

# Accordion User Manual

# 1. Introduction

## 1.1. Overview

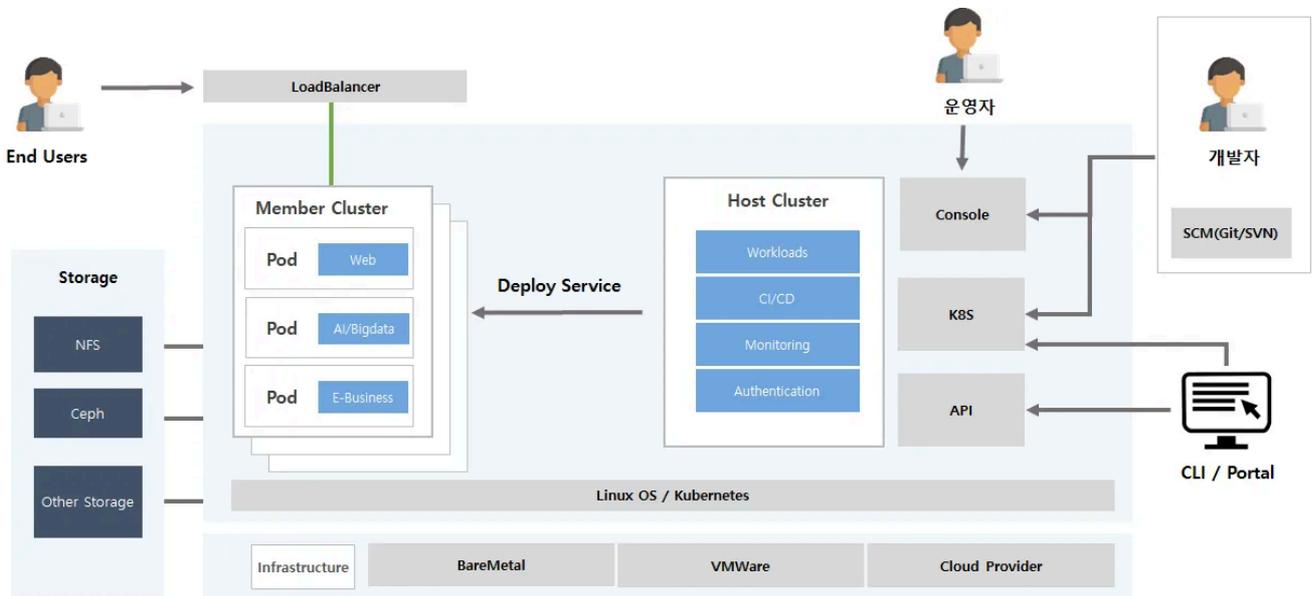
Accordion is an all-in-one solution for easy deployment of container-based applications and automated operational management.

The accordion has the following main functions:

- Multi-cluster management
- Public cloud integration and management, including EKS/AKS/GCP/AWS/Azure
- Automated application deployment and rollback through CI/CD
- Automating builds with approval pipelines
- Global system monitoring and WAS monitoring
- Provides logging and auditing capabilities
- Helm provisioning and custom container management

## 1.2. System Configuration

The accordion's system configuration is as follows.



## 1.3. Cluster Configuration

Accordion manages multiple clusters, and clusters are managed by dividing them into host/member clusters by role.

division	explanation
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Host Cluster	Provides multi-cluster management and monitoring, dashboard, and authentication functions.
Member Cluster	A cluster where the user's service application is deployed and operated.

## 1.4. Users and Permissions

Users can have 글로벌 권한, 클러스터 권한, and , depending on the scope. For more information, see Global Permissions/Cluster Permissions/Namespace Permissions. 네임스페이스 권한

## 1.5. Accordion Resource Naming Conventions

The naming rules for resources that can be created in the accordion are as follows. All names must be at least one character long.

item	Method of expression	Character limit
Permissions (global/cluster/namespaces), cluster catalog template, catalog template, cluster task template, cluster pipeline template, task template, pod, replica set, deployment, stateful set, daemon set, job, cron job, config map, secret, HPA, limit range, ingress, network policy, persistent volume, persistent volume claim, storage class, role, role binding, cluster role, cluster role binding, service account, notification policy, resource quota, recipient (global/cluster/namespaces), recipient configuration information, custom resource, registry	<ul style="list-style-type: none"> <li>Use only English lowercase letters, numbers, and special characters .</li> <li>In the case of special characters . , they cannot be used consecutively with special characters.</li> <li>Must start with a lowercase English letter or number</li> <li>Must end with a lowercase English letter or number</li> </ul>	253 characters
group	<ul style="list-style-type: none"> <li>Use only English lowercase letters, numbers, and special characters .</li> <li>Must start with a lowercase English letter or number</li> <li>Must end with a lowercase English letter or number</li> </ul>	253 characters
user	<ul style="list-style-type: none"> <li>Use only English lowercase letters, numbers, and special characters - , ' , -</li> <li>In the case of special characters . , they cannot be used consecutively with special characters.</li> <li>Must start with a lowercase English letter or number</li> <li>Must end with a lowercase English letter or number</li> </ul>	255 characters

item	Method of expression	Character limit
Custom Resource Definition	<ul style="list-style-type: none"> <li>• Use only English lowercase letters, numbers, and special - characters .</li> <li>• In the case of special characters . , they cannot be used consecutively with special characters.</li> <li>• Must start with a lowercase English letter</li> <li>• Must end with a lowercase English letter or number</li> <li>• {{spec.names.plural}}.{{spec.group}} 형식</li> </ul>	253 characters
Helm Repository	<ul style="list-style-type: none"> <li>• _ Use only English, numbers, and special characters</li> </ul>	244 characters
Helm app	<ul style="list-style-type: none"> <li>• - Use only English lowercase letters, numbers, and special characters</li> <li>• Must start with a lowercase English letter</li> <li>• Must end with a lowercase English letter or number</li> </ul>	53 characters
Catalog	<ul style="list-style-type: none"> <li>• - Use only English lowercase letters, numbers, and special characters</li> <li>• Must start with a lowercase English letter</li> <li>• Must end with a lowercase English letter or number</li> </ul>	33 characters
pipeline	<ul style="list-style-type: none"> <li>• Use only English lowercase letters, numbers, and special - characters .</li> <li>• In the case of special characters . , they cannot be used consecutively with special characters.</li> <li>• Must start with a lowercase English letter or number</li> <li>• Must end with a lowercase English letter or number</li> </ul>	41 characters

item	Method of expression	Character limit
namespace	<ul style="list-style-type: none"><li>• - Use only English lowercase letters, numbers, and special characters</li><li>• Must start with a lowercase English letter or number</li><li>• Must end with a lowercase English letter or number</li></ul>	63 characters
service	<ul style="list-style-type: none"><li>• - Use only English lowercase letters, numbers, and special characters</li><li>• Must start with a lowercase English letter</li><li>• Must end with a lowercase English letter or number</li></ul>	63 characters

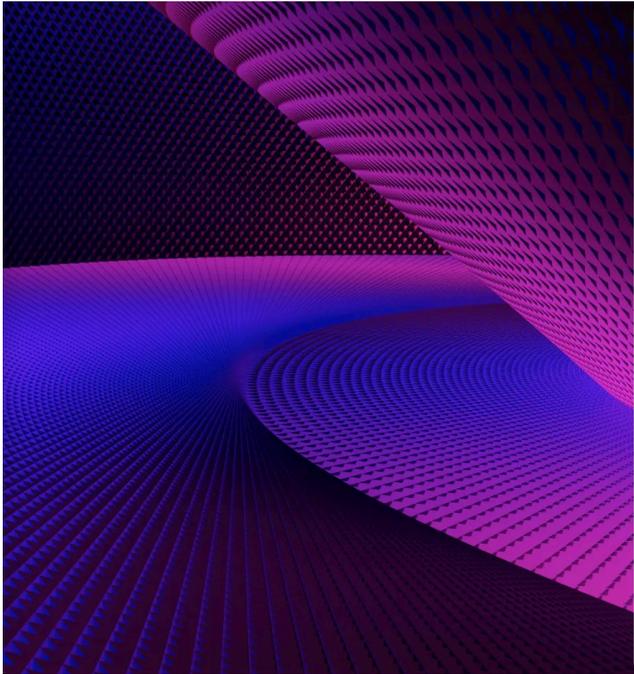
## 2. Log in

### 2.1. Log in to the web console

Connect to the host cluster where you installed Accordion in a web browser.

#### TIP

30000 Accordion provides a default port for external access . In this case , use this when accessing the web browser . `https://<HOST_IP>:30000`



All-in-One Solution

### 2.2. Account

The initial account ID is admin, and the initial password can be confirmed by the server administrator using the command below.

#### NOTE

```
kubectl get secret init-secret -n acc-global -o jsonpath='{.data.init-key}' | base64 -d
```

# 3. Screen composition

## 3.1. Screen area

The screen is divided into four areas as follows:

area	explanation
header area	Located at the top of the screen, it allows you to select a scope (cluster/namespace) and displays user information.
Menu area	Located on the left side of the screen, it displays menus for each scope (global/cluster/namespace). The menus display available items based on user permissions.
Event Area	Located at the bottom of the screen, it displays events occurring in multiple clusters.
Main area	Displays a screen for each menu. You can display information for each menu and configure, control, and monitor its functions.

### 3.1.1. Header area



#### 3.1.1.1. Scope Selection

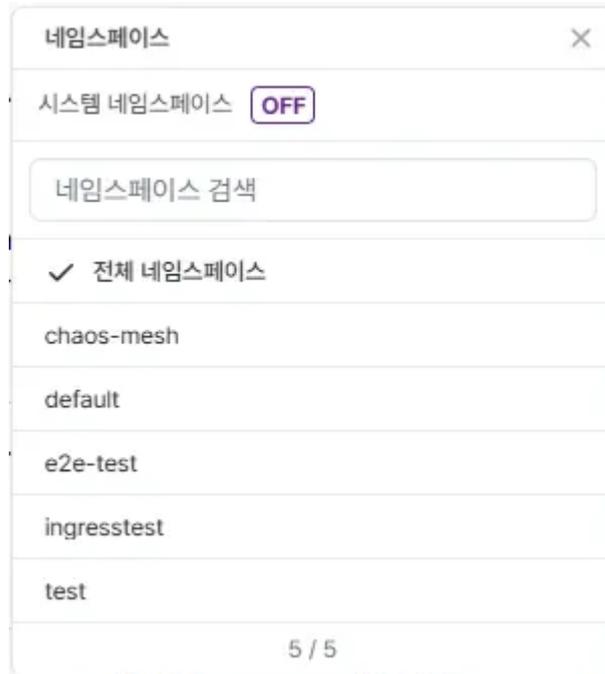
##### 3.1.1.1.1. Cluster Selection

You can select a cluster to perform tasks that require cluster scope, such as namespace and node management.

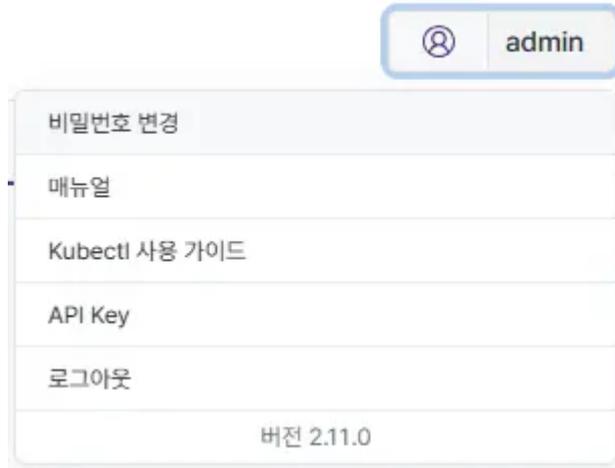


### 3.1.1.1.2. Selecting a Namespace

You can select a namespace to perform tasks that require namespace scope, such as applications and builds.



### 3.1.1.2. User Settings



#### 3.1.1.2.1. Change Password

You can change your password.



#### 3.1.1.2.2. Manual

You can check the accordion manual.

#### 3.1.1.2.3. Kubectl User Guide



kubectl You can find the download path for the executable file that matches your version of Accordion . You can download

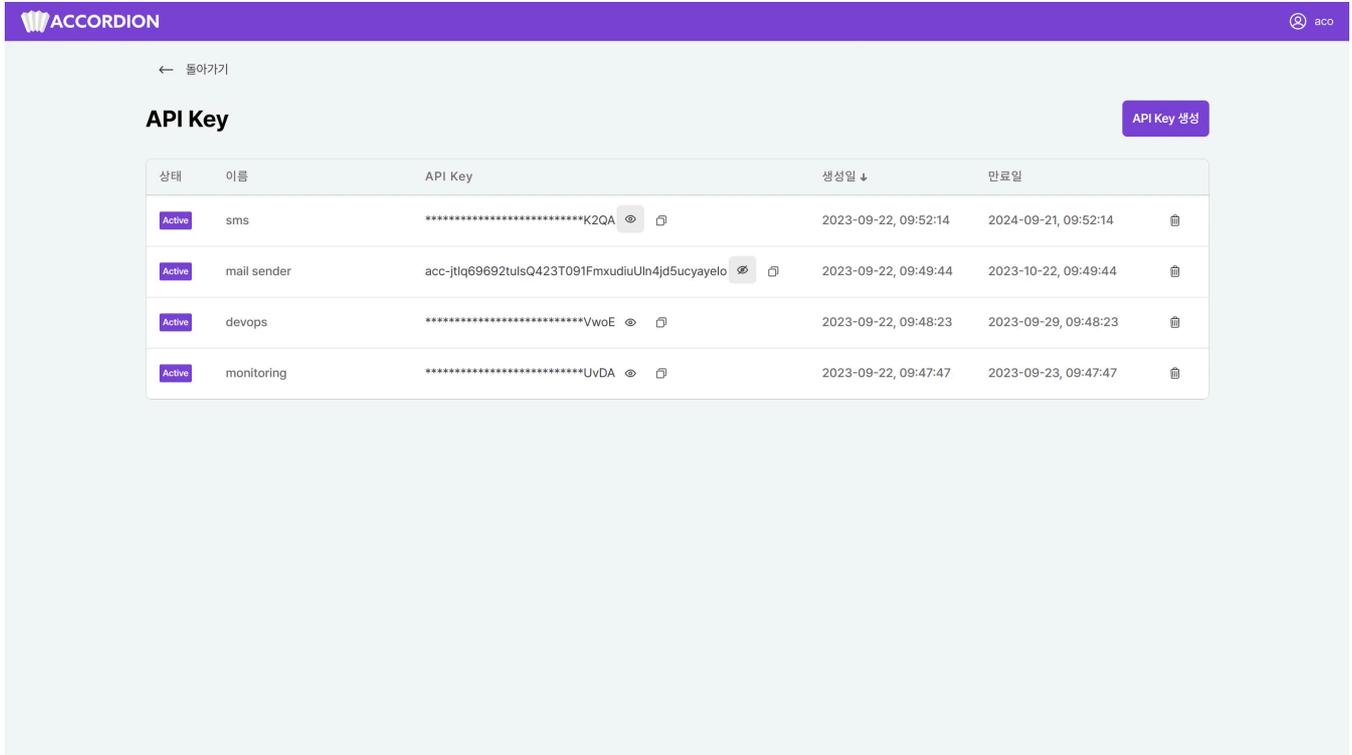
Accordion users . kubeconfig

### 3.1.1.2.4. API Key

Manage tokens that can be used to use the Accordion API.

#### 3.1.1.2.4.1. API Key List

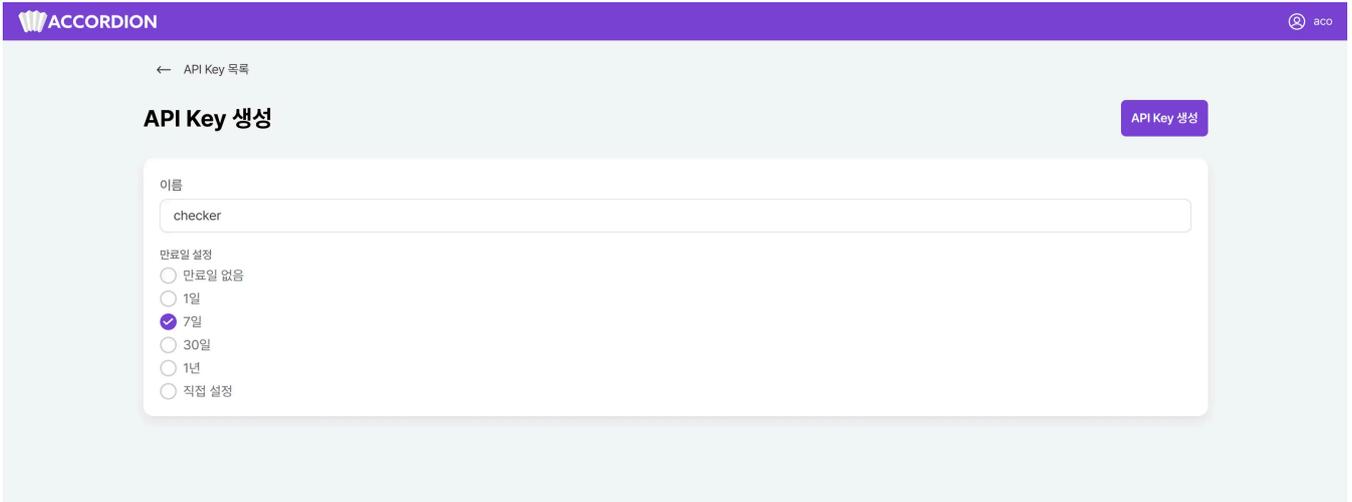
token View the generated information.



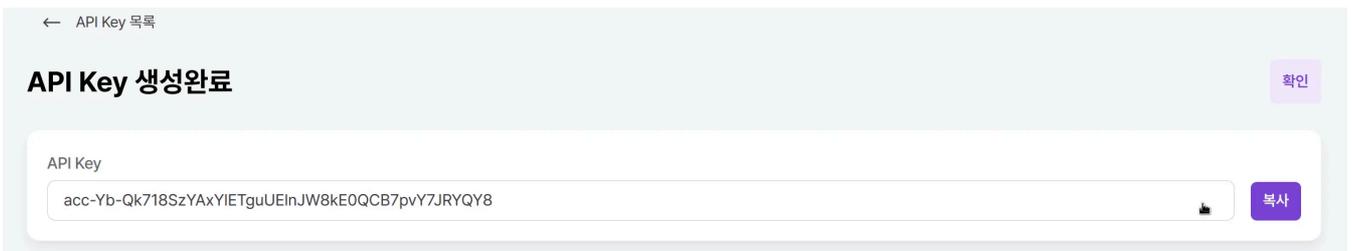
function	explanation
situation	token You can tell if this is valid. ( Active or InActive )
API Key	token information
Creation date	token Creation date
Expiration date	token It will be automatically deleted when the expiration date is reached.

### 3.1.1.2.4.2. Create an API Key

token Create a , including a brief description .  
It is recommended to create it with an expiration date, if possible.



token Check the created .



### 3.1.1.2.4.3. Delete API Key

token Delete manually .



### 3.1.1.2.5. Logout

Logs out the user.

## 3.1.2. Menu area

Menus are categorized by scope, which is divided into three categories: global, cluster, and namespace.

