

NGC User Guide

Application Note

DA-08792-001_v13 | December 2024

Table of Contents

Chapter 1. What is NVIDIA NGC?	1
Chapter 2. Why NGC Software	2
Chapter 3. NGC Organizations and Teams	3
3.1. NVIDIA Cloud Accounts and NGC	3
3.2. NGC Teams	
3.3. NGC Org Owner and Other Org Users	
3.3.1. Adding NGC Users to an Org	
3.3.2. Updating User Roles	
3.3.3. Securing the Owner Account with Multi-Factor Authentication	
3.3.4. Contacting your Org Owner	
3.4. User Accepting an NGC Org Invitation	21
Chapter 4. Accessing NGC Org	23
4.1. Signing Up for an NVIDIA Cloud Account and Activating an Individual NGC Org	
4.1.1. Setting up your NCA Account	
4.1.2. Setting Up NCA Recovery Email	
4.2. Accessing an NGC Subscription from an NGC Welcome Email	
4.2.1. NGC Subscription - New User	
4.2.2. NGC Subscription - Existing NGC User	
4.3. Accessing NGC from an NCA Invitation Email	
Chapter 5. Accessing NGC from an NVIDIA Commercial Entitlement	53
Chapter 6. Using an External SSO for NGC Org Authentication	60
6.1. Federating IdP with NVIDIA Cloud Services	60
6.2. Authenticating and Managing User Access	
6.3. NGC IdP Membership Rules	70
Chapter 7. Activating Your Subscription (Offer Dependent)	80
Chapter 8. Switching Orgs or Team After Logging into NGC	84
Chapter 9. NGC API Keys	85
9.1. Generating a Personal API Key	86
9.1.1. Assigning Services to Your Personal API Key	91
9.2. Generating a Service API Key	
9.3. Generating NGC API Keys	100
Chapter 10. Notification Services	102

Chapter 1. What is NVIDIA NGC?

NVIDIA NGCTM is a cloud platform providing fully managed services, including <u>NVIDIA AI</u> <u>Enterprise</u>, <u>DGX Cloud</u>, and <u>Riva Studio</u> for Natural Language Understanding (NLU) and speech AI solutions. AI practitioners can leverage <u>NVIDIA DGX Cloud</u> for model training, <u>NVIDIA AI Enterprise</u> to obtain the latest NVIDIA NIMTM models, and the <u>NGC Private</u> <u>Registry</u> for securely sharing proprietary AI software. NGC also hosts a <u>catalog</u> of GPUoptimized 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 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) 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) 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 message's recipient then follows the entitlement steps to be granted an NVIDIA Cloud Account and gain access to their NGC service.

3) The account owner adds a user to an NCA account, then 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 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 NVAIE or 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) is required to manage user access within NGC. It is fully integrated with NGC, allowing user management to be handled within the NGC environment. This integration automates the process of adding users to the NCA account directly from the NGC Add User pane, eliminating the need for the NGC owner or administrator to navigate to the NCA UI separately.

Step 1: Add User to NVIDIA Cloud Account	
Users need an NVIDIA Cloud Account (NCA) to access NGC. To invite	a new 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
	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	

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, NVAIE or DGX Cloud).

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

- 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.

NCA provides a convenient and scalable way to set up and manage access to NVIDIA cloud services for various users within your company.

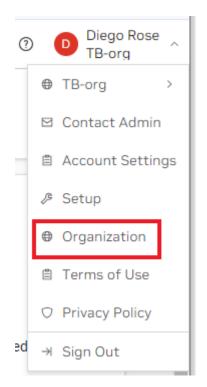


3.2. NGC Teams

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 . Organization	~			⑦ Diego Rose TB-org
	Dashboard	Organization > Dashboard			
8	Audit	Welcome to TB-org, Die	go Rose		
ф	Organization Profile				
\mathbb{R}	Teams			යිය	R
á	Usage				
2	Users	External IdP Manage NGC user	Organization Profile	Teams Add, remove, rename	Users Add, remove, rename
١	External IdP	roles using IdP claims to set up rules	Basic company information	or edit teams	or edit roles
		-\/-			
		Usage	User Activity		
		Monitor organization product usage	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.

	Dashboard	Organization > Profile	
B	Audit	TB-org	
4	Organization Profile	_	Basic Information
33	Teams	Ľ.	Change Organization Details
át	Usage		Display Name (Customer Name) TB-org
2	Users	Name	Description
	External IdP	xvy2tenvwbmg Display Name TB-org	Test Org
		Type ENTERPRISE	
		Description Test Org	
		Owner Diego Rose	
		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.

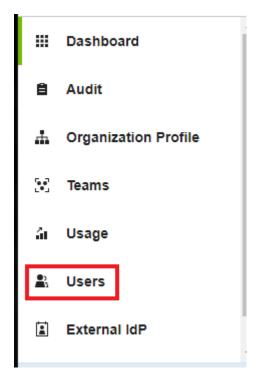
3.3.1. Adding NGC Users to an Org

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.

Select Your NVIDIA Cloud A	
Organizations within NVIDIA GPU Clor registries and resources with colleagu	,
Select One	
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.



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 🕂 to	01 486912258572994
Organization > Users	Users						+ Add User
Confirmed Use	rs Pending Invitations						
≂ Click filterin	ng icon to filter						
ŝ							
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	:
Show 25 v It	tems		<	1 >			Go to 1 of 1

- 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.

Cance
please provide their email address and assign a role.
NVIDIA Cloud Account Role *
Administrator
Assign the NCA Administrator role to enable the user to invite others.
Invitation Expiry
24 hours
Choose an expiration period for the invitation. The user must accept the invitation before it expires.

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.

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.

Organization \rightarrow Users \rightarrow	Update User		
Update User			Cancel
Add User and Send Invit	ation		
Step 2: Assign Per	missions to New U	ser	
Roles			Add Role
Please select a context for	role assignment.		
Organization (0486912	258572994)		
O 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.

Step 2: Assign Permissions to New User

 Assign a "role" under each NGC application, depending on the level of access to grant the user.

Roles			Add F
Please select a context f	for role assignment.		
Organization (04869)	12258572994)		
🔿 Team			
VVIDIA AI Enterprise	Private Registry	Organization	
Viewer	Admin	Owner	
	User	User Admin	
	Read		

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 cloud services user roles, refer to the links below.

- Base Command roles
- Fleet Command roles
- Private Registry roles
- NVIDIA AI Enterprise Viewer Role
- 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 Assigning Services to Your Personal API Key. To update user roles, go to Updating User Roles.

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.

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.

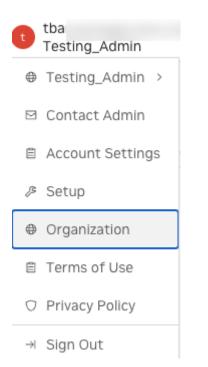
NAME	7	ORG ROLES	EMAIL	7	LAST ACTIVITY	FIRST LOGIN DATE	DATE INVITED	SIGN IN USED	
		Base Command Admi			01/08/2024	03/06/2023	03/06/2023	SSO	*
		Base Command Admi			01/08/2024	09/20/2023	09/20/2023	Remove User	

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, Organizat	tion ~			() tbar Testing_Admin
III Dashboard	Organization > Dashboard			
â Audit	Welcome to Testing_Admin, the	ba i j		
🚠 Organization Profile				
🐏 Teams			23	L
ដា 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
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 > Us	rganization > Users							
Users							+ Ade	
Confirmed Users	Pending Invitations							
₹ Email: s	×							
Ô								
Name	Org Roles	Email	Last Activity	First Login Da	Date Invited	Sign In Used	Ac	
יייאנ.	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.

