

VMware Cloud Director Service

Q. What has been announced?

A. VMware has announced global availability of VMware Cloud Director service supporting VMware Cloud on AWS (VMC on AWS), Google Cloud VMware Engine (GCVE), Azure VMware Solution (AVS) and vCenter on-premises (delivering Cloud Director to the Cloud Provider vCenter data center infrastructure).

Q. What is VMware Cloud Director service?

A. VMware Cloud Director service is a SaaS service, delivering Cloud Director management and services to VMC on AWS, Google Cloud VMware Engine, Azure VMware Solution and vCenter on-premises. The solution provides opportunity to deliver managed or self-service public cloud multi-tenanted services over endpoints with the flexibility of resources not bound to host modality.

Q. Who can use VMware Cloud Director service?

A. VMware Cloud Director service can be sold to and used by VMware Cloud Provider partners (available through Cloud Partner Navigator) and VMware customers (contact your VMware Sale representative for more information).

Q. What are the main use cases for VMware Cloud Director service?

Unlock new business opportunities by enabling Cloud Providers to sell VMware Cloud on AWS, Google Cloud VMware Engine, Azure VMware Solution and vCenter on-premises clouds to their mid-tier and SMB customers. This capability reduces the entry-point for customers to use VMware Cloud on AWS, Google Cloud VMware Engine and Azure VMware Solution resources with flexible smaller footprints suitable for most mid-tier and SMB customers – the primary target market for VMware Cloud Providers.

In addition, Cloud Providers who do not wish to support Cloud Director deployments in their data centers can now use Cloud Director service to manage their data center vCenter and NSX environment. This provides Cloud Providers a fast time to market and self-service capability into their existing vCenter infrastructure whilst all management is done through Cloud Director service.

Cloud Director service helps Cloud Providers manage customer expansion to different regions by rapidly expanding their cloud footprint to new regions or availability zones, supporting new customer segments in an asset-light pay-as-you-grow model.

Cloud Director service delivers hybrid cloud model for Cloud Providers by bringing VMC on AWS, Google Cloud VMware Engine and Azure VMware Solution and on-premises vCenter SDDC under the management umbrella of Cloud Director service. Cloud Providers have the same management model and tooling as used in on-premises Cloud Director.

Cloud Director service delivers simple and easy differentiated application services with App Launchpad integrated UI and API to Cloud Director service. Cloud Providers can deliver VMware Cloud Marketplace (inc. Bitnami) and 3rd-party or their own custom applications easily. Customers can select and deploy, via customizable wizards, their applications to any end point type from VM, vAPP to Containers (from Helm charts).

Cloud Director service provides flexible storage services to customers. VMC on AWS, Google Cloud VMware Engine and Azure VMware Solution use vSAN natively with in-host storage, which is typically used for the organization Virtual Data Center (VDC) storage. Providers can also now deliver Amazon Web Services S3 Object Storage natively in Cloud Director service with Object Storage Extension. This opens up many more use cases to customers who need the ability to use Object Storage account in their

org VDC.

Cloud Director service delivers a secure cloud, a high requirement for Cloud Providers and customers. Cloud Director service provides enhanced support for NSX L4 and L7 distributed firewalls, ensuring customer applications are protected no matter where they move in the infrastructure VMware endpoints under management. This protection is paramount when considering malware and modern cyber-attack vectors.

Q. How can I migrate a customer to VMware Cloud Director service?

A: Customers can be directly migrated into VMware Cloud on AWS using [VMware Cloud Director Availability 4.2](#) and onwards from an on-premises VMware Cloud Director instance. To migrate to Google Cloud VMware Engine, Cloud Director Availability 4.3 and onwards can be used also, with full support for migration from Cloud Director and on-premises vSphere console. VMware Cloud Director Availability can also be used to migrate VMware Cloud Director workload into the VMware Cloud Director service on Azure VMware Solution.

Q. How does VMware Cloud Director service address reduction to entry size of a VMware Cloud on AWS, Google Cloud VMware Engine and/or Azure VMware Solution footprint?