### 3.1.2.1. Global Menu

menu	explanation
Global Dashboard	View status information of multiple clusters and resources with the multi-cluster monitoring dashboard.
cluster	View and manage information about host clusters and member clusters connected to the host cluster.
Helm	View and manage Helm repositories to use Helm charts.
account	<p>Manage account information across the accordion.            Manage permissions for users, groups, and menus by global/cluster/namespace scope, and bind users/groups to global permissions to set them as global members. Additionally, you can view user access logs.</p> <ul style="list-style-type: none"> <li>• User: View and manage user information</li> <li>• Group: View and manage user group information</li> <li>• Global Permissions: Collect permissions for menus in the global scope and manage them as a single permission.</li> <li>• Cluster Permissions: Aggregate permissions for menus within a cluster scope and manage them as a single permission.</li> <li>• Namespace permissions: Aggregate permissions for menus within a name - space scope and manage them as a single permission.</li> <li>• Global Members: Binds users/groups to global permissions.</li> <li>• User Access Log: View the user's access log.</li> </ul>
Global Settings	<p>Manage global recipients for sending activation keys and notifications.</p> <ul style="list-style-type: none"> <li>• Activation Key: View and register activation key information.</li> <li>• Global Recipients: Manage global recipient information to which notifications will be sent.</li> </ul>

### 3.1.2.2. Cluster Menu

The cluster menu provides menus for deploying and operating services in individual cluster scopes.

menu	explanation
Cluster Dashboard	Provides resource status information for the cluster.
namespace	Manages namespace information for the cluster.
Node	Manages information about the nodes that make up the cluster. Nodes can be excluded from scheduling or pods deployed on a node can be moved to other nodes.
Application	Deploy applications to a cluster using Helm.
Workload	<p>Provides a dashboard for managing workload resource information and manages it with an editor, etc.</p> <ul style="list-style-type: none"> <li>• Workload Dashboard: Displays information about deployed pods in charts.</li> <li>• Pod: Provides and manages pod information. Accessible via container logs and terminal.</li> <li>• Deployment/StatefulSet: A resource that manages pods. It can be managed with an editor and auto-scale can be set.</li> <li>• DaemonSet: Controls the execution of pods on each node.</li> <li>• Job/Cronjob: Manages specific tasks to be executed temporarily/periodically.</li> </ul>
composition	<p>Manages information required to configure and set up systems and applications.</p> <ul style="list-style-type: none"> <li>• ConfigMap/Secret: Stores general or confidential information.</li> <li>• HPA/LimitRange: Limits horizontal autoscaling and resource allocation.</li> </ul>
network	<p>Manages the resources required to configure the network for application integration.</p> <ul style="list-style-type: none"> <li>• Service: Exposes the application as a network service.</li> <li>• Ingress: Exposes a service as an http or https path.</li> <li>• Network Policy: Controls traffic flow at OSI Layer 3 or 4.</li> </ul>
Storage	<p>You can check the storage list and create/edit/delete YAML.</p> <ul style="list-style-type: none"> <li>• Persistent Volume: Manages information required for storage implementation, such as NFS.</li> <li>• PersistentVolumeClaim: Manages resource information for making requests for storage.</li> <li>• StorageClass: Dynamically deploys persistent volumes.</li> </ul>
Custom Resources	Manage Kubernetes custom resources.

menu	explanation
Access control	<p>Manage and configure role-based access control in Kubernetes.</p> <ul style="list-style-type: none"> <li>• Service Account: Primarily provides authentication information to pods (user role).</li> <li>• Role/Cluster Role: Set permissions for APIs or resources.</li> <li>• Role binding/cluster role binding: Links a role/cluster role to a user or service account.</li> </ul>
Monitoring	<p>Check system status and various logs.</p> <ul style="list-style-type: none"> <li>• System: Provides resource usage information such as CPU and memory within the cluster.</li> <li>• Event Log: View Kubernetes event logs.</li> <li>• Container Logs: View logs generated from containers deployed in Kubernetes.</li> <li>• Audit Log: View audit logs within the cluster.</li> <li>• Notification Log: View information about notifications that occurred within the cluster.</li> <li>• Service Mesh: Displays communication information between services within a cluster.</li> </ul>
setting	<p>Configure members that use the cluster and set up notification policies. Set up registry information and cluster recipient information for notifications.</p> <ul style="list-style-type: none"> <li>• Cluster Member: Associates cluster permissions with users/groups.</li> <li>• Cluster Receiver: Manages information on cluster receivers to which notifications will be sent.</li> <li>• Notification Policy: Sets cluster notification sending rules, sending cycle/recipients, etc.</li> <li>• Registry: Sets the registry repository information for deploying and retrieving container images.</li> </ul>

### 3.1.2.3. Namespace Menu

The namespace menu provides menus for deploying and operating services in the namespace scope.

Some of the menus overlap with the cluster menu. Most of the overlapping menus provide the same functionality, except for differences in the scope of access to the same features.

menu	explanation
Namespace Dashboard	Provides resource status information for the given namespace.
Application	<p>Deploy applications to a cluster using Helm and the catalog.</p> <ul style="list-style-type: none"> <li>• Helm: Deploy applications using Helm charts. Primarily used for deploying service-based applications that don't perform builds.</li> <li>• Catalog: Deploy applications using a catalog. Supports build pipelines.</li> </ul>
Build	<p>Control and manage the information required to build your applications. You can build container images and configure the pipelines or approvals required for the build.</p> <ul style="list-style-type: none"> <li>• Pipeline: Create a pipeline that combines tasks to perform a build.</li> <li>• Approval: Processes approval requests that arise in the pipeline.</li> <li>• Task Templates: Manage templates for tasks used when creating pipelines.</li> </ul>
Workload	클러스터 메뉴 워크로드 Performs the same function as the menu in the namespace scope .
composition	클러스터 메뉴 구성 Performs the same function as the menu in the namespace scope .
network	클러스터 메뉴 네트워크 Performs the same function as the menu in the namespace scope .
Storage	Manages PersistentVolumeClaim resource information.
Access control	<p>Manage and configure role-based access control in Kubernetes.</p> <ul style="list-style-type: none"> <li>• Service Account: Primarily provides authentication information to pods (user role).</li> <li>• Role: Set permissions for APIs or resources.</li> <li>• Role binding: Links a role to a user or service account.</li> </ul>

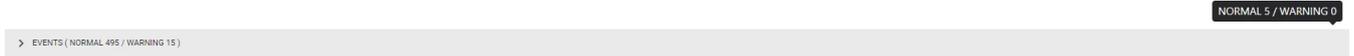
menu	explanation
Monitoring	<p>View system and application status and various logs.</p> <ul style="list-style-type: none"> <li>• System: Provides resource usage information such as CPU and memory within the namespace.</li> <li>• Application: Provides metrics information about applications collected by Scouter.</li> <li>• Event Log: View Kubernetes event logs that occurred in the namespace.</li> <li>• Container Logs: View logs generated from containers deployed to the namespace.</li> <li>• Audit Log: View audit logs within a namespace.</li> <li>• Notification Log: View notification information that occurred within the namespace.</li> </ul>
setting	<p>Configure members that use the namespace. Then, set a notification policy and configure namespace recipient information for notifications.</p> <ul style="list-style-type: none"> <li>• Namespace Members: Associate namespace permissions with users/groups.</li> <li>• Namespace Recipient: Manages information about the namespace recipients to which notifications will be sent.</li> <li>• Notification Policy: Sets the namespace notification sending rules, sending cycle/recipients, etc.</li> </ul>

### 3.1.3. Event Area

Events provides real-time multi-cluster Kubernetes event information, is minimized by default, and can be viewed in detail by clicking on the event area.

#### 3.1.3.1. Minimizing the Event Area

You can check the number of events occurring in real time in the right tooltip in the event area.



#### 3.1.3.2. Maximizing the Event Area

You can check and search event details when the event area is maximized.

 A screenshot of a web interface showing a maximized event area. It displays a table with columns: Age, 클러스터 (host-cluster), 네임스페이스 (mjtest), 타입 (Normal), 원인 (Pulling), 오브젝트 (pod/test-27500090-1-t2thk), 개수, and 메시지 (Pulling image "busybox").

item	explanation
Age	The time the event occurred
cluster	Cluster name
namespace	Namespace name
Type	Event Type <ul style="list-style-type: none"> <li>Normal: Events that occur during normal operations</li> <li>Warning: Event caused by an error</li> </ul>
cause	Reason for the event
Object	Object information
message	Event Detail Message

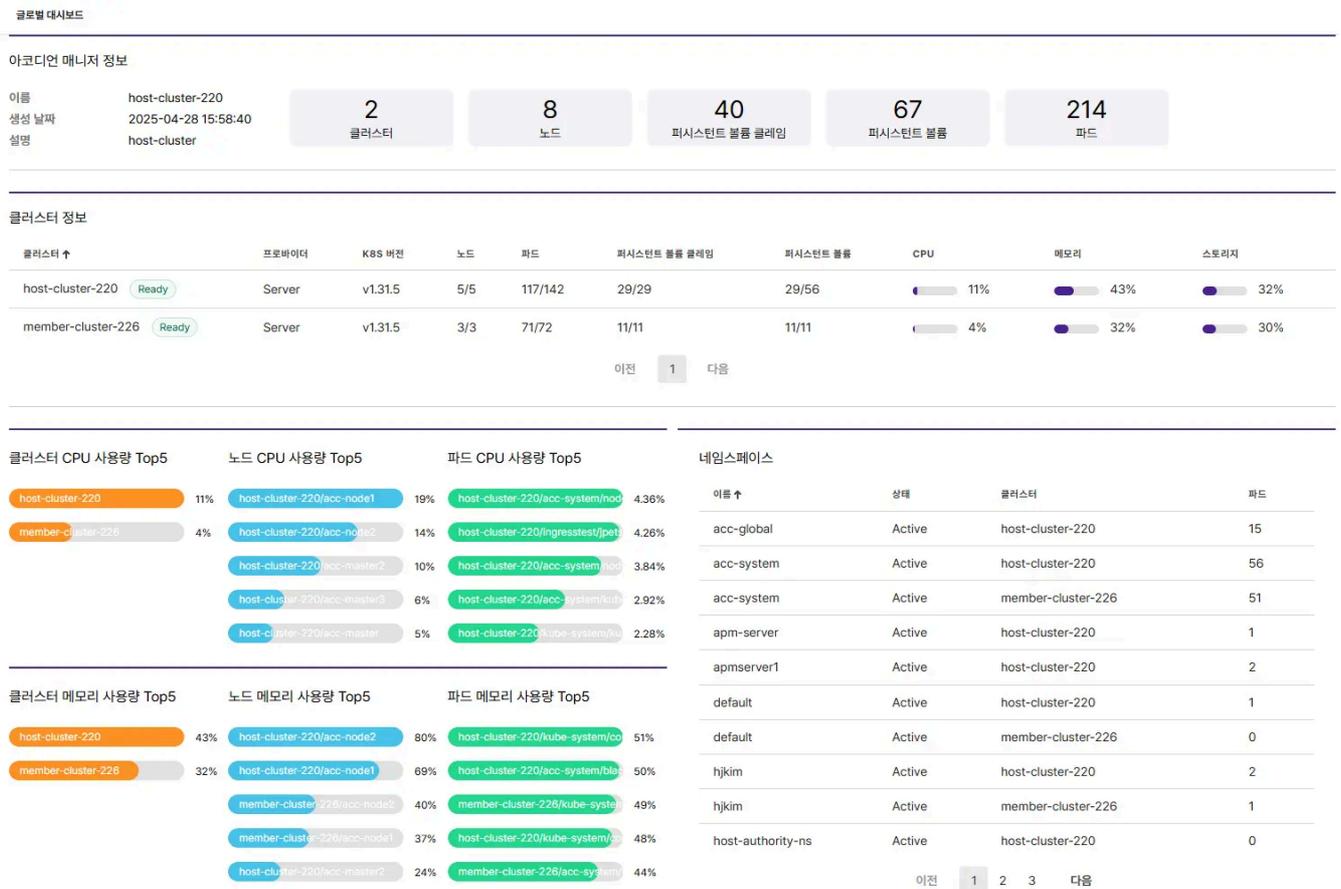
## 4. Menu

Describes the menu for each scope: global/cluster/namespace.

### 4.1. Global Menu

#### 4.1.1. Global Dashboard

The global dashboard provides information on Kubernetes resources and system resource usage such as CPU/memory.



The information provided is as follows:

item	explanation
Accordion Manager Information	Provides host cluster description and resource information.
Cluster information	Provides system/resource information for clusters connected to the accordion.
Top 5 usage	Provides charts for the top 5 CPU/memory usage by cluster, node, and pod.
namespace	Provides namespace information created in all clusters.

## 4.1.2. Cluster

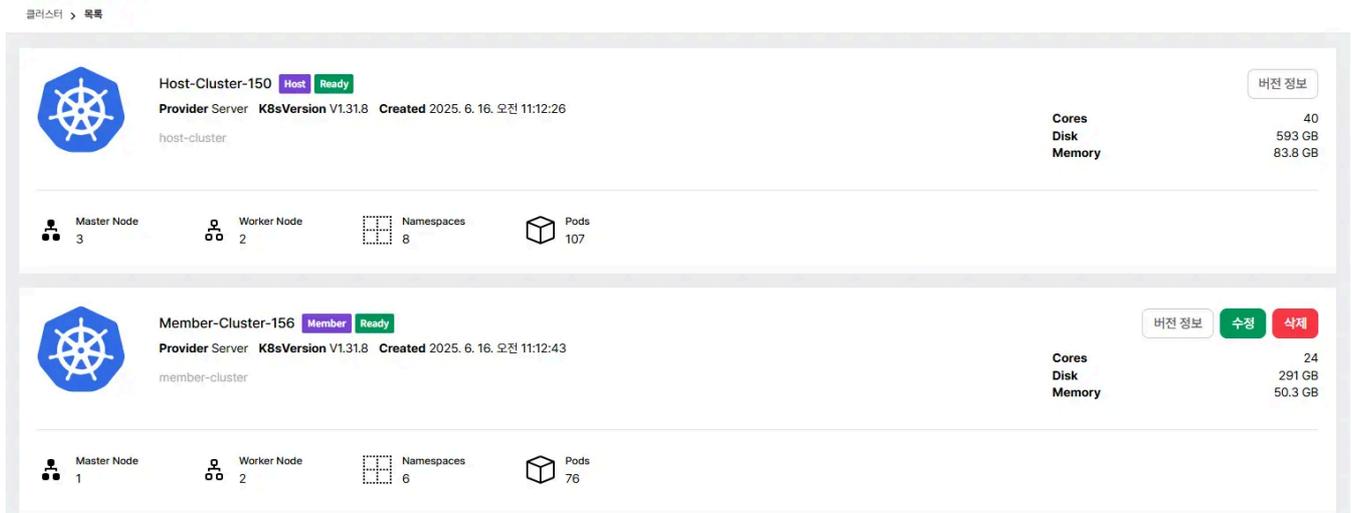
A cluster is a set of nodes for running containerized applications. Containerized applications are deployed to the cluster, not tied to individual nodes. A cluster is divided into a host cluster, which manages the cluster, and member clusters, where user applications are deployed. The host cluster also serves as a member cluster. An accordion consists of one host cluster and one or more member clusters.

**TIP**

Example configuration of a host/member cluster

- Single cluster configuration
  - One cluster performs both host and member cluster roles.
- Separation of management and operational clusters
  - In the host cluster, only management tasks are performed and applications are deployed only to separate member clusters.

### 4.1.2.1. Dashboard



The cluster menu allows you to view information about the host cluster and manage member clusters.

item	explanation
Cluster Name	Cluster name
Provider	Service providers (e.g. EKS, AKS, GKE, etc.)
K8sVersion	Kubernetes version
Created	Cluster creation time information
Cores, Disk, Memory	Cluster-wide resource (CPU/disk/memory) information

<b>item</b>	<b>explanation</b>
Master Node, Worker Node	The number of master nodes and worker nodes that make up the cluster
Namespaces, Pods	Number of namespaces and pods created in the cluster
Version information	Provides version information for each module
Edit, delete	Modify or delete cluster information with features only available on member clusters.

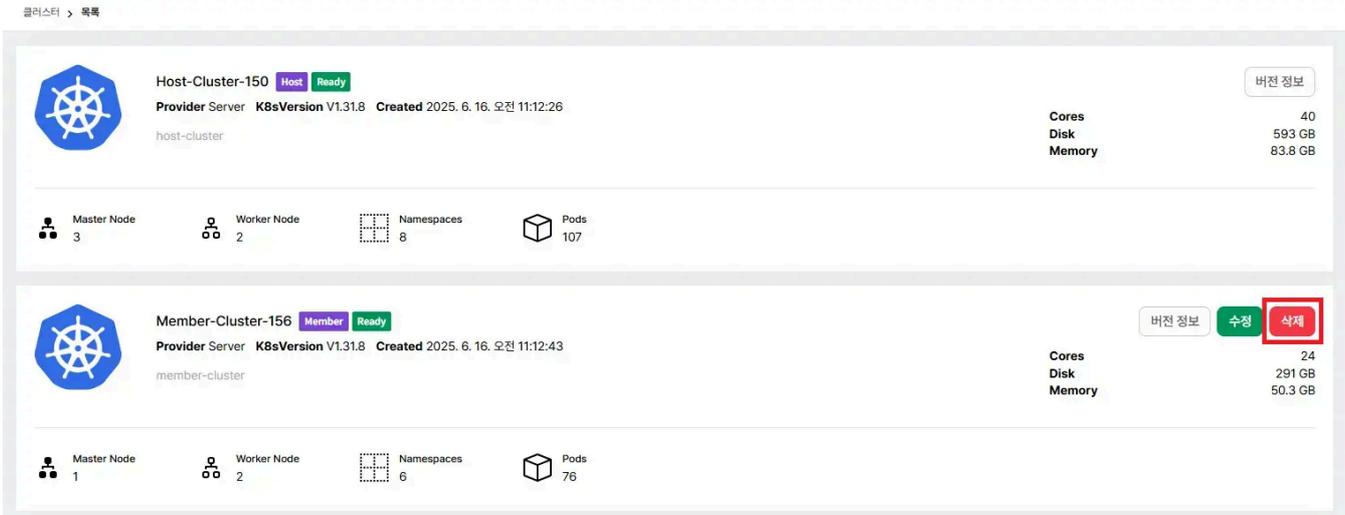


The information provided is as follows:

item	explanation
name	Cluster name (cannot be changed)
Server	member-agent Enter the endpoint installed on the member cluster
provider	Service providers (e.g. EKS, AKS, GKE, etc.)
Roll	Member Selectable only by cluster role
Proxy CA certificate	member-agent CA certificate used in
explanation	Cluster Description

### 4.1.2.1.3. Deleting a Member Cluster

To remove a member cluster from the managed list, 삭제 select the button to the right of the cluster card. Deleting a cluster only removes it from the managed list in the accordion; it does not actually delete the cluster.