Organization > Users > tba tt	Edit Membership
Email tt Roles ORG OWNER REGISTRY ADMIN USER ADMIN Date Created 04/05/2022 03:51 PM Last Login 11/	Teams Personal Keys

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

Hello, Please join this acc	ount Thanks	6 hours	· · · · · · · · · · · · · · · · · · ·
	I message to be sent to the invited user.		the invitation. The user must accept the invitation befo
Add User and Send Invita	ition		
Step 2: Assign Perr	nissions to New User		
Roles			Add Role
Please select a context for r	ole assignment.		
Please select a context for r Organization (s6jzvcl32e Team			
Organization (s6jzvcl32e Team	bb8)	Organization	NVIDIA AI Enterprise Essentials
Organization (s6jzvcl32e Team	bb8)	Organization	NVIDIA AI Enterprise Essentials
Organization (s6jzvcl32e Team Private Registry	Fleet Command		

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.

ORG NAME	ТЕАМ NAME 🛇		
s6jzvcl32eb8	testteam_1	Registry Admin	×
s6jzvcl32eb8	testteam_1	User Admin	\times
s6jzvcl32eb8	fc_group1	Registry Admin	\times
s6jzvcl32eb8	fc_group1	User Admin	\times
Display 25 V results per page			$\ll < \fbox{1} of 1 > \gg$

Afterwards, you'll see a confirmation dialog.

3.3.3. 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.

ල 😑 nvidia.com/e	en-us/accou	nt/edit-profile/			
Account	Profile	Preferences	Redeem	GeForce NOW	
Security Change your passv	vord, see de	vices using your ac	count, or cha	nge other security settings Logout	Update

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

<mark>©</mark> Г	NIDIA.				
Ac	count	Profile	Preferences	Redeem	GeForce NOW
	Multi-fa When will I be a		ecurity	Eve	ery time I sign in
	Factor auto se	lect policy		Aut	comatically select last used factor
	Authenticator	App Code		Us	e the authenticator app to genereate single use
	Hardware Secu	irity 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.

3.3.4. 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.

Jane Smith ^
⊕ mm-test-nfr >
🖾 Contact Admin
Account Settings
∥ Setup
Organization
Terms of Use
○ Privacy Policy
→ Sign Out

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

Contact Admin	\times
Send an email to this Organization's Owner. Replies will be sent to your registered email address. All emails wil logged.	ll be
Organization demo	
Select Message Template	
	~
Product Request	
Team Access Request	
Cancel Se	nd

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.

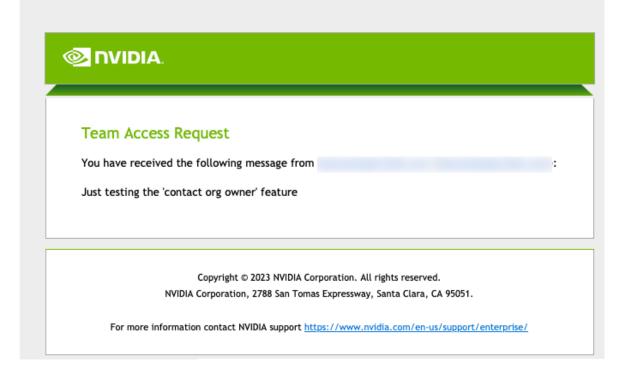
Both templates come with pre-populated message content, but you can edit or delete portions of the message to create a customized message to send to your organization owner.

Contact Admin	\times
Send an email to this Organization's Owner. Replies will be sent to your registered email address. All emails w logged.	ill be
Organization demo	
Select Message Template Team Access Request	V
Message	
I'd like to request access to [team-name] in demo org.	
Cancel	end

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:

From: noreply-ngc@nvidia.com <noreply-ngc@nvidia.com> Date: Tuesday, October 3, 2023 at 10:43 AM To: | Subject: Team Access Request



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

3.4. User Accepting an NGC Org Invitation

A user added will receive an NCA invite email requesting the user to join the NCA account to access NGC.

NVIDIA Cloud Account Portal

You have been invited to join account MyNVAIEsub as admin.

Message from the account administrator:

Hello F Please join this account to help manage users and resources to NVIDIA app. Thanks.

Please login to accept or reject this invitation.

LOGIN	
	Privacy Po
	Copyri

After clicking the Login link in the email message, the user is automatically redirected to their appropriate sign-in method. Suppose this is the user's first time signing into NVIDIA Cloud Accounts. In that case, they will be automatically prompted to create a new NVIDIA identity account using their email address or can select More Signup Options in the NVIDIA identity account creation portal to sign in using an existing social platform user account (e.g., Google, Facebook, Apple, or Discord).

Users who have an existing NVIDIA identity account are automatically prompted for their password to sign in and access NVIDIA NCA. Users ready to accept an invitation to access their NGC org go here. Users whose company has federated their NGC org to an external SSO identity provider are automatically redirected to their SSO portal to provide authentication credentials to sign in. To learn more about bringing your own SSO/IdP provider, see <u>Using an External SSO for NGC Org Authentication</u>.

Important: For a successful user onboarding experience, customers should add the following NVIDIA email addresses to their allow-list in their firewall rules: 'noreply-ngc@nvidia.com', 'account@tmail.nvidia.com', noreply-cloud-accounts@nvidia.com, and 'account@nvidia.com'.

Chapter 4. Accessing NGC Org

The following are ways to access an NGC org.

NCA/NGC owner

A user must create a new NVIDIA identity account, an NVIDIA cloud account, and register a new NGC individual org against it. Alternatively, the user receives an NCA welcome email and is invited to accept and sign in as the org owner of a new enterprise org.

Org user

The org owner, or an org user admin, adds a new user to the org (or team) and sends an NGC welcome email inviting the user to sign in.

Subscription

To access subscription-based software, users must provide Business Address details and a token (serial number, activation code, and so on.). Note that this category also requires Authenticated Access.

4.1. Signing Up for an NVIDIA Cloud Account and Activating an Individual NGC Org

This section describes the steps to sign up for an NCA account and activate an individual NGC org.

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



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

<u>Login Help</u>

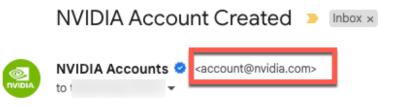
2. In this step you will create your NVIDIA sign-in identity using NVIDIA's default IdP. At the Create your Account screen, create a password, make sure to review the NVIDIA Account Terms of Use and Privacy Policy, and click Create Account to accept and proceed with account creation. You will receive an email to verify your email address.

Cre	ate Your Account	
Email		
Password		
Enter your passwo	rd	
Confirm password		
Enter your passwo	rd	
Stay logged in	Log In With Security	y Device >
By proceeding, I agr	ee to the <u>NVIDIA Account Terms Of</u> <u>Privacy Policy</u> Create Account More Signup Options	[:] <u>Use</u> and

A verification email is sent to your email address.

Verify Your Email
An email has been sent to, please, please, click the link in the email to continue.
Cancel
Change Email →

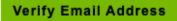
3. Open the NVIDIA account creation email and click Verify Email Address.





