

Getting Started with VMware Cloud

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VMware Cloud

You can find the most up-to-date technical documentation on the VMware website at:

<https://docs.vmware.com/>

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About VMware Cloud Getting Started

The *VMware Cloud Getting Started* provides information about onboarding and configuration for VMware Cloud.

This information provides a description of how to create your VMware Cloud account, purchase subscriptions for various forms of cloud infrastructure, and use the VMware Cloud Console to manage your deployments.

Intended Audience

This information is intended for anyone who wants use VMware Cloud to deploy and manage SDDC infrastructure in a variety of environments.

Onboarding Checklist for VMware Cloud

This onboarding checklist highlights the steps and resources that are available to you as you prepare to create your first deployments in VMware Cloud.

Use the Launchpad

The VMware Cloud Launchpad is a consolidated starting point designed to help you learn about the latest VMware Hybrid Cloud solutions and infrastructure providers.

The Launchpad provides technical details on how you can use VMware products and solutions to achieve business outcomes. The Launchpad is available to anyone, even if you are not logged in to the VMware Cloud Console. It includes detailed technical information, relevant tools, and tested workflows for VMware Hybrid Cloud solutions and infrastructure.

For each product or solution, Launchpad content includes these categories:

Overview

The Overview typically consists of a short video or image that provides a technical overview of the offering followed by additional details and diagrams covering the architecture and technical capabilities.

Journey

The Journey page helps you envision your end-to-end journey with VMware for the offering. The Journey typically consists of 3 or more stages, structured to help you achieve these key objectives:

- 1 Learn about the offering and prepare your environment.

- 2 Deploy the offering.
- 3 Configure the offering to maximize its capabilities and value.

For some offerings, the Journey also enables you to track and monitor your progress.

Resources

The Resources page includes links to technical documents, including white papers, solution briefs, and reference architectures, along with videos, FAQs, and other documents that can help you understand the technical details of the offering and its underlying technologies.

The Launchpad also offers access to VMware Cloud Packs. VMware Cloud Packs are product bundles designed to simplify and accelerate your multi-cloud adoption. Four different Cloud Packs are available:

- Compute with Advanced Automation
- HCI
- HCI with Advanced Automation
- VMware Cloud Foundation

For more information on VMware Cloud Packs and what is included, see [Accelerate Your Cloud Transformation with a Cloud-Smart Strategy](#).

A free trial is available for HCI with Advanced Automation. This trial includes use of all the products and services in the selected Cloud Pack for 30 days.

To activate the free trial:

- 1 Go to the Launchpad at <https://vmc.vmware.com/home>.
- 2 Click **VMware Cloud Packs** and then click **Learn More**.
- 3 Click **Start Trial**.
- 4 Log in to your VMware Cloud account, or create one as described in [Creating an Account](#).
- 5 Select or create an organization and click **Complete Signup**.
- 6 Click **Connect vCenter Server**, and continue by following the instructions in [Connect Your vCenter Server](#).

After you have activated the free trial, consult the documentation for the products included in the selected Cloud Pack to learn more.

Read Your Service Welcome Email

During the deal process, your Cloud Sales Specialist or Client Executive requested that you identify a Fund Owner and a Fund User. After your deal is processed, VMware sends a service welcome email to the Fund Owner and Fund User.

The welcome email is entitled "Welcome to VMware Cloud". If you do not recall seeing it, check your spam message or corporate spam filter. This email contains a unique service activation link which directs you to the VMware Cloud Console. It is important to use this service activation link when you log into the VMware Cloud Console for the first time.

Update Your My VMware Account

Prior to logging in to the VMware Cloud Console, ensure that your My VMware account is up-to-date and all required fields are filled in. If required fields are missing, you will not be able to create your first SDDC.

You must provide a valid address as part of your My VMware profile. In addition, spell out the name of your state in full. For example, enter **California** rather than **CA**.

- To log in to My VMware, go to <https://my.vmware.com>.
- For more information on updating your My VMware profile, see <https://kb.vmware.com/s/article/2086266>.
- For more information on resetting your My VMware password, see <https://kb.vmware.com/s/article/2013961>.

View Your Subscription Purchase Program Fund

Many customers select to purchase Subscription Purchase Program (SPP) credits, which can be redeemed against VMware Cloud in either an On-demand or Subscription consumption model. The Subscription model is similar to an AWS Regional Reserved Instance. An SPP fund dedicated specifically to VMware Cloud Universal purchases is available.

It is your responsibility to be aware of your SPP fund balance and manage users who should have access to it. Only a Fund Owner can add additional Fund Users. Fund Owners and Fund Users can direct VMware Cloud to use the SPP fund as a payment method.

- View your SPP fund balance on My VMware: <https://kb.vmware.com/s/article/2143195>.
If you don't see an SPP fund listed under **Accounts > Hybrid & Subscription Purchasing Programs (HPP/SPP)**, then contact your Cloud Sales Specialist or Customer Success Manager.
- For more information on adding or removing fund users, see <https://kb.vmware.com/s/article/2094497>.
- To change a Fund Owner, do one of the following.
 - Select **Support > Product Licensing**.
 - Select **Account > VMware Cloud Services - User Management**.
 - Speak to your Customer Success Manager.

Log into the VMware Cloud Console

The service activation link provided to you in the service welcome email directs you to the VMware Cloud Console.

- 1 Click the service activation link that was provided to you in the service welcome email.
You will be directed to the VMware Cloud Console.
- 2 Use the email and password from your My VMware account to log in.
This account must also be either the Fund Owner or Fund User and have access to the SPP fund.

Add Organization Owners and Organization Users

VMware Cloud accounts are based on an Organization, which corresponds to a group or line of business subscribed to VMware Cloud services.