### 4.1.3. Helm

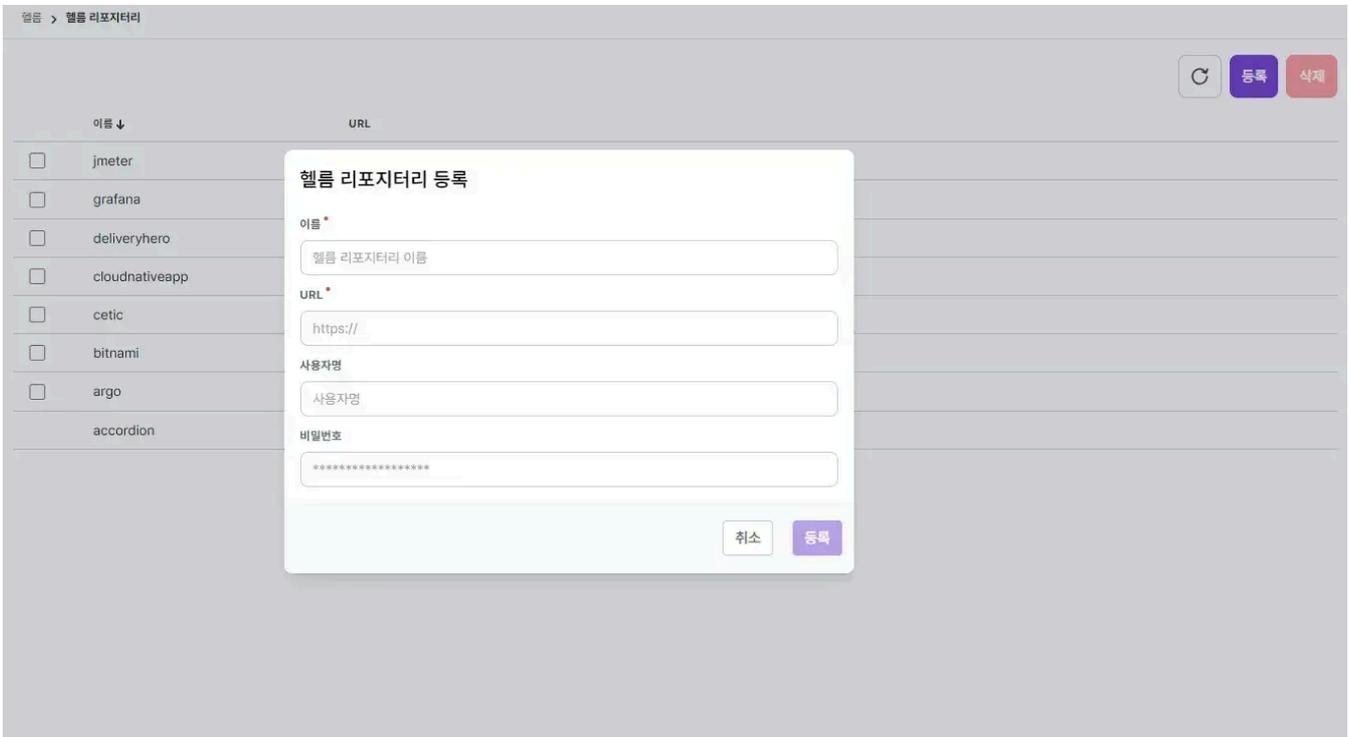
Helm is a tool that supports the deployment of Kubernetes applications. Accordion provides a service that manages Helm repositories and charts and uses them to deploy applications to clusters.

Accordion accordion provides a default repository called , allowing you to manage Helm charts even on closed networks. Users must be able to add external repositories via the internet.

#### 4.1.3.1. Helm Repository

##### 4.1.3.1.1. Registering a Helm Repository

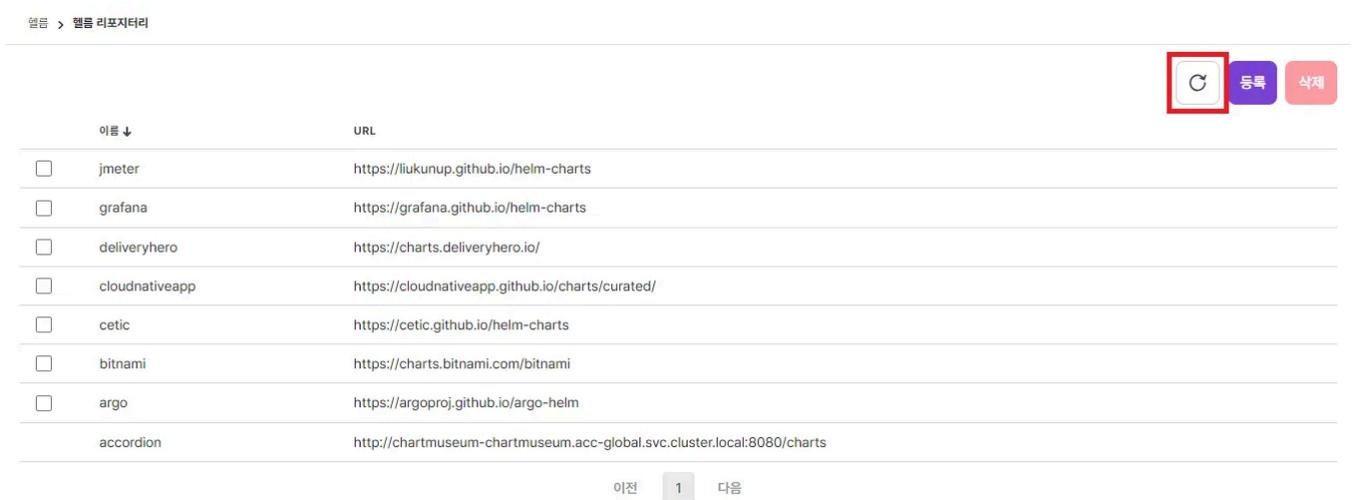
When you access the Helm menu and 등록 select the button at the top, a modal screen will appear asking you to enter your Helm repository information.



item	explanation
name	Helm repository name (required)
URL	Helm repository URL (required)
Username	Helm repository ID (optional)
password	Helm repository password (optional)

### 4.1.3.1.2. Helm Repository Update

You can update the chart information in the Helm repository to the latest version by selecting the Update button in the upper right corner.

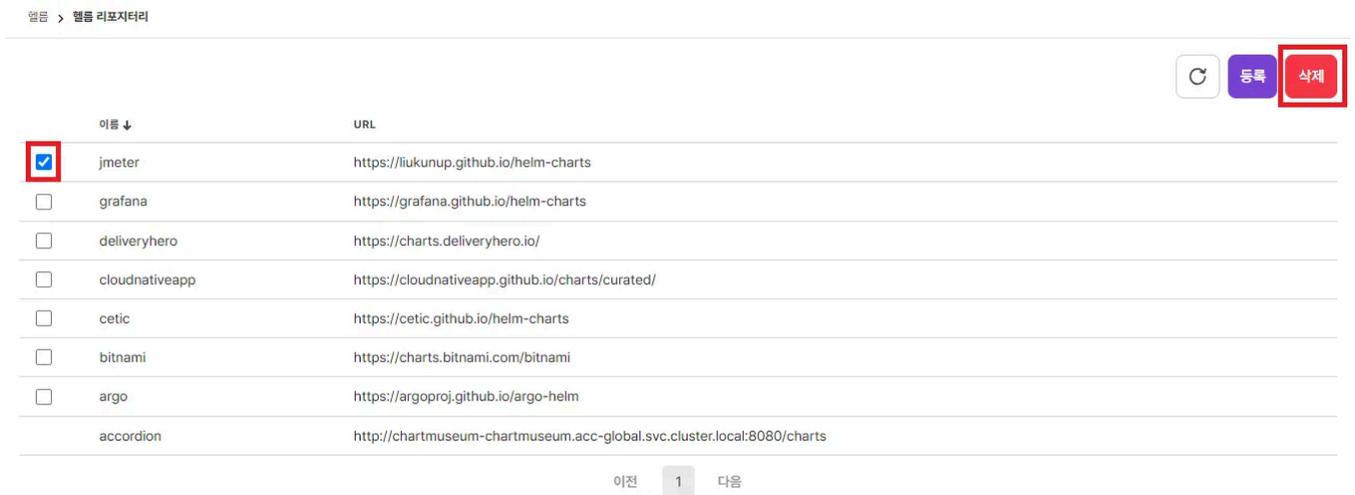


### 4.1.3.1.3. Deleting the Helm Repository

Select the repository you want to delete and 삭제 select the button in the upper right corner.

**NOTE**

The default accordionrepository cannot be deleted.



### 4.1.3.1.4. Helm Chart

#### 4.1.3.1.4.1. Registering a Helm Chart

accordion Accordion only supports registering Helm charts to the built-in repositories. To register a Helm chart accordion , select a repository and 헬름 차트 등록 click the button at the top. Enter the Helm chart file in the modal window to register.

#### NOTE

Before registering a Helm chart in the accordion, tgzprepare a compressed Helm chart file with an extension.



If the Helm chart is registered normally, you can view it as follows.



#### 4.1.3.1.4.2. Deleting and Downloading Helm Charts

You can delete charts or download them as files using the buttons on the right side of the Helm chart list.

홈 > 헬름 리포지터리 > accordion

헬름 차트 등록

검색... Total: 1

로고 ↓	차트 명	버전	앱 버전	설명	리포지터리	
	wordpress	23.1.4	6.6.1	WordPress is the world's most popular blogging and content management platform. Powerful yet simple, everyone from students to global corporations use it to build beautiful, functional websites.	accordion	<span>삭제</span> <span>다운로드</span>

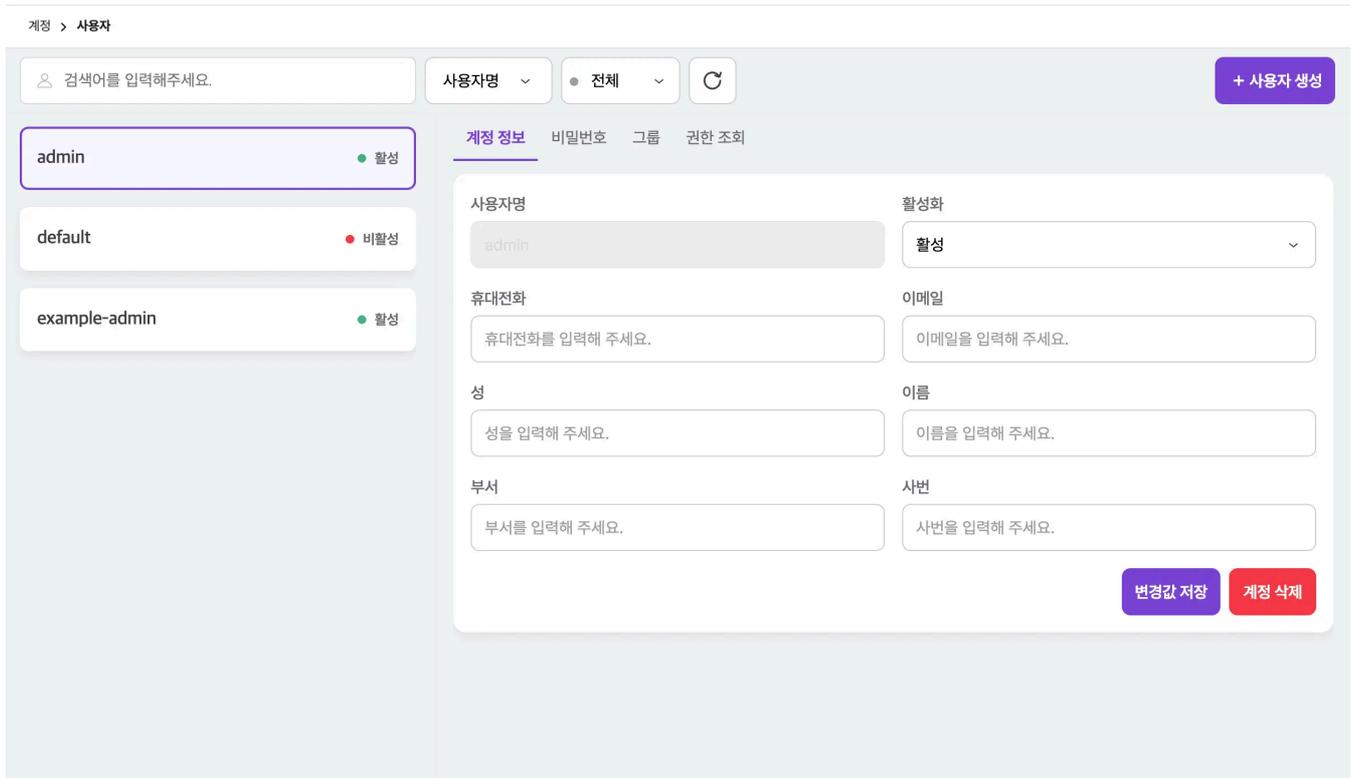
이전 1 다음

## 4.1.4. Account

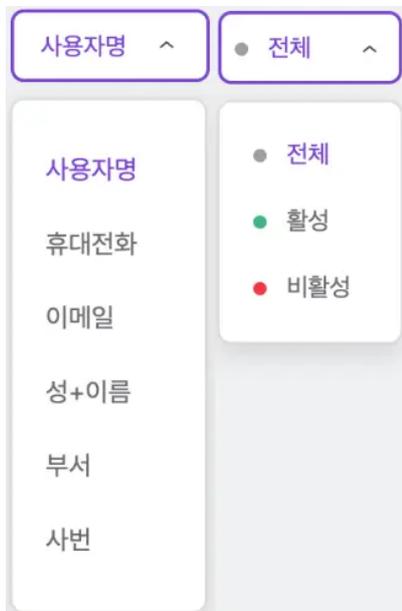
Accounts provide functions necessary for overall account management, such as user information, permissions, and access logs.

### 4.1.4.1. User

You can register, edit, or delete user information in the User menu. In the User List, the icon in the list will be displayed in green or red depending on whether the user is active.



Provides a filtering function for the user list. Filtering conditions can be searched based on detailed information entered during user registration and the user's activation status.



The user page consists of four tabs: 계정 정보 , 비밀번호 , 그룹 , and , and provides the following information: 권한 조회

#### 4.1.4.1.1. Account Information

item	explanation
Username	User ID (only English letters, numbers, hyphens ('-'), underscores ('_'), and periods ('.') are allowed, and only English letters or numbers are allowed at the beginning and end)
activate	Whether the user is active or inactive
mobile phone	User's mobile phone number (enter only numbers and 10-11 digits)
email	User email address
castle	User name
name	user name
department	User department name
cleanup	User ID (only English letters, numbers, and hyphens ('-') are allowed)

#### 4.1.4.1.2. Password

item	explanation
New password	Enter your user password (8 to 16 characters long, including English letters, numbers, and special characters, and at least one special character)
Confirm new password	Re-enter your user password, identical to your new password
Reset password	Whether to reset password (enabled or disabled) If enabled, you will be taken to a page to change your password to a new one when you first log in.

#### 4.1.4.1.3. Group

item	explanation
group	Link users and groups in a many-to-one relationship

### 4.1.4.1.4. Permission Inquiry

계정 > 사용자

검색어를 입력해주세요.    사용자명    ● 전체    🔄    + 사용자 생성

admin ● 활성

default ● 비활성

example-admin ● 활성

계정 정보    비밀번호    그룹    권한 조회

dhcho-min-auth	global-admin	global-viewer	test
	✓		

클러스터 권한

클러스터 이름	cluster-admin	cluster-viewer	test
dhcho-host-cluster			

네임스페이스 권한

클러스터 이름	네임스페이스 이름	dhcho-min-auth	namespace-admin	namespace-viewer
dhcho-host-cluster	acc-global			
	acc-system			
	default			
	delete-test	✓		
	dhcho			
	kube-node-lease			

item	explanation
Permission Query Type	전체 It consists of (individual + group), 개인 , 그룹 and you can search by selecting a specific type.
Export	Export permissions to a csv file.
Global Permissions Cluster Permissions Namespace Permissions	If the user has the corresponding permission, v it will be checked. Selecting the permission name above will take you to the corresponding permis - sion page.

### 4.1.4.1.5. User Registration

To register a user + 사용자 생성 , select the button in the upper right corner to go to the user registration page.

Information marked with a red dot is required. Enter the information and then 사용자 생성 select the button.

← 사용자 목록 사용자 생성

사용자명 \*  
사용자명을 입력해 주세요.

비밀번호 \*  
비밀번호를 입력해 주세요.

비밀번호 확인 \*  
다시 한번 비밀번호를 입력해 주세요.

활성화 \*  
비활성

비밀번호 초기화 \*  
비활성

이메일  
이메일을 입력해 주세요.

휴대전화  
휴대전화를 입력해 주세요.

성  
성을 입력해 주세요.

이름  
이름을 입력해 주세요.

부서  
부서를 입력해 주세요.

사번  
사번을 입력해 주세요.

그룹 그룹 추가

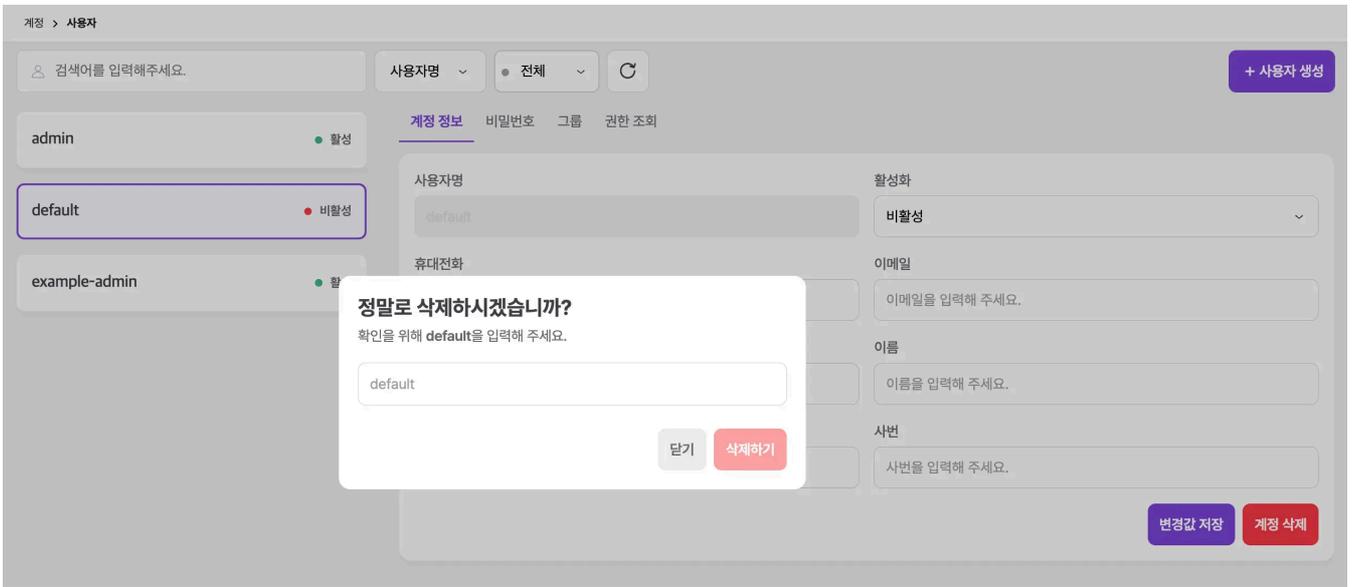
### 4.1.4.1.6. User Modification

To edit a user, select the user from the user list, enter the information you want to edit, and then 변경값 저장 select the button.

User information is modified separately for each tab.

