/Silver Bronze	VM		Baseline	

Calculation of Overage values

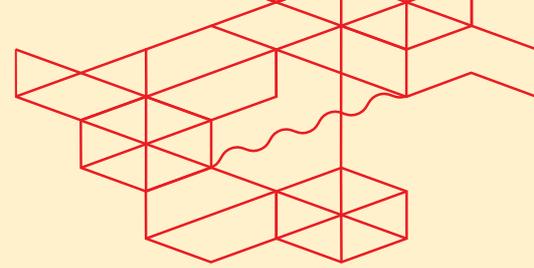
The consumption of MPC is measured multiple times a day. Every day the maximum used consumption of that day is used for the Overage calculation. The Overage value for billing is calculated as the sum of the day values divided by the number of days of that month.


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The number of days in a month is calculated as the number of days between the fore last day before the start of the month until the fore last day in the next month. For example, the consumption over October will be billed from 29th of September to the 30th of October.

Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Date	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Contracted Baseline	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Customer Usage	160	120	180	180	180	180	100	100	100	120	150	170	200	260	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	
Max Overage per Day	10	0	30	30	30	30	0	0	0	0	0	20	50	110	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	1110
Weighted value	0.3333	0	1	1	1	1	0	0	0	0	0	0.6667	1.6667	3.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	1.6667	37

In this example the Overage for billing for this month is $1110/30 = 37$



5 Roles & Responsibilities

In the fulfilment and delivery of the services there is a responsibility both for Equinix as for the customer, below there is an overall explanation of these responsibilities.

5.1 Onboarding

ACTIVITIES	EQUINIX	CUSTOMER
Schedule / execute project kickoff meeting	RA	CI
Schedule / execute customer onboarding	RA	CI
Delivery of the OVDC in accordance with the order	RA	I ¹
Delivery of the agreed compute capacity in accordance with the order	RA	I ¹
Delivery of the agreed storage capacity in accordance with the order	RA	I ¹
Delivery of the Connectivity type in accordance with the order	RA	I ¹
Delivery of the Managed Virtual Circuits in accordance with the order	RA	C
Delivery of the Managed Internet Access in accordance with the order	RA	C
Delivering the agreed network functionality in accordance with design (optional)	RA	C
Delivery of the MPC Operational Console	RA	I ¹
Delivery of the Admin account for the Operational Console	RA	I ¹

5.2 Acceptance Into Service

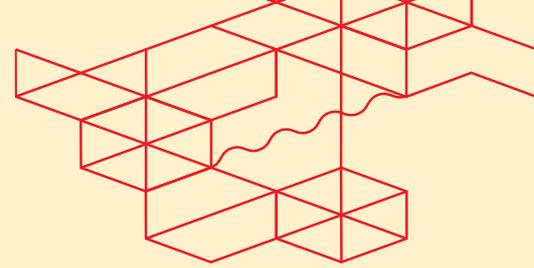
Once Onboarding activities have been finished, then testing activities will confirm if the product was delivered successfully and it is ready to be billed.

ACTIVITIES	EQUINIX	CUSTOMER
Test access to MPC Product page on Managed Solutions Portal	CI	RA
Test access to MPC documentation on docs.equinix.com	CI	RA
Test access to MPC operational console	CI	RA
Confirm MPC fulfillment based on preview evidence	CI	RA
Set product as enabled for customer on internal systems	RA	I

1. Operational

Once the Managed Private Backup service is enabled to customers, some operational items will be addressed as below:

ACTIVITIES	EQUINIX	CUSTOMER
Technical management of the service (overall)	RAC	I ¹


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Functional management of the customer environment within the service (overall)	I ²	RAC
MPC infrastructure monitoring and maintenance	RA	I
Create, import and manage VMs and vApps	I ²	RAC
Scale VMs up and down	I ²	RACI
Manage VM Snapshots		RACI
Manage access to VMs with console		RACI
Request performance statistics		RACI
Create and fill "Library" with Customer's own ISO/OVA files		RACI
Separate or group VMs for availability or performance	I ²	RAC
NFV: Virtual L2 networks	I ²	RAC
NFV: Standard firewalling	I ²	RAC
NFV: Routing (static)	I ²	RAC
NFV: Routing (dynamic OSPF / BGP)	I ²	RAC
NFV: NAT	I ²	RAC
NFV: DHCP	I ²	RAC
NFV: Load Balancing	I ²	RAC
NFV: VPN (IPSec, Client)	I ²	RAC
Setup and manage scripting & automation capabilities		RACI

Note: RACI stands for Responsible, Accountable, Consulted and Informed.