Hello,

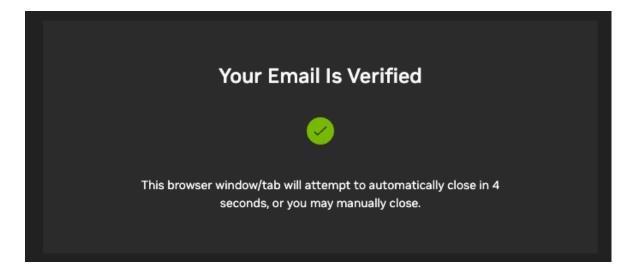
We are almost done creating your NVIDIA account. Click the link below to verify this email address.



If you did not register for an NVIDIA Account, someone may have registered with your information by mistake. Contact NVIDIA customer care for further assistance.

Manage Preferences | Contact Us | Privacy Center © 2024 NVIDIA Corporation. All rights reserved. NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, CA 95051.

You are automatically directed to nvidia.com and see an email verified successfully page. This window will close automatically



4. At the Almost done! dialog, set your communications preferences, and then 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.
Bei	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.nvidia.com
	Submit Submit

5. Enter the password you just created to continue setting up your NVIDIA Cloud Account. (This is a required security measure).

Your NVIDIA Account
Sign in to the client
tb
Password
Enter your password
Stay logged in
Log In
More Login Options >
By proceeding, I agree to the <u>NVIDIA Account Terms Of Use</u> and <u>Privacy Policy</u>
Login Help >

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



Create a NVIDIA Cloud Account

You need a cloud account to use NVIDIA Services. Provide your cloud account name to start the setting up process.

Provide a Cloud Account Name

Choose a distinctive name for your cloud account to easily identify it in the future.

Account Name*

Enter Cloud Account Name

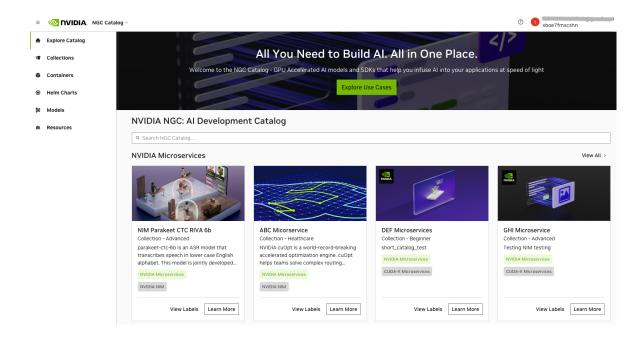
Create NVIDIA Cloud Account

Learn more about NVIDIA Cloud Accounts

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	~

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



Your access to NVIDIA NGC org is completed, you can choose to complete the setup of your NVIDIA Cloud Account now, or at a later time.

4.1.1. 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.

Welcome to NVIDIA Cloud Accounts! > Inbox ×
NVIDIA Cloud Account Dear , You've taken the first step by creating your NVIDIA Cloud Account.
To continue using this NVIDIA Cloud Account (Account Name: MyfirstNCA , Account Number: 0461357615843481), please complete your setup. Simply click the button below to log in: Log In Now
Privacy Policy Legal Info Contact Us Copyright © 2024 NVIDIA Corporation

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

Login		
Email address *		
tł		
	Continue	
By proceeding Lagray	e to the <u>NVIDIA's Privacy Policy</u>	

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

Your NVIDIA Account
Sign in to the client
tt
Password
Enter your password
Log In
More Login Options >
By proceeding, I agree to the NVIDIA Account Terms Of Use and Privacy Policy
Login Help >

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.

4.1.2. 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.

🥺 NVIDIA. Cloud Account			0 t
☆ Accounts Home ~ ๕: Account Management ~	Account Management > Details MyfirstNCA		Deactivate Account
	Account Details		₽ Edit
	Account Name MyfirstNCA	Account Number 0461357615843481	
	Description	Status	
	Account Owner's Email to	Recovery Email (Recommended) Not Setup: Secure your account by adding a recovery email.	
	Account Contact		✓Edit
	First Name	Last Name	
	Orgnization Name 		
	Email Address tb	Phone Number	
	Address Line 1	Address Line 2	
	City 	State	
	Zip Code 	Country 	
	Billing Contact		✓Edit
	First Name	Last Name	
	Orgnization 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 account		

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

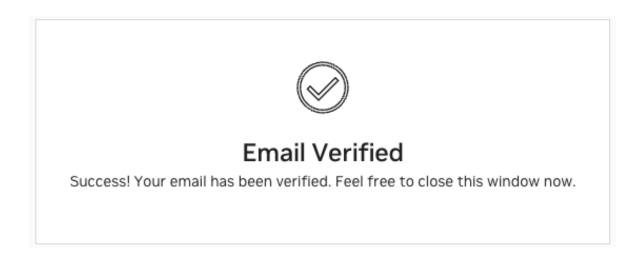
Account Details	
Account Name MyfirstNCA	Account Number 0461357615843481
Description My NVIDIA recovery email account	Status
Account Owner's Email	Recovery Email (Recommended) Pending verification for: abanuelos@ngcprodmgt.com. We sent an email to verify this recovery email address.

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

Ν	norep To: To	ply-cloud-accounts@nvidia.com c	
		NVIDIA Cloud Account Verify your recovery email for your NVIDIA Cloud Account. To verify your email address please click on the link below	
		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

4.2. Accessing an NGC Subscription from an NGC Welcome Email

When you are approved for an "early access" program for NVIDIA AI software delivered on NGC, you will receive a welcome email where you start your onboarding journey to access the software. To access NGC, you will need an 'NVIDIA Cloud Account' to manage access to NGC for you and additional users. Below are the steps to use your welcome email.

Go to your email inbox you used to apply for the early access program to find the email "Welcome to NVIDIA NGC". Click the Accept invitation and sign-in button.

Welcome to NVIDIA NGC > Inbox ×		
noreply-ngc@nvidia.com 🔮		
Dear , Welcome to NVIDIA NGC!		
NGC is NVIDIA's cloud platform where you can access your software subscriptions, including NVIDIA AI Enterprise, CuOpt, NeMoLLM, BaseCommand, and more!		
To access NGC, you will need an NVIDIA Cloud Account. Please click the link below to begin your onboarding journey and gain access to NVIDIA NGC.		
ACCEPT INVITATION AND SIGN IN		
Copyright © 2024 NVIDIA Corporation. All rights reserved.		
NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, CA 95051. <u>NVES link</u> <u>User Guide link</u>		

If you are an existing NVIDIA user, go directly to <u>NGC Subscription - Existing NGC</u> <u>User</u>.

4.2.1. NGC Subscription - New User

This section describes signing in if you are new to NVIDIA. New users are automatically prompted to create a new NVIDIA account.

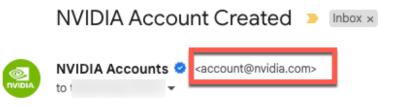
 If you are new to NVIDIA, follow the steps below to create your NVIDIA sign-in identity account, make sure to review the NVIDIA account Terms of Use and Privacy Policy, and click Create Account to accept and proceed with your identity account creation.