### 4.1.4.1.7. Deleting a User

To delete a user, select the user you want to delete from the list and select the button 계정 정보 on the tab . In the modal that appears, enter the username and select the button to complete the deletion. If the user is set as a global member, cluster member, or namespace member, they will be removed from those members. 계정 삭제 삭제하기

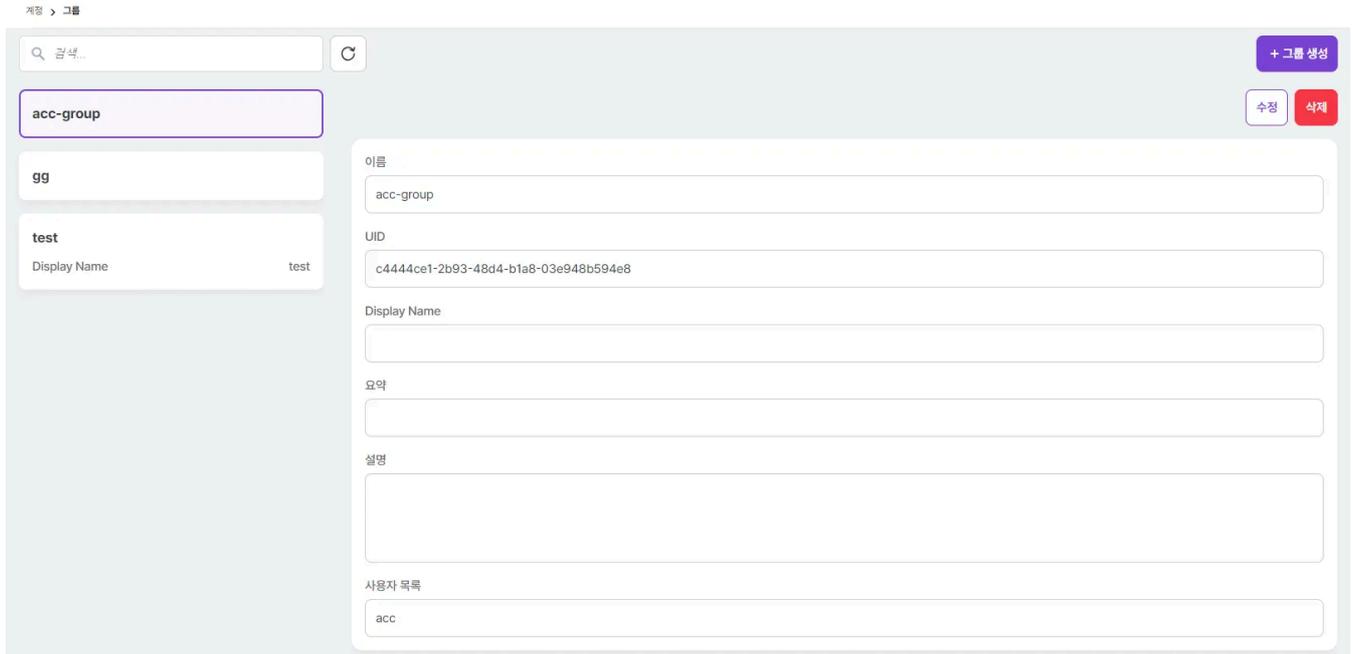


### 4.1.4.2. Group

The Group menu allows you to register, edit, and delete group information. Administrators 멤버 can grant permissions to users or groups through the menu. The Group Information section provides a list of users registered to the group.

**NOTE**

그룹 refers to a set of users.



item	explanation
name	Group name
UID	Group's unique ID
Display Name	The name under which the group appears in Users, Global Members, Cluster Members, and Namespace Members.
summation	Summary information about the group
explanation	Detailed description of the group
User list	List of users associated with the group (usernames)

#### 4.1.4.2.1. Group Registration

To register a group, + 그룹 생성 select the button in the upper right corner, fill in the required fields such as name and other optional fields, and then 그룹 생성 select the button.

← 그룹 목록

그룹 생성

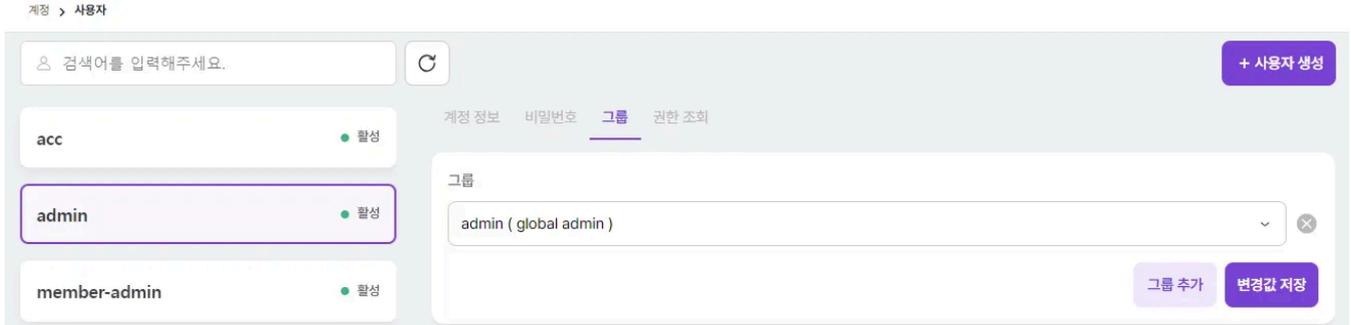
이름 *	<input type="text"/>
Display Name	<input type="text"/>
요약	<input type="text"/>
설명	<input type="text"/>

## Display Name

Defines the name that will actually be displayed where the group is registered.

### NOTE

Associating a user with a group is done by changing the group information in the user information in the user menu.



As shown in the image above, it is displayed as the group name (Display Name). If you modify the information of the registered group, Display Name the information will be displayed as such.

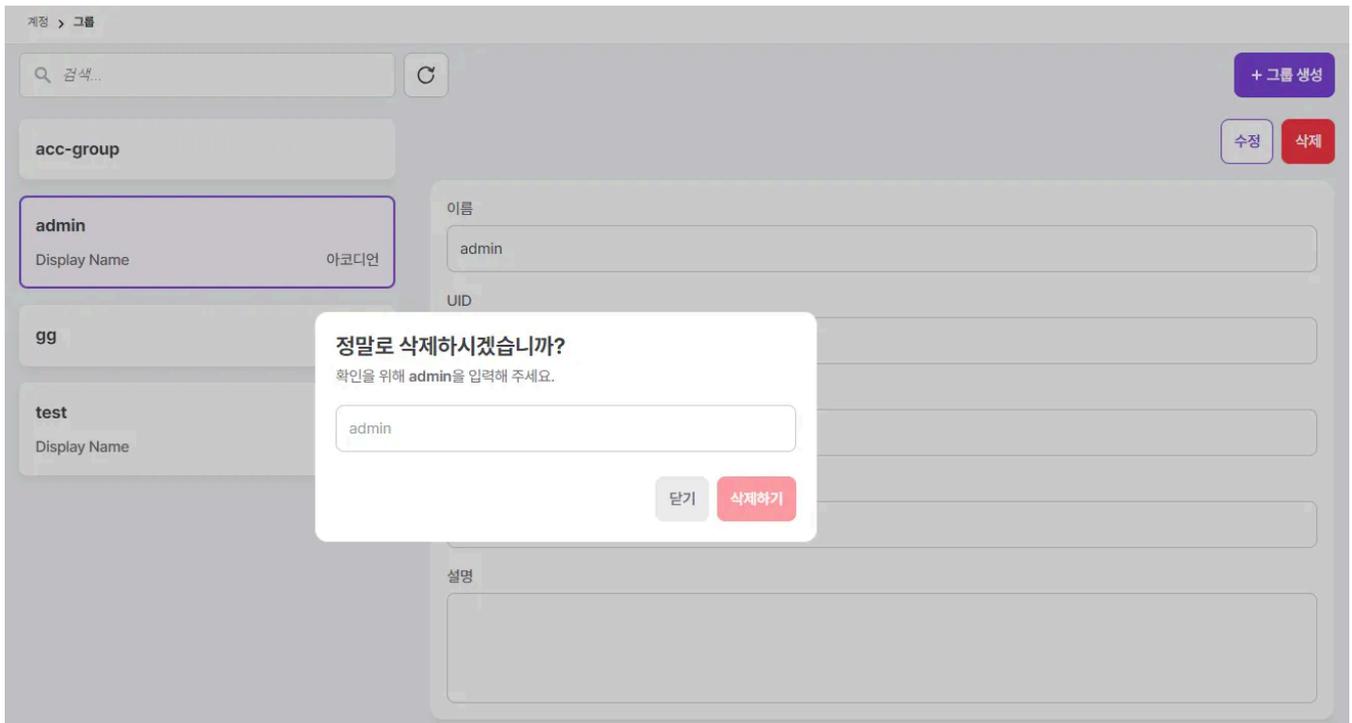


#### 4.1.4.2.2. Deleting a Group

To delete a group, select the group you want to delete from the list and 삭제 select the button in the upper right corner.

In the modal that appears, enter the group name and 삭제하기 select the button to complete the deletion.

If the group is set as a global member, cluster member, or namespace member, it will be removed from those members.



### 4.1.4.3. Permissions

A permission represents a collection of menus and roles. These permissions are managed separately by scope and are referred to as global, cluster, or namespace permissions, respectively. Each scoped permission can be bound to menus within that scope. For example, see the following.

- Global authority
  - Role settings for cluster menus (global scope)
  - Role settings for namespace menus (cluster scope)
  - Roles can be set for the catalog menu (namespace scope)
- Cluster permissions
  - Role settings for namespace menus (cluster scope)
  - Roles can be set for the catalog menu (namespace scope)
- Namespace permissions
  - Roles can be set for the catalog menu (namespace scope)

#### TIP

The text explains global authority as an example.

You can view permission information for each scope in the Global/Cluster/Namespace permissions menu. Each permission consists of one or more menus and roles.

계정 > 글로벌 권한

이름 검색

+ 글로벌 권한 생성

global-admin

2024. 6. 20. 오후 5:35:12

수정

삭제

global-viewer

2024. 6. 20. 오후 5:35:12

이름

global-admin

메뉴명

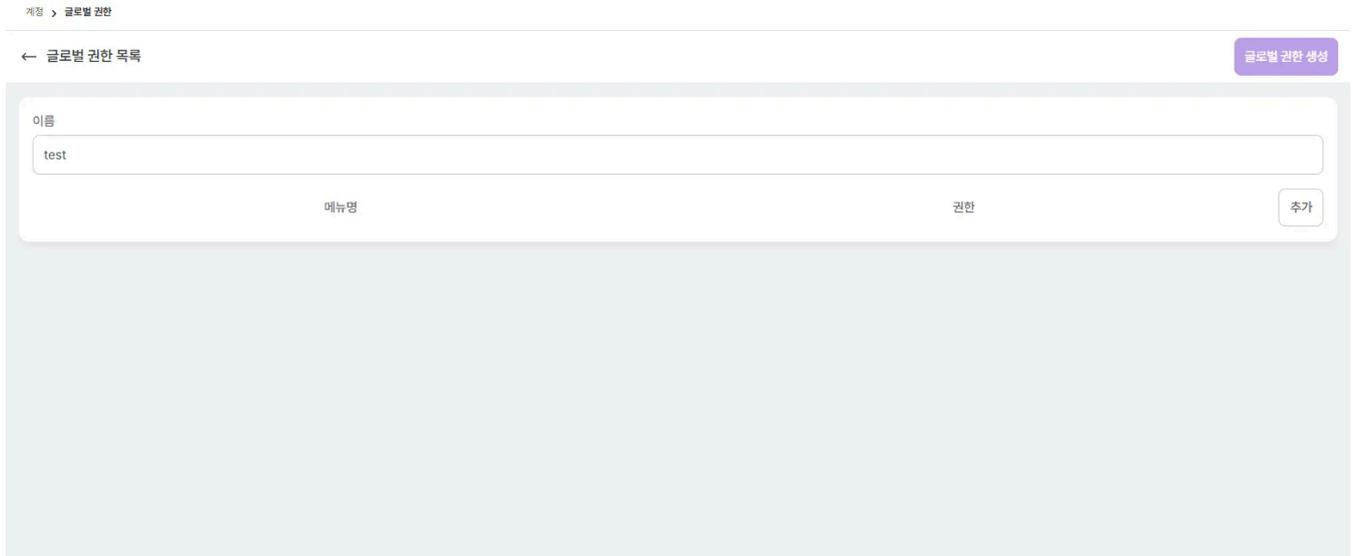
권한

글로벌 대시보드	viewer
클러스터	admin
클러스터 대시보드	viewer
네임스페이스	admin
노드	admin
네임스페이스 대시보드	viewer
헬름	admin
사용자	admin
그룹	admin
글로벌 권한	admin
클러스터 권한	admin
네임스페이스 권한	admin
글로벌 멤버	admin

> 이벤트 ( NORMAL 0 / WARNING 0 )

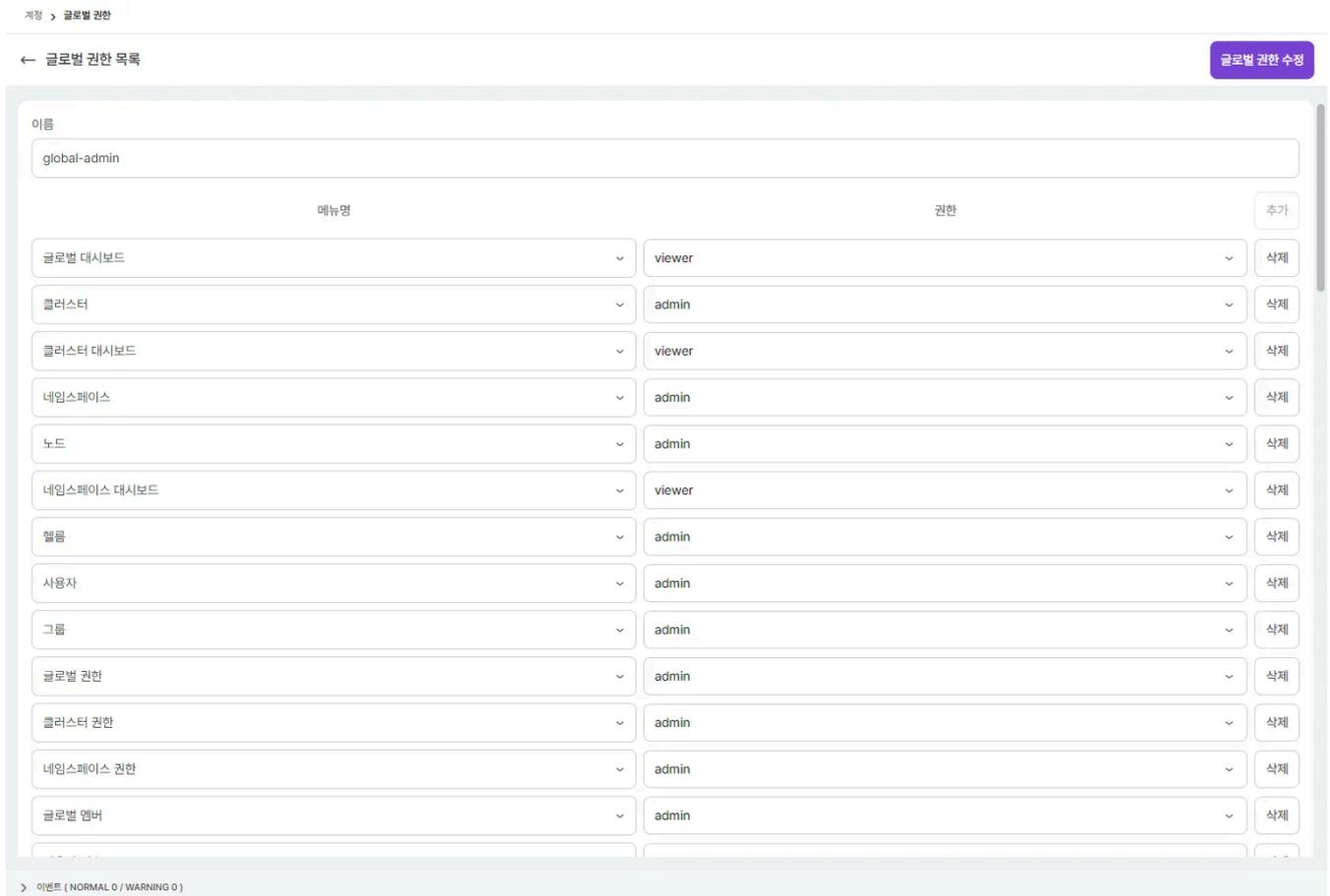
### 4.1.4.3.1. Registering Permissions

To register a permission, + 글로벌 권한 생성 select the button in the upper right corner and add the name of the permission and the menus and roles to be included in the permission.



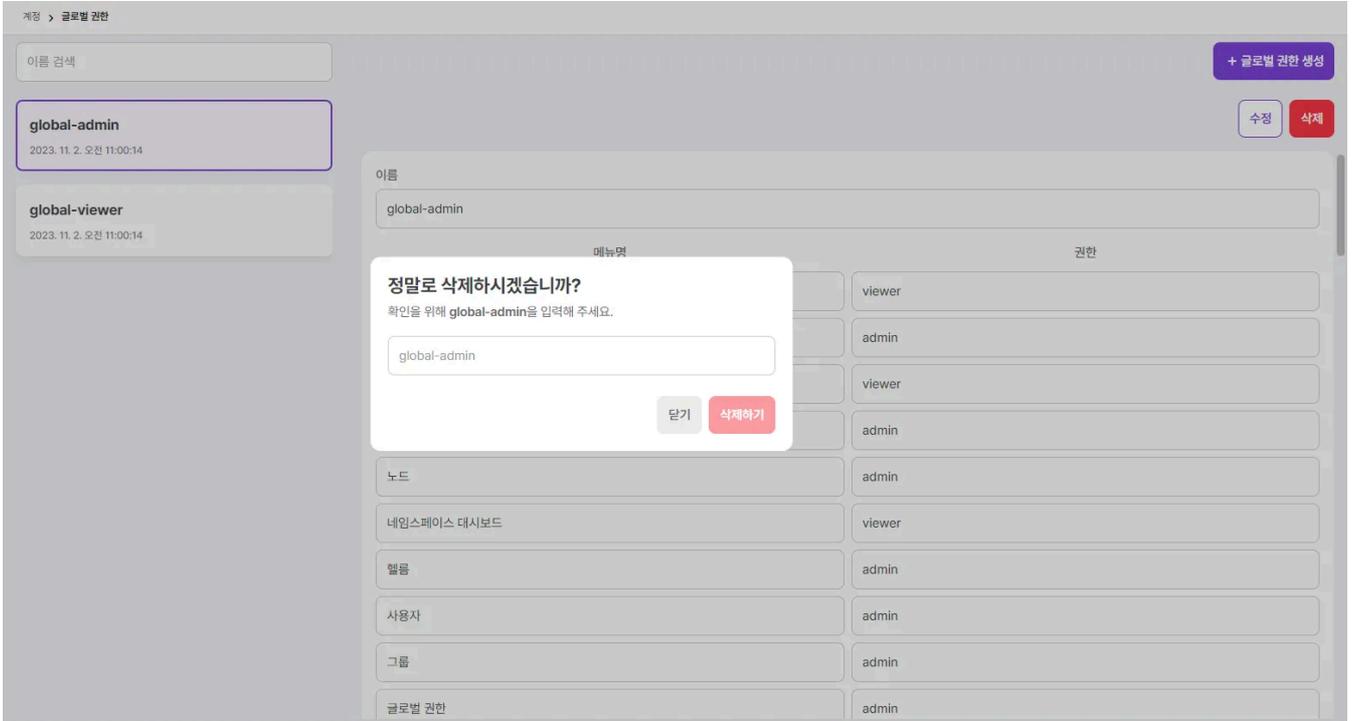
### 4.1.4.3.2. Modify permissions

To edit permissions, select the permissions you want to modify and 수정 select the button in the upper right corner to go to the edit screen. Then, add or delete menus, or change roles for the menus. Finally, 글로벌 권한 수정 select the button in the upper right corner to apply the changes to the permissions.



