

NGC User Guide

Application Note

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Chapter 1. What is NVIDIA NGC?

NVIDIA NGCTM is a cloud platform providing fully managed services, including <u>NVIDIA</u> <u>AI Enterprise</u>, <u>NVIDIA DGXTM Cloud</u>, and <u>NVIDIA Riva Studio</u> for Natural Language Understanding (NLU) and speech AI solutions. AI practitioners can leverage <u>DGX Cloud</u> for model training, <u>NVIDIA AI Enterprise</u> to obtain the latest NVIDIA NIMTM models, and the <u>NGC Private Registry</u> for securely sharing proprietary AI software. NGC also hosts a <u>catalog</u> of GPU-optimized AI software, SDKs, and Jupyter Notebooks to accelerate AI workflows and offers support through <u>NVIDIA AI Enterprise</u>.

Enterprises access their AI cloud services via a dedicated virtual NVIDIA Cloud Account (NCA) linked to the NGC organization where their services are enabled.

Chapter 2. Why NGC Software

NGC provides software to meet the needs of data scientists, developers, and researchers across various levels of AI expertise.

All software hosted on NGC undergoes thorough scans for common vulnerabilities and exposures (CVEs), crypto, and private keys.

In addition to security scanning, NGC software is tested against a wide range of GPUenabled platforms, including public cloud instances, workstations, and OEM servers designed for data center or edge deployments. Supported GPUs include H100, V100, A100, T4, Jetson, and the RTX Quadro.

NGC software is tested and assured to scale across multiple GPUs and, in some cases, across multiple nodes, ensuring users can fully utilize their GPU-powered servers out of the box.

For select containers, NVIDIA offers NGC Support Services to run software on DGX platforms or certified OEM servers. The service gives enterprise IT direct access to NVIDIA subject matter experts to address software issues and minimize system downtime quickly.

Chapter 3. NGC Organizations and Teams

An NGC organization (org) is linked to an NVIDIA Cloud Account (NCA) and shares the same account number. The dedicated account instance is used to enable and manage NVIDIA cloud services.

Users can access an NGC org in the following ways:

1) Sign-Up through the NGC Portal: A user can sign up for a free NGC org through the NGC <u>sign-in</u> portal and create a new NVIDIA cloud account that grants access to an NGC org enabled with NVIDIA Catalog access (public artifacts only).

2) Entitlement Message: NVIDIA sends a message to the company or person granted entitlement for a service delivered in NGC. This can happen through a purchase order, early trial program, or other commercially related offers. The recipient follows the entitlement steps to be granted an NVIDIA Cloud Account and gain access to their NGC service.

3) Account Owner Invitation: The account owner adds a user to an NCA account and grants the required permissions to access the NGC org. The account owner will invite the user through an <u>NCA invitation email</u> or add the user using a corporate <u>AD group</u> <u>membership</u> rule mapped to the NGC org. Note that only *enterprise* type orgs support the ability for account owners to manage additional users.

Users who sign up for an NGC org through the NGC sign-in portal get assigned an NCA account linked to an *individual* org that is automatically enabled with the <u>NGC</u> <u>Catalog</u> service and grants authenticated access to the catalog. An *individual* org is only accessible by a single user, the org owner. The NCA account linked to the org supports additional users, but these users cannot be assigned NGC access permissions.

An NVIDIA premium cloud service subscription, such as NVIDIA AI Enterprise or NVIDIA DGX Cloud, will be granted through purchase, an early access program, or the NGC Activate Subscription portal. Subscriptions get enabled on *enterprise* NGC orgs. Alternatively, an *individual* org is converted to an *enterprise* org when a user activates their subscription through the NGC Activate Subscription portal. An NGC *enterprise* org is linked to an NCA account and supports additional users, subdividing NGC resources into NGC teams, and role-based access rules.

3.1. NVIDIA Cloud Accounts and NGC

NVIDIA Cloud Accounts (NCA) provide a convenient and scalable way to set up and manage access to NVIDIA cloud services for various users within your company.



NCA is required for managing user access within NGC. It is fully integrated with NGC, allowing user management to be handled within the NGC environment. Adding users through the NGC Add User pane automates the process of updating the NCA account, saving NGC owners and administrators the step of navigating to the NCA user interface.

Step 1: Add User to NVIDIA Cloud Account		
Users need an NVIDIA Cloud Account (NCA) to access NGC. To invite a new	w user to NCA, please provide their email address and assign a role.	
NVIDIA Cloud Account		
Email Address *	NVIDIA Cloud Account Role *	
Enter Email Address	Select Role	\sim
	Assign the NCA Administrator role to enable the user to invite others.	
Email Invitation		
Message	Invitation Expiry	
Hello, Please join this account. Thanks.	6 hours	~
You may include a personalized message to be sent to the invited user.	, Choose an expiration period for the invitation. The user must accept the invitation before it expires.	
Add User and Send Invitation		
Step 2: Assign Permissions to New User		

After the user is added, the next step (Step 2) requires the NGC owner or administrator to assign access permissions to the service entitlements hosted in the NGC org (for example, NVIDIA AI Enterprise or NVIDIA DGX Cloud).

As a follow-up step, the owner or administrator can navigate to the NCA UI console to set up essential services like the following:

- Set up an account recovery email (Highly recommended)
- Add additional NCA administrators (Highly recommended)
- Enter company information

Manage user tenancy status

Removing a user from NGC doesn't remove their associated NCA account. The user's access permissions within the NGC organization are revoked, but the NCA account itself remains active. To completely remove a user from all NVIDIA cloud services, the user must be removed at the NCA account level.

While users can be added and assigned permissions within the NGC UI console, administrators should be aware of additional steps necessary to manage the NCA account.

To learn more about NCA, visit NVIDIA Cloud Accounts.

3.2. NGC Teams

An NGC team is a virtual sub-unit within an org, each with its own registry space. Only the same NGC team members have access to that team's registry space. Creating NGC teams allows users to share images within their team while keeping them hidden from other NGC teams in the same organization. Only the org owner or a user with the user admin role can create NGC teams. A user admin assigned at the org level (without specifying teams), can manage users across all NGC teams within the organization. If assigned to a specific NGC team, the user admin can only access and manage users exclusively within that team.

To create an NGC team, follow these steps:

- 1. Log in to your NGC org.
- 2. Select Organization from the user account menu.



3. On the dashboard or in the left navigation, select Teams.

=	💿 NVIDIA. Organizat	ion ~			Diego Rose TB-org
	Dashboard	Organization > Dashboard			
•	Audit	Welcome to TB-org, Die	go Rose		
4	Organization Profile				
×	Teams	000 000	\oplus	28	R
á	Usage				
*	Users	External IdP Manage NGC user	Organization Profile	Teams Add, remove, rename	Users Add, remove, rename
٤	External IdP	claims to set up rules	information	or con teams	of cut forca
		~~	Ê		
		Usage Monitor organization product usage	User Activity View user activity across products		

4. On the Teams page, click Create Team on the upper right corner.



- 5. Enter a team name and description. Note that names must be all lowercase.
- 6. Click Create Team to finish.

3.3. NGC Org Owner and Other Org Users

When an NGC org is created, an NVIDIA Cloud Account (NCA) is required to access the NGC org. The NCA account is automatically generated, and the user needs to name it. The user is assigned the owner role in NCA and NGC as the initial user.

As mentioned previously, an individual org is only accessible by the org owner; additional users are not supported. To verify the type of org you manage, sign in to NGC to access your org. Under the user account menu, select Organization, and then select Organization Profile in the left navigation pane.

III Dashboard	Organization > Profile TB-org	
A Organization Profile X Teams A Usage	品	Basic Information Internation
よ Users	Narei xv/2tenvuturng Dialay hane Todorg Typer Professors Teauration Teauration Teauration Teauration Teauration	Devolution Test Org
	Owner Email -	

The org owner possesses the highest admin privileges in an NGC org. The org owner of an *enterprise* org can add and remove NGC teams and users, and assign NGC

permissions to each added user by managing the assignment of teams and roles. When a new user gets added, the org owner invites the user to join the NVIDIA Cloud Account, then assigns access to the entire org or limits the user's access to a team or a set of teams created within the org. Then, the org owner controls the user's access by assigning the permissions (roles) necessary to perform their functions within the org or team.

An org supports up to three org owners, and only an org owner can add or invite additional org owners to share in the NGC org management responsibilities. In NCA, only one owner is supported, therefore to support the additional NGC org owners the account owner must assign the NCA "Admin" role when creating the add user invitation. For details, see the steps to add org additional org owners. To prevent accidentally adding an outside user as an org owner, the email address domain between all org owners' users must match.

For example, if the users' email addresses are john@intelligence.ai,

jane@intelligence.ai, and peter@intelligence.ai, then all three can be added as org owners because their email address domains match. In contrast, if Peter's email address was peter@artificial.ai, then Peter cannot be added as an org owner.

Follow the steps in the next section to add a new org owner or additional users with different access permissions.

3.3.1. Adding NGC Users to an Org

The following section guides you through the steps to add a new org owner or additional users with different access permissions.

1. <u>Sign in to NGC</u>. Select the correct NCA account linked to the NGC org you want to manage, and click Continue.

壑 NVIDIA. NGC
Select Your NVIDIA Cloud Account / Team
Organizations within NVIDIA GPU Cloud allow you to share registries and resources with colleagues.
Select One
 Search
Miramontes Labs
0486912258572994
NGC UX Test
0484809030898195
0486912258572994 Continue

2. Select Organization from the user account menu. On the dashboard or in the left navigation, select Users.

	Dashboard
8	Audit
4	Organization Profile
×	Teams
á	Usage
*	Users
٤	External IdP

3. Click Add User at the top-right corner.



Important: If your org is linked to an external IdP/SSO service, managing user membership using <u>NGC IdP Membership Rules</u> is recommended. If your IdP doesn't support groups, you can use the NGC add user service.

						⑦ (t) tor 044	36912258572994	
Irganization > Users Isers								
Confirmed Users	Pending Invitations							
\$								
Name	Org Roles	Email	Last Activity	First Login Date	Date Invited	Sign In Used	Actions	
to .	NVIDIA AI Enterp	tony@ngcuxtest.com	07/15/2024	07/08/2024	07/08/2024	Individual	:	

- 4. In Step 1, invite the user to be an "admin" if they require the ability to manage users in the NCA account, or assign the "member" role in NCA if they do not manage users.
 - Enter the user email address, making sure the domain matches your email domain.
 - Assign the NVIDIA Cloud Account Role "Administrator" or "Member."
 - Customize the invitation email to inform the user what this is for (optional).
 - Set an expiry for the invitation link (default: 6 hours).
 - Click Add User and Send Invitation to proceed to Step 2.

ganization > Users > Add User	
dd User	Cancel
Step 1: Add User to NVIDIA Cloud	
Users need an NVIDIA Cloud Account (NCA) to access NGC. To invite a new user to NCA, p	lease provide their email address and assign a role.
NVIDIA Cloud Account	
Email Address *	NVIDIA Cloud Account Role *
fay	Administrator ~
	Assign the NCA Administrator role to enable the user to invite others.
Email Invitation	
Message	Invitation Expiry
Hello Faye, Please join this account to help manage users and resources to NVIDIA app	24 hours v
You may include a personalized message to be sent to the invited user.	Choose an expiration period for the invitation. The user must accept the invitation before it expires.
Add User and Send Invitation	
Step 2: Assian Permissions to New User	

5. After completing Step 1, you will see a successful invitation dialog and Step 2 configuration buttons become active.

User Role

To assign a role to the user:

- Select Organization for role assignment.
- Under the Organization roles, select Owner.

Click Add Role to finish.

6		
1	N	1

Note: If the user being added will not manage users or NGC teams, assign the "member" role in NCA and don't assign the Owner or User Admin role in NGC.

0	rganization > Users	> Update User		
υ	pdate User			Cancel
	Add User and Send In	vitation		
	Step 2: Assign Pe	ermissions to Nev	v User	
	Roles			
	Please caleet a context f	or role accignment		Add Role
	Please select a context i	or role assignment.		
	Organization (048691	2258572994)		
	⊖ Team			
	NVIDIA AI Enterprise	Private Registry	Organization	
	Viewer	Admin	Owner	
		User	User Admin	
		Read		

Controlled Permissions

To assign controlled permissions to a user:

- Click the Organization or Team radio button.
- Assign a "role" under each NGC application, depending on the level of access to grant the user.

dd Role

In this example, the user added is assigned the Viewer role under NVIDIA AI Enterprise and the User role under Private Registry. These permissions limit the user to viewing and pulling artifacts from the NVIDIA Catalog and pushing and pulling artifacts to the org's private registry.

To learn more about NGC product roles, refer to the documentation for each product.

Note: NVIDIA NGC is introducing a new user role, "Public API Endpoints User," to control access to NVIDIA inferencing credits used for calling NVIDIA API Catalog NIM endpoints. This role must be assigned to NGC organization users who need to generate an NGC Personal Key to use API Catalog credits. For more information, go to <u>Assigning Services to Your Personal API Key</u>. To update user roles, go to <u>Updating User</u> <u>Roles</u>.

Team Role Assignment

Assigning the user permissions at a Team level grants them access only to resources (such as containers, models) shared with that specific team. To grant a user access to resources across the entire org, assign the user roles at the Organization level.

6. The user added will receive an NCA invitation email message that includes the NCA URL to accept the invite and access the NGC org. Share the link to <u>Accepting an NCA</u> <u>Invitation to Access NGC</u> with the invited user.

In the case of org owners, after all three org owners are added, any org owner can replace another org owner when needed. An org owner can remove another org owner by going to the 'users' list and selecting Remove User.

NAME	•	ORG ROLES	EMAIL	•	LAST ACTIVITY	FIRST LOGIN DATE	DATE INVITED	SIGN IN USED	
		Base Command Admi			01/08/2024	03/06/2023	03/06/2023	SSO	>
		Base Command Admi			01/08/2024	09/20/2023	09/20/2023	Remove User	

When an org owner is deleted, an email notification is sent to the remaining active owners about the deletion event. Using the same steps above, a replacement owner can be invited.

3.3.2. Updating User Roles

The following section guides you through the steps to update user roles.