Each Organization has one or more Organization Owners, who have access to all the resources and services of the Organization and can invite additional users to the account. By default, these additional users are Organization Users, who can create, manage, and access SDDCs belonging to the Organization, but cannot invite new users.

Create a Subscription

Subscriptions allow you to save money by committing to buy a certain amount of capacity for a defined period. Some VMware Cloud products, such as VMware Cloud Foundation subscriptions require a subscription purchase. Others, such as VMware Cloud on AWS, can be purchased either on a subscription or on-demand basis.

You can use your SPP fund to purchase a subscription. You would have agreed to the number of hosts, type of hosts, and term (1 year or 3 year subscription) during the sales process to determine the amount of SPP credit purchased.

Sales promotions discounts are applied to your fund after the first billing cycle.

Contact your Cloud Sales Specialist if you are uncertain of what your company committed to in terms of hosts under subscription.

- Read "Working with Payment Methods and Billing" at <https://docs.vmware.com/en/VMware-Cloud-services/services/Using-VMware-Cloud-Services/GUID-81C8F89A-669C-40BC-9211-50DB25C322C7.html>
- Create your subscription by following the instructions at [#unique_4](#).

View Your Billing Information

Fund owners can view billing information for the active method of payment in the organization. You can only view billing information if you are the fund owner.

To display your billing information in My VMware, click **Billing** on the VMware Cloud Services Console page, or on the menu, click the **VMware Cloud Services** icon and click **Billing**.

View the VMware Cloud Release Notes

is able to release new features at a much faster pace than our traditional on-premises software products. Check the release notes page frequently to keep updated on the new features that have been released: <https://docs.vmware.com/en/VMware-Cloud/services/rn/VMware-Cloud-Release-Notes.html>.

Sign Up to Receive Service Alerts

The VMware Cloud Operations team posts updates on planned maintenance events, maintenance start and end times, and service incidents on the VMware Cloud Services status page.

- Bookmark the VMware Cloud Services Status page: <https://status.vmware-services.io/>.
- Subscribe to receive real-time alerts and updates.

Account Creation and Management

VMware Cloud accounts are based on an Organization, which corresponds to a group or line of business subscribed to VMware Cloud services.

Each Organization has one or more Organization Owners, who have access to all the resources and services of the Organization and can invite additional users to the account. By default, these additional users are Organization Members, who can use and manage cloud services belonging to the Organization, but cannot invite new users.

Both types of accounts are linked to a Customer Connect account.

Creating an Account

You receive an email invitation containing a link that you can use to sign up for a VMware Cloud account. This link can be used only once.

When you sign up for the service, an Organization is created with an Organization ID and Organization Name. You are designated as the Organization Owner and can invite other users in your organization to use the service.

Create an Organization Owner Account with a Customer Connect Account

If you have a Customer Connect account, you can use it to create an Organization Owner account after you receive the invitation email.

If you don't have a Customer Connect account, you are prompted to create one during account creation.

Procedure

- 1 Click the activation link in your invitation email.

You are taken to the sign up page.

- 2 Enter the email address associated with your Customer Connect account, and click **Next**.
- 3 Enter the password associated with your Customer Connect account, and click **Log In**.
- 4 Select the check box to accept the service terms and conditions and click **Next**

You see a page acknowledging successful completion of your account creation. You are directed to a login page.

- 5 Log in with your My VMware credentials.
- 6 If you are not automatically redirected to the VMware Cloud Console, go to <https://vmc.vmware.com> and log in.

Create an Organization Owner Account Without a Customer Connect Account

If you do not already have a valid Customer Connect account, you can create one as part of the sign-up process.

Procedure

- 1 Click the activation link in your invitation email.
You are taken to the sign up page.
- 2 Click **Create an Account**.
- 3 Fill in the required information and select the terms of service check boxes.
Registration fails if:
 - You don't provide a valid address.
 - You don't enter the full name of your state. For example, if you enter **CA** instead of **California**, registration fails.
- 4 Click **Sign Up**.
You receive an activation email within the next 10 minutes.
- 5 Open the email and click the activation link.
The link is unique and can be used only once.
- 6 On the Welcome page, enter and confirm a password, and click **Save**.
You are directed to a login page where you can sign in with your credentials.
- 7 Log in with your My VMware credentials.
- 8 If you are not automatically redirected to the VMware Cloud Console, go to <https://vmc.vmware.com> and log in.

Invite a New User

As an Organization Owner or Organization Administrator, you can invite additional users as Organization Members to your Organization.

Organization roles specify the privileges that an organization member has over organization assets. Service roles specify the privileges that an organization member has when accessing VMware Cloud services that the organization uses.

Procedure

- 1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.



- 2 Click the services icon () at the top right of the window, and select **Identity & Access Management**.

You see a list of all the users currently in your Organization.

- 3 Click **Add Users**.
- 4 Enter an email address for each user you want to add, separated by a comma, space, or a new line.
- 5 Assign a VMware Cloud services Organization role to the new user.

See [What Organization roles are available in VMware Cloud Services](#) for the list of VMware Cloud services Organization roles and their privileges.

- 6 Click **Add**.

Results

Invitation emails are sent to the invited users. They can use the link in the email to activate their accounts.

Accept an Account Invitation

After an Organization Owner has invited you to their organization in VMware Cloud, you can accept the invitation to create your account and gain access to the service.

Procedure

- 1 In the invitation email you received, click **VIEW SERVICES**.

The registration page opens in your Web browser.

- 2 Register your account.

Option	Description
If you already have a Customer Connect account associated with your email	Enter your email address and Customer Connect password, and click Log In .
If you do not already have a Customer Connect account associated with your email	<ol style="list-style-type: none"> Enter your First Name, Last Name, and Password. Select the check box to accept the VMware Terms of Use Agreement. Click Save.