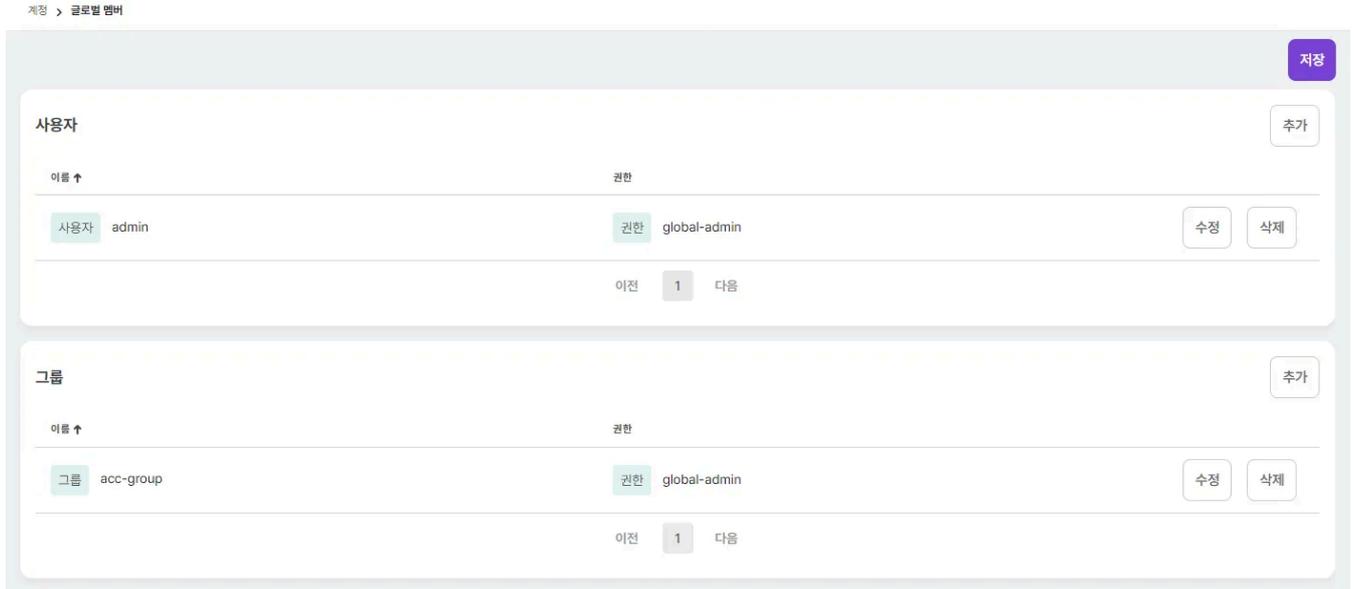
### 4.1.4.3.3. Deleting Permissions

To delete a permission, select the permission you want to delete and 삭제 select the button in the upper right corner. In the modal that appears, enter the permission name and 삭제하기 select the button.



### 4.1.4.4. Global Member

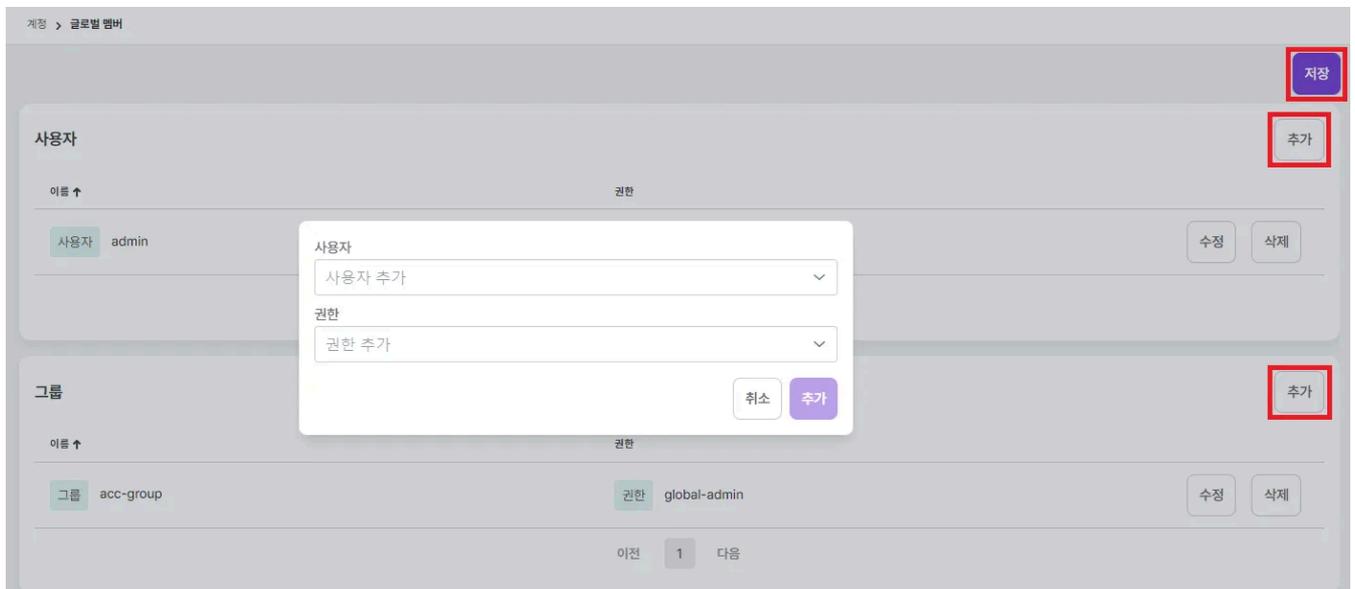
Global members manage global permissions for users and groups.



type	explanation
user	Managing global permissions for individual users
group	Manage global permissions by group (same effect as granting permissions to all users in a group)

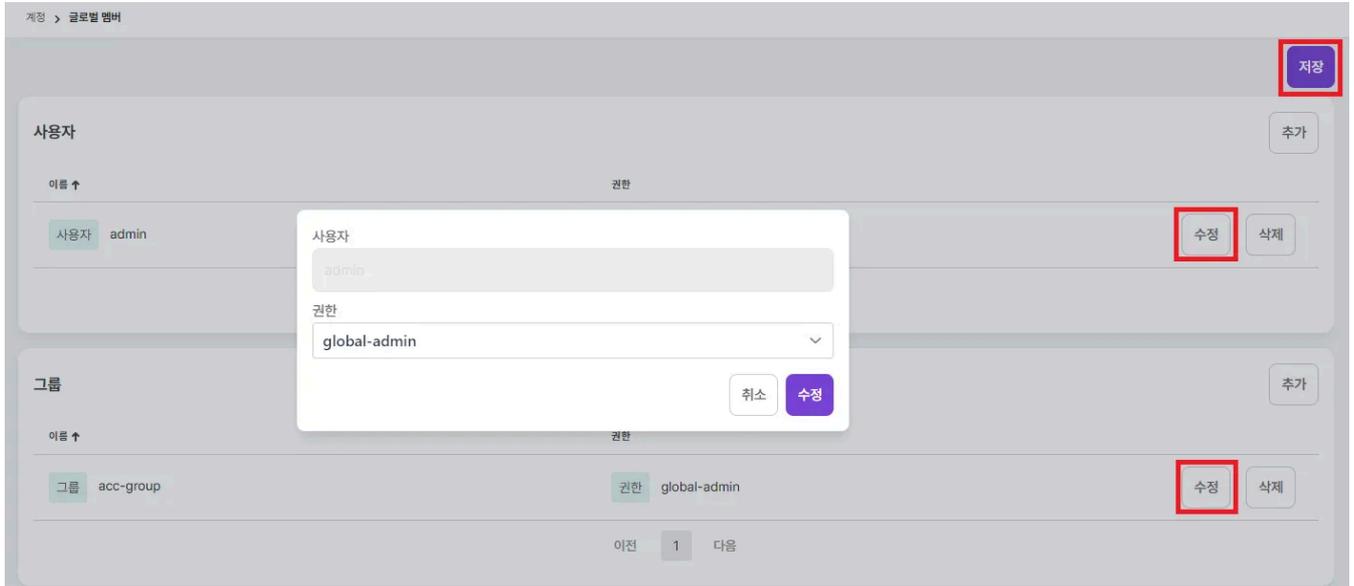
#### 4.1.4.4.1. Adding a Member

추가 Select the button to the right of the user (or group) list . You can select a user (or group) and set permissions in the modal. After setting the permissions 저장 , you must select the button for the changes to take effect. While multiple users (or groups) can be selected, only single permis - sions can be selected.



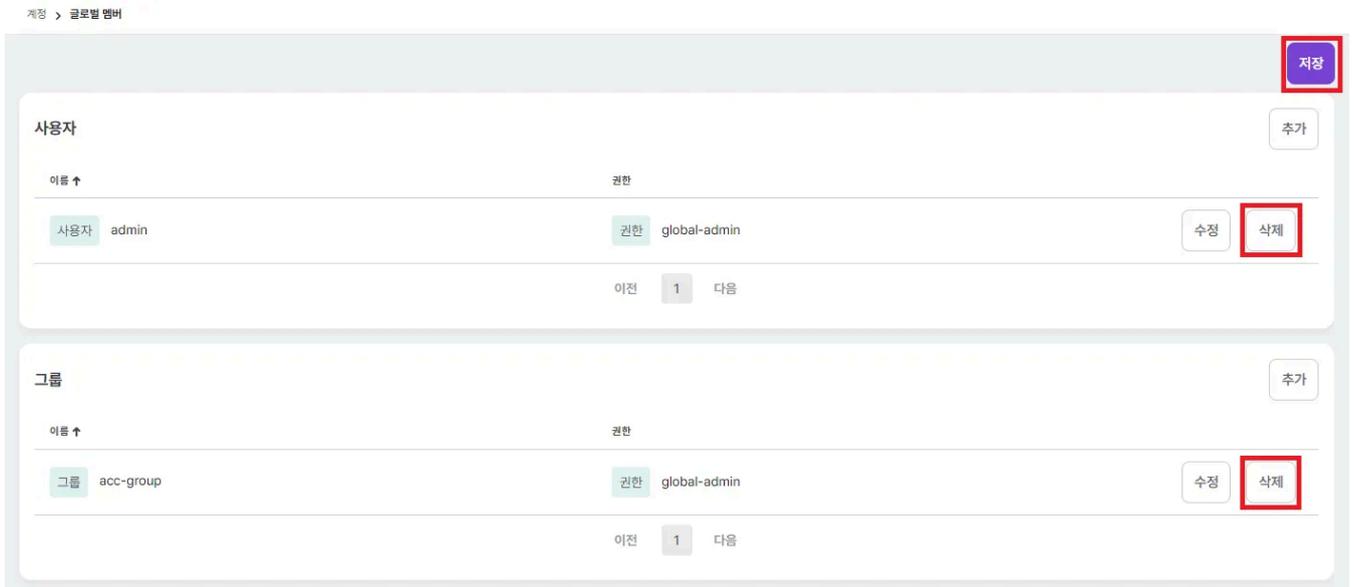
### 4.1.4.4.2. Modifying member permissions

수정 You can modify a user's (or group's) permissions by clicking the button to the right of the user (or group). 저장 Changes will only take effect after clicking the button at the top.



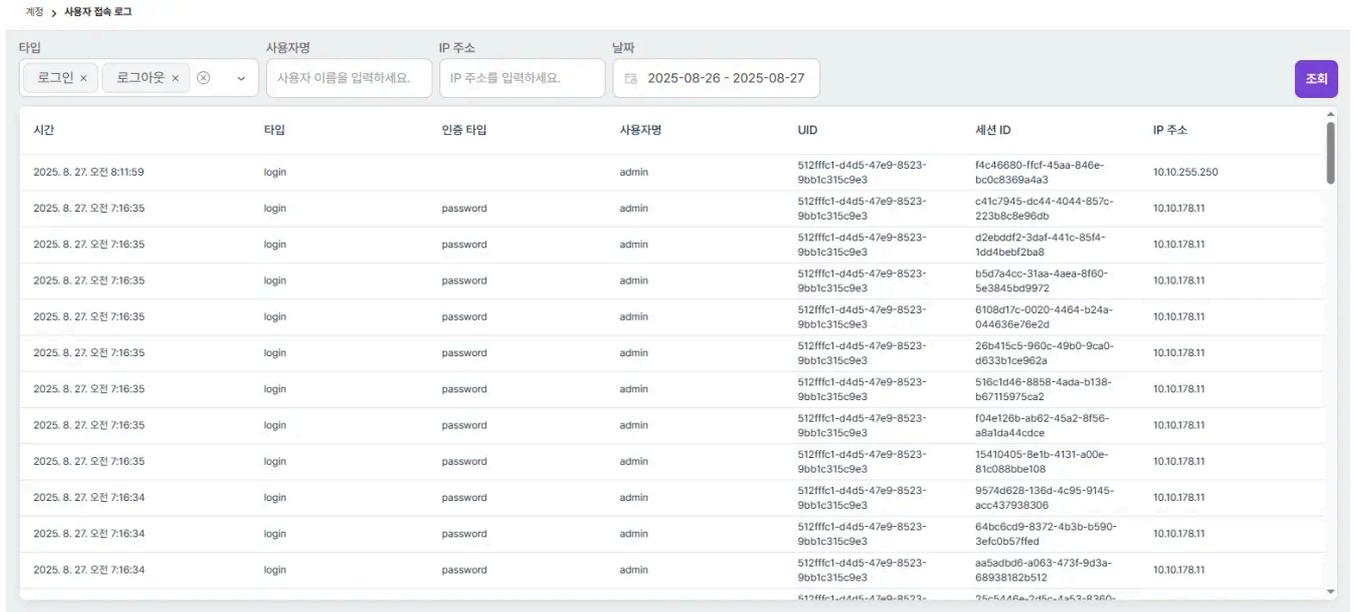
### 4.1.4.4.3. Deleting a Member

삭제 You can delete a member by right-clicking on the user (or group) . 저장 You must then click the button at the top to apply the change.



### 4.1.4.5. User Access Log

You can view access log information such as users' login/logout.



item	explanation
hour	hour
Type	Connection Type ( LOGIN or LOGOUT )
Authentication type	If you authenticate using Basic authentication rather than logging in through the Accordion Web Console, password the authentication type will be set to Approval Type (Authentication Method).
Username	user name
UID	User UID
Session ID	User Session ID
IP address	User IP address

You can refine your search by setting the conditions above.

Setting conditions and 조회 selecting a button will search user access logs based on those conditions.

The available conditions are as follows:

item	explanation
Type	Filter by type (multiple selection possible)
Username	Filter by username (partial search is not supported)

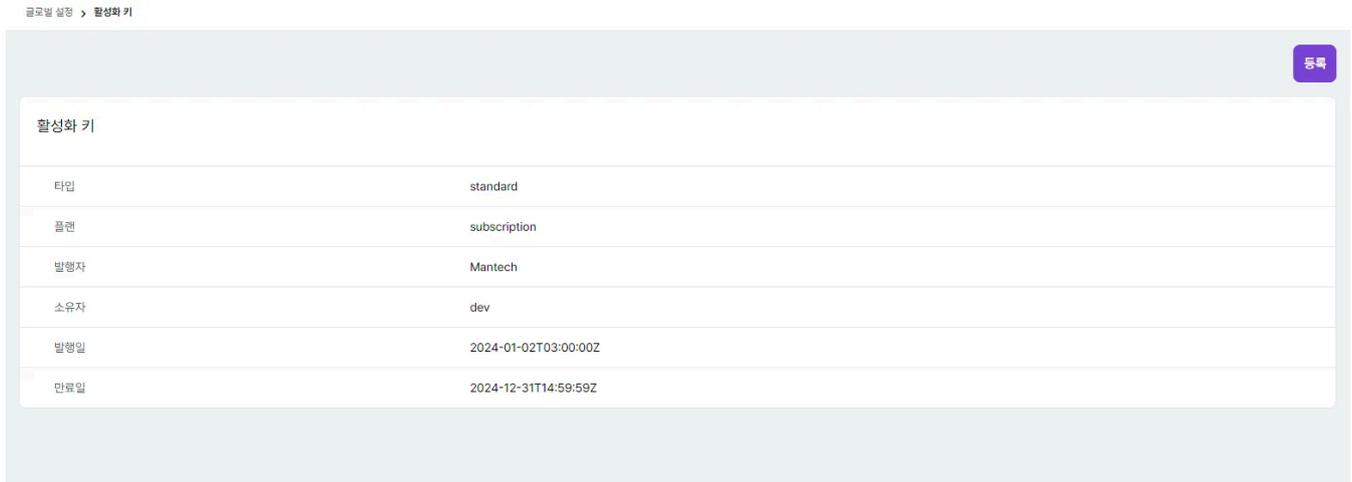
<b>item</b>	<b>explanation</b>
IP address	Filtering by user IP address (partial search is not supported)
date	Specify a date range with the calendar

## 4.1.5. Global Settings

Global settings allow you to configure system-wide activation keys and recipients for notifications.