1. After signing in and selecting the NGC org to update, navigate to the Organization > Users page.



= 💿 NVIDIA. Organizati	ion ~			③ tbar 1 Testing_Admin
III Dashboard	Organization > Dashboard			
Audit	Welcome to Testing_Admin, the	ba		
🚠 Organization Profile				
😥 Teams	0,004		22	R
át Usage	080			
🗈 Users	External IdP Manage NGC user roles using	Organization Profile Basic company information	Teams Add, remove, rename or edit	Users Add, remove, rename or edit
Activate Subscription	IdP claims to set up rules		teams	roles
Subscriptions				
External IdP	~~	Ê		
	Usage Monitor organization product usage	User Activity View user activity across products	Subscriptions View organization subscriptions	

2. To locate the user, you can search by either email address or name using the filtering bar.

Organization >	Users					
Users						
Confirmed Use	ers Pending Invitation	ns				
👻 Email:	s X					
0						
Name	Org Roles	Email	Last Activity	First Login Da	Date Invited	Sign In Used
ור	v Org Owner, Re	<u>tba</u>	11/07/2024	04/05/2022	04/05/2022	SSO

3. Click on the user you want to modify, then click Edit Membership at the top of the page.

4. Select the desired roles to add to the user and click Add Role. A confirmation message will appear.

uate Osei			c
Hello, Please join this acc	ount. Thanks.	6 hours	
You may include a personalized	I message to be sent to the invited user.	Choose an expiration period for t it expires.	the invitation. The user must accept the invitation be
Add User and Send Invit	ition		
Step 2: Assign Per	missions to New User		
Roles	ole assignment.		Add Ro
Roles Please select a context for Organization (s6jzvcl32)	role assignment. 268)		Add Ro
Roles Please select a context for Organization (s6jzvcl32) Team	ole assignment. Ib8)		Add Ro
Roles Please select a context for Organization (s6jzvcl32) Team Private Registry	ole assignment. b8) / ~	Organization	Add Ro WVIDIA Al Enterprise Essentials
Roles Please select a context for Organization (s6jzvcl32) Team Private Registry Admin	vle assignment.	Organization	Add Re WIDIA Al Enterprise Essentials
Roles Please select a context for i organization (s6jzvc132) Team Admin User	ele assignment. ib8) Flet Command Admin @ Operator	Organization	NVIDIA AI Enterprise Essentials

5. To remove roles, find the assigned roles in the table at the bottom of the page. Click the X to remove that role from the user.

ORGINAME ()	TEAM NAME 0	eous o	
s6j2vcl32eb8	lestean_1	Registry Admin	\times
16j2vcI32eb8	lestean_1	User Admin	×
s6jzvc332eb8	fil_group1	Registry Admin	×
s6jzvcl32eb8	fc_proup1	User Admin	×

Afterwards, you'll see a confirmation dialog.

3.3.3. Removing a User from an NGC Org

The following section guides you through the steps to remove a user from an NGC org.

Only the organization owner or a user admin can remove a user from the org.

To remove a user from an NGC org, follow these steps:

1. Click on your user account icon to open the menu, then select Organization and click on Users.

=	Section 10 Invibia. Organization	l v							🕚 🕕 🕅	
	Dashboard Audit	Organization > Users	Users							+ Add User
4	Organization Profile	Confirmed	Users Pe	nding Invitations						
×	Teams	Click fi	tering icon t	o filter						
â	Usage	¢								
*	Users	Name		Org Roles	Email	Last Activity	First Login Date	Date Invited	Sign In Used	Actions
٩	Service Keys			Registry Read, User	abi	02/14/2025	01/16/2024	01/16/2024	Individual	1
١	External IdP		a.com	Fleet Command Ad	802	02/21/2025	03/24/2022	03/24/2022	SSO	ı
				User Read	hin	02/21/2025	02/26/2020	02/26/2020	SSO	ı
				NVIDIA AI Enterpris	ma	02/23/2025	03/11/2021	02/24/2021	SSO	1
				Fleet Command Ad	<u>aa</u>	07/12/2024	02/14/2022	02/14/2022	Individual	I
			/idia	NVIDIA AI Enterpris	<u>ms</u>	09/07/2022	09/07/2022	09/07/2022	SSO	i
			com	Registry Admin, Us	800	12/16/2024	12/04/2024	12/04/2024	SSO	1

2. Use the filter tool to find the email address of the user you want to remove.

Organization	> Users							
Users								
Confir	med Users Pen	ding Invitations						
En En	nail: tba	×						
(Q)*								
Name		Org Roles	Email	Last Activity	First Login Date	Date Invited	Sign In Used	Actions
		Fleet Command Ad	tbar	02/23/2025	04/05/2022	04/05/2022	SSO	:

3. Click the Actions ellipsis and select Remove User.

Sign In Used	Actions
SSO	i
	🔒 Disable User's Keys
	🖞 Remove User

Removing a user from the NGC org will revoke all their access to NGC. However, the user will still remain an active tenant member in the NVIDIA Cloud Account (NCA), where user tenancy is managed.

In NGC, you grant access permissions (roles) to a user, and removing the user only removes these permissions. To completely delete the user from NCA, follow the steps provided in the <u>NCA User Guide</u>.

3.3.4. Securing the Owner Account with Multi-Factor Authentication

When you create your owner account, you receive an NVIDIA identity account that is protected by a password you set at the time of owner account creation. You can further secure access to your owner account by setting up multi-factor authentication using the directions below:

1. Go to <u>NVIDIA</u> and click the sign-in icon.



- 2. Sign in with the credentials you set up during the org owner account setup.
- 3. From your NVIDIA user profile page, navigate to the bottom, click on Security settings, and click Update.



- 4. You will be prompted to enter your password again to access security settings.
- 5. Navigate to the Multi-factor Security settings.

≥ nvidia.			
Account Profile	Preferences	Redeem	GeForce NOW
Multi-factor Se When will I be asked for th	curity	Eve	rry time I sign in
Factor auto select policy		Aut	tomatically select last used factor
Authenticator App Code		Us	e the authenticator app to genereate single use
Hardware Security Device		Us	e any compatible hardware security device to pr

6. You can now configure your identity account for two-factor authentication.

Go to the <u>NVIDIA N-factor</u> help page for details on how to set it up.

3.3.5. Contacting your Org Owner

As a user within an NGC organization, you may need to contact the organization owner to request a new service subscription or add a new user. NGC simplifies this communication with the Contact Admin option in your user account menu.

1. First, sign into the NGC application with your organization. Then click on your user ID in the top right corner to access the user account menu.



2. Select Contact Admin to open the email editor dialog.

Contact Admin		×
Send an email to this Organization's Owner. Replies will be sent to your registered email add ogged.	ress. All em	ails will be
2nganization Semo		
ielect Message Template		
		× 1
Product Request		
Team Access Request		

Within this editor, you can choose from the following email templates:

- Product Request: Use this template when requesting a specific product for your <org-name> organization. For example, "I'd like to request the [product name] product for the <org-name> organization."
- Team Access Request: Select this template if you need to request access to the org or a particular team, such as "[team-name]," within your <org-name> organization.

Both templates come with pre-populated message content, but you can edit or delete portions of the message to create a customized message to send to your organization owner.

Contact Admin	×
Rend an email to this Organization's Owner. Replies will be sent to your registered email address ogged.	s. All emails will be
Prganization Demo	
ielect Message Template Team Access Request	
dessage	
I'd like to request access to [team-name] in demo org.	
	Cancel Send

3. Once you are ready to send the message, click Send.

The organization owner will receive the email from <u>noreply-ngc@nvidia.com</u> and will include your email address. The following is a sample email message:



By following these steps and using the Contact Admin option, you can easily initiate communication with your organization owner.

3.3.6. External User Groups

As an NGC organization owner or administrator, you may need to share resources with users outside your organization. While you could add these external users as regular account members, this poses security risks since account members automatically receive access to certain account services. Instead, NGC provides a more secure way to collaborate with external users through *External User Groups*.

External User Groups let you control exactly what external users can access in your NGC organization. Unlike regular account members, external users receive only the specific permissions you assign to their group. You can manage access by:

- Adding or removing group permissions
- Adding or removing group members

For managing access in your organization, NGC recommends:

- For your company's internal users: Add them as account members by:
 - Inviting them with the Users management page.
 - Using your <u>Enterprise Identity Provider (IdP)</u> to grant access to the org with IdP groups.

 For external users (users with email domains outside your company or IdP): Use External User Groups.

External User Groups: Quick Reference				
Supported NGC Applications	Private Registry and Catalog			
Maximum Users per Group	1,000			
Maximum Groups per Organization	100			

Creating an External User Group

To create and configure an External User Group:

1. Sign in to your NGC organization you want to share access to and select Organization from the menu.

a	at cosmos
•	cosmos >
	Contact Admin
Ē	Account Settings
ß	Setup
⊕	Organization
₿	Terms of Use
O	Privacy Policy
\rightarrow	Sign Out

2. Select External User Groups from the left navigation or dashboard.

🗏 📀 NVIDIA. Organi	zation \vee			(a) aba cosmos
III Dashboard	Organization > Dashboard			
自 Audit	Welcome to cosmos, aba			
📇 Organization Profile				
🕃 Teams			23	2
🔐 Usage				
🖹 Users	Enterprise IdP Manage NGC user roles using IdP	Organization Profile Basic company information	Teams Add, remove, rename or edit teams	Users Add, remove, rename or edit roles
Activate Subscription	claims to set up rules			
🛱 Subscriptions				
Subscriptions				-AP
Activate Subscription				U
Subscriptions	Usage	User Activity		Service Keys
» Service Keys	Worker organization product asage		view organization subscriptions	And the manage of the Arrieys
External User Groups				
🖹 Enterprise IdP	Ls			
	External User Groups Create an external group to grant access to users outside of your organization.			
NGC Organization v0.140.9				

3. Click Create Group.

≡	📀 NVIDIA. Organizat	tion ~ (2) aba cosmos ~
	Dashboard	Organization > External User Groups
B	Audit	External User Groups
4	Organization Profile	
X	Teams	•>
â	Usage	
	Users	Create A Group of Users
87	Activate Subscription	Create an external group to grant access to users outside of your organization.
Ŷ	Subscriptions	
۶,	Service Keys	
۲	External User Groups	
	Enterprise IdP	
NGC	C Organization v0.140.5	

4. Configure your group settings:

- a). Name: Enter a descriptive name that identifies the group's purpose.
- b). Description: Add a brief description explaining the resources this group will access.
- c). Other Options: By default, leave the checkbox unchecked to manage external users from any domain or Identity Provider (IdP). If you check the box, only onboarded IdPs will be supported. To allow users from additional IdPs, keep the box unchecked.
- d). Assign Permissions: Configure access rights for group members:
 - i. Assign Context of the Permissions: Choose between organization-wide or team-specific access. For details, see <u>NGC Teams</u>.
 - ii. Services and Roles: Select the services members can access and their permission levels.

Important:

- For Private Registry permissions, refer to the available <u>role types</u>.
- For Catalog access, Read access allows users to view artifacts under your organization's NVIDIA AI Enterprise essentials subscription.

Click Create User Group when you're ready.

	L	
External User Group Details		
Create an external user group to grant access to use its members those permissions.	's outside of your organization.Assigning permissions to this group g	gran
Name *	Role *	
SharePrivateRegistry	ADMIN	
	You will be the administrator of this new User Group.	
Description *		
Private Registry access for external users Other Options Select this box to restrict user authentication to a the IDPs utilized by active members for authentic	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	∍d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to a the IDPs utilized by active members for authentic Acceign Parmissions	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	ed, c
Private Registry access for external users Other Options Select this box to restrict user authentication to o the IDPs utilized by active members for authentic Assign Permissions	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	≥d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to o the IDPs utilized by active members for authentic Assign Permissions Assign Context Of The Permissions	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	≥d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to or the IDPs utilized by active members for authentic Assign Permissions Assign Context Of The Permissions Organization Level Team Level 	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	∍d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to a the IDPs utilized by active members for authentic Assign Permissions Assign Context Of The Permissions Organization Level Team Level 0633559459841480	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	≥d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to o the IDPs utilized by active members for authentic Assign Permissions Assign Context Of The Permissions Organization Level O633559459841480 Services And Roles	nboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	∍d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to a the IDPs utilized by active members for authentication Assign Permissions Assign Context Of The Permissions Organization Level Team Level 0633559459841480 Services And Roles Private Registry NGC Catalog	anboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	≥d, c
Private Registry access for external users Other Options Select this box to restrict user authentication to a the IDPs utilized by active members for authentic Assign Permissions Assign Context Of The Permissions • Organization Level Team Level 0633559459841480 Services And Roles Private Registry NGC Catalog ✓ User	onboarded IDPs. If left unchecked, any IDP can be used; when checke ation will be permitted.	ed, c

5. Invite users to your External User Group.

You can invite external users using either of these methods:

a). From the groups list: Click the ellipsis menu (#) under Actions and select Invite Users.

Organization > External User Groups External User Groups Creat							e Group	
	Name	Description	Context	Services/Roles	Number of Users	Group Admin	Pending Invitations	Actions
	<u>SharePrivateRegistry</u>	Private Registry access		REGISTRY_USER	aba	Yes		÷



b). From the group details page: Click Invite User.

0 S	rganization → External User Groups → harePrivateRegistry	SharePrivateRegistry					Edit Gro	up Invite User
	Group Details	Confirmed Users Pending Invitat	ions					
	Name SharePrivateRegistry	Email	Identity Provider	Group Role	Date Invited	sign-In Used	Actions	
	Group ID dm33-aylU- vjpoc	aban	NGC-TEST	Admin	04/30/2025 10:15 PM	SSO	I	
	Description Private Registry access for external users							
	Restrictive this group to NVIDIA Active Directory Users No							

- 6. Configure the invitation to be sent to the external users.
 - a). Subject: Customize the email subject to help recipients identify your invitation.
 - b). Invitation Expiry: Set the invitation's validity period. After expiration, users cannot access shared permissions via the email invitation. Available periods:
 - 1 hour
 - 6 hours
 - 24 hours
 - 1 week
 - 1 month

c). Message: Add a personalized message to provide context about the invitation.

- d). Role of Users: All invited users receive the fixed 'member' role. This role is separate from NGC organization permissions and does not affect access levels.
- e). Email Address: Enter the email addresses for your external users. Click Add another user to include additional users. When finished, click Invite Users.