Create	Your Account		
Email			
Password			
Enter your password			
Confirm password			
Enter your password			
Stay logged in	Log In With Se	ecurity Device >	
By proceeding, I agree to	the NVIDIA Account Tern Privacy Policy	ns Of Use and	
c	eate Account		
Mor	Signup Options		

A verification email is sent to your email address.

Verify Your Email
An email has been sent to, please, click the link in the email to continue.
Cancel
Change Email →

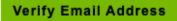
2. Open the email and click Verify Email Address.





Hello,

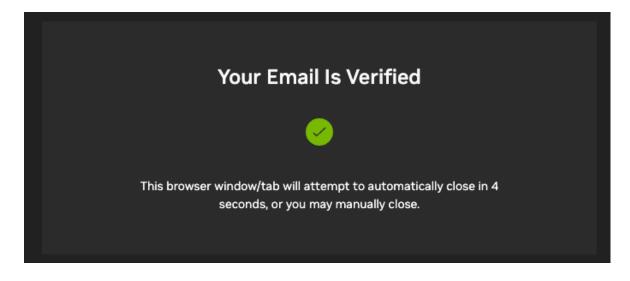
We are almost done creating your NVIDIA account. Click the link below to verify this email address.



If you did not register for an NVIDIA Account, someone may have registered with your information by mistake. Contact NVIDIA customer care for further assistance.

Manage Preferences | Contact Us | Privacy Center © 2024 NVIDIA Corporation. All rights reserved. NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, CA 95051.

You are automatically directed to nvidia.com and see an Email verified successfully page.



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

Almost done!			
Please confirm the information below to complete the registration			
Recommendation 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.nvidia.com			
Submit			

4.2.2. NGC Subscription - Existing NGC User

This section describes signing in if you already have an NVIDIA account.

After successfully signing into your NVIDIA identity account, you will need to choose between the following:

An existing NCA account you own, or

 Creating a new NCA account to generate a separate NGC org to claim the subscription.

Select your NVIDIA Clou	d Account
MyNCA-VDR (0474895331875198) Owner	
ExternalIDP (0462258828931128)	
nvaie-stage (0436885730436677)	
kdtwnxodl0ql (0278214794327184) Owner	
i1dyqpfbrhvo (0278149351511184)	۲
xvy2tenvwbmg	
Continue	
Create New NVIDIA Cloud	Account
wner indicates that you are the owner of the a	ccount

Note: You must be an 'owner' of an existing account to activate a new subscription against it.

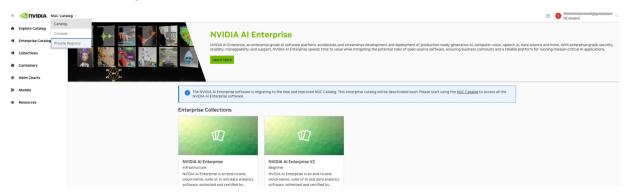
If this is your first NCA account or you chose to create a new account for your subscription, you are prompted to name your account with a meaningful name that will help you identify it easily the next time you sign-in.

Cr	eate your NVIDIA Cloud Account
Start by giving you your account in the	r cloud account a unique name. This name will help you identify e future.
Name *	
My2ndNCA	
	Create NVIDIA Cloud Account

Accept the "Terms of Use" and "Privacy Policy."

🐼 NGC	
Terms of Use	
Please review and accept the following Terms of Us	e
I agree to the <u>NVIDIA Privacy Policy</u>	
I agree to the <u>NVIDIA GPU Cloud Terms of Us</u>	<u>e</u>
	Agree

Your NVIDIA Cloud Account is created, and you are automatically redirected to your enterprise NGC org.



Your access to NVIDIA NGC org is now complete. You can choose to complete the setup of your NVIDIA Cloud Account now, or at a later time.

Follow the steps in <u>Setting up your NCA Account</u> to finish setting up your NCA account. You will need to access your NCA account to add users to your enterprise NGC org.

4.3. Accessing NGC from an NCA Invitation Email

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.

	You've been invited to an NVIDIA Cloud Acco	ount 🤰 Inbox ×	
NVIDIA	to tb	11:09 AM (O minutes ago) ☆
	NVIDIA Cloud Account Port You have been invited to join account My2r Message from the account administrator: Hello, Please join this account. Thanks. Please login to accept or reject this invitation LOGIN	ndNCA as admin.	•
	Privacy Policy Lega Copyright © 2024 N		

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.

Z
92
ns Of Use

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

Verify Your Email
An email has been sent to tb enching and how 2000 withows , please click the link in the email to continue.
Cancel
Change Email >

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

NVIDIA	NVIDIA Accounts 🤣 <acc to</acc 	ount@nvidia.com>	11:27 AM (0 minutes ago)	☆	٢	¢
		Hello,				
		We are almost done creating your NVIDIA account. You can use in to GeForce NOW, GeForce Experience, NVIDIA Games, NVID NVIDIA Omniverse, NVIDIA Game Developer Portal, GTC, NVID and NVIDIA AI.	DIA Indie Spotlight,			
		Click the link below to verify this email address.				
		Verify Email Address				
		If you did not register for an NVIDIA Account, someone may hav your information by mistake. Contact <u>NVIDIA customer care</u> for f	-			

The email confirmation message will display in your browser.

Your Email Is Verified
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 website software, and events.
Tech	nnical Settings
	Yes, I'd like to help fix bugs by sharing my error logs.
Be t	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 p	promise to protect your privacy. You can change your settings anytime at privacy.nvidia.con
	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.

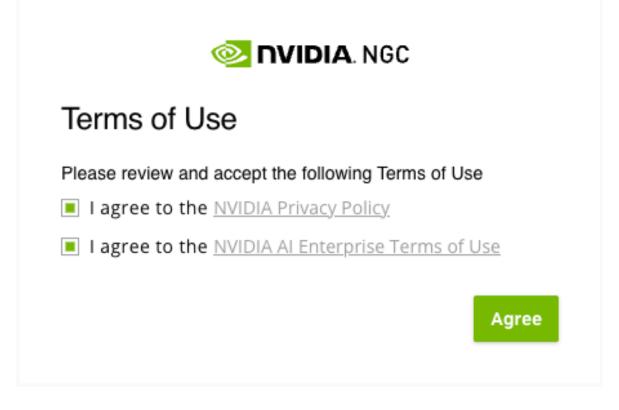
You've been invited to join the NVIDIA cloud account. Here are the invitation details:

_	mail ID: t	
N	3	ello, Please join this account. Thanks. : 11:09:55 AM
Y	our invitation is valid un	til <u>June 6, 2024 at 11:09:55 AM</u>
v	Vhat would you like	to do?
	Accept Invitation	Reject Invitation

6. Enter your password (required for security).

Your NVIDIA Account
Sign in to the client
tbi
Password
Enter your password
Stay logged in
Log In
More Login Options >
By proceeding, I agree to the <u>NVIDIA Account Terms Of Use</u> and <u>Privacy Policy</u>
Login Help →

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



You can now access the NGC org.

Chapter 5. Accessing NGC from an NVIDIA Commercial Entitlement

When you procure a software subscription delivered on NVIDIA NGC Cloud, you'll receive an entitlement certificate 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.

- 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 ENTER	PRISE ACCOUNT REGISTRATION
	Let's get started tony@nc Sign In
	Copyright @ 2024 NMD/A 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: After logging in, choose an existing NCA or create a new NCA to claim your 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.