### 4.1.5.1. Activation Key

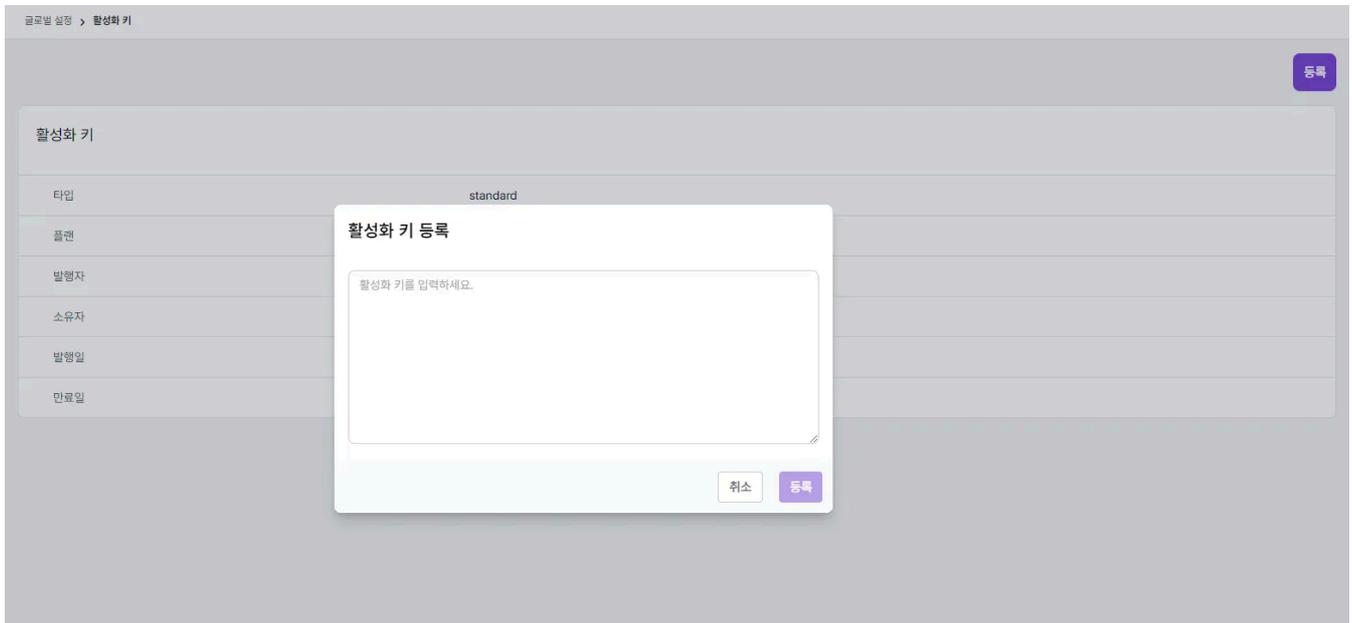
Manage activation keys for using the accordion.



classification	explanation
Type	Standard or Trial <ul style="list-style-type: none"> <li>• Standard               <ul style="list-style-type: none"> <li>◦ Types that can be managed by a formal activation key</li> </ul> </li> <li>• Trial               <ul style="list-style-type: none"> <li>◦ A type that allows you to use the accordion for a certain period of time</li> </ul> </li> </ul>
flan	Perpetual 또는 Subscription <ul style="list-style-type: none"> <li>• Perpetual               <ul style="list-style-type: none"> <li>◦ Permanent Activation Key</li> </ul> </li> <li>• Subscription               <ul style="list-style-type: none"> <li>◦ Activation key with a time limit</li> </ul> </li> </ul>
publisher	Activation Key Issuer (Mantech)
owner	Activation Key Owner
Date of issue	Activation key issue date
Expiration date	Activation key expiration date

### 4.1.5.1.1. Registering an Activation Key

등록 Select the button in the upper right corner . When the modal appears, enter your activation key to register.



## 4.1.5.2. Global Recipients

Set recipients to receive notifications according to the notification policy.

### 4.1.5.2.1. Global Recipient Overview

⌵ 기본

+ 수신자 생성

**sample-receiver**  
🕒 2024-05-22 20:21:16

MULTICLUSTERRECEIVER
**sample-receiver**

수정

삭제

**이메일**

호스트: smtp.sample.com  
 포트: 999  
 발신자 이메일: sample@sample.com

---

**인증**

방식: BasicAuth  
 TLS 활성화: false  
 사용자 이메일: sample@sample.com  
 사용자 비밀번호: \*\*\*\*\* 👁

---

**수신자 이메일 목록**

- user1@sample.com
- user2@sample.com

**슬랙**

토큰: \*\*\*\*\* 👁

---

**채널 목록**

- channel1
- channel2

**Webhook**

Webhook URL: https://sample-hook.com  
 인증 타입: 인증 안함  
 바디 test : sample1  
 헤더 content-type : application/json

---

TLS 인증서 검증: O

Root CA 인증 sample-ca 👁

서

\*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*

인증서/개인 sample-tls 👁

키

\*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*

- email

classification	explanation
Host	SMTP Host Address
port	SMTP Port Number
Sender's email	Sender email address
method	Authentication method 인증 안함 (anonymous), Basic Auth
TLS enabled	Whether to use TLS
User Email	SMTP User Email
User password	SMTP user password
Recipient Email List	Recipient email information

- Slack

classification	explanation
token	Slack token value
Channel List	Slack channel name

- Webhook

classification	explanation
Webhook URL	Webhook URL address
Authentication type	인증 안함 (anonymous), Bearer 인증 , basic 인증
token	Bearer 인증 Token information in case of
user name	basic 인증 For username
User password	basic 인증 In case of user password
body	Body to be included in the request
header	Headers for the request
TLS certificate verification	When verified O , when not verified X
Root CA certificate	Secret name and data containing Root CA certificate information

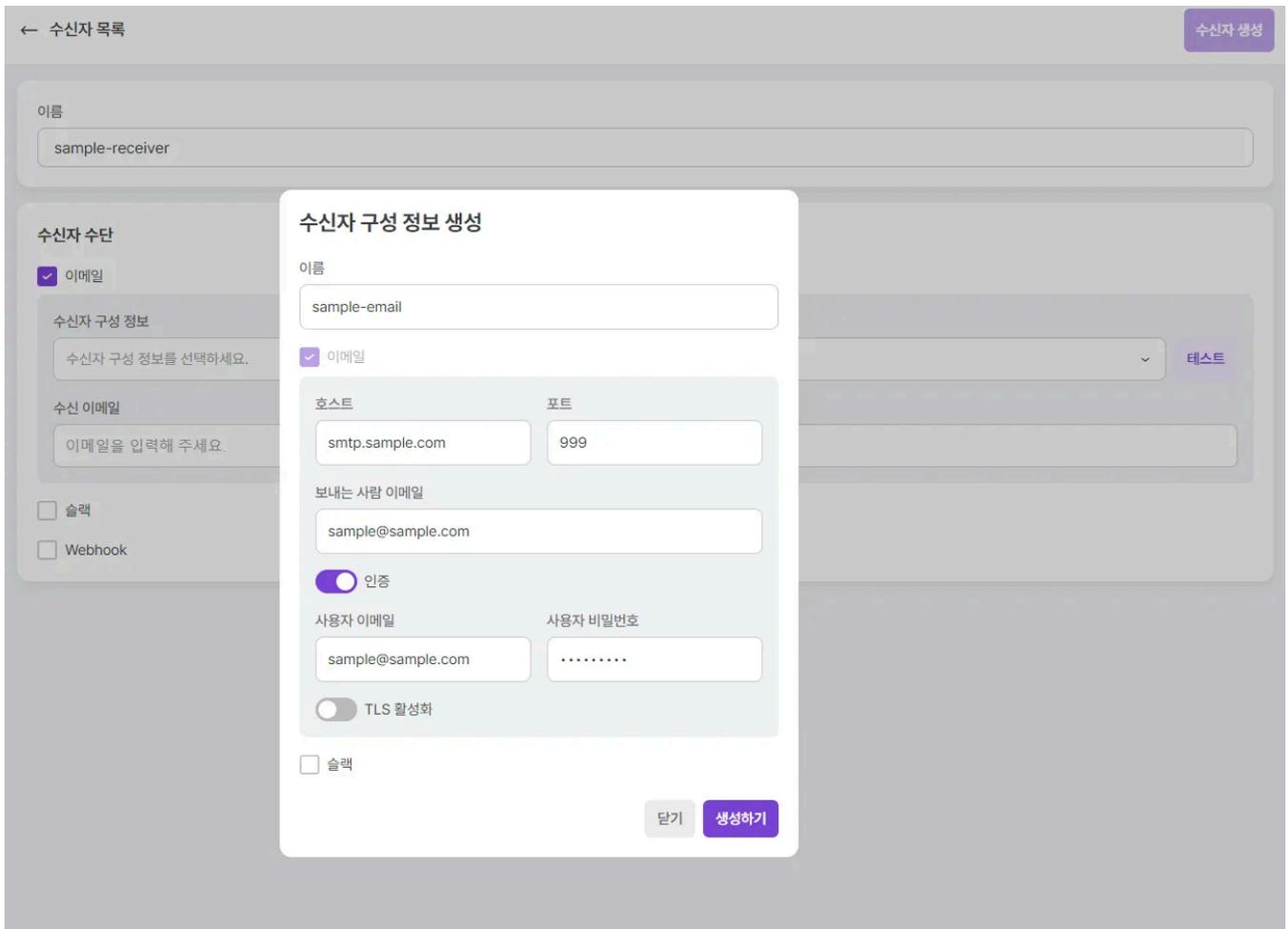
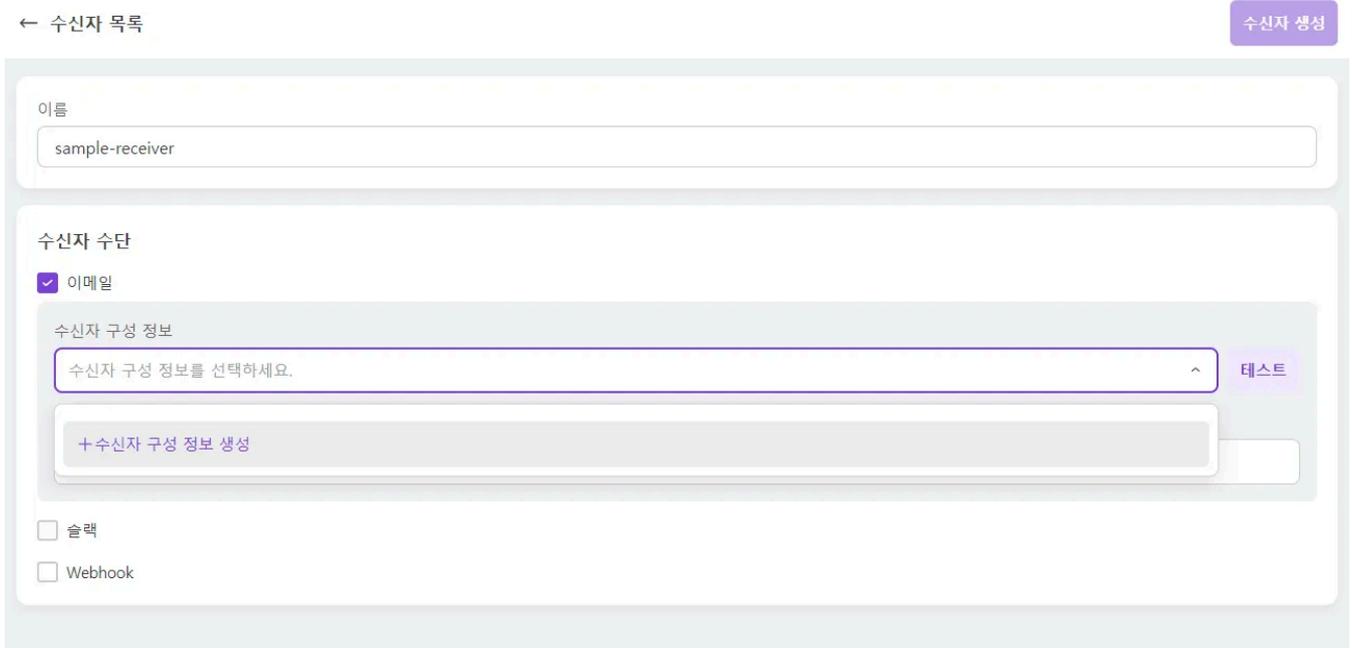
<b>classification</b>	<b>explanation</b>
Certificate/Private Key	Secret name and data containing TLS certificate and private key information

### 4.1.5.2.2. Creating a Global Recipient

When creating a recipient 이메일, you can set, 슬랙, . 웹훅

#### 4.1.5.2.2.1. Email Settings

After entering the recipient configuration information and recipient email, 테스트 click the button to check if the settings are valid.



← 수신자 목록

수신자 생성

이름

sample-receiver

수신자 수단

이메일

수신자 구성 정보

sample-email

테스트

호스트: smtp.sample.com

포트: 999

발신자 이메일: sample@sample.com

인증

방식: BasicAuth

TLS 활성화: false

사용자 이메일: sample@sample.com

사용자 비밀번호: \*\*\*\*\*

참조 수신자 목록

수신 이메일

user1@sample.com

user2@sample.com

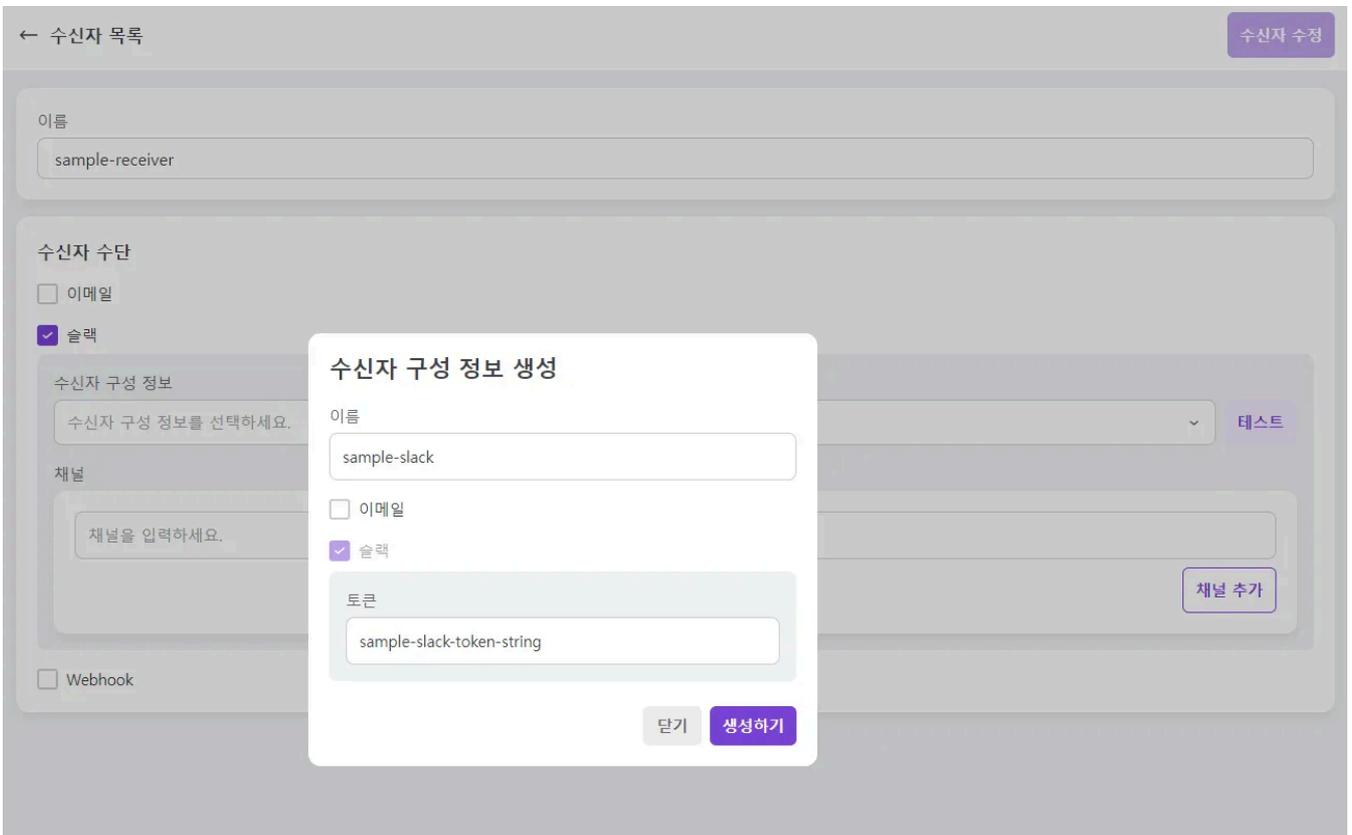
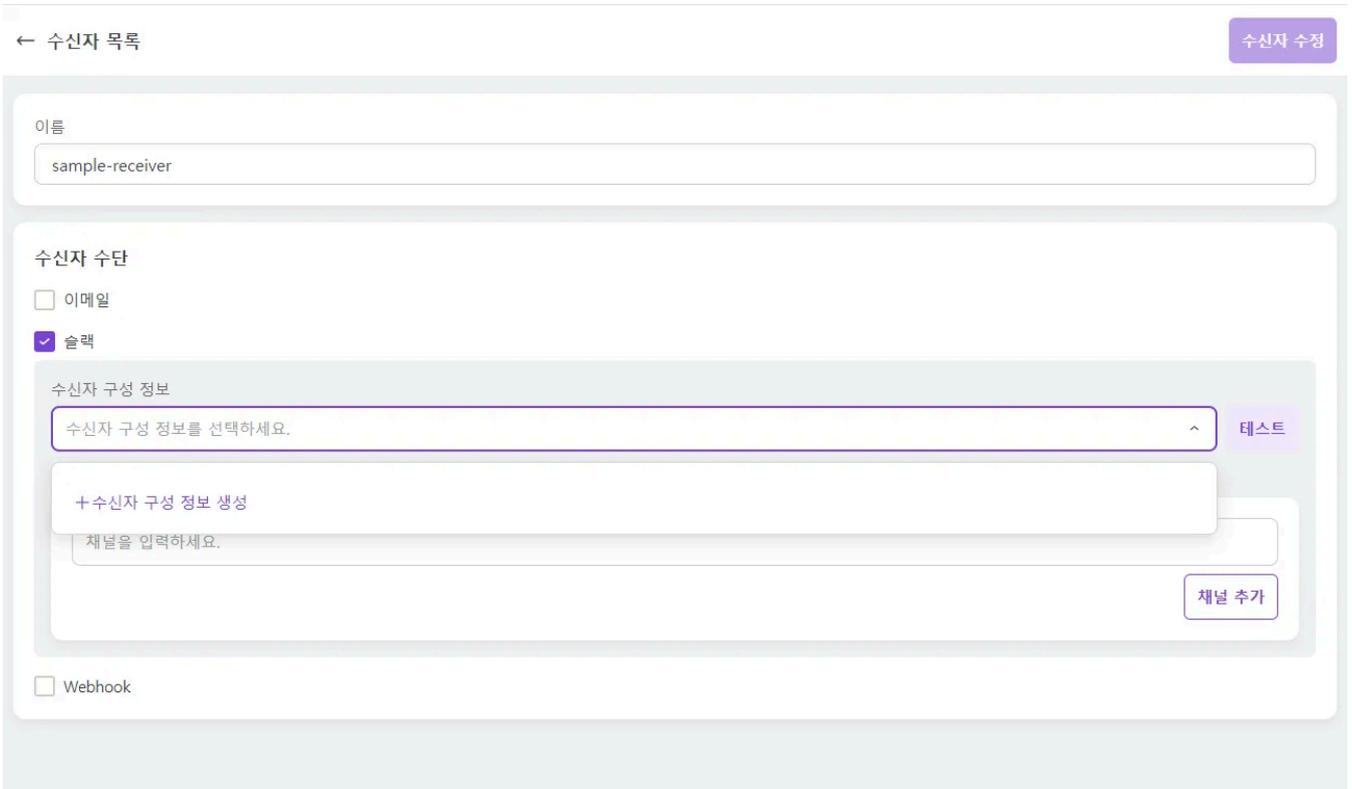
이메일을 입력해 주세요.

슬랙

Webhook

### 4.1.5.2.2. Slack Settings

After entering the receiver configuration information and channel, 테스트 press the button to confirm that the settings are valid.



← 수신자 목록

수신자 생성

이름  
sample-receiver

수신자 수단  
 이메일  
 슬랙

수신자 구성 정보  
sample-slack 테스트

토큰: \*\*\*\*\*

참조 수신자 목록

채널  
channel1  
channel2 채널 추가

Webhook

### 4.1.5.2.2.3. Webhook Settings

Enter the webhook URL, header, and body information. Select an authentication type from 인증 안함 , Bearer 인증 , . After entering the webhook URL, header, and body information and selecting an authentication type, click the button to confirm that the settings are valid. basic 인증 테스트

← 수신자 목록

수신자 생성

이름

수신자 수단

이메일

슬랙

Webhook

Webhook url

 테스트

인증 타입

인증 안함
^

인증 안함

Bearer 인증

basic 인증

바디

[0]

TLS 인증서 검증 건너뛰기

When selecting Bearer authentication, create and select a secret containing token information.