Invite Users	×
Email Invitation	
Subject *	Invitation Expiry
You've been invited to NGC org "cosmos" as an external user	1 week ~
	The user will need to accept the invitation before it expires.
Message	
You have been invited as an external user to join NGC org "cosmos". To	accept the invitation click the button below you must accept to gain ac
Add Users	
Role of User(s) *	
Member	~
Assign a role to the users of this group. The Administrator role will give users the abi	lity to manage this group.
Enter User email address to send invitation	
Email Address * Email	Address *
r.rod × tba	×
+ Add another user	
	Cancel Invite Users

After sending the invitations, you'll see a "Users successfully created" message.



You can monitor pending invitations in the group details page.

Organization > External User Groups > SharePrivateRegistry SharePrivateRegistry Edit C							
Group Details Name SharePrivateRegistry	Confirmed Users Pending Invitations Email	Admin	Date Invited	Invitation Expiry	Resend		
Group ID dm33-aylU- vinodZ	<u>r.ro</u> .	Member	04/30/2025 10:26 PM	05/07/2025 10:26 PM	Resend		
Description	tbar	Member	04/30/2025 10:26 PM	05/07/2025 10:26 PM	Resend		
Private Registry access for external users Restrictive this group to NVIDIA Active Directory Users							

When users accept their invitations, they become "Confirmed Users." You can monitor their API key status and resend expired invitations if needed. Resent invitations maintain the same validity period as the original.

Managing External Users' Personal API Keys

As an NGC organization administrator, you can manage API keys for your external users through the following capabilities:

- Monitor API key status and usage
- Revoke compromised keys (requiring users to generate new ones)
- Remove users from the External User Group to prevent key generation or rotation

The administrator interface provides two main views:

External user's personal key view:

anization > External User Gr	oups > SharePrivateRegi	stry > r.rod r		
				Edit Group
Personal Key deactivation will i	remove the user's permissions	s, which were assigned not only to th	nis User Group but also to the entire NGC	organization.
owing 1 - 1 of 1 🎡				
Key ID	Key Name	Expiration	Key Value	Active

External users list view:

rganization > External User Groups harePrivateRegistry	> SharePrivateRegistry				Edit Group	ivite User
Group Details	Confirmed Users Pendin	g Invitations				
Name SharePrivateRegistry	Email	Identity Provider	Group Role	Date Invited	sign-In Used	Actions
Group ID dm33-ayIU- vinod7kli	<u>extern</u> ;	NVIDIA-J	Member	05/02/2025 11:21 AM	Individual	I
Description	<u>n</u>	NVIDIA-J	Member	05/05/2025 11:05 AM	Individual Remove User	i h
Private Registry access for external users	abe	NGC-TEST	Admin	04/30/2025 10:15 PM	SSO	÷
Restrictive this group to NVIDIA Active Directory Users No						

Guide for External Users: Accepting Invitations

Follow these steps to accept your invitation to join an external user group:

1. Check your email for an invitation from <u>noreply-ngc@nvidia.com</u>.

Click Access Org in the email.

	You've been invited to NGC org "cosmos" as an external user Σ [hbox $ imes$]						
NVIDIA	noreply-ngc@nvidia.com 🗳 to me 👻		10:26 PM (1 minute ago)				
		You've been invited to NGC org "cosmos" as an external user					
		You have been invited as an external user to join NGC org "cosmos". To accept the invitat click the button below you must accept to gain access to Private Registry	ion				
		ACCESS ORG					
		 As an external user, you do not belong to the NGC organization account and will only have access to shared Copyright © 2025 NVIDIA Corporation. All rights reserved. NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, CA 95051. <u>NVES link User Guide link</u> 	l services.				



- 2. Sign in to NGC. If you're new to NVIDIA, you'll be prompted to create an account. Otherwise, use your existing credentials.
- 3. Select the organization under External User In.



You now have access to the shared NGC organization.

Setting Up API Access

To access shared organization resources via CLI or API, you'll need to generate a personal key:

1. Click your user icon and select Setup.



2. Select Generate API Key.

Setup

Setup

Reys/Secrets	
Ser.	Generate API Key
API Keys	
Generate your ov	wn API key in order to use the NGC
CLI for Private R	eaistry`

3. On the API Keys page, click Generate Personal Key.

Important:

If the Generate Personal Key button is inactive, follow these steps:

- a). Create an NVIDIA Cloud Account (NCA) where you are an active member.
- b). Create and activate an NGC organization in that account. This organization will authorize your personal key for the shared organization where you are an external user.
- c). Return to generate your key.

To create your NCA and NGC organization:

a). Click Create NVIDIA NGC Org and authenticate with your NVIDIA Cloud Account credentials.

Solution -	⑦ e.rosa@ngcuxtest.com cosmos
Update Email Preferences Please visit your account settings to configure email notifications for your product services for this organization.	Go to Account Settings $~~ imes$
Setup > API Keys	
API Keys	+ Generate Personal Key
To create a personal key for this organization, you first need to join an NGC organization linked to an NVIDIA Cloud Account. Click "Create NVIDIA NGC Org" to start.	Create NVIDIA NGC Org
*	
No Personal Keys Configured	
+ Generate Personal Key	
NGC API Keys NVIDIA NGC API keys are required to authenticate to NGC services using NCG CLI, Docker CLI, or API communication. NVIDIA NGC supports two types of API keys.	
Personal API Key	
Any user who is a member of an NGC org can generate Personal API Keys. These keys are tied to the user's lifecycle within the NGC org and can access up to the permissic assigned to the user. During the key generation steps, users can configure which NGC services are accessible by the API key and the time-to-live from one hour to 'never e	ons and services expires'.
Legacy API Key	
This is the original type of API key available in NGC since its inception. This type allows you to create only one 'API key' at a time. Generating a new key automatically revok	es the previous one, as

b). Enter a name for your NCA and click Create NVIDIA Cloud Account.

Croato ar	NVIDIA Cloud Account
To use our servi an NVIDIA Cloud	ces, your NVIDIA Account needs to be associated with Account. Provide your cloud account name to set up.
Provide a C	Cloud Account Name
Choose a distine the future.	ctive name for your cloud account to easily identify it in
Account Name *	
MyNCA	
Ð	Create NVIDIA Cloud Account
	ut NVIDIA Cloud Account

- c). Click Continue to return to the NGC Personal Key management page.
- 4. Configure your personal key:
 - a). Key Name: Enter a descriptive name that identifies the key's purpose.
 - b). Expiration: Choose a preset period, set a custom date, or select "never expire".
 - c). Services Included: Select the services this key will access.
 - d). User Organization: Select an NGC organization you belong to (required for key authorization).
| Your Personal API Key au
with your account within | thenticates your use of the se
only this organization when u | elected services associat
Ising a CLI or Rest API. |
|---|--|---|
| Key Details | | |
| Key Name * | | |
| Mykey-for-orgxyz | | |
| This key authenticates service | es only within the cosmos organiza | ation |
| Expiration * | | |
| 12 months | | |
| Key Permissions | | |
| Key Permissions Services Included * Private Registry × These services are based on y To generate a perce | our access within this organization | n
n |
| Key Permissions Services Included * Private Registry × These services are based on y To generate a perse an org of which you | our access within this organization
onal key as an external user ir
a are an owner or member of. | n
n this org, you must selec |
| Key Permissions Services Included * Private Registry × These services are based on y To generate a perso an org of which you User Organization * | our access within this organization
onal key as an external user ir
a are an owner or member of. | n
n this org, you must selec |
| Key Permissions Services Included * Private Registry × These services are based on y To generate a perso an org of which you User Organization * RodriguezAccount | our access within this organization
onal key as an external user ir
a are an owner or member of. | n
n this org, you must selec |

Click Generate Personal Key.

WARNING:

Copy and store your key immediately - it will only be shown once.

For additional information:

See the <u>NGC API keys documentation</u> for general API key information.

Refer to the <u>NGC Catalog and NGC CLI guide</u> for using your key with CLI clients.

3.4. Transferring Your Product Activation Invitation

When you receive an NGC product activation email, and you want to activate the product in an account you don't own, you must transfer the product activation invitation to the account owner. Follow the steps below to transfer.

1. To transfer a product, at the Activate Product page, click View All NVIDIA Cloud Accounts. This displays accounts you are a member of but do not own; those without the 'owner' tag are not owned by you. Review carefully to identify the account associated with the desired NGC organization before starting the transfer process.

Step	2 of 2: Activate Product					
After lo	gin to accept the invitation, an activation	or the new product enablement	s required.			
Produ	uct Details					
NVAIE						
Include	ed Subscriptions					
NV AI EI	NTERPRISE PRIVATE REGISTRY					
NVID	IA Cloud Account (NCA)	roduct				
Select	an invitible cloud Account to activate this p	-				
O VI	ew Eligible NVIDIA Cloud Accounts ①	View All NVIDIA Cloud Account View All NVIDIA Cloud Account	nts 🕕			
Q Se	arch table by id, name, or description					⊤ Fi
	Account Name	Org Name		Subscriptions Associated	Actions	
0	(0650471081895959)	Invitacion para Salcedo	OWNER	AIR		
0	(062632481111	Does my name change	OWNER	NV CLOUD FUNCTIONS		
0	(0555714970488721)	My-PR			Transfer Product Act	tivation
~	(0494753623038961)		OWNER			
0						
0						
0						

- 2. Click the Transfer Product Activation link under the Actions column.
- 3. Review the pop-up indicating that the transfer cannot be undone and confirm that you are certain about proceeding with the transfer.

This action cannot be undone. Once y	ou transfer the product activation to t	7re
account owner, your invitation will exp	ire.	

4. Check the default email template for accuracy, then click Transfer Product Activation. Editing is optional if the content is correct.

Transfer produc	t activation to account owner
message *	
The user	st.com transferred this NVIDIA product invitation
NVIDIA Cloud Ac	count My-PR (0555714970488721). To get started, you will
need to accept t	his invitation and select the NVIDIA Cloud Account (NCA)

Chapter 4. Accessing NGC Org

Activating an NVIDIA NGC product depends on how you obtained the product activation message. This chapter provides comprehensive instructions for activating your NGC product, regardless of whether you received an NGC email invitation from NGC (noreply-ngc@nvidia.com), an NVIDIA commercial entitlement certificate (noreply@nvidia.com), or registered for a free individual NGC organization. It outlines the steps to create and link your NVIDIA Identity account and NVIDIA Cloud Account to your NGC organization, and details the activation process required to access NGC products.

4.1. Activating Your NGC Product from an NGC Email Invitation

Customers can try upcoming NVIDIA NGC AI products through the <u>NVIDIA Developer</u> website or by engaging directly with the NVIDIA product team. Once approved, you will receive a welcome email from NVIDIA NGC, similar to the image shown below, guiding you on how to begin your onboarding process and activate the software. To access NGC, you need to be a tenant of an NVIDIA Cloud Account used to manage access to NGC for you and additional users. The following sections explain how to use your NVIDIA NGC welcome email.

Dear 1 Wire excited to welcome you to NVDIA NGC, a cloud platform where you can access enterprise software and services. To part started you indired to accept this invitation and create a new NVDIA Cloud Account RCA). The ICA you create will be accivated with your MeMo Microservices IA software. Atternatively, if you on mail stilling VMDIA Cloud Account Microservices IA software select from the list show. Wo can find an one destaided with hough of these account creation sizes hare.
Please click this button to begin the onboarding process and access NVIDIA NGC. ACCEPT INVITATION AND SIGN IN Proceeding
Best regards, The NVIDIA NGC Team
Capyright © 2025 WYDIA Corporation All rights reserved. WYDIA Corporation, 2788 San Tomas Expressing, Santa Clara, CA 95051. INVES Into I Later Guide Into

If you're already an NVIDIA NGC user, go directly to <u>NGC Product Activation by Invitation -</u> <u>Existing User</u>.

4.1.1. NGC Product Activation by Invitation - New User

This section describes the steps necessary to activate a new NGC product as a new user to NVIDIA NGC.

1. Go to your inbox to find the email "Welcome to NVIDIA NGC". Click the Accept invitation and sign-in button.

Dear 1	
Dear	
We're ex software	cited to welcome you to NVIDIA NGC, a cloud platform where you can access enterprise and services.
To get st	arted, you will need to accept this invitation and create a new NVIDIA Cloud Account
(NCA). TI	he NCA you create will be activated with your NeMo Microservices EA software.
Alternati	vely, if you own an existing NVIDIA Cloud Account linked to an enterprise NGC org, you can
serect it	from the list shown.
roo can	and a more decaled walk chooger of cheate account creation steps here.
Please c	ick this button to begin the onboarding process and access NVIDIA NGC.
	EPT INVITATION AND SIGN IN
Best req	ards.
The NVII	DIA NGC Team

2. To create your NVIDIA sign-in identity account, type in a password and confirm it (must meet the complexity check), review the NVIDIA account Terms of Use and Privacy Policy, and click Create Account to accept and proceed with your identity account creation.

ć	
Password	
Enter your passwor	rd 🥠
Enter your passwo	rd 🥠
🖌 Stay logged in	Log In With Security Device
	as to the MUDIA Assount Terms Of Lice an

3. A verification email is sent to your email address.

Verify Your Email
Enter the 6-digit code sent to \$1997/it #1997/straggmail.com.
Alternatively, you can also click on the link provided in the email or <u>change the email address</u> you provided.
Cancel

4. Open the email, copy the code, paste it in the Verify Your Email screen, and click Continue.

2	NVIDIA Accounts <a (0="" 1:23="" <="" a="" ccount@="" minu="" pm="" to="">	tes ago)	☆	٢	ŕ	:
	NVIDIA Account					
	Your verification code is:					
	819-180 This verification code will expire in 15 minutes.					
	Having trouble with the code? Use this link instead Upon verification, return to the original page and co	mplete y	our pro	file.		
	You received this email because NVIDIA requires w used to create an NVIDIA Account. If you did not cre NVIDIA Customer Care for further assistance,	rification rate an N	of the VIDIA /	email a Accoun	ddress t, conta	ct
	Verify Your Email					
En	ter the 6-digit code sent to UnixAlternative grymal.com.					
Alte	Didn't get the code? <u>Request a new one</u> , matively, you can also click on the link provided in the email					
	or <u>change</u> the email accress you provided. Cancel Centinue					

You may see an additional browser page open to validate the creation of your user account. Close this page and return to the browser page you started on.

5. In the Almost done! dialog, select your communication preferences, and then click Submit.

	Almost done!
	Please confirm the information below to complete the registration
Rec	commendation Settings
	Yes, recommend content that I might enjoy based on how I engage with NVIDIA's websites, software, and events.
Be	the first to learn about new SDKs, developer tools and training
	Send me the latest developer news, announcements, and more from NVIDIA. I can unsubscribe at any time.
We	promise to protect your privacy. You can change your settings anytime at privacy.rvidia.com
	Submit

6. You must now complete the creation of your new NVIDIA Cloud Account. Provide a meaningful name (spaces are not allowed) that helps you identify it easily against other accounts you own or are a member of.