A. VMware Cloud Director service uses the same constructs as VMware Cloud Director on-premises; using differing allocation and consumption models the VMware Cloud on AWS, Google Cloud VMware Engine and/or Azure VMware Solution resources are pooled into Virtual Data Centers for customers — carving up the amount of IaaS a customer needs, to be whatever size necessary from a small VM to much larger dynamically expandable estates over multiple endpoints and hyper-scale data centers. Equally using Cloud Director service to connect an on-premises vCenter SDDC applies the same model allowing you to deliver right sized resources to lines of business or separate tenants on the same on-premises hardware with logical layer 2 multi-tenanted segregation.

Q. How does VMware Cloud Director service provide geographic expansion?

A. As with Cloud Director on-premises you can associate different Cloud Director site instances, regions and availability zones into a single view. This multi-site association capability is the same in VMware Cloud Director service (after all, it is the same codebase), providing the benefit of being able to view and jump to different VMware Cloud on AWS, Google Cloud VMware Engine and/or Azure VMware Solution and vCenter on-premises VMware Cloud Director service managed endpoints and on-premises Cloud Director entities — all from the same Cloud Director service user interface.

A. In the same manner, VMware Cloud Director service can be used to manage SDDCs in the same region. For best performance, these regions should be sub 150ms latency — this is typically available for VMware Cloud on AWS, Google Cloud VMware Engine and Azure VMware Solution regions in the same or adjacent country. For example, an SDDC in VMware Cloud on AWS US East and US West data centers can be managed by a single VMware Cloud Director service in US West. This means customers can expand geographically and have a seamless infrastructure service experience. The same principle applies to managing on-premises vCenter SDDC with Cloud Director service — in order to achieve an optimal user experience, the latency between sites must be less than 150 milliseconds.

A. For different endpoints from hyper-scale providers, separate agreements must be procured, typically directly with that partner. For instance, VMware Cloud on AWS and Cloud Director service is available and sold from VMware, Google Cloud VMware Engine is available and sold by Google and Azure VMware Solution is available and sold by Microsoft. Lastly VMware Cloud Director service is available and sold by VMware. Please find out more from the MSP Handbook for [VMware Cloud on AWS](#) and [Cloud Director service](#). (Contact your VMware Sale representative for more information).

Q. How does VMware Cloud Director service deliver a consistent operational model and avoid fragmented offerings?

A. VMware Cloud Director service is a SaaS version of VMware Cloud Director on-premises, hence the look and feel to a tenant and Cloud Provider is the same. This means there is no need to re-skill or re-tool when providing services on VMware Cloud on AWS or Google Cloud VMware Engine or Azure VMware Solution.

The user interface can be self-service or used in a managed service. The Cloud Provider can optionally [brand the interface](#) with their own color schemes and logos to provide consistency with their VMware Cloud Director on-premises (if available) and their own corporate branding.

VMware Cloud Director service can connect to VMware Cloud Director on-premises and vice versa, using [site association](#), providing a hybrid operating model across multiple clouds if the Cloud Provider uses Cloud Director on-premises.

The services provided are the same to the tenant as those provided in the VMware Cloud Director on-premises provider instance. VMware Cloud Director service and VMware Cloud Director deliver extensibility services using a common workflow engine, meaning all services that VMware Cloud Director supports should be supported in VMware Cloud Director service (Note: should be validated prior to deployment on target endpoint).

Q. Who supports the service?

A. VMware provides, support for Cloud Director service, and all related service incidents and supporting tickets can be routed via the [Cloud Partner Navigator](#) where the service is managed.

A. VMware providers, support for VMware Cloud on AWS and all related service incidents and supporting tickets can be routed via the [Cloud Partner Navigator](#) where the service is managed.

A. Support for Google Cloud VMware Engine is available directly from Google and not from VMware.

A. Support for Azure VMware Solution is available directly from Microsoft, and not from VMware.

Cloud Partner Navigator has the ability to create a support bundle, which, if the provider is having issues with VMware Cloud Director service or hyperscale endpoints, can be used to generate and aggregate all logs necessary for support at the click of the button. Providers have also set ability to set the maintenance level where VMware could automatically get logs based on the setting if desired.

For product, technical and non-technical support related to Cloud Director service, partners can (1) Open a support ticket via the Support Center of the Cloud Partner Navigator platform or (2) Use the chat functionality in the console or (3) Call us. For contract related queries, partners can raise a ticket in the commerce portal. Support tickets are the most preferable method to contact us. For contract, usage, billing, additional license order related support, partners can raise a ticket within the [commerce portal](#).