- 3 If you are not automatically redirected to the VMware Cloud Console, go to <https://vmc.vmware.com> and log in.

Purchase GCVE Through VMware

Google Cloud VMware Engine (GCVE) is available to purchase through VMware for VMware Cloud Universal customers only.

When you purchase GCVE through VMware, you can use VMware purchase funds, and take advantage of subscriptions.

The first step in purchasing GCVE through VMware is to connect your Google Cloud Platform account to your VMware Cloud account. Currently, you can only have one Google Cloud Platform account connected to your VMware Cloud account at any given time. To add a new account, you must first delete the existing one.

Procedure

- 1 If you have not already done so, create a Google Cloud Platform account. Note the Billing Account ID and the Project Number that you want to use to deploy GCVE.

You will need to supply this information when you link your Google Cloud Platform account in the VMware Cloud Console. To locate this information in your Google Cloud Platform account, see [Locate Your Billing ID, Project Number, and Domain in Google Cloud Platform](#).

- 2 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.

- 3 Click **Service Settings** ().

- 4 Click **Connected Accounts**.

- 5 Select **Google Cloud** from the dropdown menu, and click **Add New Connection**

- 6 Enter the following information about your Google Cloud account.

Parameter	Description
Enter Billing Account ID	Enter your Google Cloud Billing Account ID.
Enter Project Number	Enter the Project Number from your Google Cloud Platform account that you want to use for your GCVE resources.
Enter Your Business's Domain Name	Enter your domain name.

You cannot edit this connection info after submitting it, so ensure that it is correct before proceeding.

- 7 Click **Add**

Results

After you add your Google Cloud Platform account information, it can take up to three business days for the connection to be processed. You will receive a notification email when the connection has been processed.

What to do next

You can now consume GCVE resources on an on-demand basis or create a subscription. See the [Google Cloud VMware Engine documentation](#) to create resources.

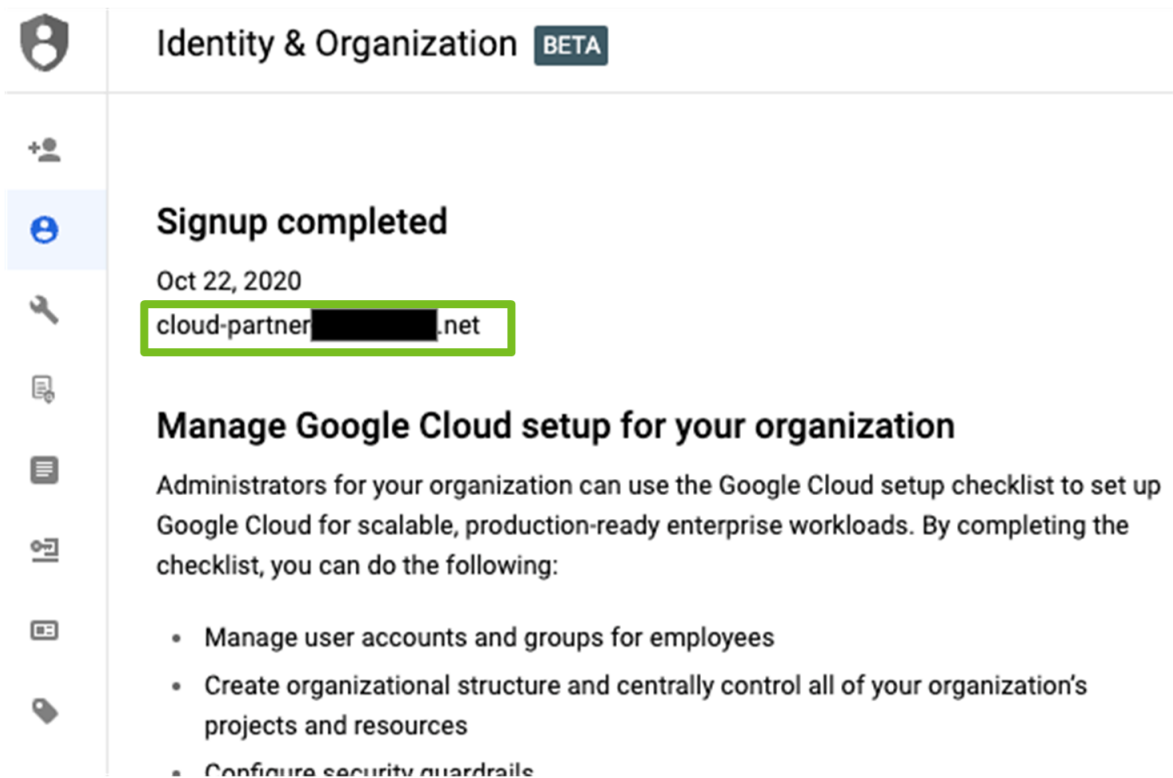
Locate Your Billing ID, Project Number, and Domain in Google Cloud Platform

You can find the Billing ID, Project ID, and Domain required to link your Google Cloud Platform account in the Google Cloud Console.

Procedure

- 1 Log into the Google Cloud Console at <https://console.cloud.google.com>.
- 2 From the navigation menu, select **IAM > Identity & Organization**.

The domain name appears near the top of the screen, as highlighted in the screenshot below.



- 3 Locate the Billing Account ID and the Project ID by following the instructions in [View the Projects Linked to a Billing Account](#).

Purchase Azure VMware Solution Through VMware

Azure VMware Solution (AVS) is available to purchase through VMware for VMware Cloud Universal customers only.