Note: Creating a new NCA will generate a new NGC org where your product will be activated. The NGC org is directly linked to this NCA.

	🐼 NVIDIA.
Create an	NVIDIA Cloud Account
To use our servic an NVIDIA Cloud	es, your NVIDIA Account needs to be associated with Account. Provide your cloud account name to set up.
Provide a C	loud Account Name
Choose a distinc the future.	tive name for your cloud account to easily identify it in
Account Name *	
Account Name *	

7. You've now activated your NGC product, and you will be redirected to the NGC org subscription page where you can verify your product is active.

Subscription	ns	ms				Activate Subscri Showing 1-6 of 6 ↓
	&	DGX Cloud Status	Term Date 2025-03-31	Auto Renewal No	Type Evaluation	Lauch
	8	NVIDIA AI Er Status Status	Term Date 2025-03-31	entials Auto Renewal No	Type Evaluation	Laurch
		NVIDIA PICA Status Status	ASSO Term Date 2025-05-31	Auto Renewal No	Type Evaluation	Laundh
	8	Cosmos Diff Status Status	fusion Term Date 2025-03-31	Auto Renewal No	Type Evaluation	Laurch
		Private Regi	Term Date	Auto Renewal	Type	Laundh

That's it! You're all set up with your product.

Optional: You should have received a welcome email from your NVIDIA Cloud account. You can choose to complete the setup of your account now or at a later time.

Complete the steps in <u>Setting up your NCA Account</u> to configure your NCA account. The users you add to your NGC org are automatically added to the NCA account. To remove users or update NCA-related tenancy settings for a user, you need to take these actions in NCA.

Note: You cannot access NGC and NGC permissions cannot be assigned in NCA. NCA only manages user tenancy membership. To add users and assign NGC permissions, perform these actions in <u>Adding NGC Users to an Org</u>.

4.1.2. NGC Product Activation by Invitation -Existing User

This section describes the steps to activate a new NGC product invitation received if you already have an NVIDIA NGC organization.

1. Go to your inbox to find the email "Welcome to NVIDIA NGC". Click the Accept invitation and sign-in button.



2. Sign in to your NVIDIA identity account.



	YOUR NVIDIA ACCOUNT
	Sign in to the client
i.doe@comp	pany.com
Password	
Stay logg	Log in
	Forgot Password? >
	More Login Options >
By proceedi	ng, I agree to the NVIDIA Account Terms Of Use an Privacy Policy

3. Review the product details you want to activate on the Activate Product page, select the account under which the product should be activated, and click Activate Product. By default, only the accounts eligible to activate the product are displayed. Alternatively, you can activate the new product under a new account and NGC organization by clicking Activate with a new NVIDIA Cloud Account.

Step 2 of 2: Activate Product				
After login to accept the invitation, an activati	on for the new product enablement is requi	ired.		
Product Details				
Picasso				
ncluded Subscriptions				
HCASSO				
IVII II A L IAUA ACCOUNT IND AL				
VIDIA Cloud Account (NCA) hoose an eligible account to activate your pro on't own, click View All NVIDIA Cloud Account View Eligible NVIDIA Cloud Accounts	duct in the linked NGC org. or click Activat s to transfer activation to the account own	e with a new NVIDIA Cloud Account for a new er.	org. To see accounts you can acce	ss bi
NUDIA Cloud Account (NCA) hoose an eligible account to activate your pro not own, click View All NVIDIA Cloud Accounts View Eligible NVIDIA Cloud Accounts	duct in the linked NGC org, or click Activates to transfer activation to the account own View All NVIDIA Cloud Accounts	e with a new NVIDIA Cloud Account for a new er.	org. To see accounts you can acce	ss b
IVIDIA CIOUD ACCOUTE (NCA) hoose an eligible account to activate your pro- tor wn, cick Verb WHVDIA Cloud Account View Eligible NVIDIA Cloud Accounts O, Search table by id, name, or description Account Name	duct in the linked NGC org. or click Activat to transfer activation to the account own View All NVIDIA Cloud Accounts Org Name	e with a new NVIDIA Cloud Account for a new er. Subscriptions Associated	org. To see accounts you can acce v Actions	ss bi
NIDIA CLOUD ACCOUNT (NCA) NODA CLOUD ACCOUNT (NCA) Interview Interview	duct in the linked NGC org. or click Activat to transfer activation to the account own View All NVIDIA Cloud Accounts () Org Name dealba-acct ()	e with a new NVIDIA Cloud Account for a new er. Subscriptions Associated DEXC: W/AI ENTERFIELE COSMOS DIFFUSION	org. To see accounts you can acce	ss bi
VILLIA CLOUD ACCOURT (INCA) Soese in digble account to activate your point or on on, cick View All NVIDIA Cloud Account on, cick View All NVIDIA Cloud Account on Q, Saarch table by sit, name, or description Account Name on dealba-acct (0659033053258619)	duct in the linked NGC org. or click Activate to transfer activation to the account own O View All NVIDIA Cloud Accounts Org Name dealba-acct	e with a new INNDIA Cloud Account for a new er. Subscriptions Associated	org. To see accounts you can acce Actions	ss bi

- Note: If you want to activate the product in an account you are not an owner of, you must transfer the product activation invitation to the owner. You can find the transfer steps <u>here</u>.
- 4. You've now activated your NGC product, and you will be redirected to the NGC org subscription page where you can verify your product is active. Click the Launch button for the service you want to access.

script	tions					Activate Subsc
						Showing 1 - 6 of 6 🞍
	~	DCX Claud				
	SA .	DGX CIOUU				Lunch
		Status	Term Date	Auto Renewal	Туре	
		Active	2025-03-31	No	Evaluation	
	M	NVIDIA AI E	nterprise Esse	entials		_
	649	Status	Term Date	Auto Renewal	Туре	Launch
	$\mathbf{\nabla} \mathbf{\Psi}$	Active	2025-03-31	No	Evaluation	
		NVIDIA PICA	ASSO			
	UT J	Status	Term Date	Auto Renewal	Type	Launch
	~	Active	2025-05-31	No	Evaluation	
	0	Cosmos Diff	fusion			
		Status	Term Date	Auto Renewal	Type	Launch
	\sim	Active	2025-03-31	No	Evaluation	
	0	Private Regi	stry			
	UIII)	Status	Term Date	Auto Renewal	Type	Launch
		Artist	2025-03-31	No	Evaluation	

That's it! You're all set up with your product.

Optional: You should have received a welcome email from your NVIDIA Cloud account. You can choose to complete the setup of your account now or at a later time.

Complete the steps in <u>Setting up your NCA Account</u> to configure your NCA account. The users you add to your NGC org are automatically added to the NCA account. To remove users or update NCA-related tenancy settings for a user, you need to take these actions in NCA.

Note: You cannot access NGC and NGC permissions cannot be assigned in NCA. NCA only manages user tenancy membership. To add users and assign NGC permissions, perform these actions in <u>Adding NGC Users to an Org</u>.

4.2. Activating NGC Product from an NVIDIA Commercial Entitlement Certificate

When you procure a software subscription for an NVIDIA product, you'll receive an *entitlement certificate attachment* in an email with instructions on how to claim your entitlement. The following steps guide you through the entitlement registration process.

1. Find the Entitlement Certificate Email

Open your email inbox and locate the email titled "NVIDIA Entitlement Certificate - Ref" containing your entitlement certificate attachment.

Here is a sample entitlement certificate email:

entitle6.pdf		
noreply@nvidia.com		🙄 🥎 Reply 🌑 Reply all 🦽 Forward
To: Die		Mon 8/26/2024
entitlement-149496.pdf	~	
Welcome to NVIDIA AI Ente	erprise! Your evaluation license	has been approved.
Run Generative Al Model	s Anywhere with NVIDIA NIM	
You can now deploy NIMs o model's NIM.	on your own infrastructure. Hea	d over to the <u>API catalog</u> to generate an API key and download yo
Get Enterprise Support fo	or NVIDIA software	
Attached to this email is yo with <u>NVIDIA Enterprise Sup</u>	ur NVIDIA Al Enterprise entitler port.	nent certificate. This includes the PAK ID you need to file support t
Experience all of NVIDIA	Al Enterprise	
The entitlement also includ and more.	es details for accessing exclusiv	e NVIDIA AI Enterprise software, including production branches, vi
The following is your order	information:	
Entitlement Type	NVIDIA Sales Order	NVIDIA Delivery Number
EVAL-NVAIE	NA	149496
Questions?		
Need help? Please contact	us.	

The entitlement certificate is provided as a PDF attachment. The following is an example:

788 San Tomas IANTA CLARA ISA	ion Epressway CA 95051							
	NV This certificate serves as evider	'IDIA® En ace that NVI	titlement C IDIA has en	Certific: titled ye	ate ou for	the followi	ng product(s).	
End Custom	er (1b5bd62a-22e1-405d-b0fc-	N	VIDIA Deliv	ery				149496
NVIDIA	,	Er	ntitlement D:	ate				26 AUG 2024
		E	ntitlement Ty	pe				Eval - NVAIE
		N	VIDIA Sales	Order				NA
No Entiti	ment Description		Quantity	Sales 7	[ype]	Term	Start Date	End Date
1 NVIDL	Al Enterprise Evaluation		6 EA	Initial		N/A	26 AUG 2024	24 NOV 2024

The PDF also includes instructions for using the certificate. Here is an example:

NVIDIA Cooperation 2018 san Tomas Borrenovy SANTA CLARA CA 59051 USA
NOTICE
HOW TO USE THIS CERTIFICATE
Please refer to your <u>NVIDIA AI Enterprise Quick Start Guide</u> for information on how to get started, including additional instructions on how to register for your entitlement.
Sales Type: EVAL
 After you have successfully registered, you will receive an email from NVIDIA application hub to access NVIDIA Licensing Portal, NVIDIA Enterprise Support and NVIDIA NGC.
2. In order to access your entitlements, please login and bookmark this site for future access/reference.
Rights and restrictions on the use, transfer and copying of the Software are set forth in NVIDIA's End User License Agreement.

- 2. Login or Register
 - If you're an existing NVIDIA customer, click Already have an entitlement? Please Login.
 - If you're a new NVIDIA customer, click the "registration page" link to begin claiming your entitlement.
- 3. Sign In

Enter your NVIDIA username and click Sign In.

NVIDIA ENTERPRISE ACCOUNT REGISTRATION	
Let's get started tony@nc * Sign in	
Copyright © 2024 NVIDIA Corporation	

- Existing NVIDIA customers: Enter your password, and then click Login.
- New customers: Create a new identity user account by setting a password.
- 4. Select or Create an NVIDIA Cloud Account (NCA)
 - Returning customers are prompted by the NCA picker to choose an existing NCA or create a new NCA to activate the subscription entitlement. Select an existing account if you want the new subscription activated in the *existing* NGC org linked to the NCA account or create a new NCA to activate the subscription in a *new* NGC org.

	Select your NVIDIA Cloud Account	
meosa6qhcqxt	(0484998763291212) Owner	
My_new_NCA (0	0484998709568076) Owner	
MyNCA_for_AP	IC (0484809030898195) Owner	
	Continue	
	Create New NVIDIA Cloud Account	
	0	

▶ To use an existing account, select the desired account and click Continue.

Note: You must select an account you "own"; otherwise, the entitlement claim will fail.

- ▶ To create a new account, click Create New NVIDIA Cloud Account.
- New customers: You will be prompted to create a new NCA. Choose a meaningful account name for easy identification.

Cre	ate your NVIDIA Cloud Account
To ac	ess NVIDIA cloud services, you need a NVIDIA Cloud Account.
Prov	vide a NVIDIA Cloud Account name
Start your a	by giving your account a unique name. This name will help you identify ccount in the future.
Accou	nt Name *
RW	AVDR
	Create NVIDIA Cloud Account

5. Complete Entitlement Registration

After selecting or creating an NCA, you will be directed to the entitlement registration page. Fill out the required fields and click Register.

Please register with your of If you need assistance or have questions with accou	corporate email address. nt registration, please review the Registration EAO.
Entitlement	
PAK ID/Entitlement	ID: i64px:
Primary Contact	
* First Name:	Tony
* Last Name:	В
* Email Address:	ton
* Confirm Email Address:	ton
* Claiming Entitlement as	✓ Select an Option
	System Integrator
Company	

Required Information:

- Primary Contact Information
 - First Name
 - Last Name
 - Email Address
 - Claiming Entitlement as
- Company
 - Company Name
 - Location (Country)
 - Address
 - Industry
- Primary Contact Details*
 - Location (Country)
 - Address
 - Phone
 - Job Role

* Click the checkbox above if the Primary Contact address is the same as the company address.

6. Email Confirmation and Access

After a successful registration, you'll receive two emails from NVIDIA. An email from Application Hub and an email from NCA:

 NVIDIA Application Hub Email: Click Log In to access your software subscription in NGC.



First, click the Application Hub email message to login and begin accessing NGC and the NVIDIA enterprise support portal.

7. Click the NVIDIA NGC card to access your software subscription in NGC.

Wetcome NVIDIA Application Access the tools and services you need quick	n Hub Ily and easily.		Log Out
Access and many Fortain Iccesses, set up your license server, and download software for your products.	Access knowledge base articles and create or view support cases.	Explore GPU-optimized AI software, including containers, models, charts, and industry- focused solutions.	
Sign Up for NVIDIA News Subscribe		Follow NVIDIA	f y in ⊚ ¤
Privacy Policy Manage My Privacy Do Not Sell or Shar	re My Data Terms of Service Acc	cessibility Corporate Policies Pro	United States

When you are in NGC, you can add additional users for them to access NGC by following steps in <u>Adding NGC Users to an Org</u>.

Your registration is now complete!

Optional: From the NCA email, complete the steps in <u>Setting up your NCA Account</u> to configure your NCA account. The users you add to your NGC org are automatically added to the NCA account. To remove users or update NCA-related tenancy settings for a user, you need to take these actions in NCA.

Note: You cannot access NGC and NGC permissions cannot be assigned in NCA. NCA only manages user tenancy membership. To add users and assign NGC permissions, perform these actions in <u>Adding NGC Users to an Org</u>.