Q. What is the best service availability I can achieve?

A. Using a VMware Cloud SDDC infrastructure with stretched cluster across more than one availability zone, you can achieve a 99.99% service availability for the infrastructure, while VMware Cloud Director service supports a 99.9% availability. Google Cloud VMware Engine offers a [99.99% service level](#) assurance in a single zone. Azure VMware Solution offers a [99.9%](#)

[service level](#) assurance in a single zone.

Q. How is the service updated?

A. As a SaaS service VMware will update Cloud Director service when necessary to keep it up to date with new features. Cloud Providers then have the option to upgrade their instance in an agreed maintenance window. All maintenance notifications can be subscribed to via status.vmware-services.io for updates. All maintenance windows will be published to the same site that VMware Cloud on AWS uses, in VMC [Console at console.cloud.vmware.com](https://console.cloud.vmware.com) under the maintenance tab that you can find and schedule.

Commercial questions

Q. Who can buy VMware Cloud Director service?

A. VMware Cloud Providers who have signed up for an MSP agreement can purchase VMware Cloud Director service. Enterprise customers can also purchase VMware Cloud Director service, available via a VMware representative.

Q. Who can buy VMware Cloud on AWS?

A. VMware Cloud on AWS is an infrastructure-as-a-service offering built on AWS highly scalable infrastructure including VMware vSphere™, vCenter™, vSAN™, and NSX™ and HCX™. VMware Cloud Providers who have signed up for an MSP agreement can purchase VMware Cloud on AWS. Enterprise customers can also purchase, available via a VMware representative and also VMware Cloud Universal program.

Q. Who can buy Google Cloud VMware Engine?

A. Google Cloud VMware Engine is an infrastructure-as-a-service offering built on Google Cloud's highly scalable infrastructure and VMware vSphere™, vCenter™, vSAN™, and NSX™. It enables a fast path to the cloud, seamlessly migrating or extending existing VMware workloads from on-premises environments to Google Cloud Platform without the cost, effort or risk of re-architecting applications or retooling operations. It is a service sold and supported by Google, and also sold by VMware as part of the VMware Cloud Universal program.

Q. Who can buy Azure VMware Solution as an Initial Availability?

A. Azure VMware Solution is an infrastructure-as-a-service offering built on Azure cloud's highly scalable infrastructure including VMware vSphere™, vCenter™, vSAN™, and NSX™ and HCX™. Azure VMware Solution is a Microsoft service, sold and supported by Microsoft, verified by VMware, that runs on Azure hardware in Azure data centers.

There are 2 use cases supported initially:

1. The Enterprise customer purchases the Azure VMware Solution service offered by Microsoft and Cloud Director service offering from VMware.
2. The Enterprise customer purchases the Azure VMware Solution service offered by Microsoft and the Managed Service

Provider (MSP) will buy the Cloud Director service offering available from VMware.

Q. How much does VMware Cloud Director service cost?

A. VMware Cloud Director service is provided under a commit contract which the Cloud Provider must sign with a VMware Aggregator. The commit contract covers a currency cash commit which is discounted the more you commit to and longer the term, or a Cloud Provider can use their existing rental point level to discount the MSPR and then apply a term for further discount. Specific pricing is available for VMware Cloud Director service in the [pricing handbook](#) available on Partner Central or from your Aggregator and also sold by VMware and its authorized partners as part of the VMware Cloud Universal Program. For the enterprise customers contact your VMware Sale representative for more information.

Q. Does VMware provide leads or sales incentives to Cloud Providers?

A. VMware does not provide leads nor sales incentives for VMware Cloud Director service nor VMware Cloud on AWS or Google Cloud VMware Engine or Azure VMware Solution to Cloud Providers. Cloud Providers are expected to generate their own pipeline and market their own services on the platform.

To assist partners in driving a faster GTM process, VMware has built a GTM kit specifically for Cloud Director service for VMware Cloud on AWS and Google Cloud VMware Engine. The kit contains; sales value propositions, sales whiteboard, eBook, webpage, messaging, videos and a full social media kit. All kits can be downloaded from [VMware Partner Demand Center](#), a free resource for VMware Cloud Provider partners. VMware offers a free customization service of these kits to brand them in your corporate designs and add in your value-added services. This tailoring is on a first come, first served basis; to find out more, please email vcpp_gtm@VMware.com.