When you purchase AVS through VMware, you can use VMware purchase funds to consume Azure VMware Solution.

The workflow for purchasing AVS through VMware involves multiple steps in both the Azure portal and the VMware Cloud Console.

Figure 1-1. AVS On-Demand Purchase Flow

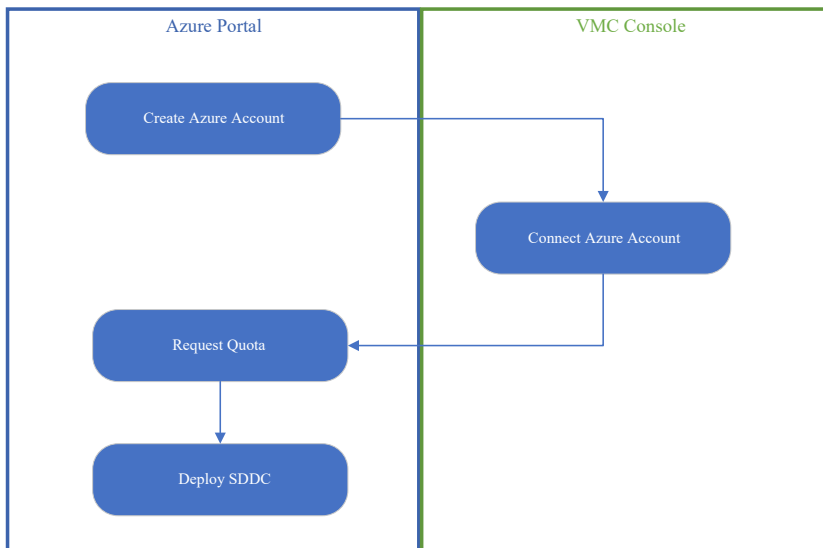
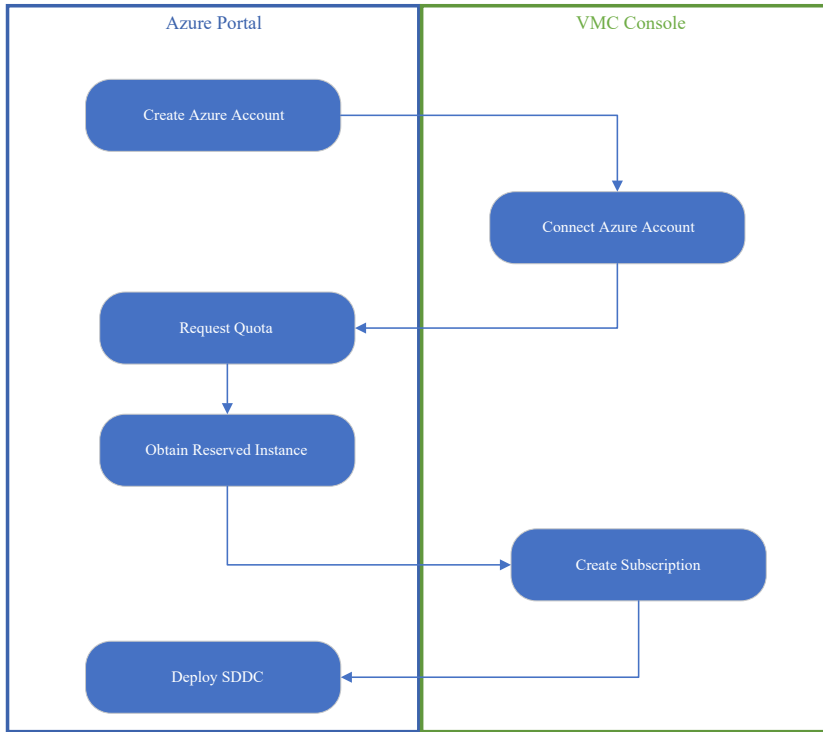



Figure 1-2. AVS Subscription Purchase Flow



Prerequisites

- If you do not already have an Azure account, create one using the Azure portal.

Procedure

- 1 Obtain the subscription ID and tenant ID for your Azure account.
For instructions on finding your subscription and tenant IDs, see <https://learn.microsoft.com/en-us/azure/azure-portal/get-subscription-tenant-id>
- 2 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.
- 3 Click **Service Settings** ().
- 4 Click **Connected Accounts**.
- 5 Select **Azure Cloud** from the dropdown menu, and click **Add New Connection**.
- 6 Enter your **Azure Subscription ID** and **Azure Tenant ID** and click **Add**.

Results

VMware notifies you when the connection is complete. It can take up to 3 business days to complete the connection.

What to do next

- Request quota from the Azure portal as described in <https://learn.microsoft.com/en-us/azure/azure-vmware/request-host-quota-azure-vmware-solution>.
- If you intend to use Azure VMware Solution on an on-demand basis, deploy your SDDC using the instructions in [Create an Azure VMware Solution Private Cloud](#).
- If you want to purchase a subscription, see [Create an AVS Subscription](#).

Remove a Connected Azure Account

You can remove a connected Azure account from the VMC Console if you no longer want to use AVS with it.

If you have an active AVS term commitment, you might not be able to request account removal.

Prerequisites

Remove all AVS resources associated with the Azure Cloud account before you request account removal.


Procedure

1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.

2 Click **Service Settings** ().

3 Click **Connected Accounts**.

4 Select **Azure Cloud** from the drop-down menu.

5 Click the  icon next to the account you want to remove and select **Request to remove connection**.



6 Click **Request to Remove** to confirm that you want to remove this account.

Results

The status of the account changes to **Pending removal**. When removal is complete, the status changes to **Disconnected**.