4.3. Signing Up for a Free Individual NGC Org

This section describes the steps to sign up for an individual NGC org to access NGC Catalog artifacts gated by authentication. While setting up the NGC org, an NVIDIA Cloud Account is also created.

1. Go to the <u>NGC sign-in page</u> from your browser, enter your email address, and then click Continue.

 NGC NGC
Portal of enterprise services, software, and support for AI, digital twins, and high-performance computing.
Log In Enter your email to log in or create a NVIDIA profile.
Email Address
tba
Continue
More Options
By proceeding, I agree to the
NVIDIA Technology Access Terms of Use Login Help

2. To create your NVIDIA sign-in identity account, type in a password and confirm it (must meet the complexity check), review the NVIDIA account Terms of Use and Privacy Policy, and click Create Account to accept and proceed with your identity account creation.

Password	
Enter your password	9
 Stay logged in 	Log In With Security Dev
By proceeding, I agree	to the NVIDIA Account Terms Of Use
Stay logged in By proceeding, I agree	Log In With Security De to the NVIDIA Account Terms Of Us

3. A verification email is sent to your email address.



4. Open the email, copy the code, paste it in the Verify Your Email screen, and click Continue.



You may see an additional browser page open to validate the creation of your user account. Close this page and return to the browser page you started on.

5. In the Almost done! dialog, select your communication preferences, and then click Submit.



6. Give your NVIDIA Cloud Account (NCA) a name that will help you identify it easily the next time you sign-in.

•	
Create a NVIDI	A Cloud Account
You need a cloud acco cloud account name to	unt to use NVIDIA Services. Provide your o start the setting up process.
Provide a Cloud Ad	ccount Name
Choose a distinctive n identify it in the future	ame for your cloud account to easily
Assount Name *	0 A
Account Name*	me
Account Name*	me
Account Name* Enter Cloud Account Na Creat	me e NVIDIA Cloud Account

7. Complete your user profile at the Set Your Profile screen, agree to the NVIDIA GPU Cloud Terms of Use, and then click Submit.

irst Name		Last Name
ocation		Job Role
Select one	~	Select one
Organization		Organization URL
Ex. NVIDIA		Ex. https://www.nvidia.com
ndustry Segment(s)		Areas of Interest
Select one	~	Select one
I agree to the NVIDIA GPU Cloud Term	<u>ns of Use</u>	

Your NVIDIA account is created, and you are automatically redirected to your individual NGC org.



Your registration is now complete.

Optional: From the NCA email, complete the steps in <u>Setting up your NCA Account</u> to configure your NCA account. The users you add to your NGC org are automatically added to the NCA account. To remove users or update NCA-related tenancy settings for a user, you need to take these actions in NCA.

Note: You cannot access NGC and NGC permissions cannot be assigned in NCA. NCA only manages user tenancy membership. To add users and assign NGC permissions, perform these actions in <u>Adding NGC Users to an Org</u>.

4.4. Setting up your NCA Account

To finish setting up your NVIDIA Cloud Account, find your NCA invitation email message in your inbox and click Log In Now.

1. Your NVIDIA Cloud Account (NCA) provides the services to set up a recovery email address in case your existing one becomes unavailable, manage access for additional users (subscription required), and set up billing information to purchase consumption-based NVIDIA cloud products.



2. Enter your email address to Login and click Continue.



3. Enter the credentials you created for your NVIDIA identity account.



4. On the NCA landing page you can find the details of your account. Here you can setup a recovery email address that can be used to regain access if the email address you used to create your account becomes unavailable. Go to <u>Setting Up NCA</u> <u>Recovery Email</u> for steps on how to setup your recovery email.

4.4.1. Setting Up NCA Recovery Email

To set up your NVIDIA Cloud Account (NCA) recovery email, follow these steps.

1. Click Edit on the Account Details pane under the Account Management > Details page.

IVIDIA. Cloud Account		0
	Account Management > Details MyfirstNCA	Deactivate Account
	Account Details	- East
	Account Name MytrythiCA	Account Number 0461357015843481
	Description	Status ACTINE
	Account Owner's Ernall	Receivery Enail Recommended) A Not Strip. Secure your account by adding a recovery email.
	Account Contact	× 603
	First Name	Last Name
	Crosszation Name	
	Email Address to	Phone Number
	Address Line 1	Address Line Z
		State
	Zip Code 	Country
	Billing Contact	×105
	First Name Orginization Name	Last Name

2. On the Edit - Details dialog, enter the email address that you want to use for account recovery. This email address must be different from the address used to create the account. You can optionally set a description of this account, click Save.

Name *	Recovery Email (Recommended)
MyfirstNCA	al
Description	This email address will be used for recovery purposes and must not be the same as the owner's email address.
My NVIDIA recovery email accou	unt

3. Check to see that the recovery email status on the Account Details pane changed to Pending.

Account Details	
Account Name MyfirstNCA	Account Number 0461357615843481
Description My NVIDIA recovery email account	Status
Account Owner's Email	Recovery Email (Recommended) Pending verification for: abanuelos@ngcprodmgt.com. We sent an email to verify this recovery email address.

4. Go to your recovery email inbox, search for the NVIDIA message with the title "NVIDIA Cloud Account, Verify Your Recovery Email", and click Verify.

NVIDIA Cloud Account, Verify Your Recovery Email			
N	noreply-cloud-accounts@nvidia.com To: Tc		
	NVIDIA Cloud Account Verify your recovery email for your NVIDIA Cloud Account. To verify your email address please click on the link below VERIFY		
	Privacy Policy Legal Info Contact Us Copyright © 2024 NVIDIA Corporation		

You should see that your email has been verified.



5. Go back to your NCA console and check the recovery email status has updated with the address you assigned.

Account Management > Details MyfirstNCA	
Account Details	
Account Name MyfirstNCA	Account Number 0461357615843481
Description My NVIDIA recovery email account	Status
Account Owner's Email	Recovery Email (Recommended) a

4.5. Accepting an NCA Invitation to Access NGC

Follow these steps to accept an invitation to join an NVIDIA Cloud Account and access NGC.

1. Check your email inbox for a message titled "You've been invited to an NVIDIA Cloud Account." Open the email and click Login to proceed.



2. If you are new to NVIDIA, you are prompted to create an NVIDIA identity account. Create a password that is at least 9 characters long and uses a mix of uppercase and lowercase letters, numbers, and special characters. If you already have an NVIDIA identity account, enter your password to continue. You can skip to Step 6 below.

Password		
Enter your passwo	rd	Þ
Confirm password		
Enter your passwo	rd	Sp.
Log In With Securi By proceeding, I age	ty Device > ree to the <u>NVIDIA Ac</u> <u>Privacy Policy</u>	count Terms Of Use and
Log In With Securit By proceeding, I age	ty Device > ree to the <u>NVIDIA Ac</u> <u>Privacy Policy</u> Create Account	count Terms Of Use and

You will be asked to verify your email address in a confirmation email.



3. Check your email inbox for a message titled "NVIDIA Accounts". Open the email and click Verify Email Address.



The email confirmation message will display in your browser.

Your Email Is Verified	
0	
This browser window/tab will attempt to automatically close in 2 seconds, or you may manually close.	

4. NVIDIA would like permission to send you the latest news related to our software and products, as well as learn more about how you use our websites to make sure we send you information relevant to you. Select your options and click Submit.

	Almost done!
	Please confirm the information below to complete the registration
Rec	ommendation Settings
	Yes, recommend content that I might enjoy based on how I engage with NVIDIA's websites, software, and events.
Tec	nnical Settings
	Yes, I'd like to help fix bugs by sharing my error logs.
Be 1	he first to learn about new SDKs, developer tools and training
	Send me the latest developer news, announcements, and more from NVIDIA. I can unsubscribe at any time.
We ;	romise to protect your privacy. You can change your settings anytime at privacy.nvidia.com
	Submit

5. You are prompted by NVIDIA Cloud Accounts to accept the invitation to join your company's account. Click Accept Invitation to continue joining.

Invitation Details	
You've been invited to join the NVIDIA cloud account. Here are the invitation details:	
Email ID: t	
Assigned Role: ADMIN	
Message from Sender: Hello, Please join this account. Thanks.	
Invited On: June 5, 2024 at 11:09:55 AM	
Your invitation is valid until June 6, 2024 at 11:09:55 AM	
What would you like to do?	
Accept Invitation Reject Invitation	

6. Enter your password (required for security).



7. Accept the terms of use and privacy policy to access your software subscription.



You can now access the NGC org.

Chapter 5. Using an External SSO for NGC Org Authentication

An enterprise org can federate its external SSO/IdP identity service to centralize user authentication and manage access to NVIDIA cloud services. This section covers how to configure NGC org authentication through an external SSO provider such as Azure AD or Okta.

The setup process to federate an NGC org to an external SSO identity provider is now guided by an NVIDIA IdP onboarding wizard app and the steps are performed by the customer. To gain access to the IdP onboarding app, contact your NVIDIA sales representative or submit a support case with <u>NVIDIA Enterprise Support</u>. If you don't have an NVIDIA sales rep or an active support contract, please email <u>integration-</u> <u>requests@nvidia.com</u> and submit the following information in your request message:

- 1. Your company name
- 2. A list of email domains that must be associated with the partner (e.g. acme.com, acme.net). The list can only include domains owned by the customer.

Note: If the request is submitted by email, an identity verification process will be required before the IdP onboarding can be started.

3. The email addresses of the customer representatives who are expected to perform the IdP federation configuration steps.

5.1. Federating IdP with NVIDIA Cloud Services

When your request to federate your IdP is approved, you will receive an email with the NVIDIA URL to access the IdP onboarding configuration tool. Follow the steps below.

1. Access the Tool

Locate the NVIDIA email, then either create an NVIDIA identity account with your work email or sign in with an existing account.



2. Initial Setup

After you log in, you will see the initial screen of the IdP onboarding tool. Complete the required fields and click Next.

- > Your company name: NVIDIA will verify your employment.
- Your identity management system: Select your IdP (e.g., Azure AD, Okta) from the dropdown.
- > Your email domains: Enter the domains managed by your IdP.

fo Configuration details	Login test Login test result Summary	
	Welcome!	
	The following pages will guide you to securely submit the information your identity management system with NVIDIA.	ation needed to integrat
	Your company name	
	ACME	
	Your identity management system	
	Please select one	
	Your email domains	
	partner-tests.net × partner-tests.com ×	× ~
	NVIDIA will use the email domains listed above to determine which log in with your identity management system. You can only include company.	users must be directed e domains owned by yo

3. Onboarding Wizard

You will be guided through a configuration wizard based on the IdP system you selected (Azure AD, OpenID Connect, or SAML).

• Entra ID (Azure AD)

sic info	Configuration details	Login test Login test result Summary	
		Microsoft Entra ID configuration	
		The integration between NVIDIA and Entra ID is based on OpenID Connect. Using t terminology, the NVIDIA identity federation system is an application register Entra ID tenant.	the Entra II red in you
		Your Entra ID tenant id (also known as directory id)	
		Please make sure that the application you register for NVIDIA is enabled to use th web redirect URI: https://login.nvidia.com/callback/redirect	e following
		Please make sure that the application you register for NVIDIA is enabled to use th web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id)	e followin
		Please make sure that the application you register for NVIDIA is enabled to use th web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id) Client secret assigned to NVIDIA	e followin
		Please make sure that the application you register for NVIDIA is enabled to use the web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id) Client secret assigned to NVIDIA	e following
		Please make sure that the application you register for NVIDIA is enabled to use the web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id) Client secret assigned to NVIDIA Client secret expiration date YYYY-MM-DD Please generate the secret with the longest allowed to Entra ID client secrets can be valid for up to 24 months	© time-to-live
		Please make sure that the application you register for NVIDIA is enabled to use the web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id) Client secret assigned to NVIDIA Client secret assigned to NVIDIA Please generate the secret with the longest allowed to Entra ID client secrets can be valid for up to 24 months Scopes enabled for the client	© time-to-live

OpenID Connect Provider

Configuration details	Login test Login test result Summary
	OpenID Connect configuration
	With OpenID Connect your identity management system is the OpenID Provider (OP) where the NVIDIA identity federation system is the Relying Party (RP, also known as client).
	Your OpenID Provider configuration discovery URL
	Typical values end with /.well-known/openid-configuration
	Please make sure that the client you register for NVIDIA is enabled to use the following redirect URI (also known as callback URL):
	Client id assigned to NVIDIA
	Client secret assigned to NVIDIA
	Client secret expiration date
	YYYY-MM-DD Please generate the secret with the longest allowed time-to-li Leave this field blank if the secret does not have an expiration.
	Scopes enabled for the client
	Please select from the list or enter additional values
	If you plan to manage your own user authorization groups, please make sure that you enal NVIDIA to request the scope necessary to retrieve your groups.

► SAML

c info	Configuration details	Login test Login test result Summary	(?
		SAML configuration With SAML your identity management system is the Identity Provider (identity federation system is the Service Provider (SP).	ldP) while the NVIDIA
		NVIDIA SP entity ID (also known as audience URI)	
		https://login.nvidia.com	Ð
		NVIDIA Assertion Consumer Service (ACS) URL	
		https://login.nvidia.com/saml2/redirect	Ð
		Format in which you want to provide your IdP configuration	
		IdP metadata link	~
		Your IdP metadata URL	
		Please make sure that you configure the SAML attribute mappings ne user's email address and - optionally - group memberships to NVIDIA.	ecessary to return th
		If your identity management system requires the Service Provider met you can download it from here.	adata in XML forma
		Previo	ous Next

4. Perform a Login Test

After completing the IdP onboarding configuration, follow the instructions to test the login process.

Read the Login test instructions and click Next.

	DIA . IDENTITY F	EDERATI	ON		paolo@partner-tests.com	Logout
Basic info	Configuration details	Login test	Login test result	Summary		?
		Logii We are identity the info The br If the tr identify If you p that is your sy	n test ready for a login test / management system ormation we need to s owser may ask permis sest gets stuck on the y the error and then cr olan to manage your of member of at least o rstem reports the grou	t. The test will open m. The result of the set up the integration ssion to open the ne e login page of your ome back to this br own user authorizat one group. In this m up memberships.	a new browser tab to let you log in v login will be used to confirm that we n. ew tab if it is configured to block pop r identity management system, plea owser tab for instructions. tion groups, please log in with a user anner our system can attempt to de Previous	with your have all b-ups. ise try to faccount tect how

Review your login test results. If successful across all login services, click Confirm. If not, troubleshoot your IdP system and retest.