Q. Do I need to buy VMware Cloud on AWS and/or Google Cloud VMware Engine and/or Azure VMware Solution separately as well?

A. Yes, you need to buy a VMware Cloud on AWS Service as normal, through a commit contract in the MSP program and delivered by Cloud Partner Navigator. For Google Cloud VMware Engine Cloud Providers will need to purchase directly from Google. For Azure VMware Solution their Enterprise customer will need to purchase directly from Microsoft. Additionally, Cloud Providers also need to buy VMware Cloud Director service under the MSP program. Enterprise customers can also purchase, available via a VMware representative and also VMware Cloud Universal program.

Q. How does this allow me to address smaller customers if I still need to purchase a VMware Cloud on AWS or Google Cloud VMware Engine or Azure VMware Solution minimum node SDDC in the first place?

A. The cost of the minimum node SDDC infrastructure or resources is the same to the provider, plus you need to add VMware Cloud Director service to the cost. However instead of selling this as a single tenant minimum node based service to a customer, now you can carve up multiple resources for multiple customers, on the same SDDC infrastructure and sell

these in smaller or larger chunks to suit your customer tiers and requirements.

Note: This is not applicable in Azure VMware Solution Initial Availability as only an a single organization can be on-boarded and the resources can be sub-let with in the same organization. Multi Tenancy is possible with in the same organization.

Q. How do I grow the environment if I need more hosts?

A. You can purchase more resources in the VMware Cloud on AWS or purchase more hosts in the or Google Cloud VMware Engine or Azure VMware Solution and add them in any supported region. Your Provider Virtual Data Center resource pools can be seamlessly extended into the new capacity and then offered into the customer's organization Virtual Data Centers with zero downtime.

Q. How will I get billed for consumption of the service?

A. Partners who have Cloud Director service MSP commit contracts must validate usage in the corresponding Monthly Billing Order in the Commerce Portal by the 8th day of every month and submit the report to the Aggregator by the 15th, who will invoice the Cloud Provider. Add the Enterprise customers will be invoiced through their payment terms.

Q. How do we onboard the service tile for Cloud Director service on VMware Cloud Partner Navigator?

A. Since Cloud Director service provides multi-tenancy for VMware Cloud on AWS, Google Cloud VMware Engine and/or Azure VMware Solution, the Cloud Provider / Enterprise must have an existing contract in place before signing a Cloud Director service Commit Contract, if they wish to use VMware hyperscale partners as endpoints. Cloud Providers / Enterprises can also use Cloud Director service without a VMware hyper scale endpoint to manage their own on-premises vCenter SDDC endpoints. Cloud Providers can work with an Aggregator to sign a commit contract for Cloud Director service, which will be set up in the VMware Commerce Portal. Once the commit contract becomes active in the commerce portal, the partner will receive an on-boarding invitation email and a corresponding tile is made available under 'Services Available for provisioning' on Cloud Partner Navigator. Selecting open on the tile will activate the service and it will be available under 'Services provisioned for you'. Enterprise customers will similarly use the Cloud Service Portal to access and buy Cloud Director service and sign the Cloud Terms of Service

Q. Is the Primary org creation process the same as that of other services on Cloud Partner Navigator?

A. Yes, partners can follow the same process for creating a Primary org for Cloud Director service. If they have already onboarded to the Primary organization using another MSP commit contract, when the MSP Cloud Director service commit contract becomes active in the commerce portal, it will be available under 'Services available for provisioning'.

Q. How does the tenant creation and management process work for Cloud Director service?

A. The tenant creation and management process is the same in Cloud Partner Navigator for Cloud Director service. The cloud provider needs access to the email used when signing the commit contract, they should have on-boarded the Primary organization, and have a valid email of the tenant user who will be given admin access of the tenant organization.