### 토큰 생성

이름

토큰

When selecting basic authentication, create and select a secret containing user and password information.

### 기본 인증 생성

이름

사용자

비밀번호

When disabling skip TLS certificate verification, generate and select the Root CA certificate and certificate/private key in the same way.

← 수신자 목록 수신자 생성

슬랙

Webhook

Webhook url  
 테스트

인증 타입

헤더  
  헤더 추가

바디  

```
{  
  "test": "sample1"  
}
```

TLS 인증서 검증 건너뛰기

Root CA 인증서

인증서/개인 키

## Body example

```
바다
{
  "test": "sample1"
}
```

The webhook body is entered in JSON format. Then, the JSON-formatted data written together with the notification manifest, which is a response-related resource, is transmitted together when the webhook is triggered.

```
{
  "test": "sample1",
  "manifest": {
    "kind": "ClusterNotification",
    "apiVersion": "alert.accordions.co.kr/v1beta1",
    "metadata": {
      ...
    },
    ...
  }
}
```

### CAUTION

When creating a global recipient, the recipient/recipient configuration information generated is automatically copied to all member clusters. This recipient/recipient configuration information may include confidential information such as the SMTP server account and password, Slack or webhook server user accounts (username and password), tokens, and certificate information.

These confidential information is stored in the Secrets folder of each member cluster. Before using a global recipient, please be sure to understand the following:

- **Information Leakage Risk:** Since copied receiver/receiver configuration information is distributed to all member clusters, the security of each cluster is critical. Strictly manage cluster access permissions to prevent unauthorized access.

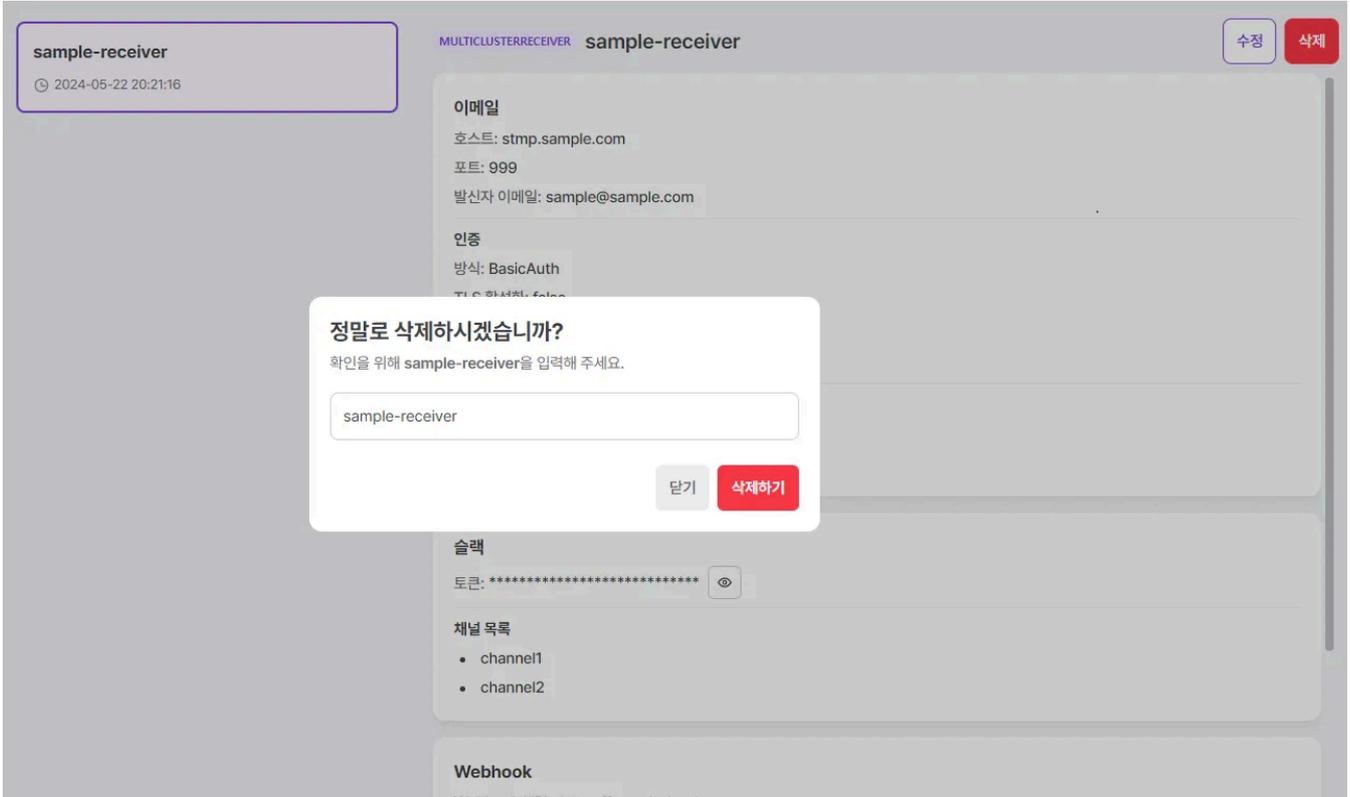
Confidential information within cluster receiver/receiver configuration information is managed as secrets in the acc-system namespace. Users with cluster administrator privileges can access this confidential information, but users with access to other namespaces cannot view it. For more information, see [Kubernetes Role-Based Access Control \(RBAC\)](#).

### 4.1.5.2.3. Modifying a Global Recipient

Just like creating a recipient 이메일 , click the button after changing the contents to confirm that the settings are valid 슬랙 , and then select the button to apply them. 웹훅 테스트 수정

### 4.1.5.2.4. Deleting a Global Recipient

Select the recipient you want to delete and 삭제 select the button on the right.

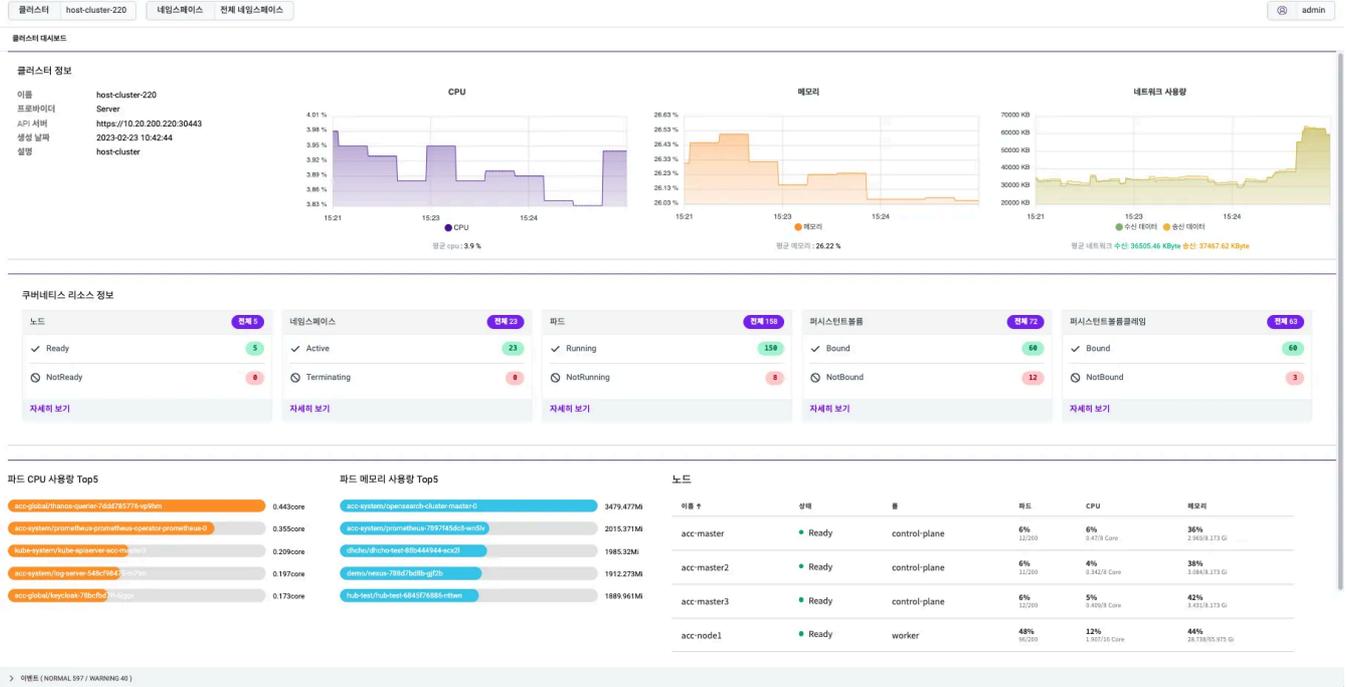


Enter the recipient name in the modal and 삭제하기 select the button.

## 4.2. Cluster Menu

### 4.2.1. Cluster Dashboard

The cluster dashboard provides information on the cluster's Kubernetes resources and system resource usage, such as CPU and memory.



The information displayed is as follows:

item	explanation
Cluster information	<p>Provides basic cluster information and CPU, memory, and network usage information.</p> <ul style="list-style-type: none"> <li>Name: Cluster name</li> <li>Provider: Kubernetes Provider</li> <li>API Server: Accordion Member Agent Endpoint</li> <li>Creation Date: Cluster registration time</li> <li>Description: Cluster description</li> </ul> <p><b>NOTE</b> 생성 날짜 The time standard is UTC.</p>

item	explanation
Kubernetes resource information	<p>Provides information about Kubernetes resources deployed in the cluster. 자세히 보기 Clicking on a resource takes you to a list of the resources and provides detailed information.</p> <div data-bbox="480 338 1453 539" style="border: 1px solid black; padding: 10px;"> <p><b>NOTE</b></p> <p>For a pod 상태, clicking on it 상태 will take you to the pod list screen filtered by that .</p> </div>
Top 5 Pod CPU/Memory Usage	<p>Provides information on the top 5 pods in order of CPU/memory usage among the pods deployed in the cluster.</p>
Node	<p>Provides information about the nodes that make up the cluster.</p> <div data-bbox="480 757 1453 1238" style="border: 1px solid black; padding: 10px;"> <ul style="list-style-type: none"> <li>• Name: Node Name</li> <li>• Status: Node status (Ready or NotReady)</li> <li>• Role: Node role (control-plane or worker)</li> <li>• Pods: Status of pods deployed on the node (number of deployed pods/maximum number of deployable pods)</li> <li>• CPU: Node CPU usage (number of cores in use/number of cores in the node)</li> <li>• Memory: Node memory usage (memory in use/memory capacity of the node)</li> </ul> </div>

## 4.2.2. Namespace

Namespaces serve to isolate groups of Kubernetes resources within a cluster. Namespace-based resources require that resource names be unique within the namespace. This allows you to logically isolate namespaces by team or project.

The Namespace menu allows you to manage namespaces within the cluster. You can create, modify, and delete namespaces, and set usage limits for system resources like CPU and memory. The information provided is as follows:

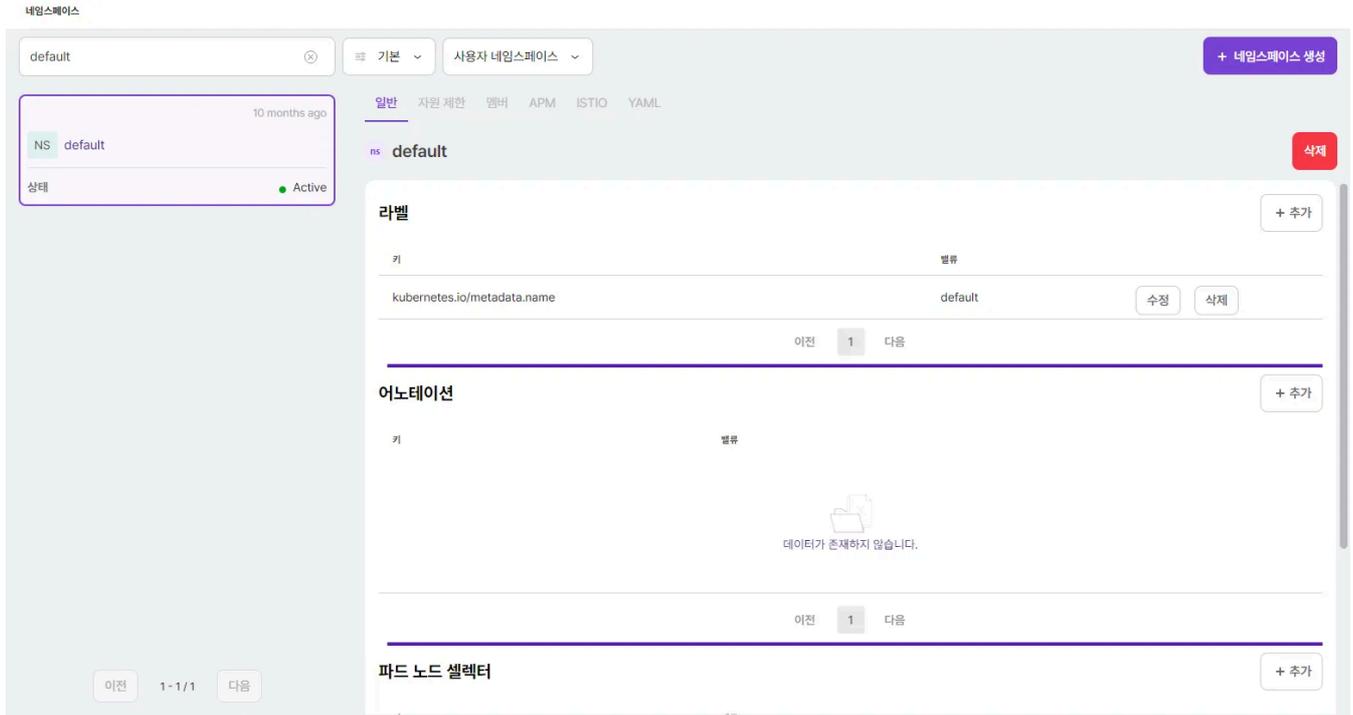


Table 1. Namespace List

item	explanation
User namespace	Deploying applications into user-created namespaces
System namespace	A namespace where resources required for Kubernetes and Accordion operations are deployed.

Table 2. General

item	explanation
Label	Filtering is possible using labels when searching by namespace label.
Annotation	Save namespace settings, etc. with namespace annotations
Pad node selector	Set to deploy to nodes with the corresponding label when deploying pods

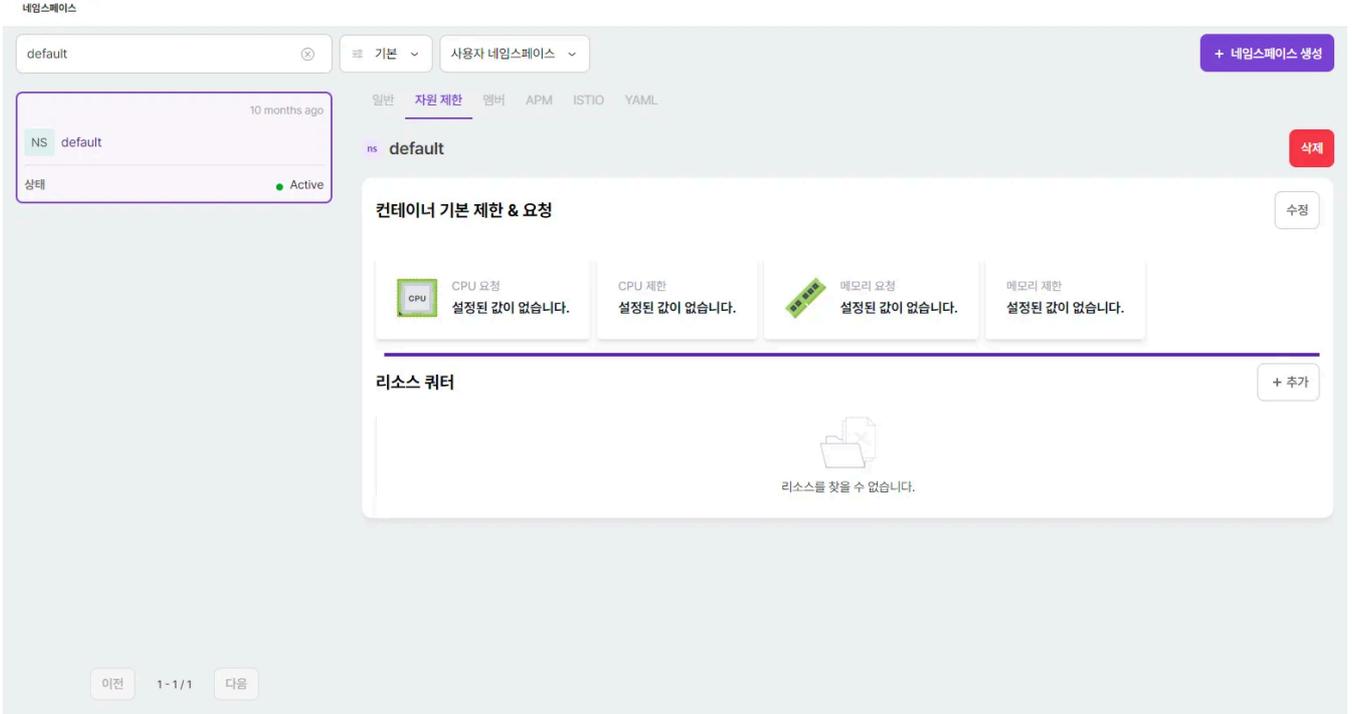


Table 3. Resource limitations

item	explanation
Container Default Limits & Requests	Setting system resource (CPU/memory) limits using Kubernetes' limit ranges
Resource quota	Set limits on Kubernetes resources and system resources (CPU/memory) using Kubernetes resource quotas.