What to do next

After the account has been disconnected, you can either delete it or reconnect it:

- To delete the account, click the  icon next to the Azure Subscription ID and select **Delete**.
- To reconnect the account, click the  icon next to the Azure Subscription ID and select **Reconnect**.

Creating Subscriptions

Through the VMware Cloud Console, you can create subscriptions for a variety of services.

Create a VMware Cloud Foundation Subscription

The VMware Cloud Foundation term commitment is a subscription bundle which includes subscriptions for VMware Cloud Foundation, Tanzu Standard, and vRealize Cloud. This term commitment does not include Network Insight Cloud, which is available separately.

Prerequisites

You must have funds associated with your VMware Cloud services account that you can use to pay for the subscription.

Procedure

1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.

2 Click **Subscriptions** ()

3 Click **Create Term Commitment** and select **VMware Cloud Foundation**.

Option	Description
VMware Cloud on AWS	<ul style="list-style-type: none"> ■ Select Host Capacity to select a term commitment based on purchasing hosts for provisioning of SDDCs. <ol style="list-style-type: none"> 1 Select the region in which the subscription applies. 2 Select the host type. 3 Select the number of hosts you want as part of the subscription. <p>The total number of subscribed hosts cannot be more than the maximum allowed for your organization.</p> ■ Select Site Recovery to select a term commitment based on protecting a specified number of on-prem workloads. <ol style="list-style-type: none"> 1 Select the region in which the subscription applies. 2 Specify the number of VMs to protect under this subscription.
VMware Cloud Foundation	<p>Enter the number of CPUs for which you want to purchase the term commitment.</p> <p>The VMware Cloud Foundation term commitment is a subscription bundle which includes subscriptions for VMware Cloud Foundation, Tanzu Standard, and vRealize Cloud. This term commitment does not include Network Insight Cloud, which is available separately.</p>

4 Enter the number of CPUs for which you want to purchase the term commitment.

5 Click **NEXT** to choose subscription terms.

6 Select whether you want the flexibility to change your subscription.

Choosing flexibility gives you the option to exchange your term commitment for another full term commitment at a future date. You can exchange a flexible VMware Cloud Foundation term commitment for a VMware Cloud on AWS or VMware Cloud on Dell EMC term commitment. Pricing for this option includes a flexibility surcharge. To exchange your subscription, contact customer success or support.

7 Select a payment term and click **NEXT**.

Option	Description
On-Demand	Select this option to have your usage charged on an hourly basis based on consumption.
1 Year	<p>Select a 1 year subscription term.</p> <p>For VMware Cloud Foundation, only the upfront payment is available.</p>

- 8 Choose whether to upgrade existing on-premises product licenses and SnS support contracts to receive financial consideration on your term commitment.

Option	Description
Upgrade Licenses and Sns Contracts	<p>You can upgrade existing vSphere, VSAN, and NSX licenses and SnS support contracts to receive financial consideration on your term commitment.</p> <p>Provide the name, contact email, and contact phone of the person who manage the licenses and SnS support contracts for the products you want to upgrade. Add any additional notes that you want to include.</p> <p>A VMware representative will contact this person to obtain more details and provide information about the next steps.</p>
No, Thank You	Do not upgrade existing licenses.

- 9 Review the summary and click **PLACE ORDER**.

Results

You receive a notification email indicating that your subscription order has been received. After the order has been processed, you receive a second email notification letting you know either that your subscription is active, or that the subscription process failed. If the subscription failed, contact VMware support for assistance.

What to do next

Log in to Customer Connect to download your license keys for VMware Cloud Foundation.


Create GCVE Subscription

You can create a GCVE subscription to save money by committing in advance to a certain amount of capacity for a period of time.

Prerequisites

Ensure that you have connected your Google Cloud Platform account.

Procedure

- 1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.
- 2 Click **Subscriptions** ()
- 3 Click **Create Term Commitment** and select **Google Cloud VMware Engine**.
- 4 Review the information for your linked Google Cloud Platform account, and click **Next** to proceed or **Connect a Different Account** to connect another account.
- 5 Select the **Region** and **Number of Nodes** you want the subscription to apply to, and click **Next**.
3 nodes is the minimum number of nodes you can select.

6 Select a payment term and click **Next**.

Option	Description
1 Year	Select a 1 year subscription term with one of the following options: <ul style="list-style-type: none"> ■ Select Monthly Installments to pay for the term in monthly installments. You will be charged the monthly fee regardless of host usage. ■ Select Pay In Full to pay for the entire term in a single payment upfront.
3 Year	Select a 3 year subscription term with one of the following options: <ul style="list-style-type: none"> ■ Select Monthly Installments to pay for the term in monthly installments. You will be charged the monthly fee regardless of host usage. ■ Select Pay In Full to pay for the entire term in a single payment upfront.

7 Review and complete your order.

- a Select the checkboxes to indicate that you understand and agree to the terms and conditions.
- b Click **Place Order**

Results

You receive a notification email indicating that your subscription order has been received. After the order has been processed, you receive a second email notification letting you know either that your subscription is active, or that the subscription process failed. If the subscription failed, contact VMware support for assistance.

What to do next

See the [Google Cloud VMware Engine documentation](#) to access your Google Cloud VMware Engine account.

Create an AVS Subscription

Create an AVS subscription to pay for your AVS resources through your VMware account.

Prerequisites

- Ensure that you have connected your Azure Cloud account as described in [Purchase Azure VMware Solution Through VMware](#).
- Request quota from the Azure portal as described in <https://learn.microsoft.com/en-us/azure/azure-vmware/request-host-quota-azure-vmware-solution>.
- From the Azure portal, purchase a reserved instance for Azure VMware Solution: <https://learn.microsoft.com/en-us/azure/azure-vmware/reserved-instance#buy-a-reservation>. Note that although you purchase a reserved instance from the Microsoft Azure portal, you are billed only by VMware and not by Microsoft for the usage of resources in your connected Azure account.