IDENTITY FEDERATION paolo@partner-tests.com					
Basic info	Configuration details	Login test	Login test result	Summary	(
		Logir	n test result		
		The log receive	gin test has succes d the following inforn	sfully completed. The NVIDIA identity fe ation about the logged in user:	deration system has
		Unique i 00ubio	<mark>dentifier</mark> 1ucv6xHKjMk5d7		()
		Usernam paolo@	ne)partner-tests.com		(i)
		Email ad paolo@	Idress Opartner-tests.com		(i)
		Full nam Paolo F	e Tiorini		()
		Group m starflee	emberships et-test		()
		Please scopes	confirm that the abo you have enabled for	e information is correct. Otherwise you ca NVIDIA, and then repeat the test.	an go back, adjust the
		id toker userinfe	n payload o response	Go Ba	ick Confirm

5. (Optional) Seek Support or Reassign Task

Use the "Help" button to access support options.



You can also reassign the task to complete the IdP configuration to a colleague.

<mark> Invidia</mark> , identity feder#	ION paolo@partner-tests.com Logou
	(7)
	Reassign this task
	Completing this task requires detailed knowledge of the identity management system used by ACME. If necessary, you can reassign this task to other people within your organization.
	Here are the available options:
	 Replace paolo@partner-tests.com (yourself) with someone else
	Add someone else
	Additional person
	user@example.com
	The additional person will be enabled to view and update this task
	Cancel Reassign

6. Complete the IdP onboarding

Once your login test is successful, you will see a success message.

Thank you!

We have successfully received all the information we need to integrate your identity management system with NVIDIA.

We will configure our identity federation system in accordance with your inputs and let you know as soon as we have finished. The configuration work at our side usually is completed within one business day.



The NVIDIA team will finalize the onboarding generally within one business day, and you will receive a confirmation email.



Once your IdP is federated, NVIDIA cloud platforms are not automatically enabled to authenticate users through your external IdP. Since your company may have users accessing NVIDIA cloud platforms with NVIDIA-based identity user accounts, we would like to assist in identifying these users, communicating upcoming changes, and planning the migration of enterprise entitlements to their new external IdP-based identity user accounts. Please contact <u>ngc-sso@nvidia.com</u> to conduct this audit and coordinate the transition.

5.2. Authenticating and Managing User Access

This chapter covers the steps required to authenticate users through an enterprise SSO/ IdP identity service, add new users, manage user permissions and roles, and ensure secure access to organizational resources.

After an NGC org is federated against an enterprise SSO/IdP identity service, the users signing into NGC will automatically be prompted to authenticate against their enterprise SSO/IdP service and redirected back to NGC after a successful sign-in. To add new users to an org federated to an external SSO/IdP provider, the org owner follows the steps described in <u>Adding NGC Users to an Org</u>. Alternatively, suppose the external IdP provider supports OIDC claims to identify the user's membership to a group or set of groups. In that case, NGC can be configured to map these OIDC claims to NGC org, teams, and role assignments. See the <u>NGC IdP Membership Rules</u> section for more details.

Note that NGC orgs no longer manage user tenancy; users and/or groups are assigned "permissions" to access NGC org resources and are tenants of the NVIDIA Cloud Account (NCA) linked to the NGC org. Users and groups are now added to the NVIDIA Cloud Account.

If you are managing user memberships using IdP-based group tags (claims), you need to add these groups both in the NCA account under "Add Groups" and in the NGC org under "External IdP > IdP rules." (In the future, we will deliver a feature where groups are added in NCA and discovered automatically in NGC to assign access permissions.)

To ensure access to the NCA account and NGC org is never lost, even if the IdP service is rendered inaccessible, configure a "Recovery email address" under the NCA account. This email address will be used to authenticate you outside of your IdP. For more information about email recovery, refer to <u>Setting Up NCA Recovery Email</u>.

Important:

For NVIDIA to automatically detect the deletion or deactivation of a user managed by the external IdP, the customer must also integrate their IdP user management service to our NVIDIA identity federation system using "SCIM" or "Security Event Tokens" and allow the user to update events to flow to NVIDIA. NVIDIA will use these events to ensure deleted user accounts from the enterprise side are reflected across all NVIDIA services. Any credential assets (e.g., API keys) owned by the removed user are immediately revoked upon receiving the deletion or deactivation event.

During the federation process, NVIDIA will share our IdP federation "Synchronization of users and group changes" document, and we will need to record a written acknowledgment (email is okay) of receipt of this information and a decision on whether or not you (customer) will implement the security event integration.

Some NVIDIA products (like NGC) provide a UI option for customers to manually disable/deactivate/dis-enroll users manually within the NVIDIA application and trigger

the revocation of credential assets by deleting the user. For example, NGC supports removing a user from an NGC org, and this event automatically triggers the revocation of user-owned NGC API keys. However, such application-specific admin functions do not remove users from other NVIDIA applications unless the removal is performed at the NCA account level. The risk with this process is that if the user were part of other NVIDIA services that grant credential assets, these assets would remain as active dangling assets against those services because the user account remains "active" in our central identity service and NCA. The user's API keys are thus not revoked. The only way to guarantee NVIDIA-wide user account removal is to integrate user event sharing with the NVIDIA IdP federation service, and the customer must be guided to execute the NVIDIA recommended de-provisioning operations in the NVIDIA IdP federation service.

5.3. NGC IdP Membership Rules

An enterprise org can be federated to an external SSO/IdP identity service to centrally manage a company's rules for user authentication to cloud services.

When the NGC org is linked to an external IdP, the org owner will see the ability to start creating membership rules under the Organization > External IdP configuration page.

Important: Only the org owner or the user_admin roles can manage IdP rules.

If you are an org owner, even if you are a member of a group configured in an IdP rule, the rule will not update your roles. By default, the org owner inherits admin privileges across all enablements and services in the owned org, and these role assignments are immutable.



If the NGC org is not linked to an enterprise-owned SSO IdP provider, the 'External IdP' web prompt is disabled with a message stating the org is not linked to an IdP. You can request to link your org to an enterprise-owned SSO IdP by emailing <u>ngc-sso@nvidia.com</u>.


The membership rules feature uses Open ID Connect (OIDC) claims containing the user's membership attributes. However, if your integration is based on SAML, our IdP federation service will translate your SAML based identities and group labels to the appropriate OIDC Id-token and group labels our Cloud Platforms expect.

Sample ID-token expected by NGC

```
Unset
An ID-token retrieved after a successful user authentication
  "sub": "00uixa271s6x7qt8I0h7",
  "ver": 1,
  "iss": "https://{MyDomain}",
  "aud": "28dn4g32287AD709hgea",
  "iat": 1574201516,
  "exp": 1574205116,
  "jti": "ID.ewMNfSvcpuqyS930gVeCN3F2LsegR0kyYjz7DNb9yhs",
  "amr": [
    "pwd".
    "mfa",
    "kba"
  1.
  "idp": "00oixa26ycdNcX0VT0h7",
  "nonce": "UBGW",
  "auth_time": 1574201433,
  "groups": [
    "Everyone",
    "NGC_Admin"
  1
```

The ID-token contains several claims that carry attributes associated with the user. Specifically, we are interested in the "groups" claims values that map users to specific membership groups in their Active Directory (AD) service.

It's important to note that the external IdP uses the name "groups" to carry membership attribute values in the example above. However, other IdP providers may use a different name for their membership attribute claim. If your IdP provider uses a different claim name, check that NGC supports it by emailing <u>ngc-sso@nvidia.com</u>.

An org owner or user_admin will create membership rules by mapping the name (alias) value of the IdP 'groups' claim to NGC org roles and permissions. Within the enterprise AD service, users assigned to these groups will receive the roles and permissions assigned to the group name in the NGC IdP rules.

Example

In this example, we are using Okta as the enterprise-owned SSO IdP provider. It is assumed the same person managing Okta also has NGC org owner permissions.

Okta Settings

okta		Q Search for people, ap	ps and group	S		@gmail ~
Dashboard Directory	~	Applications				Help
Customizations	~	Developer Edit	ion pro	vides a li	mited number of apps.	
Applications	^	Deactivate unused apps or	check out ou	ır plans page. C	ontact us to find a plan that is right for your organizatio	n.
Applications		Create App Integration	Browse A	pp Catalog	Assign Users to App More 🔻	
Self Service						
Security	~	Q Search				
Workflow	~	STATUS		Ô	NGC Client ID: 0oamo9ih2c6GVELeE357	¢ . ▼
Reports	~	ACTIVE	2			
Settings	~	INACTIVE	0	•	Okta Admin Console	
				0	Okta Browser Plugin	
					Okta Dashboard	
				Ø	VMware SD-WAN VCO Client ID: 0oari1eeqpq7ebX24356	o 🔹

First, the NGC org gets linked as a client application to the Okta IdP service.

On Okta, managed users get assigned to the NGC client application, enabling them to sign in to NGC using their Okta SSO account.

At this point, users *have not* been assigned to a 'group'.

okta		Q Search for peo	ple, apps and groups			@gmail ~
Dashboard	~	← Back to Application	S			
Directory	^		NGC			
People		ţ <u>O</u> r	Active View Logs			
Groups		General Sign C	On Assignments Okta API Scope	5		
Profile Editor						
Directory Integrations		Assign 🔻	Convert assignments 🔻	Q Search	People v	REPORTS
Self-Service Registration		Filters	Person	Туре		🐺 Current Assignments
Profile Sources		People	Testacct Account	Individual	/ ×	Recent Unassignments
Customizations	~	Groups	 testacct@ngcprodmgt.com 			
Applications	^		1	Individual	 × 	SELF SERVICE
Applications			Antonio	Individual	× ×	Requests Disabled
Self Service			abanuelos@ngcprodmgt.com			Approval N/A
Convitu			amyp@ngcprodmgt.com	Individual	/ ×	Edit
Security	Ť.		Marco	Individual	× ×	
Workflow	~		marcom@ngcprodmgt.com			
Reports	~		Adam adamt@ngcprodmgt.com	Individual	 × 	
Settings	~		Kayhan l kayhand@ngcprodmgt.com	Individual	× ×	
			Kyle kylep@ngcprodmgt.com	Individual	× ×	
				Individual	× ×	

On Okta, secure AD groups are created, and users can be assigned to a group or a set of groups.

okta		Q Search for people, apps and groups		@gmail ~
Dashboard	~	Groups		H ala
Directory	^	Gloups		• Help
People		All Rules		
Groups				
Profile Editor		NGC	<i>"</i> Q	将 Add group
Directory Integrations		Advanced search *		
Self-Service Registration	ı	Group source type All		Showing 3
Profile Sources		Group name	People	Applications
Profile Sources Customizations	~	Group name O NGC_Admin Maps to Org owner role	People 47	Applications 0
Profile Sources Customizations Applications	~ ~	Group name NGC_Admin Maps to Org owner role NGC_AIE_PR_Admin NGC_AIE_PR_Admin	People 47 2	Applications 0 0
Profile Sources Customizations Applications Security	~ ~	Group name NGC_Admin Maps to Org owner role NGC_AIE_PR_Admin NVAIE-Registry-Admin NVAIE-Registry-Admin	People 47 2	Applications 0 0 0
Profile Sources Customizations Applications Security Workflow	* * *	Group name O NGC_Admin Maps to Org owner role O NGC_AIE_PR_Admin NVAIE-Registry-Admin O NGC_PR_user Private Registry user	People 47 2 1	Applications 0 0 0 0 0 0
Profile Sources Customizations Applications Security Workflow Reports	* * *	Group name NGC_Admin Maps to Org owner role NGC_AIE_PR_Admin NVAIE-Registry-Admin NGC_PR_user Private Registry user	People 47 2 1	Applications 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Profile Sources Customizations Applications Security Workflow Reports Settings	* * *	Group name O NGC_Admin Maps to Org owner role O NGC_AIE_PR_Admin NVAIE-Registry-Admin O NGC_PR_user Private Registry user	People 47 2 1	Applications 0 0 0 0 0
Profile Sources Customizations Applications Security Workflow Reports Settings	* * * *	Group name NGC_Admin Maps to Org owner role NGC_AIE_PR_Admin NVAIE-Registry-Admin NGC_PR_user Private Registry user	People 47 2 1	Applications 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

In this example, Adam and Amy are assigned to the NGC_AIE_PR_Admin group. Note that this is being done manually using the Okta user management feature, but this is typically managed automatically by using an enterprise active directory integrated into the IdP provider.

okta		Q. Search for people, apps and g	roups	@gmail ~
Dashboard	~	← Back to Groups		
Directory	^	ONGC_AIE_PR_	Admin	Actions v
People		NVAIE-Registry-Admin		
Groups		© Created: 03/06/2023 © Last n	nodified: 03/09/2023 View logs	
Profile Editor				
Directory Integrations		People Applications Pr	ofile Directories Admin roles	
Self-Service Registration		People		
Profile Sources				
Customizations	~	Search for users by first name	, primary email or username	Assign people
Applications	~	Advanced search *		
Security	~			Showing 2 of 2
Security	· .	Person & username	Status	
Workflow	~	Adam adamt@ngcprodmgt.com	Active	×
Reports	~	amy	Active	×
Settings	~	amyp@ngcprodmgt.com		

At this point, Adam and Amy can sign into NGC, but there isn't an IdP rule that assigns them NGC org roles and permissions. The next section covers creating the NGC IdP membership rules that will grant Adam and Amy their roles.

Configuring NGC

After the IdP groups are created and users are assigned to secure AD groups on the Okta IdP side, the administrator (org owner) is ready to configure NGC IdP membership rules.

NGC

In the NGC web application, go to NGC External IdP settings and click Create Rule.

Type in a Rule Name that describes the purpose of the rule.

Then, under the If group equals field, enter the name of the IdP 'group' claim that will map to this rule. Note that the name must match exactly and is case-sensitive.

Finally, assign the NGC team or org-level access, and assign cloud service roles to grant to users that are assigned to the group. Click Save.

Rule Name

NVAIE and Private Registry admin

If aroup equals



(i) This field is case sensitive. Please ensure the group name entered matches the one in your IdP.

then assign to

TB2-org (no team) X V

as

Base Command Platform	Fleet Command	NVIDIA AI Enterprise
Admin	Admin	Viewer
User	Operator	
Viewer	Viewer	
Omniverse Cloud	Private Registry	Organization
Omniverse Cloud	Private Registry Admin	Organization
Omniverse Cloud Admin User	Private Registry Admin User	Organization
Omniverse Cloud Admin User Read	Private Registry Admin User Read	Organization
Omniverse Cloud Admin User Read	Private Registry Admin User Read	Organization

Cancel Save



Once the rule is saved, the org owner must activate the rules to apply the membership roles to Adam and Amy when they sign

This completes the creation of an NGC IdP membership rule.