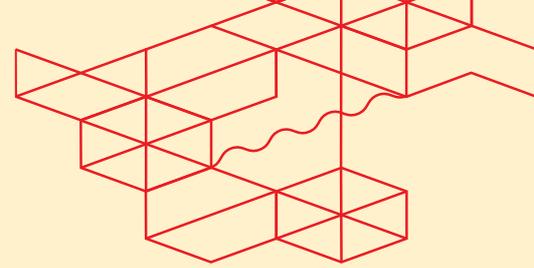
Footnote:

- 1. Informing is only mandatory for tasks that have an impact on the functioning of user environment.*
- 2. Informing is only required for tasks that have an impact on the operation and/or management of the service.*

6. Incident Management

Incident management is included in service support. All incidents are handled based on priority. Priority is determined after the failure has been reported and assessed by Equinix based on the provided information.

PRIORITY	IMPACT/URGENCY	DESCRIPTION
P1 High	Unforeseen unavailability of a service / environment delivered and managed by Equinix, in accordance with service description due to a disruption. The user cannot fulfill its obligations towards its users. The user suffers direct demonstrable damage due to the unavailability of this functionality.	The service must be restored immediately; the production environment(s) is/ are unavailable, with platform-wide disruptions.
P2 Medium	The service does not offer full functionality or has partial functionality or a reduced performance, because of which the users are impacted. The user suffers direct	The service must be repaired the same working day; the

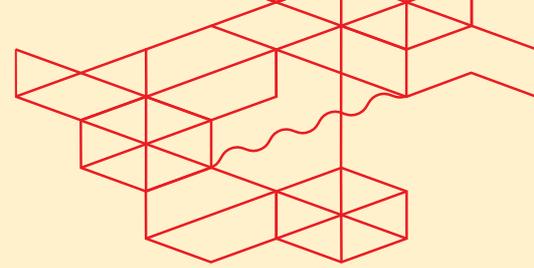

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	demonstrable damage due to unavailability of the functionality. The service may be impacted due to limited availability of this functionality.	management environment is not available.
P3 Low	The service functions with limited availability for one or more users and there is a workaround in place.	The moment of repair of the service is determined in consultation with the reporting person.

Note: This classification does not apply to disruptions that are, for example, caused by user-specific applications, actions by the user, or dependent on third parties.

The incidents can be submitted in the ECP in the Managed Solutions section.

P1 incidents need to be submitted by phone.



7. Service Requests

Service Requests are used to report an issue with the service or when there is a need to implement or assist with the implementation of a change.

Customers can raise a Service Request for configuration changes that cannot be implemented through Self Service in the Operational Console.

There is 24x7x365 support for the Managed Private Cloud Service.

There are two types of service requests available:

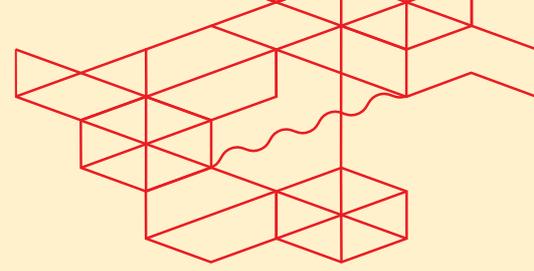
- **INCLUDED:** Service Requests which are in scope of the Service, and as such, no additional charges apply.
- **ADDITIONAL:** Service Requests which are out of scope of the Service, and therefore additional charges apply.