Procedure

1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.

2 Click **Subscriptions** ()

3 Click **Create Term Commitment** and select **Azure VMware Solution**.

4 Enter the **Azure Subscription ID** and the **Azure VMware Solution RI ID**, and click **Next**.

5 Specify the number of hosts you want as part of this subscription, and click **Next**.

Option	Description
Option	Description
Data Center	The Azure region that you selected when you created your reserved instance.
Host Type	The host type that you want to include in your AVS SDDC.
Number of Hosts	Number of hosts you selected when you created your reserved instance.

The region, host type, and number of hosts must match what you selected when you purchased your Azure reserved instance.

6 Select a payment term and click **Next**.

Option	Description
1 Year	Select a 1 year subscription term with one of the following options: <ul style="list-style-type: none"> ■ Select Monthly Installments to pay for the term in monthly installments. You will be charged the monthly fee regardless of host usage. ■ Select Pay In Full to pay for the entire term in a single payment upfront.
3 Year	Select a 3 year subscription term with one of the following options: <ul style="list-style-type: none"> ■ Select Monthly Installments to pay for the term in monthly installments. You will be charged the monthly fee regardless of host usage. ■ Select Pay In Full to pay for the entire term in a single payment upfront.

7 Review and complete your order.

- a Select the checkboxes to indicate that you understand and agree to the terms and conditions.
- b Click **Place Order**

Results

You receive a notification email indicating that your subscription order has been received. After the order has been processed, you receive a second email notification letting you know either that your subscription is active, or that the subscription process failed. If the subscription failed, contact VMware support for assistance.

What to do next

See the [Azure VMware Solution Documentation](#) for more information on AVS.

Exchange a Subscription

If you purchased a flexible subscription, you can exchange that subscription to change the number or type of hosts, region, and term.

Procedure

- 1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.
- 2 Click the Subscriptions tab.
- 3 Select **Actions > Exchange Subscriptions**.
- 4 Click the link to download the Microsoft Excel file and fill out your subscription information.
- 5 Click **Open a Support Ticket** to open a support ticket and attach the spreadsheet you filled out.

Results

After the support ticket is processed, your original subscription will be canceled and your new subscription activated. Note that the subscription exchange impacts your financial commitment only and will not affect currently running workloads. You might be subject to on-demand charges if your new subscription does not cover your current workloads.

Request a Subscription for vRealize Cloud Universal

vRealize Cloud Universal is a SaaS management suite, designed to accelerate the cloud evolution by combining on-premises and SaaS capabilities for automation, operations, and log analytics into one license.

vRealize Cloud provides the flexibility to deploy on-premises or SaaS, interchangeably, without the need to repurchase, for a consistent hybrid and multi-cloud management experience. For more information about vRealize Cloud Universal, see [vRealize Cloud Universal Documentation](#).

Procedure

- 1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.
- 2 Click the **Subscriptions** tab.
- 3 Select **Create a Term Commitment > vRealize Cloud Management**.
- 4 Click **Next**.
- 5 Provide contact details for someone in your organization.

A VMware representative will contact you to confirm the details of the subscription.

Installing and Configuring VMware Cloud Gateway

VMware Cloud Gateway serves as a gateway between your on-premises vCenter Server and VMware Cloud allowing you to leverage several VMware Cloud capabilities.

Note A single VMware Cloud Gateway instance cannot be used for both Hybrid Linked Mode and vSphere+. If you want to use both of these at the same time, you must install two separate VMware Cloud Gateway instances.

Install VMware Cloud Gateway Using the GUI

Download and install VMware Cloud Gateway to access solutions available from VMware Cloud.

Procedure

- 1 In the installer ISO image, browse to the `ui-installer/operating_system` folder, and run the installer.
 - For Windows OS, go the `win32` subdirectory and run the `installer.exe` file.
 - For Linux OS, go to the `lib64` subdirectory, and run the `installer` file.
 - For Mac OS, go to the `mac` subdirectory and run the `Installer.app` file.
- 2 Click **Deploy VMware Cloud Gateway**.
- 3 Accept the End User License agreement and click **Next**.
- 4 Specify the deployment parameters according to the VMware Cloud platform and click **Next**.

Option	Steps
	1 Enter the fully qualified domain name (FQDN) or IP address of the vCenter Server instance.
	2 Enter the HTTPS port of the vCenter Server instance.
	3 Enter the user name and password of user with vCenter Single Sign-On administrative privileges on the vCenter Server instance, for example, the <code>administrator@your_domain_name</code> user.
	4 Click Next .
	5 Verify that the certificate warning displays the SHA1 thumbprint of the SSL certificate that is installed on the target vCenter Server instance, and click Yes to accept the certificate thumbprint.

5 Set up the target VM and click **Next**.

Option	Description
VM name	Enter a name for the VMware Cloud Gateway VM. The VM name must not contain a percent sign (%), backslash (\), or forward slash (/) and must not be more than 80 characters in length.
Set root password	Set a root password for the VMware Cloud Gateway VM. The password must contain only lower ASCII characters without spaces, at least eight characters, a number, uppercase and lowercase letters, and a special character. A few examples of special character are, an exclamation mark (!), hash key (#), at sign (@), or brackets ().
Confirm root password	Confirm the password you set above.

6 Select the datastore location for VMware Cloud Gateway and click **Next**.

- a Select the datastore where you want to place the VMware Cloud Gateway VM.
- b Select **Enable Thin Disk Mode** to conserve disk space by installing VMware Cloud Gateway using a thin disk.