The org owner or user_admin can create multiple rules to support multiple group claim values from the IdP. An example of multiple IdP membership rules created can be seen

External IdP	Rules	Activate Rules Create Ru
- Rules Inactive	ORG-Admin If group NGC_Admin then assign equals to	org (no teem) as Nvidia Ai Enterprise Edit Remove Viewer Registry Admin User Admin
	If NCC_AIE_PR_Admin then group assign equals to	r y admin 182-org (no teem) as Nvidia Ai Enterprise Edit Remove Viewer Registry Admin
	If group NGC_PR_user then assign to	TB2-org (no team) as Registry Edit Remove User

Important: The NGC IdP membership rules do not go into effect until they are "activated". Users' accounts that were added using the manual method will continue to use NGC role permissions assigned through 'Users' invite user membership configurations.

When the Activate Rules button is clicked, the org owner or user_admin is prompted to confirm activation of the IdP rules. When the rules are activated, the NGC IDP rule system reviews user memberships previously added to the org using the "user invitation" method. The NGC IdP rule system will check if the user account maps to a new IdP membership rule. If one does, the previous account membership is deleted, and a new user account membership using the same email address and IdP association will be created. The permissions and roles that get assigned to the new account membership are based on the IdP 'groups' claim attribute.

Note: Previous user accounts that are determined not to have an associated IdP rule
remain as active user accounts under "Users" account memberships. An org owner or user
admin can remove these users if the org should only be accessible by members mapped to
IdP rules.

Chapter 6. Activating Your Subscription (Offer Dependent)

This section describes activating a subscription and linking it to your NGC Account.

Note: These steps are only required for customers who have been given an activation code as part of the purchase of a GPU or DPU.

- 1. Access the activation page directly via <u>Activate Subscription</u>.
- 2. Sign in to NGC with your email address and password if prompted. If you have not created an NGC account, <u>create one now</u>.
- 3. On the Activate Subscription page, enter your Business Information using your company's headquarters address and the serial number or activation code described by the specific offer.

If entering multiple serial numbers or activation codes, use a comma to separate each.

4. Click Activate Subscription.

ollow the below process to acce	equired for borthare babberiptions	included with purchase of NVIDIA	GPUs and NVIDIA DPUS. For examp	ple, customers who have purchased I	NVIDIA H100 PCIe GPUs sho
	ss their software. Customers who	have purchased software subscrip	otions sold separately do need not ne	eed to follow the below process.	
Business Information					
irst Name *	i your business address.	Last Name *		Company Name *	
.ddress *			Address 2 (Optional)		
ity *	State / Province *		Zip / Postal Code *	Country *	
				Select	
ole *		Industry *		Phone *	
Select	· ·	Select	v		
Activation Request					
lse your promotional code, seria equest for each product family s romotional Code, Serial Number, or T	l number or token to activate your e eparately. You may bulk add serial oken	subscription. If you are requesting numbers from the same product f	activation for more than one produc amily but tokens must be submitted	ct family (e.g. H100 GPU and BlueFiel d individually. Please comma separat	ld DPU), you must submit a e or line break all codes.
Enter promotional code, serial n	umber, or token				

5. Once the system validates the serial numbers, review the information displayed and click Request Activation.

+ +	· · · · · · · · · · · · · · · · · · ·	-
	++++++++++++++++++++++++++++++++++++++	À
Activate Subs	cription	
Activate Oubs	cription	
Activation gives your org	anization a subscription for the	1
NVIDIA AI Enterprise Sof	ftware Suite, including NVIDIA	
Business Standard Supp	iort.	
<u>Terms of Use</u> 다		
Activate		
Product Type	H100-NVAIE	
Subscription Quantity	1	
Application		
	-	
No Theolog	Dominant Antipotion	
NO TRANKS	Request Activation	

- 6. The Subscriptions page will display for your organization with the active NVIDIA AI Enterprise subscription.
- 7. Use the left navigation and click Enterprise Catalog to access the NVIDIA AI Enterprise software suite.



Chapter 7. Switching Orgs or Team After Logging into NGC

This section describes switching to a different org or team after logging in.

In the top menu bar, click your user account icon. Then, select your org menu to expand the view to other available orgs. If you manage many orgs, you can use the search field to find the specific org you want to select. Select the desired org by clicking it once.



Depending on the org or team you select, your current page may also refresh.

Chapter 8. NGC API Keys

NVIDIA NGC API keys are required to authenticate with NGC services using NCG CLI, Docker CLI, or direct API requests.

NGC provides two types of API keys:

Personal Keys

- Any NGC org user can generate a personal key.
- An NGC org user can grant a personal key up to the permissions assigned to them in the NGC org.
- A personal key is linked to the user's NGC org lifecycle.
 - If the user's permissions change, the available permissions that can be or are assigned to the personal key also change.
 - ▶ If the user is removed from the NGC org, the key's validity is revoked.
- > Supports updating permissions, rotation, and deletion (immediate revocation).
 - Org owners and user_admins can revoke any member's key on demand.
- Each user can generate up to eight personal keys.

Use personal keys to begin using NGC services within your sandbox. Personal keys are best suited for individuals working on early development and testing code before moving to pre-production and production releases.

To learn how to authorize the services you have access to in the org and generate a personal key, go to <u>Generating a Personal API Key</u>.

Important:

Use the legacy NGC API Key to authenticate with Base Command Platform, Fleet Command, or other NGC services that don't support "Personal key" authentication. For cross-org authorization, continue using the legacy NGC API Key.

NVIDIA plans to deprecate the legacy NGC API key after 2025. NVIDIA encourages you to use the Personal Key, but if you need to continue using the legacy API key, go to <u>Generating a Legacy NGC API Key</u> to find out where to create a new one. Also, your current NGC API key will continue to work.

Service Keys

- The lifecycle of service keys is linked to the NGC org account, not associated with an individual user.
- Only NGC org owners and user_admins can manage service keys.
- A service key can be scoped to access only the permissions and services required, or full access to the services enabled in the org.
- Supports scoped permissions, updating permissions, on-demand revocation, rotation, and deletion.
- An NGC org can have up to 50 service keys.

Use service keys when you require automated communication between machines and deploying to pre-production and production environments where you do not want to depend on a user's membership status in the NGC org.

Note: Service keys currently do not support listing artifacts in NGC CLI or Docker CLI. This functionality will be added in the future. In the meantime, use a Personal API key to list artifacts.

Examples using NGC API Keys

Here are some examples of using NGC API keys to authenticate with NGC CLI and Docker CLI:

NGC CLI

\$ ngc config set <Enter>

Paste your key value at the API_KEY prompt:

```
[Enter API key [****API-Key]. Choices: [<VALID_APIKEY>]
```

Important:

Always use the latest NGC CLI version to access the newest features, bug fixes, performance improvements, and security updates. Check for the latest versions at NGC CLI Installers or run <code>ngc version list</code> to view the latest releases, then upgrade using

ngc version upgrade

Docker CLI

docker login nvcr.io --username '\$oauthtoken'

For the username, enter '\$oauthtoken' exactly as shown. It is a special name that indicates that you will authenticate with an API key. Paste your key value at the Password prompt.

8.1. Supported NGC Applications and API Key Types

The NVIDIA NGC applications/services that support Personal and Service Keys are listed below:

NGC Application/ Services	Service Description
NVIDIA NGC Catalog	Grants your key permission to access or download containers and artifacts from the NGC Catalog. The permission level matches your account's permissions for the catalog.
NVIDIA NGC Private Registry	The key is authorized to perform actions on your organization's private registry service, such as pulling, retrieving, creating, or deleting containers and artifacts. The permission level assigned to the key matches the permission level of your user account. Therefore, your user account must have permissions for the Private Registry.
NVIDIA Cloud Functions	This authorization allows your key to perform actions on your organization's cloud functions service. If your organization has private functions published by NVIDIA, or if your cloud functions service enables you to create, deploy, and run your own functions, your personal key will have the same permissions as your user account for the cloud functions service. Therefore, it's important that your user account has the necessary permissions for Cloud Functions.
NVIDIA Public API Endpoints	Grants permission for your key to access NVIDIA NIM inference endpoints listed in the <u>NVIDIA API Catalog</u> . Therefore, your user account must have Public API Endpoints permissions.
NVIDIA Secrets Manager	Authorizes your key to perform actions on the NVIDIA Secrets Manager service, which is used to store and manage secrets. Your key will have the same permission level as your user account, so your user account must possess Secrets Manager permissions.

8.2. Generating NGC API Keys

Generating API keys is essential for authenticating with NGC services using the NGC CLI, Docker CLI, or direct API requests.

8.2.1. Generating a Personal API Key

1. Sign in to the NGC website.

From a browser, go to <u>https://ngc.nvidia.com/signin</u> and then enter your email and password.

2. Click your user account icon in the top-right corner and select Setup.



3. Click Generate API Key from the available options.

tup		
eys/Secrets		
Generate API Key API Keys Generate your own API key in order to use the NGC service through the Docker client or through NGC CLI for Secrets Manager, NGC Catalog, Private Registry, Public API Endpoints, and Cloud Functions.	View Secrets Secrets Secrets hold your key value pairs tied to a specific external entities. Once created, you can inject these secrets into jobs to be used in apps that support secrets.	Secure Credential Sharing Secure Credential Sharing Securely share credentials and other classified information with encrypted, ephemeral sharing links.
eveloper Tools		
CLI The NGC command line interface (NGC CLI) can run deep learning jobs on NVIDIA Docker containers.	SOK Collection of tools that developers use to create applications for a specific platform, operating system, or programming language.	

4. On the Setup > API Keys page, click + Generate Personal Key on the menu or the pane.

l Keys		+ Generate Perso
	×°	
	No Personal Keys Co	nfigured
	+ Generate Persona	l Key
		_
NGC API Keys		
NVIDIA NGC API keys are require supports three types of API keys	ed to authenticate to NGC services using NCC s.	S CLI, Docker CLI, or API communication. NVIDIA NGC
Personal API Key		
Any user who is a member of an and can access up to the permis services are accessible by the Al	NGC org can generate Personal API Keys. Th isions and services assigned to the user. Duri PI key and the time-to-live from one hour to 'I	ese keys are tied to the user's lifecycle within the NGC on ng the key generation steps, users can configure which never expires'.
Legacy API Key		
This is the original type of API ke Generating a new key automatic when you create a new key.	ey available in NGC since its inception. This ty ally revokes the previous one, as they cannot	pe allows you to create only one 'API key' at a time. be rotated. The active key immediately becomes invalic
NVIDIA will continue to support encourage customers to migrate	this key type for services that have not trans e to our next-generation API keys when possi	itioned to the next-generation API keys. However, we ble.
NGC CLI		
\$ ngc config set		ĺ
Docker⊠		
For the username, enter '\$oauth	token' exactly as shown. It is a special authe	ntication key for all users.
\$ docker login nvcr.io		ĺ
Username: \$pauthtoken		
Password: <your key=""></your>		
		년 Read M

5. In the Generate Personal Key dialog, fill in the required information for your key.

Generate Personal Key	×
Your Personal API Key authenticates your use of the selected services associated with your account within only this organization when using a CLI or Rest API.	
Key Name *	
My Personal API Key	
This key authenticates services only within the NVIDIA organization	
Expiration *	
12 months	~
Services Included *	
Private Registry ×	~
These services are based on your access within this organization	
Cancel Generate Personal K	(ey

- Key Name: Enter a unique name for your key.
- Expiration: Choose the expiration date for the key.

12 months	
6 months	
3 months	
30 days	
14 days	
7 days	
24 hours	
12 hours	
1 hour	
Never Expire	
Custom Time	
12 months	~

- Services Included: Choose from the available services the key is permitted to access. Refer to <u>Assigning Services to Your Personal API Key</u> to learn more about each service and when to assign service access to your Personal Key.
- 6. Click Generate Personal Key when finished.

Your API key appears in the following dialog.

7. NGC does not save your key, so store it securely. You can copy your API Key to the clipboard by selecting Copy Personal Key or using the copy icon to the right of the API key.

Generate Persona	al Key	×
The following Personal AF for use with this organiza be displayed.	PI Key has been successfully gene tion. This is the only time your ke	rated y will
\$ nvapi-j2W_n pgoHCrd8uFF	-	
\$ nvapi-j2w_nt pgoHCrd8uFF Keep your Personal Key a place where others can se	secret. Do not share it or store it se or copy it.	in a

You can generate up to eight personal keys and manage them from the Setup > Personal Keys dashboard. To activate or deactivate a key, click the Active toggle. The Actions (ellipsis) menu allows you to rotate or delete a personal key.

howing 1 - 2 of 2 🔅						
Key ID		Key Name	Expiration	Key Value	Active	Actions
		My Personal API Key	03/14/2025	nvapi-stg-*********HT2		:
_		My Second Personal Key	03/14/2025	nvapi-stg-*********cTr		÷
						Rotate Personal
isplay 25 v results per pa	ige					🖉 Update Authoriz
						🖞 Delete Personal

8.2.1.1. Assigning Services to Your Personal API Key

The services you can assign to a personal API key depend on two factors:

- > The services enabled for the NGC org where you generate the API key.
- > The service roles assigned to you by your NGC org owner or administrator.

For example, consider an NGC org with the following services enabled:

≡	INVIDIA Organization	Ý					
ш	Dashboard	Organization >	Subscriptions				
8	Audit	Subscriptions	5				
÷	Organization Profile		NVIDIA Mic	roservices			
×	Teams		Status	Term Date	Auto Renewal No	Type Not for resale	
á	Usage						
2	Users		Private Reg	istry			
	Activate Subscription		Status O Active	Term Date	Auto Renewal No	Type Not for resale	
Ŷ	Subscriptions		NVIDIA ALE	Interprise for	VMware Private A	Al Foundation	
¢	Service Keys		Status	Term Date	Auto Renewal	Туре	
١	External IdP		Active		No	Not for resale	
		⊘₽⊘	Cloud Func	tions			
			Status	Term Date	Auto Renewal	Туре	
		~_~	Active		No	Not for resale	
			NVIDIA AI E	Enterprise Ess	entials		
			Status	Term Date	Auto Renewal	Туре	
		$\checkmark \checkmark$	Active		No	Not for resale	

An NGC user account might have the following access roles assigned:



In this scenario, the NGC org has enabled NVIDIA Microservices, Private Registry, NVIDIA AI Enterprise, and Cloud Functions (NVCF). The user account has been granted access roles for all these services. Therefore, a personal API key can be generated with permissions to access one or all of them.