	Selective			
	Select yo	our NVIDIA Clou	a Account	
meosa6q	ncqxt (0484998763	3291212) Owner		
My_new_	NCA (04849987095	568076) Owner		
MyNCA_f	or_APIC (04848090	030898195) Owne	r	
		Continue		
	Create	New NVIDIA Cloue	d Account	
	cates that you are t	6		

► 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.

- Important: An NCA account (NGC org) entitled with a commercial type license cannot support adding an evaluation or Not-For-Resale type license. Mixing license types into one NCA account is not allowed. If you know the license type installed in your existing account does not match the license type you are claiming, or you don't know the existing license type, please choose to Create a New NVIDIA Cloud Account.
- ▶ 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.

Create	e your NVIDIA Cloud Account
To access M	NVIDIA cloud services, you need a NVIDIA Cloud Account.
Provide	a NVIDIA Cloud Account name
	ving your account a unique name. This name will help you identify nt in the future.
Account Nan	ne *
RWAVDR	4

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 corporate email address.
ŀ	f you need assistance or have questions with account registration, please review the Registration EAO.
	Entitlement
	PAK ID/Entitlement ID: i64px
	Primary Contact
	* First Name: Tony
	* Last Name: B
	* Email Address: ton
	* Confirm Email Address: ton
	* Claiming Entitlement as Select an Option

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 submitting the registration form, you'll receive two emails from NVIDIA:

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

💿 NVID	Dear To
Welcome to the NV	IDIA.
To get started, pleas tor	e log in with your user name:
lf you haven't set up	an account yet, please follow the instructions provided when you log in.
Log In	
Best Regards, The NVIDIA Team	*
Questions ? Please	contact us at NVIDIA Enterprise Support .

 NVIDIA Cloud Accounts Email: In the "You've been invited to an NVIDIA Cloud Account" email, click Log In Now and log in.



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

Second Se			Log Out
NVIDIA Applica Access the tools and services you ne			
		, 🐼)
NVIDIA Licensing	9 Portal NVIDIA Enterprise	e Support NVIDIA NO	iC
Access and manag licenses, set up you server, and download for your produc	r license and create or view d software cases.		containers, industry-
Sign Up for NVIDIA News	ubscribe	Fol	Iow NVIDIA f 🎔 in 🞯 🚥
			United States

Privacy Policy | Manage My Privacy | Do Not Sell or Share My Data | Terms of Service | Accessibility | Corporate Policies | Product Security | Contact

NVIDIA Cloud Accounts allow you to view and manage additional users within your account, granting them access to NVIDIA cloud services.

Your registration is now complete!

Chapter 6. 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.

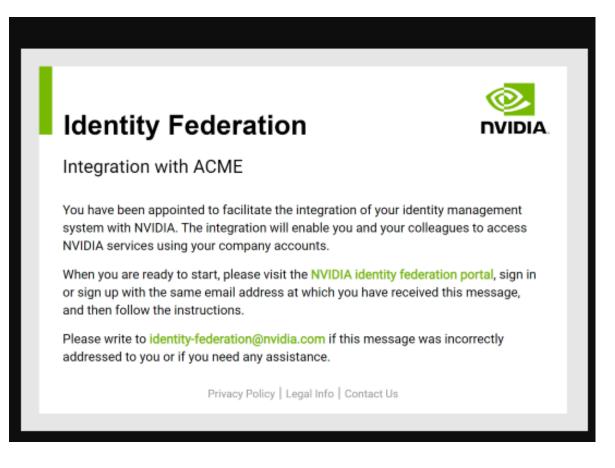
3. The email addresses of the customer representatives who are expected to perform the IdP federation configuration steps.

6.1. 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.	

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 terminology, the NVIDIA identity federation system is an application register Entra ID tenant.	
		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	ne following
		web redirect URI:	ne following
		web redirect URI: https://login.nvidia.com/callback/redirect	ne followin
		web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id)	ne following
		web redirect URI: https://login.nvidia.com/callback/redirect Client id assigned to NVIDIA (also known as application id)	© time-to-live
		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 VVVV-MM-DD Please generate the secret with the longest allowed in the longest allow	© time-to-live

OpenID Connect Provider

fo 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 followiredirect URI (also known as callback URL): https://login.nvidia.com/callback/redirect
	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-line 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 (Id identity federation system is the Service Provider (SP).	IP) while the NVIDI <i>I</i>
		NVIDIA SP entity ID (also known as audience URI)	
		https://login.nvidia.com	면
		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 neo user's email address and - optionally - group memberships to NVIDIA.	essary to return th
		If your identity management system requires the Service Provider meta you can download it from here.	data in XML forma
		Previou	IS 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.

Login test We are ready for a login test. The test will open a new browser tab to let you log in with you identity management system. The result of the login will be used to confirm that we have all the information we need to set up the integration.
The browser may ask permission to open the new tab if it is configured to block pop-ups. If the test gets stuck on the login page of your identity management system, please try to identify the error and then come back to this browser tab for instructions. If you plan to manage your own user authorization groups, please log in with a user accoun that is member of at least one group. In this manner our system can attempt to detect how your system reports the group memberships.

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

<mark>©</mark> NV	dia . Identity f	EDERATIO	ON	paolo@partne	er-tests.com	Logou
Basic info	Configuration details	Login test	Login test result	Summary		(
			n test result			
			•	sfully completed. The NVIDIA identity fe nation about the logged in user:	ederation system	m has
			identifier 1ucv6xHKjMk5d7			(j)
		Usernar paolo@	ne)partner-tests.com			()
		Email ac paolo@	idress Opartner-tests.com			(i)
		Full nam Paolo F				(j)
		Group m starflee	nemberships et-test			(j)
				ve information is correct. Otherwise you c r NVIDIA, and then repeat the test.	an go back, adjı	ust the
			n payload fo response	Go Ba	ack Conf	firm

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.

🧼 NVIDIA, IDENTITY FEDERA	ION paolo@partner-tests.com Logou
	Ć
	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.

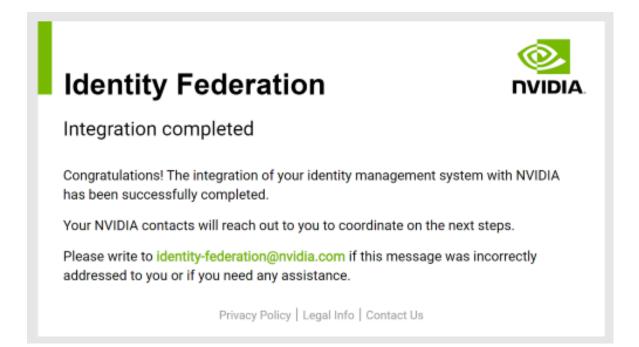
Thank you!

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.

6.2. 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.

6.3. 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.

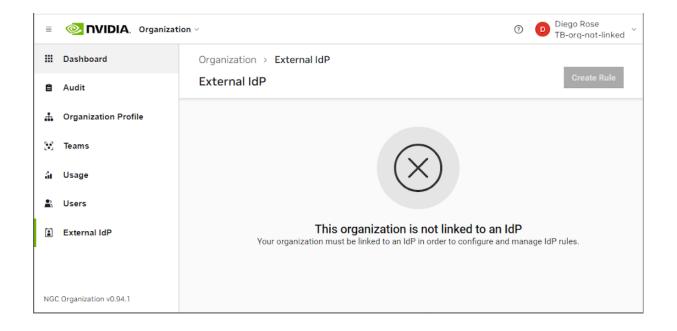
When the NGC org is linked to an external IdP, the org owner will see the ability to start creating membership rules under the Organization > External IdP configuration page.