7 Configure the network settings for VMware Cloud Gateway and click **Next**.

Parameter	Description
Network	Select the network. The networks displayed in the drop-down menu depend on the network settings of the target server. If you are installing VMware Cloud Gateway directly on an ESXi host, non-ephemeral distributed virtual port groups are not supported and are not displayed in the drop-down menu.
IP version	Select IPv4. VMware Cloud Gateway does not support IPv6.
IP assignment	Select how to allocate the IP address. <ul style="list-style-type: none"> ■ static The wizard prompts you to enter the IP address and network settings. Note Avoid using an IP address as a system name. If you use an IP address as a system name, you cannot change the IP address and update the DNS settings after the installation. ■ DHCP A DHCP server is used to allocate the IP address. Select this option only if a DHCP server is available in your environment.
FQDN	Enter an FQDN for VMware Cloud Gateway.
IP address	If you selected a static IP address, enter the IP address for VMware Cloud Gateway. If you enter an IP address that already exists, the installer warns you that this will cause an error in the installation unless you isolate the network where VMware Cloud Gateway is on. For example, you can install VMware Cloud Gateway on a different port group from the existing IP address.
Subnet mask or prefix length	Enter the subnet mask or prefix length for the IP address.

Parameter	Description
Default Gateway	Enter the default gateway that VMware Cloud Gateway should use.
DNS Servers	Enter the addresses of the DNS servers used by VMware Cloud Gateway.

8 Configure VMware Cloud Gateway settings and click **Next**.

- Select **Synchronize Time with NTP servers** and enter the address of one or more NTP servers in the text box to use NTP servers for time synchronization.

Note Ensure that you enter the correct address for the NTP servers. Otherwise, the installation may not complete successfully.

- Select **Synchronize Time with ESXi host** to synchronize time with the host where you are installing VMware Cloud Gateway.

9 Click **Finish** to install VMware Cloud Gateway.

Results

VMware Cloud Gateway is installed in your on-premises environment.

What to do next

Install VMware Cloud Gateway Using the CLI

Use the command-line installer to script or automate your VMware Cloud Gateway installation.

Use the command `vcgw-deploy` to install VMware Cloud Gateway from the command line. In addition to installing VMware Cloud Gateway, you can use `vcgw-deploy` to validate your installation templates and run pre-checks on your installation. For a full list of `vcgw-deploy` options, run `vcgw-deploy install --help`.

Procedure

1 Prepare a JSON template for the installation.

- In the installer ISO image, browse to the `cli-installer/templates` directory.

This directory contains sample JSON templates for installing VMware Cloud Gateway either directly on an ESXi host or through a vCenter Server system.

- Copy a template to a working directory and edit it to include the necessary parameters.

For more information about available template parameters, invoke the installer with the option `--template-help`. For example, on Windows, enter `vcgw-deploy.exe install --template-help`.

- 2 From the command line, change directory to the `cli-installer` directory and run the installation prechecks.
 - For Windows OS, enter `vcgw-deploy.exe install path-to-template --precheck-only`.
 - For Linux OS, enter `vcgw-deploy install path-to-template --precheck-only`.
 - For Mac OS, enter `vcgw-deploy install path-to-template --precheck-only`.

The prechecks identify problems with the template and parameters provided, so that you can fix any errors before launching the installation.

- 3 Launch the installer.
 - For Windows OS, enter `vcgw-deploy.exe install path-to-template --accept-eula`.
 - For Linux OS, enter `vcgw-deploy install path-to-template --accept-eula`.
 - For Mac OS, enter `vcgw-deploy install path-to-template --accept-eula`.

What to do next

Backing Up VMware Cloud Gateway

Backing up VMware Cloud Gateway is not necessary, because it is stateless and can be redeployed if needed.

File-based backup and restore solutions are not supported for VMware Cloud Gateway.

Updates to VMware Cloud Gateway and Component Features

VMware periodically releases updates for VMware Cloud Gateway as well as for the individual solutions available through the appliance.

VMware Cloud Gateway regularly checks for updates and applies them when they are available. Individual solutions, such as Hybrid Linked Mode, are updated separately from the core appliance.

To view the current version for the VMware Cloud Gateway, log in to the VAMI UI at `https://gw-address:5480/ui` and select **Help > About**.

Replace the Certificate for VMware Cloud Gateway

By default, VMware Cloud Gateway uses the self-signed certificate that gets generated during the installation. You can replace the certificate when the certificate expires or when you want to use a certificate from another certificate provider.

Procedure

- 1 Connect to VMware Cloud Gateway using SSH.

2 For a CA-signed certificate, generate the certificate by performing the following steps:

- a Generate a Certificate Signing Request (CSR) by typing the following command at the command line:

```
openssl req -new -newkey rsa:4096 -nodes -out server.csr -keyout
server.key
```

- b Provide the CSR to your CA according to their request process.
- c When you receive the certificate from your CA, place it in a location you can access from the VMware Cloud Gateway.
- d If it is not a well-known CA, ensure that the following parameters for the root CA are set as follows:

```
X509v3 extensions:
    X509v3 Basic Constraints: critical
        CA:TRUE
    X509v3 Key Usage: critical
        Digital Signature, Key Encipherment, Certificate Sign, CRL Sign
```

Note Set Key Encipherment on the endpoint/machine SSL certificate.

- e Obtain the following files from the CA:

- `server.key`: VMware Cloud Gateway private key.
- `server.crt`: CA signed VMware Cloud Gateway leaf certificate. If `server.crt` contains any intermediate CAs, move them to a new file, `intermediateCA.pem`.
- `rootCA.pem`: the root CA certificate in the certificate chain.