Q. How can MSPs manage the usage consumption and billing for their end customers?

- A. Bills are spooled in the VMware Cloud Provider Commerce Portal in monthly arrears and Cloud Director service commit contract usage information can be viewed in the commerce portal > Monthly Reporting > Select filters from displayed Monthly billing orders (MBOs) > View Details > Provide PO number > Submit/ Download.
- A. Cloud Provider can also opt-in for automatic reporting through vCloud Usage Insight, in which case, the usage data from production Usage Meter instances is pre-populated in the report. If the usage reported by the Usage Meter instances is inaccurate, partners can open a support request from the Support menu.
- A. Enterprise customers will see their billing information in the Cloud Service Portal.

Q. What is the billing frequency?

- A. The billing frequency for Cloud Director service is monthly.

Q. What are the reporting requirements for Cloud Director service?

- A. Once a month, partners need to complete reporting inside the VMware Commerce Portal. All the service information will be pre-populated with the information that MSPs entered while ordering. This report is used to initiate the monthly billing cycle. You can refer to this [blog](#) or this [documentation](#) to learn more about the commerce portal. Partners can opt for automatic reporting through vCloud Usage Insight within the commerce portal.
- A. Enterprise customers will see their billing information in the Cloud Services Portal.

Q. What are the timelines for monthly reporting for Cloud Director service?

- A. Partners who have MSP commit contracts must validate usage in the corresponding Monthly Billing Order on the Commerce Portal by the 8th day of every month and submit the report to the Aggregator by the 15th.

Capabilities

Q. What capabilities are available for Cloud Director service?

- A. Cloud Director service provides the same functionality as VMware Cloud Director on-premises (dependent on endpoint support):
- Resource pooling of SDDC infrastructure
 - Differing consumption models
 - NSX Edge and distributed firewall
 - NSX VRF-lite (not available today on Google Cloud VMware Engine & Azure VMware Solution) & NAT

- NSX Advanced Load Balancer (supported as an attached service with completely manual deployment and operations)
- Public IP address
- Branding & customization of Cloud Director UI
- Object Storage Extension supported on all clouds apart from Google Cloud VMware Engine
- App Launchpad service supported on all clouds
- Cloud Director Availability Migration is supported to all clouds and DR services are only available on Google Cloud VMware Engine and on-premise endpoints.
- Cloud Director Tenant App is supported in on-prem and VMC on AWS cloud.
- Veeam Backup and Restore has been tested on VMware Cloud on AWS and On-premise endpoints only
- With the exception of:
 - Cloud Director Placement policies in VMware Cloud on AWS (use VMC compute policies outside of Cloud Director service as a workaround)
 - HCX (not directly into Cloud Director service, manual import of customer VMs is required)

Q. Which versions of the Cloud Director API will work with VMware Cloud Director service?

- A. At time of issue of this FAQ, VMware Cloud Director service supports [Cloud Director API version 37.0](#) - Cloud Director 10.4 and above (supported versions).

Q. If HCX and Cloud Director Availability are not supported, how can I onboard customers?

- A. Cloud Providers can use HCX as a provider fully managed service to then import customer VMs into Cloud Director service management. The process involves installing HCX on the source vCenter, pairing the source vCenter to the VMware Cloud on AWS SDDC, Google Cloud VMware Engine SDDC vCenter and/or Azure VMware Solution SDDC. Use HCX to migrate the VM to the tenant's folder, create a Resource Pool and network in Cloud Director service. The Cloud Director service auto-import feature can be used to start and present the VMs to the end user.
- A. VMware Cloud Director Availability is supported for migration only operations to VMC on AWS, Google Cloud VMware Engine and Azure VMware Solution.

Q. What consumption models are supported?

- A. The following Cloud Director service consumption models are supported:
- **Pay as you go** – provides a no up-front resource allocation in the org VDC, rather resources are committed as users power up VM/vApp in an org VDC. Resources are committed at the VM level in terms of CPU and RAM, a provider can use these commitments to specify an SLA.
 - **Allocation Pool** – each organization VDC gets an allocated pool of resources and only a % of resources are committed or reserved to the org VDC. The provider can construct an SLA and pricing around the volume of reserved resources.
 - **Reservation Pool** – the organization is committed 100% of the resources, whether needed or not — there is no sharing of

resources with other org VDC. This ensures resources are available when needed and tenants can adjust their own reservations and limits per VM.

- **Flex** – Simplifies and provides the best of Allocation Pools and Pay-Go Models by controlling CPU and RAM consumption both at org VDC and individual VM levels through compute policies.