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, app	os and groups	S		0 ==	@gmail ~
Dashboard	~						
Directory	~	Applications					Help
Customizations	~	Developer Editi	on prov	vides a li	mited number of apps.		
Applications	^	Deactivate unused apps or	check out ou	r plans page. C	contact us to find a plan that is right for your organization	۱.	
Applications		Create App Integration	Browse A	pp Catalog	Assign Users to App More 🔻		
Self Service							
Security	~	Search					
Workflow	~	STATUS		Ø	NGC Client ID: 00amo9ih2c6GVELeE357		o
Reports	~	ACTIVE	2				
Settings	~	INACTIVE	0	•	Okta Admin Console		
				0	Okta Browser Plugin		
					Okta Dashboard		
				Ô	VMware SD-WAN VCO Client ID: Ooarileeqpq7ebX24356		<u>ه</u> .

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 per	ople, apps and groups			@@gmail
Dashboard	~	← Back to Application	15			
Directory	^	~	NGC			
People		Ø	Active View Logs			
Groups		General Sign	On Assignments Okta API Scop	bes		
Profile Editor		denoral oibin				
Directory Integrations		Assign v	Convert assignments 🔻	Q Search	People v	REPORTS
Self-Service Registratio	n	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 abanuelos@ngcprodmgt.com	Individual	× ×	Requests Disabled
Self Service			abanuelos@ngcprodmgt.com	Individual		Approval N/A
Security	~		amyp@ngcprodmgt.com	munudai	/ ×	Edit
Workflow	~		Marco marcom@ngcprodmgt.com	Individual	× ×	
Reports	~		Adam	Individual	/ ×	
Settings	~		adamt@ngcprodmgt.com			
Gerrings	•		kayhan 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 Directory	~ ^	Groups		• Help
People		All Rules		
Groups				
Profile Editor		NGC	" Q	^શ ્ Add group
Directory Integrations		Advanced search *		
Self-Service Registration		Group source type All *		Showing 3
Profile Sources		Group name	People	Applications
Customizations	~	NGC_Admin Maps to Org owner role	47	0
Applications	~	NGC_AIE_PR_Admin NVAIE-Registry-Admin	2	0
Security	~		1	0
Workflow	~	Private Registry user	•	C C C C C C C C C C C C C C C C C C C
Reports	~			
Settings	~			

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 gr	pups	@gmail ~
Dashboard	~	← Back to Groups		
Directory	^	ONGC_AIE_PR_	Admin	Actions v
People		NVAIE-Registry-Admin		
Groups		() Created: 03/06/2023 () Last m	odified: 03/09/2023 View logs	
Profile Editor				
Directory Integrations		People Applications Pro	file Directories Admin roles	
Self-Service Registrati	on	People		
Profile Sources		-		
Customizations	~	Search for users by first name,	primary email or username // Q	Assign people
Applications	~			Showing 2 of 2
Security	~			Showing 2 of 2
		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.

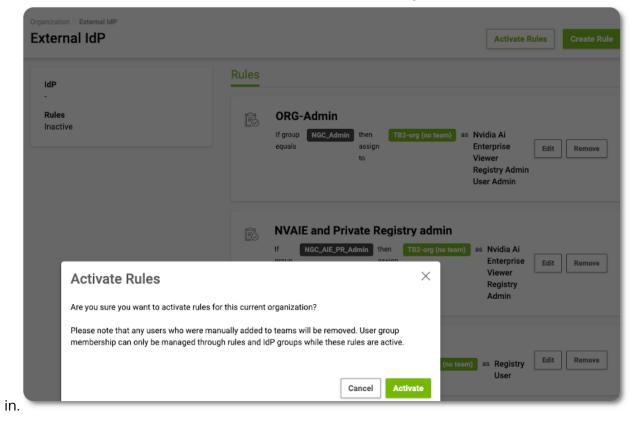
then assign to

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
	Admin	
Admin	Admin User	

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

Organization : External IdP 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 7. 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.

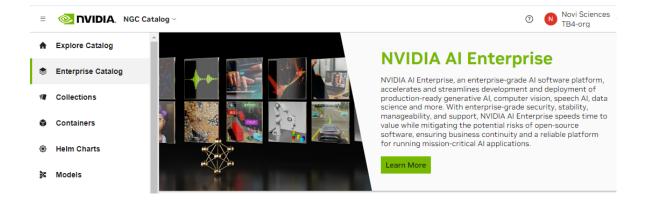
4. Click Activate Subscription.

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					
Please complete this section with	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		
am a systems integrator					
	eparately. You may bulk add serial			ct family (e.g. H100 GPU and BlueFiel d individually. Please comma separat	
Enter promotional code, serial n	umber, or token				

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

ption for the ng NVIDIA	+
	+
	Ì
-	
quest Activation	
	-

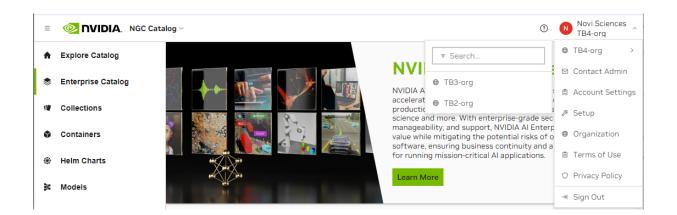
- 6. The Subscriptions page will display for your organization with the active NVIDIA AI Enterprise subscription.
- 7. Use the left navigation and click Enterprise Catalog to access the NVIDIA AI Enterprise software suite.



Chapter 8. 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 9. 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 three types of API keys.

API Key (Original)

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 revokes the previous one, as they cannot be rotated. The active key immediately becomes invalid when you create a new key.

Note: NVIDIA will continue to support this key type for services that have not transitioned to the next-generation API keys. However, we encourage customers to migrate to our next-generation API keys when possible.

NVIDIA NGC introduces two new types of API keys supporting Role-Based Access Control (RBAC) configuration and the ability to manage the state of each key.

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 permissions and services 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 expires'.

Service API Key

Service API keys are not associated with individual user accounts; instead, they are linked to an NVIDIA cloud account and manage their lifecycle within the NGC org where they are created. The org owner and members assigned the user_admin role can create and manage Service API keys. The user_admin role must be assigned along with the specific application role for which the user will generate and manage service keys.

Note: Service keys do not currently 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.

As NVIDIA rolls out support for "Personal" and "Service" API keys, the original NGC API keys will continue to be supported. We highly recommend generating new API keys using the latest "Personal" or "Service" type API keys. These key types deliver the ability to

configure an expiration date, revoke or delete the key using an action button, and rotate the key as needed.

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

NGC Application/ Services	Service API Keys	Personal API Keys	NGC API Keys (Original)
NVIDIA NGC Catalog	Yes	Yes	Yes
NVIDIA NGC Private Registry (Helm charts are not yet supported).	Yes	Yes	Yes
NVIDIA NIM [™]	Yes	Yes	No
NVIDIA Fleet Command	No	Yes	Yes
NVIDIA Base Command Platform	No	No	Yes

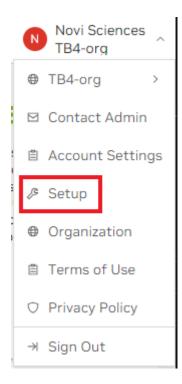
If your NGC service isn't listed under Personal or Service Keys, continue using the original NGC API key. We'll update this list by adding support for other NGC services into our next-generation key types.