REQUEST NAME	INCLUDED/ADDITIONAL
Create a DC Group over multiple OVDC's	Additional
Change external access OVDC API	Additional
Add a user for the Operational Console	Included
Remove a user from the Operational Console	Included
Change permissions for a user	Included

All changes not listed in the table above can be requested by selecting “change” at the service request module. Equinix will perform an impact analysis to determine whether the change can be implemented and to determine associated costs and lead time.

Any charges related to Service Requests will be deducted from the Premier Support Plan Balance (See the Service Description for Premier Support for more details), or in case of insufficient balance invoiced in arrears based on the prevailing rate.

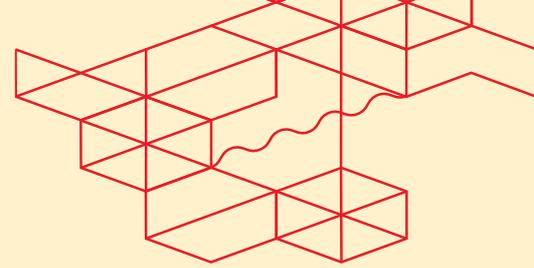
Changes in the baseline capacity, amount ordered or any other change that will have an impact on the monthly service fee should be requested via the Sales team.



8. Reporting

As part of the service, customer will receive monthly service reporting covering the following topics:

- Raised tickets against the SLA parameters
- Capacity per OVDC



9. Service Levels

The purpose of this Service Level Agreement (“SLA”) is to define the measurable performance levels associated with the MPC service and specify remedies available to Customer if Equinix fails to achieve these levels. The service credits listed below are the sole and exclusive remedy for any failure to meet the service level thresholds stated herein.

6. Support

The SLA on support applies to the incident registration and resolution (see section 4.4 of this document).

PRIORITY	RESPONSE TIME ¹	RESOLUTION TIME ²	EXECUTION OF WORK	SLA ³
P1	< 30 min	< 4 hours	24 x 7	95 %
P2	< 60 min	< 24 hours	24 x 7	95 %
P3	< 120 min	< 5 days	24 x 7	95 %

Note:

1. Response time is from submitting the Trouble tickets and an Equinix Managed Service specialist sending a formal response.
2. Resolution time of a case is from registering to resolve or cancelling the Trouble Ticket in the ITSM Tool or the hand over to IBX Support.
3. SLA applies to the response time, details on the SLA can be found in the Product Policy.

7. Availability

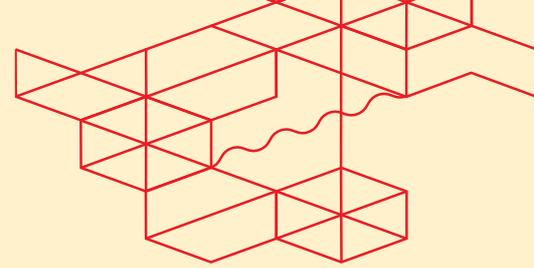
The availability level of the MPC service refers to the availability of a single OVDC. The MPC service is considered “**Unavailable**” when a failure in the infrastructure managed by Equinix means that the OVDC operating on it is in an error status and there is an interruption to the Customer’s services caused directly by that error.

AVAILABILITY SERVICE LEVEL	DESCRIPTION
----------------------------	-------------

99.95%+	This is met by achieving less than twenty-two (22) minutes of Unavailability of the OVDC over a calendar month period.
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A Service credit regime is available on the availability SLA, this is described in the Product Policy. The availability of MPC does not include the restore of the data. Customer self is responsible for restoring the data. When you have contracted Managed Private Backup, you can restore the data by using Self Service in the Managed Private Backup Operational Console.

If you have chosen not to contract Managed Private Backup, customer needs to take care of the data restore themselves.



Other documentations

Where to find more documentation?

You will find the most up to date documentation on docs.equinix.com website.

Where to find EMS policy?

You will find it on [our website](#).

Where to find official VMware documentation?

You will find it on <https://docs.vmware.com>

How to ask for help

Please make sure to open a ticket every time you need help. This is your guarantee that the right team has received your request and will work on that under the expected SLAs.