Your Personal API	Key authenticates your use of the selected
services associate	d with your account within only this
organization when	i using a CLI of Rest API.
Key Name *	
My personal API	key for all services
This key authenticate	es services only within the NV-Developer organization
This key authenticate	es services only within the NV-Developer organization
This key authenticate Expiration • 12 months	es services only within the NV-Developer organization
This key authenticate Expiration * 12 months	is services only within the NV-Developer organization
This key authenticate Expiration * 12 months Services Included *	is services only within the NV-Developer organization
This key authenticate Expiration * 12 months Services Included * Secrets Manager 2	s services only within the NV-Developer organization x NGC Catalog X Public API Endpoints X
This key authenticate Expiration * 12 months Services Included * Secrets Manager 3 Cloud Functions ×	s services only within the NV-Developer organization x [NGC Catalog ×] [Public API Endpoints ×] × ~ [Private Registry ×] [

If a service is unavailable for assignment to the API key, it indicates that the org owner or administrator has not granted the user the necessary role for that service.

For details about each service listed above and its function, see the table <u>Supported</u> <u>NGC Applications and API Key Types</u>.

8.2.1.2. Generating a Legacy NGC API Key

To generate a legacy API key, go to Setup > API Keys and click + Generate Legacy Key in the Legacy Keys drop-down.

Setup > API Keys API Keys	+ Generative rsonal Key
NGC CLI	
\$ ngc config set	۵
Docker: For the username, enter ' \$oauthtoken ' exactly as shown. It is a special authentication key for all users.	
\$ docker login nvcr.io	۵
Username: Soauthtoken Password: <your key=""></your>	
	☑ Read More
	~
Use the legacy NGC API Key to authenticate with Base Command Platform, Fleet Command, or other NGC services not supporting authentication using the personal key. For cross-org authorization, continue using the legacy NGC API Key.	+ Generate Legacy Key

In the Generate Legacy Key dialog, click on + Generate Legacy Key.



8.2.2. Generating a Service API Key

1. Sign in to the NGC website.

From a browser, go to <u>https://ngc.nvidia.com/signin</u> and then enter your email and password.

2. Select Organization from the user account menu on the upper right.



Select Service Keys on the organization dashboard.

= 🧆 NVIDIA. Organizatio	on ~			⑦ S nvidia
🕏 Dashboard	Organization > Dashboard			
S Audit	Welcome to nvidia, (ζ.		
Organization Profile				
🕏 Teams	\$ 0 0 0 0 0 0 0 0 0 0 0 0 0		29	R
📚 Usage				
🕏 Users	External IdP Manage NGC user roles using	Organization Profile Basic company information	Teams Add, remove, rename or edit	Users Add, remove, rename or edit
External IdP	IdP claims to set up rules		teams	roles
	Usage Monitor organization product usage	User Activity View user activity across products	Service Keys Add and manage Service API Keys	

3. On the Organization > Service Keys page, click + Create Service Key button to create a key.

= 🧆 NVIDIA. Organizat	on ~	⑦ S nvidia
Dashboard	Organization > Service Keys	
Audit	Service Keys	+ Create Service Key
Organization Profile		
🕏 Teams		
📚 Usage		
📚 Users	¢.	
📚 External IdP	No Service Keys Configured	
	+ Create Service Key	

4. In the Create Service Key dialog, fill in the required configuration. Service keys currently support services such as NVIDIA NIM, NGC Catalog, and Private Registry. Assign scopes and resource permissions to the key.

= 🐼 NVIDIA. Organiza	tion ~						0 6	nvidia	,
Dashboard	Organization >	Service Keys						+ Create	Service Key
🏶 Audit	Service Keys								
Organization Profile	_						Sho	wing 1 - 2 of 2	ø
Teams	ID		NAME		EXPIRATION	DATE CREATED	4	ACTIVE	_
🕏 Usage	b		test-private-registry		07/23/2025 10:56 AM	07/23/2024 11:08 AM	•		
🕏 Users	e9dS	Create Service Key				:4 11:10 AM			
External IdP	Display	A Service Key authenticates use of NGC	services for a NVIDIA Clou	d Account when using a CL	l or API.			< 1 of 1	
		Name *		Expiration *					
		test-catalog		12 months		~			
		Service *	0	Scope *		•			
		NGC Catalog	~	Select one or more scop	bes 🗸	· [+]			
		Entity Type *	0	Entity Value *	•				
		Select entry type	Ý	Select entity value	V +				
					Cancel Ne:	xt Step			

In the Entity Type field, select from the available options to grant to the API key.

🗏 💿 NVIDIA. Organizat	ion ~					(⑦ S nvidia	
Dashboard	Organization > \$	Service Keys						
Audit	Service Keys						+ Crea	ate Service Key
Organization Profile							Showing 1 - 2 o	f2 🛞
🕏 Teams	ID		NAME		EXPIRATION	DATE CREATED	ACTIVE	
🕏 Usage	1	3	test-private-registry		07/23/2025 10:56 AM	07/23/2024 11:08 AM		
🕏 Users	e9d\$	Create Carvina Kay				4 11:10 AM		
External IdP	Display	A Service Key authenticates use of NGC	services for a NVIDIA Cloud	Account when using a CL	l or API.		≪ < 1	of 1 > ≫
		Name * test-catalog		Expiration *				
		-						
		Service *	0	Scope *		•		
		NGC Catalog	×	Select one or more scop	bes	→ L+		
		Select entity type	• ~	Select entity value		+		
		All Entity All Containers All Models			Cancel N	ext Step		
		All Helm Charts						
		All Resources						
		Specific Container						
		Specific Helm Chart						
		Specific Resource						

In the Scope field, choose from the available options.

= 💿 NVIDIA. Organiza	ation ~						0	S nvidia	
Dashboard	Organization >	Service Keys						_	
🏶 Audit	Service Keys							+ Creat	e Service Key
Organization Profile								Showing 1 - 2 of	2 💮
📚 Teams	ID		NAME		EXPIRATION	DATE CREATE	D	ACTIVE	
🕏 Usage	k		test-private-registry		07/23/2025 10:56 AM	07/23/2024	11:08 AM		
🕏 Users	e9dS	Create Saniaa Kay				~ :4	11:10 AM		
External IdP	Display	A Service Key authenticates use of NGC	services for a NVIDIA Clou	d Account when using a CL	l or API.			« < 1	of1 > ≫
		Name *		Expiration *					
		test-catalog		12 months		~			
						_			
		Service *	0	Scope *					
		NGC Catalog		Select one or more scop	pes	<u> </u>			
		All Entity		All Scopes					
				Get Container					
				List Containers		Step			
				Get Artifact					
				List Artifacts					
				Download Artifact					
				Get Artifact Deployme	ent				

5. Click Next Step to review your key configuration.

= 💿 NVIDIA, Organizat	ion ~ C	nvidia
Dashboard	Organization > Service Keys	_
Audit	Service Keys	+ Create Service Key
Organization Profile		Showing 1 - 2 of 2 💮
Teams	ID NAME EXPIRATION DATE CREATED	ACTIVE
🕏 Usage	test-private-registry 07/23/2025 10:56 AM 07/23/2024 11:08 AM	
🕏 Users	e9ds Create Service Key	
📚 External IdP	Display A Service Key authenticates use of NGC services for a NVIDIA Cloud Account when using a CLI or API.	\ll < 1 of 1 > »
	Name * Expiration *	
	test-catalog 12 months v	
	Service * ● Scope * ● NGC Catalog ∨ All Scopes × ∨ +	
	Entity Type * O Entity Value * O All Entity * All Entity * All Entity * Î Î	
	Cancel Next Step	

6. Once you verified the configuration, click Confirm to generate your service key. Your service key appears in the next dialog.

= 💿 NVIDIA. Organizat	ion ~			0	s nvidia
Dashboard	Organization > :				
Audit	Service Keys				+ Create Service Key
Organization Profile					Showing 1 - 2 of 2 💮
🕏 Teams	D	NAME	EXPIRATION DATE	CREATED	ACTIVE
📚 Usage	b6f6	Create Service Key	×	:4 11:08 AM	
📚 Users	e9d9	Selecting "Confirm" will generate a new Service Key based on the following conditions:		:4 11:10 AM	
External IdP	Display	Name			\ll < 1 of 1 > »
		test-catalog			
		Expiration 07/23/2025			
		NGC Catalog			
		Scope (All Scopes)			
		Resources All Entity: All Entity			
		Edit Configuration	Cancel Confirm		
		Lair configuration	Cancel		

7. NGC does not save your key, so store it securely. You can copy your API Key to the clipboard by clicking the copy icon to the right of the API key or the Copy Service Key button.

= 💿 NVIDIA. Organizat	ion ~					⑦ S nvidia	`
 Dashboard Audit 	Organization > Service Keys	Service Keys				+ Creat	e Service Key
Organization Profile						Showing 1 - 3 of	3 💮
🕏 Teams	ID		NAME	EXPIRATION	DATE CREATED	ACTIVE	
🕏 Usage	2	C	test-catalog	07/23/2025 10:56 AM	07/23/2024 11:23 AM		
🕏 Users	b6f6				:4 11:08 AM		
📚 External IdP	e9d9	Create Service Key			× :4 11:10 AM		
	Display	The following Service Key has been succ D 2 6 6 7 7 8 7 7 8 7 7 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7	essfully generated. This is the only time your Servic Name test-catalog	e Key will be displayed. Expiration 07/23/2025	ice Key	« < 1.	(1> ≫

Make sure to copy the key value before leaving this page. Once you navigate away, the key value cannot be retrieved, and replacing it will require generating a new key.

NGC supports multiple Service API keys, which are managed from the Organization > Service Keys dashboard.

To activate or deactivate a key, click the Active toggle. The Actions (ellipsis) menu allows you to rotate or delete a service key.

*	Dashboard	Organization > Service Keys Service Keys	+ CI	reate Service Key	
	Organization Profile			Shou	ving 1, 2 of 2 in
*	organization Frome			500	ving 1 - 3 of 3 🔅
۲	Teams	ID NAME	EXPIRATION	DATE CREATED	ACTIVE
۲	Usage	223c. JOB test-catalog	07/23/2025 10:56 AM	07/23/2024 11:23 AM	•••
۲	Users	b6f£c4! test-private-r	egistry 07/23/2025 10:56 AM	07/23/2024 11:08 AM	•••
۲	External IdP	e9c la6 test-public-ca	atalog 07/23/2025 10:56 AM	07/23/2024 11:10 AM	•••

Note: When managing containers, ensure the scopes Get Container and Get Container list are assigned to your service key. For other types of artifacts, add the Get Artifact and Get Artifact list scopes. These scopes are the minimum required to discover the artifacts that need to be managed. Refer to the <u>NGC Catalog User Guide</u> and <u>Private</u> <u>Registry User Guide</u> for more information.

Chapter 9. Notification Services

The NGC Notification Services feature enables NGC users to subscribe to email notifications to receive service change events. By subscribing to notifications, users can stay updated with the latest changes and developments in the NGC cloud platform and its services.

NGC customers can be informed of the following types of changes:

- Customer-impacting service enhancements (release notes)
- Security vulnerabilities (CVEs) and scanning reports
- Software end-of-life announcements
- Scheduled web portal maintenance to an NGC property

NGC customers can subscribe to notifications in the following ways:

 During their first sign-in, the NGC portal will pop up a modal allowing users to set their notifications preferences.

Services Email Preferences are available from Account Settings under your user ID account menu	
end me information regarding security, announcements and maintenance for all of my services	
Private Registry	^
ecurity ecurity vulnerabilities	
Maintenance Vanned maintenance events	
Innouncement lew s/w version release notes, API end of service, NGC CLI updates and end of service	
Organization	^
ecurity ecurity vulnerabilities	
Aaintenance Planned maintenance events	
Innouncement lew s/w version release notes, API end of service, NGC CLI updates and end of service	
IVIDIA AI Enterprise Essentials	^
ecurity ecurity vulnerabilities	
Maintenance Vanned maintenance events	
Innouncement lew s/w version release notes, API end of service, NGC CLI updates and end of service	
_	

The following sample toast notification confirms the user's email preference settings:

0	Email preferences has been updated for 3 services: Private Registry Organization NVIDIA AI Enterprise Essentials	×
	View Account Settings	

 After their initial sign-in, users can edit their notification preferences under their NGC user account settings page.

My Account	
Profile & Preferences	
Name Email	
Last Lonin	
06/24/2024 04:50 PM	
Services Email Preferences	
Send me information regarding security, announcements and maintenance for all of my services	
Private Registry	^
Security Security vulnerabilities	
Announcement New s/w version release notes. API end of service. NGC CLL updates and end of service.	
Maintenance Planned maintenance events	
Organization	^
Security Security vulnerabilities	
Maintenance Planned maintenance events	
Announcement New s/w version release notes, API end of service, NGC CLI updates and end of service	
NVIDIA AI Enterprise Essentials	^
Security Security vulnerabilities	
Maintenance Planned maintenance events	
Announcement New s/w version release notes, API end of service, NGC CLI updates and end of service	

Notification preferences are organized based on the subscriptions enabled within the organization. Access to these preferences will be gated by the service roles assigned to each user.

Chapter 10. Appendix

NVIDIA NGC Network Protocols

NVIDIA NGC Network Protocols

The table below lists the required network protocols and port configurations for communication with NVIDIA NGC services.

To enable access, ensure that these ports are open in your web proxy, which connects your network to external services.

Location	Description	URL	Port
NGC	Authentication URL	https://authn.nvidia.com	443
NGC	Container Registry URL	https://nvcr.io	443
NGC	Container Registry URL	https://layers.nvcr.io	443
NGC	Helm Chart Registry URL	https://helm.ngc.nvidia.com	443
NGC	API URL	https://api.ngc.nvidia.com	443
NGC	Telemetry URL	https://prod.otel.kaizen.nvidia.com	8282
NGC	Catalog	https://files.ngc.nvidia.com	443
NGC	Catalog	https://xfiles.ngc.nvidia.com	443
NGC	Catalog	https://xlfiles.ngc.nvidia.com	443





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