Q. What type of services could I sell?

A. Typically most providers will consider a managed service for customers as this can be the most lucrative in terms of margin. Self-service should also be offered for customers who wish to oversee their own resources.

- **Public Cloud (shared)**

For customers that are small, only need a few VMs, have highly seasonal / variable / transient workloads, or are not interested in a whole org VDC associated to them, a Public Cloud experience is ideal. This would cover a pay-as-you-go consumption model and could be priced per t-shirt size VM / Hour. The pay-as-you-go model provides customers with the illusion of a resource pool with no configured limit of reservations. Resources are only committed when a vApp is deployed and resources such as CPU and RAM can be guaranteed in the settings.

- **Virtual Private Cloud / Virtual Data Center (shared)**

Using a mix of Reservation and Limits, you can deliver guaranteed resource performance and cloud economics with a ratio of oversubscription for stable production workloads with a potential pricing model of per Resource Pool / Month.

- **Private Cloud (dedicated)**

Typically, private clouds use 100% guarantees on resources to ensure an SLA can be met as these types are services that are typically for more mission/business critical applications or verticals, for example: ERP, CRM, SCM, Healthcare with increased security and compliance needs. This could be assigned to hosts and priced: Per VMware Cloud on AWS, Google Cloud VMware Engine and/or Azure VMware Solution Host / Month.

- **Application Services**

Using App Launchpad, you can deliver a portfolio of application services to your customers in an easy to use plugin UI in Cloud Director. Customers needn't know anything about the underlying networking or security, these are pre-conditioned in the application offering. This means you are able to offer 100's of new applications and 3rd party or your own applications in a very easy to consume application platform as a service to customers.

- **Kubernetes Clusters**

All customers are seeking to transform some portion of their estate to cloud native architectures. Now Cloud Providers are able to provide the same levels of security and control to these solutions with VMware Tanzu Kubernetes Grid. Cloud Providers can offer customers Tanzu Kubernetes cluster API and UI services to be the target for their development and production applications with AWS, Google Cloud adjacent applications and/or Azure VMware Solution.

- **AWS S3 Object Storage Services**

Most customers have multiple clouds already and there is a high chance they already use AWS S3 Object Storage for various use cases, Cloud Providers can make this available to their virtual data centers, using their own accounts they can utilize their S3 target buckets. Similarly, other Object Storage services from other endpoints such as Google Cloud can be used.

Q: How can Cloud Providers transact with Cloud Director service?

A: VMware Cloud Providers must use the Managed Service Provider (MSP) lifecycle to transact with the service:

- **Commit Contract** – Partner signs a VMware Cloud Director service Managed Service Provider commit contract with a VMware Aggregator. Partner then commits to VMware an MSRP (list price) spend to obtain a volume discount for their purchases.
- **Cloud Provider Builds Pipeline** – Partner initiates go-to-market activities and starts building their business for Managed Services.
- **Deliver Managed Services and Own the Terms of Service** – Once the opportunity has been identified, partners can order Cloud Director service from VMware and provide Managed Services as part of the offering to their customers. Partners must provide their own terms of service and managed services. At a minimum this must include technical support for the service and all functions associated with service configuration, add-ons, renewals and anything pertaining to billing.
- **On-Board and Provide Support to Customers** – Partners will onboard Cloud Director service for their customers. Subsequently, they may obtain technical support from VMware as needed, with the following provisions. In turn, partners are responsible for all customer support, which may include, but may not be limited to customer communication, any managed services, answering installation, configuration and usage questions.
- **Complete Monthly End Customer Reports and Pay Invoices** – The partner will log into the Commerce Portal and review the prior month's usage. They can view their monthly billing orders (MBOs) in the Monthly Reporting menu. Partners will then review the report and submit it to their Aggregator. Following that, the Aggregator will send the Partner an invoice for the month.

Getting Started

Q. How do Cloud Providers get started with Cloud Director service?

A. Refer to the MSP [Operations Handbook](#), the Cloud Director service [solution brief](#), [datasheet](#) or the [Getting started](#) with Cloud Partner Navigator or [Using](#) Cloud Partner Navigator documentation.

Q. How can Cloud Providers learn more about Cloud Director service?

A. Cloud Providers can refer to the resources on our [website](#).