9.1. 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.

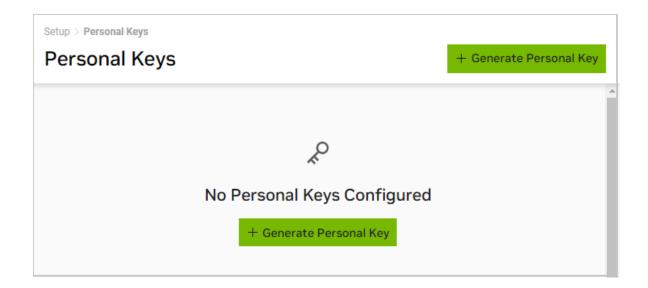
2. Click your user account icon in the top right corner and select Setup.



Click Generate Personal Key from the available options.
 Personal Keys allow access to a set of NGC service APIs.

Setup Setup	
Generate API Key Generate API Key Generate your own API key in order to use the NGC service through the Docker client or through NGC CLI.	Generate Personal Keys Personal Keys Generate your own API key in order to use the NGC service through the Docker client or through NGC CLI for AI Foundation Models and Endpoints, NGC Catalog, Fleet Command, and Private Registry.

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



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 I	Key

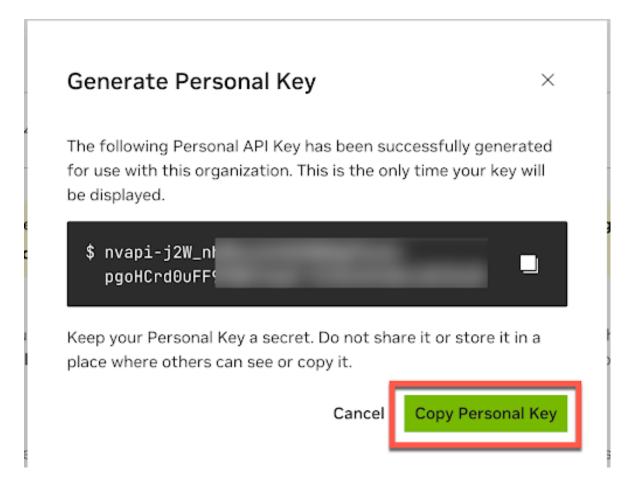
- Key Name: Enter a unique name for your key.
- Expiration: Choose the expiration date for the key.

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.



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.

owing 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
splay 25 🗸 result	ts per page					🖉 Update Authoriza
						🖞 Delete Personal I

9.1.1. 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:

=	📀 NVIDIA. Organizatio	n ~								
	Dashboard	Organization \rightarrow	Subscriptions							
Ø	Audit	Subscriptions								
4	Organization Profile	Ŕ	NVIDIA Mie	croservices						
3	Teams		Status	Term Date	Auto Renewal No	Type Not for resale				
â	Usage									
	Users		Private Reg							
::	Activate Subscription		Status Active	Term Date	Auto Renewal No	Type Not for resale				
Ŷ	Subscriptions			Enternrise for \	/Mware Private					
¢	Service Keys		Status	Term Date	Auto Renewal	Туре				
i	External IdP		Active		No	Not for resale				
		0₽⊗	Cloud Fund	tions						
		L C	Status	Term Date	Auto Renewal	Туре				
		×0×	Active		No	Not for resale				
		NVIDIA AI Enterprise Essentials								
			Status	Term Date	Auto Renewal	Туре				
			Active		No	Not for resale				

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

Email
tba
Roles
NVCF VIEWER NVIDIA AI ENTERPRISE VIEWER
ORG OWNER REGISTRY ADMIN REGISTRY READ
USER ADMIN USER READ
Date Created 04/05/2022 03:51 PM
Last Login 12/02/2024 08:42 PM

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.

	l Key ×
	henticates your use of the selected our account within only this CLI or Rest API.
Key Name *	
My personal API key for a	all services
This key authenticates services Expiration *	s only within the NV-Developer organization
12 months	\checkmark
Services Included *	
Secrets Manager \times NGC	Catalog X Public API Endpoints X X V
	e Registry $ imes$
Cloud Functions × Private	
	our access within this organization

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 below.

Secrets Manager: The NGC Secrets Manager service enables the NGC user to store secret key pairs required to access NVIDIA or external services that require programmatic authentication.

If you need to use a personal API key to retrieve these secret keys from the Secrets Manager vault, you must assign the Secrets Manager service permission to your API key.

NGC Catalog:The NGC Catalog service provides access to NVIDIA AI artifacts available for download. Users can browse available artifacts and access information about each one. Access to gated catalog artifacts is controlled by the NVIDIA AI Enterprise subscription.

Grant your personal API key NGC Catalog service permission if you need to use it to access NGC Catalog API endpoints, such as downloading NIM artifacts.

Public API Endpoints: The Public API Endpoints service is required to call NVIDIA NIM inference endpoints. Although NIM inference endpoints are enabled on all NGC orgs and do not appear as a service in the NGC subscription portal, calling them consumes org credits. Therefore, users must have the appropriate role assigned to them to add this service to their personal API key and use org credits.

Cloud Functions (NVCF): The Cloud Functions service is required to access functions that are private or shared with a specific NGC org. If enabled, the NVCF service allows the creation and management of functions. Permissions for these functions (create, read, update, delete, list) can be assigned to a user and are then inherited by their personal API key.

Grant your personal API key access to the Cloud Functions service if you need to use it to invoke, manage, or list private or shared org functions.

Private Registry: The Private Registry service provides a private repository for NGC org users with appropriate role access to manage and store private artifacts. NGC users with Private Registry access can upload, download, create, delete, share, and list artifacts.

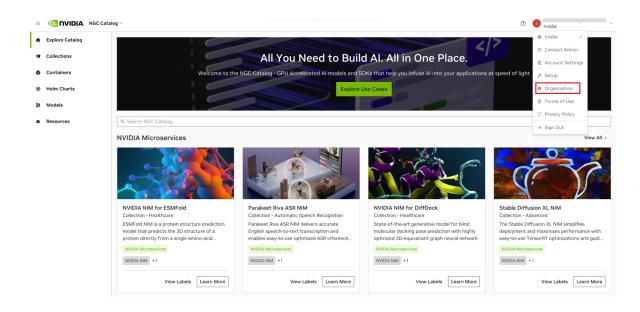
Assign Private Registry access to your personal API key if you need to use it to programmatically manage private artifacts in the org's registry via Private Registry API endpoints.