- 3 Generate the `server.pem` file, which is the full certificate chain including `server.crt`, all intermediate CAs (if any), and the private key (`server.key`) by typing the following command:

If there are intermediate CAs, type: **cat server.crt intermediateCA.pem server.key > server.pem**

If there are no intermediate CAs, type: **cat server.crt server.key > server.pem**

The `server.pem` must include the details in the following order:

```
---BEGIN CERTIFICATE---
<CERT>
---END CERTIFICATE---
---BEGIN PRIVATE KEY---
<KEY>
---END PRIVATE KEY---
```

- 4 Back up the existing `server.key`, `server.pem`, `server.crt`, and `rootCA.pem` in the `/etc/applmgmt/appliance` directory by typing the following commands:

```
cp -p /etc/applmgmt/appliance/server.key /etc/applmgmt/appliance/
server.key.bak
```

```
cp -p /etc/applmgmt/appliance/server.pem /etc/applmgmt/appliance/
server.pem.bak
```

```
cp -p /etc/applmgmt/appliance/server.crt /etc/applmgmt/appliance/
server.crt.bak
```

```
cp -p /etc/applmgmt/appliance/rootCA.pem /etc/applmgmt/appliance/
rootCA.pem.bak
```

- 5 Replace `server.key`, `server.pem`, `server.crt`, and `rootCA.pem` using the new files by typing the following command:

```
cp -p server.key server.pem server.crt rootCA.pem /etc/applmgmt/
appliance/
```

- 6 Restart the following services:

```
systemctl restart gps_envoy.service
```

```
systemctl restart aap_envoy.service
```

```
systemctl restart rsyslog.service
```

- 7 Restart the `aca_watchdog` service to restart all the VAP agents that are running.

```
systemctl restart aca_watchdog.service
```

Register Existing VMware Cloud Foundation Workloads

If you already have deployed VMware Cloud Foundation instances, you can register these with VMware Cloud in order to view your workload domains in the VMC Console.

Install the VMware Cloud Gateway Appliance

Install the VMware Cloud Gateway in a location that has network access to the the vCenter Server instances that you will be registering. Complete the installation as described in [Installing and Configuring VMware Cloud Gateway](#).

Note Due to resource constraints on the VMware Cloud Gateway, you cannot use a single instance of the VMware Cloud Gateway both to register Cloud Foundation workloads and for Hybrid Linked Mode. If you are already using an instance of the VMware Cloud Gateway for Hybrid Linked Mode, install a second instance.

Register the Cloud Gateway Appliance to VMware Cloud

Register the VMware Cloud Gateway to a VMware Cloud organization to allow communication of data to the VMware Cloud Console.

Note After you have registered the VMware Cloud Gateway with a particular organization, there is no way to change that organization from the appliance.

To complete this step, you must have a VMware Cloud account and be the owner of the Organization you want to register the appliance with.

Ensure that your web browser is not blocking popups.

Complete this task from within your Cloud Foundation network.

- 1 In a web browser, go to `https://gw-address:5480/gw-platform/` where *gw-address* is the IP address or FQDN of the appliance.
- 2 On the **VMware Cloud** card, click **Get Started**.
- 3 On the **Register Cloud Gateway** card, click **Start** and log in with your VMware Cloud Gateway credentials..
- 4 Click **Launch VMware Cloud Services** and log in with your VMware Cloud credentials.
- 5 Select the Organization you want to register with and click **Confirm Connection**.
- 6 Enter the code displayed in the VMware Cloud Gateway UI and click **Submit**.

Register SDDC Manager to VMware Cloud

Register the SDDC Manager from your Cloud Foundation instance to allow the management and workload domains to be displayed in the VMware Cloud Console.

Complete this task from within your Cloud Foundation network.

- 1 In a web browser, go to `https://gw-address:5480/gw-platform/` where *gw-address* is the IP address or FQDN of the appliance.
- 2 On the VMware Cloud card, click **Launch**.
- 3 On the **Register SDDC manager** card, click **Register**.
- 4 Enter the IP address or FQDN of the SDDC Manager, the port number, and the credentials for the SDDC Manager, and click **Next**.

The credentials are used only for the registering the SDDC Manager with VMware Cloud, and are not used after registration.

- 5 Review the displayed workload domains, and select the check box acknowledging that these domains will be connected to VMware Cloud.
- 6 Click **Register *N* Workload Domains**, where *N* is the number of workload domains to be added.

When registration is complete, you can monitor your Cloud Foundation workload domains from the VMware Cloud Console.

Monitor Registered Cloud Foundation Workloads in the VMC Console

After you register your Cloud Foundation workloads, you can use the VMware Cloud Console to monitor and manage them.

- 1 Log in to the VMware Cloud Console at <https://vmc.vmware.com>.
- 2 Click the **SDDCs** tab to view the workload domain inventory data.
- 3 On an SDDC card, click **Open SDDC Manager** to open SDDC Manager and view the inventory details of a workload domain.

These details are available only when you access the VMware Cloud Console from within your Cloud Foundation network.

- 4 On an SDDC card, click **Open vCenter** to open the vSphere Client and manage the vCenter Server instance associated with the workload domain.

These details are available only when you access the VMware Cloud Console from within your Cloud Foundation network.

Refresh Infrastructure in the Cloud Gateway Appliance

If you add, remove, or change the names of workload domains in your Cloud Foundation instance, you must refresh the infrastructure in the VMware Cloud Gateway in order for these changes to be reflected in the VMware Cloud Console.

- 1 In a web browser, go to <https://gw-address:5480/gw-platform/> where *gw-address* is the IP address or FQDN of the appliance.
- 2 On the VMware Cloud card, click **Launch**.
- 3 Click **Refresh Infrastructure**.