9.2. 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. Organizati	on ~			0 S nvidia
۲	Dashboard Audit	Organization > Dashboard Welcome to nvidia, (
*	Organization Profile				
۲	Teams	¢ [©] [©] [©] [©] [©] [©] [©]		28	2
۲	Usage	External IdP	Organization Profile	Teams	Users
*	Users External IdP	Manage NGC user roles using IdP claims to set up rules	Basic company information	Add, remove, rename or edit teams	Add, remove, rename or edit roles
		Usage Monitor organization product usage	User Activity View user activity across products	GA 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	ion ~	0	s nvidia
۲	Dashboard	Organization > Service Keys		
۲	Audit	Service Keys		+ Create Service Key
۲	Organization Profile			
۲	Teams			
۲	Usage			
۲	Users	Ŷ		
۲	External IdP	No Service Keys Configured		

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	n v		0	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	b	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 N	VIDIA Cloud Account when using a CLI or API.		\ll < 1 of 1 > »
	Name *	Expiration *		
	test-catalog	12 months	~	
	Service * NGC Catalog	Scope * Select one or more scopes	0	
	Entity Type *		•	
	Select entity type	 Select entity value 	+	
		Cance	Next 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		l or API.		≪ < 1	of 1 > ≫
		Name * test-catalog		Expiration *				
		-						
		Service *		Scope *		•		
		NGC Catalog	~	Select one or more scop		→ L+		
		Entity Type * Select entity type	•	Entity Value * Select entity value	• •	+		
		All Entity All Containers All Models			Cancel N			
		All Helm Charts						
		All Resources						
		Specific Container						
		Specific Model Specific Helm Chart						
		Specific Resource						

In the Scope field, choose from the available options.

Dashboard	Organization >								
Audit	Service Keys							+ Cre	ate Service
Organization Profile								Showing 1 - 2 o	f 2 💮
Teams	ID		NAME		EXPIRATION	DATE CF	EATED	ACTIVE	
Usage	k		test-private-registry		07/23/2025 10:56 AM	07/23/	2024 11:08 AM		
Users	e9d9	Create Service Key				×	:4 11:10 AM		
External IdP	Display	A Service Key authenticates use of N	GC services for a NVIDIA Clou	d Account when using a Cl	LI or API.			« < 1	of 1 > ≫
		Name *		Expiration *					
		test-catalog		12 months		~			
		Service *		Scope *		0			
		NGC Catalog	~	Select one or more sco	pes	~ +			
		Entity Type *		All Scopes					
		All Entity	~	Get Container					
				List Containers		Step			
				Download Container					
				Get Artifact List Artifacts					
				Download Artifact					

5. Click Next Step to review your key configuration.

= 💿 NVIDIA, Organizat	ion v	⑦ ⑤ 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	3 test-private-registry 07/23/2025 10:56 AM 07/23/2024 11:08 AV	м со …
🕏 Users	e9ds Create Service Key × 411:10 At	м 💼 …
📚 External IdP	Create Service Rey 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 *	
	Entity Type * Entity Value * All Entity All Entity All Entity	
	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	nvidia '
Dashboard	Organization > :	Service Keys			+ Create Service Key
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 > \gg
		test-catalog			
		Expiration 07/23/2025			
		NGC Catalog			
		Scope (All Scopes)			
		Resources All Entity: All Entity			
		Edit Configuration	Cancel Confirm		
				-	

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	tion ~					⑦ S nvidia	`
 Dashboard Audit 	Organization > S Service Keys	iervice Keys				+ Creat	te Service Key
Organization Profile						Showing 1 - 3 of	3 🛞
Teams	ID		NAME	EXPIRATION	DATE CREATED	ACTIVE	
🕏 Usage	z	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	ID 2	cessfully generated. This is the only time your Serv Name test-catalog	Expiration 07/23/2025 32 🛄	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			
Audit	Service Keys		+	Create Service Key
Organization Profile			Sh	owing 1 - 3 of 3 🗧
🕏 Teams	ID NAME	EXPIRATION	DATE CREATED	ACTIVE
🕏 Usage	223c. JOB test-cat	talog 07/23/2025 10:56 AM	07/23/2024 11:23 AM	•••
Users	b6f£	ivate-registry 07/23/2025 10:56 AM	07/23/2024 11:08 AM	•••
External IdP	e9c la6 test-pu	ublic-catalog 07/23/2025 10:56 AM	07/23/2024 11:10 AM	•••
	Display 25 v results per page			< 1 of 1 >

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 Registry User Guide</u> for more information.

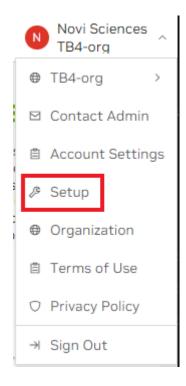
9.3. Generating NGC API Keys

This section describes obtaining an API key to access locked container images from the NGC Registry.

1. Sign in to the NGC website.

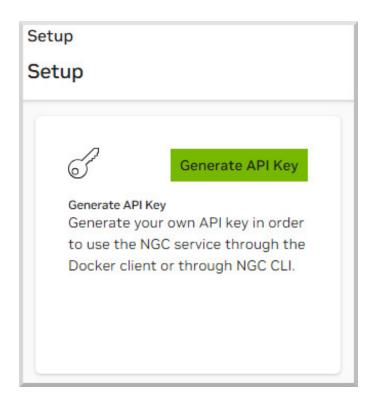
From a browser, go to <u>https://ngc.nvidia.com/signin</u> and then enter your email and password.

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



3. Click Generate API Key to open the API Key page.

The API Key is the mechanism that authenticates your access to the NGC container registry.



4. On the API Key page, click + Generate API Key to generate your API key.

A warning message shows that your old API key will become invalid if you create a new one.

5. Click Confirm to generate the key.

Your API key appears.

You only need to generate an API Key once. NGC does not save your key, so store it securely.

Tip: You can copy your API Key to the clipboard by clicking the copy icon to the right of the API key.

You can generate a new one from the NGC website if you lose your API Key. When you generate a new API Key, the old one is invalidated.

Chapter 10. 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:

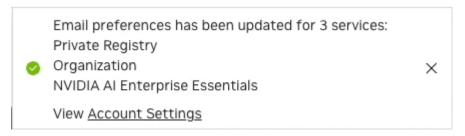
- Customer-impacting service enhancements (release notes)
- Security vulnerabilities (CVEs) and scanning reports
- Software end-of-life announcements
- Scheduled web portal maintenance to an NGC property

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	
rivate Registry	^
ecurity ecurity vulnerabilities	
laintenance lanned maintenance events	
nnouncement iew s/w version release notes, API end of service, NGC CLI updates and end of service	
Irganization	^
ecurity ecurity vulnerabilities	
laintenance lanned maintenance events	
nnouncement lew s/w version release notes, API end of service, NGC CLI updates and end of service	
VIDIA AI Enterprise Essentials	^
ecurity ecurity vulnerabilities	
laintenance lanned maintenance events	
nnouncement	

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

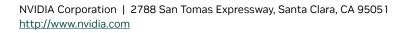


 After their initial sign-in, users can edit their notification preferences under their NGC user account settings page.

My Account

Profile & Preferences				
Name	Email			
Date Created 09/20/2023 02:23 PM	1			
06/24/2024 04:50 PM				
Services Email Preferences				
Send me information regarding security, announcements and mainter	ance for all of my services			
Private Registry		^		
Security Security vulnerabilities				
Announcement New s/w version release notes, API end of service, NGC CLI updates ar	d 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 ar	d 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.





Trademarks

NVIDIA and the NVIDIA logo are trademarks and/or registered trademarks of NVIDIA Corporation in the United States and other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

 $^{\mbox{\scriptsize C}}$ 2020-2024 NVIDIA CORPORATION & AFFILIATES. All rights reserved.