리소스 쿼터

+ 추가

QUOTA test

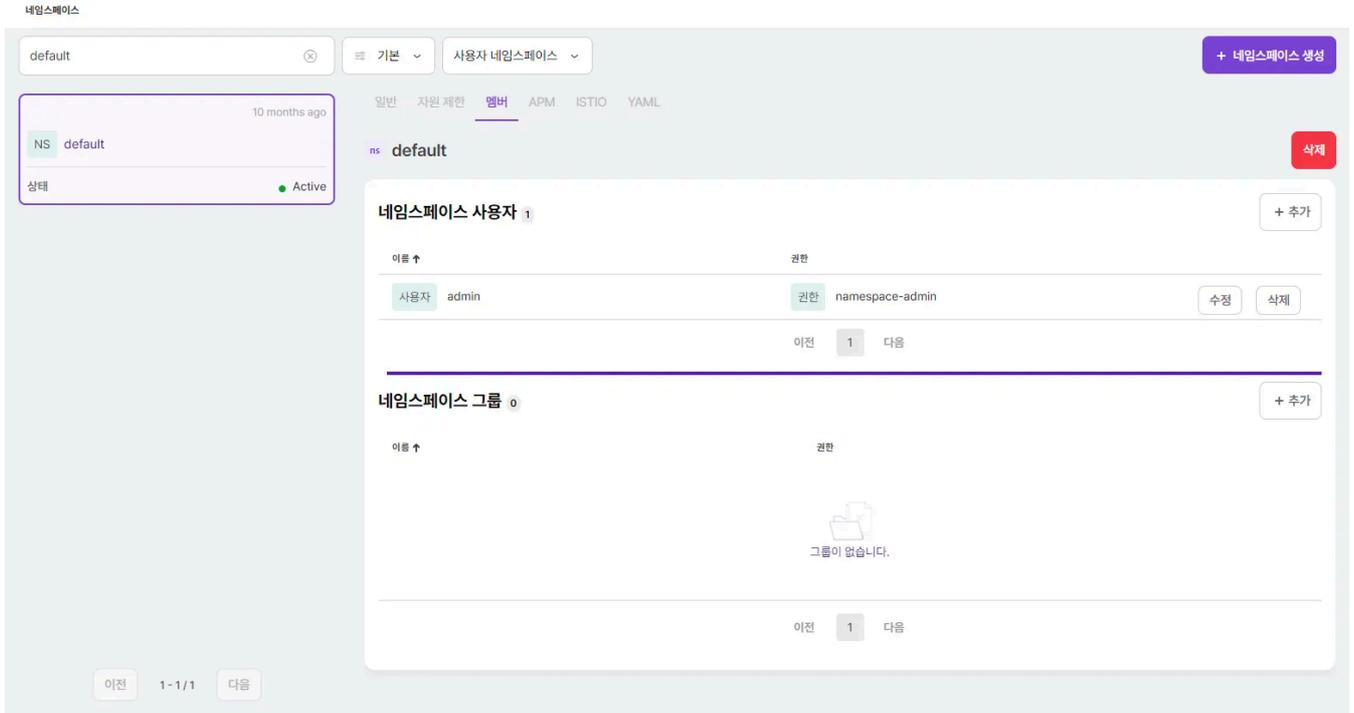
삭제

수정

타입 ↑	USED	제한	사용량
count/deployments.apps	1	1	100%
count/statefulsets.apps	0	1	0%
count/daemonsets.apps	4	1	400%
count/jobs.batch	1	1	100%
count/cronjobs.batch	0	1	0%
count/services	3	1	300%
count/persistentvolumeclaims	3	1	300%

NOTE

Resources deployed before resource quotas are set are not limited and may exceed 100% usage.



**Table 4. Members**

item	explanation
Namespace User	Assigning Namespace Users and Setting Permissions
Namespace Group	Assigning Namespace User Groups and Setting Permissions

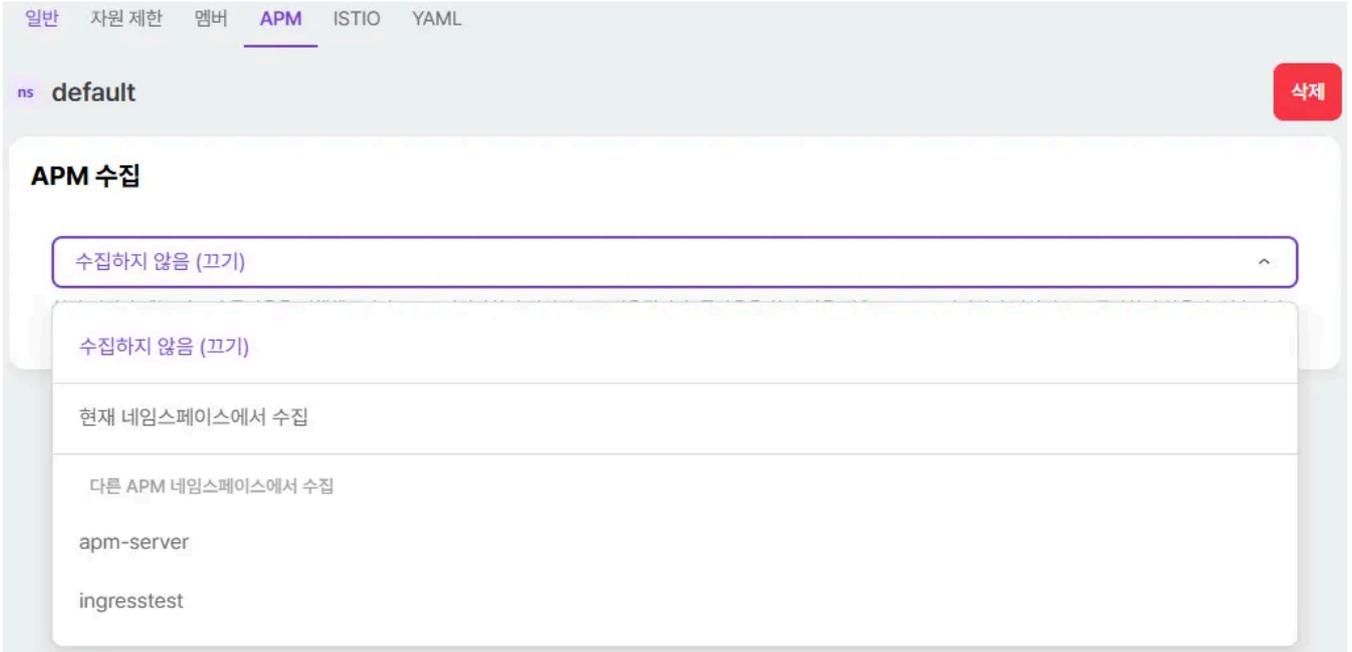
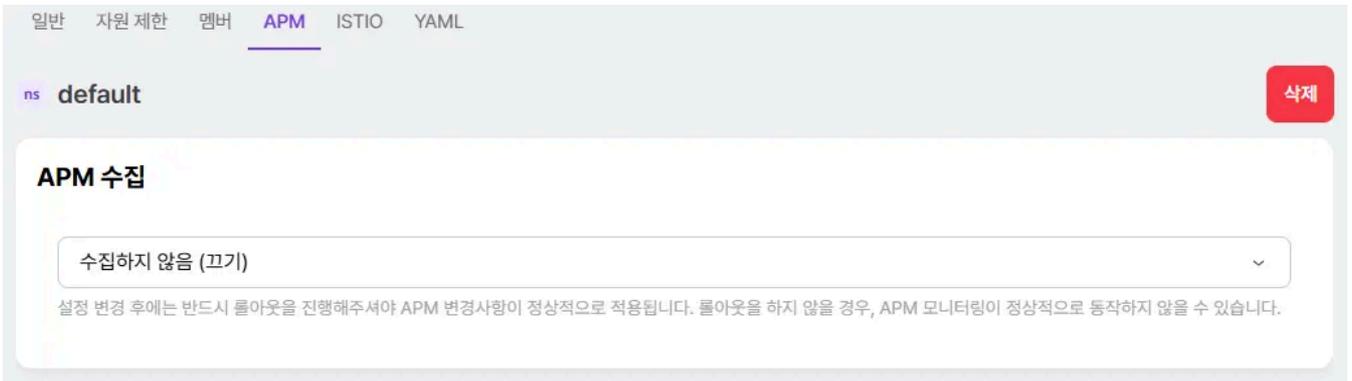
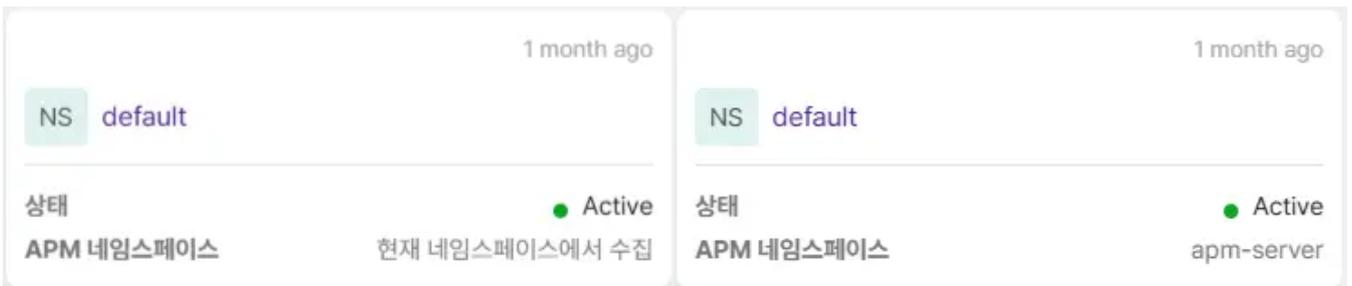


Table 5. APM

item	explanation
Not collected	Do not use APM collection function.
Collect from current namespace	Deploy a Scout server in the current namespace and collect application APM data in the same namespace.
Collect from other APM namespaces	Collect APM data by specifying a scouter server deployed in a different namespace.



**NOTE**

When you set up APM collection, the collection target namespaces are displayed in the left card area.

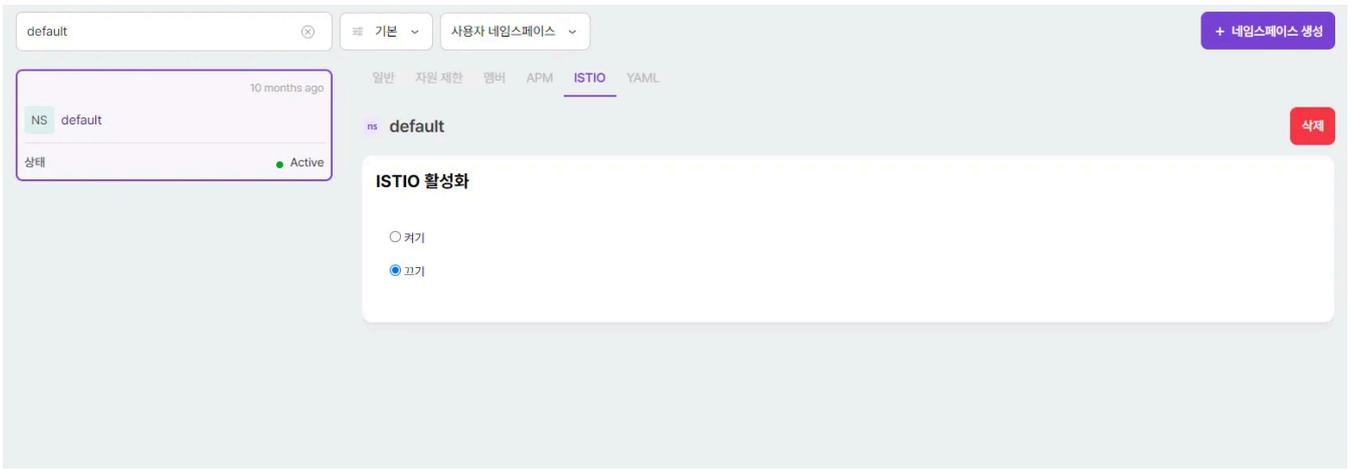


Table 6. ISTIO

item	explanation
ISTIO activation	Setting up istio-injection execution

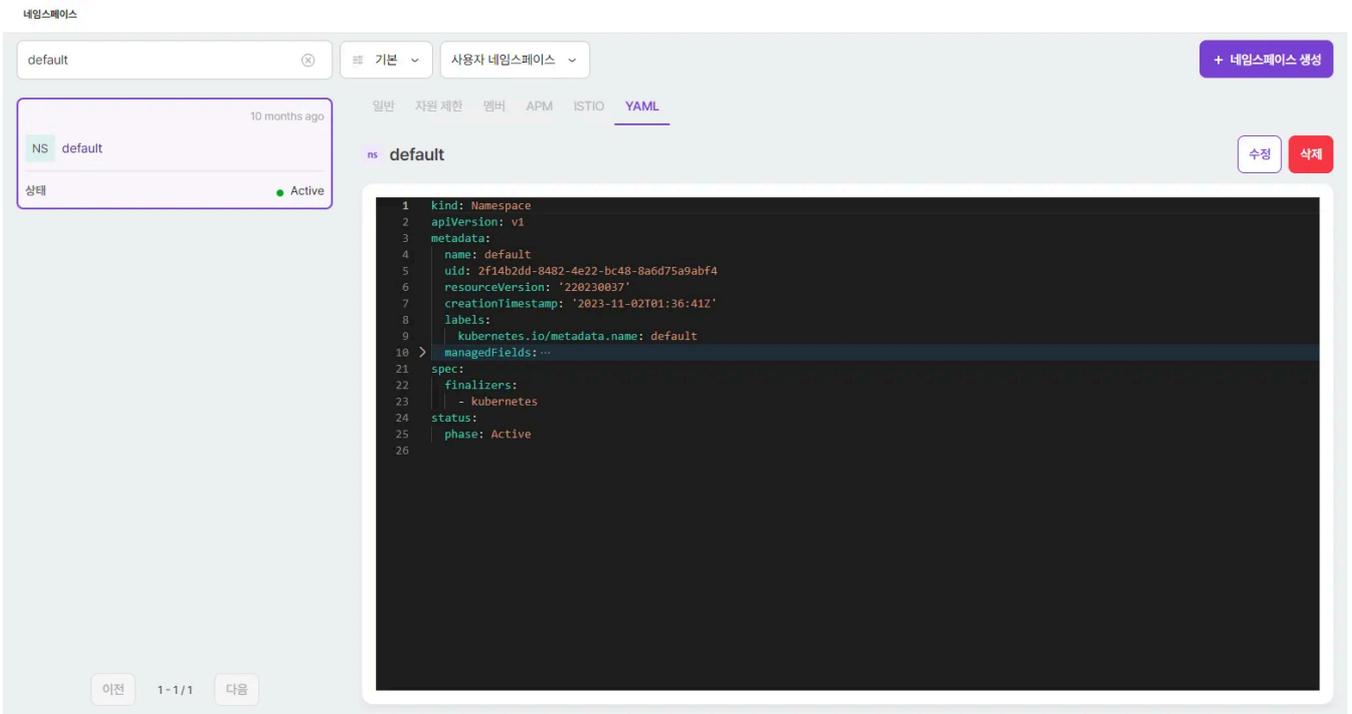
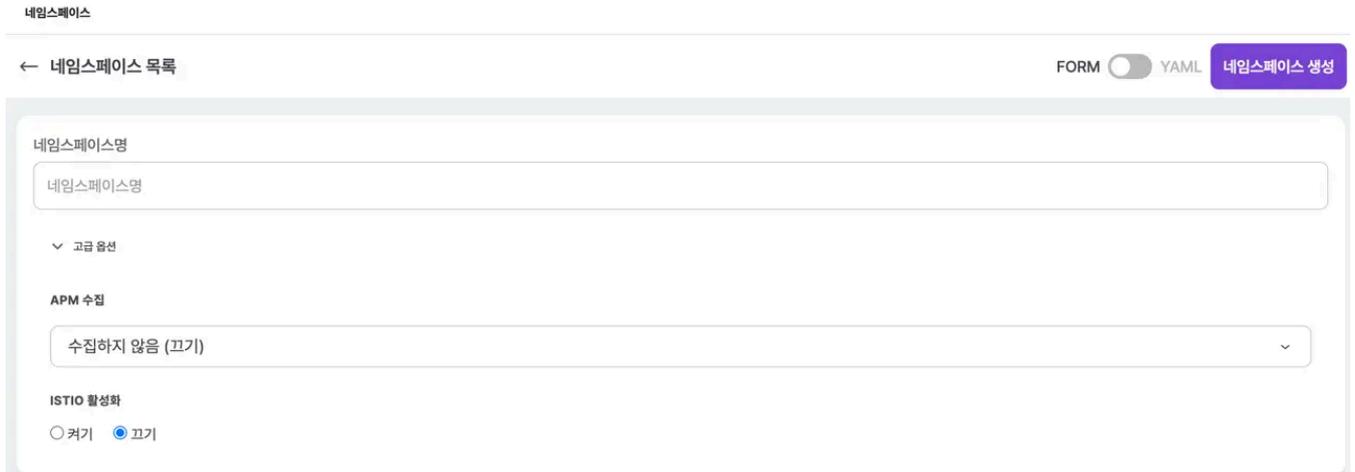


Table 7. YAML

item	explanation
correction	Reflect changes made in the editor

### 4.2.2.1. Creating a namespace

+ 네임스페이스 생성 You can select the button in the upper right corner to enter the information required to create a namespace.



You can create one with just the namespace name, but advanced options allow you to configure APM-related settings.

item	explanation
APM collection	Set up a target collection server for the scout agent within a namespace (select the namespace of the target collection server)
ISTIO activation	istio-injection enable/disable

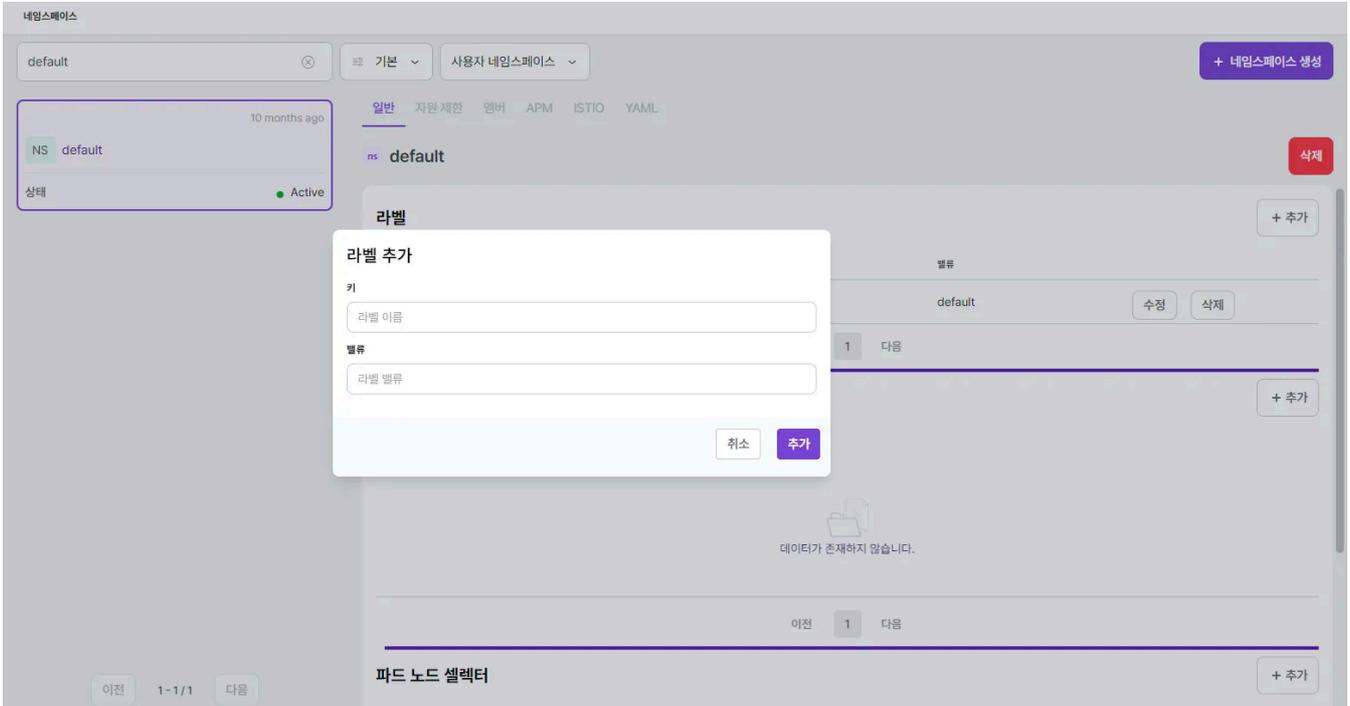
**NOTE**

For Java applications that use the Scout agent (Tomcat, Wildfly, Springboot, etc.), Java versions lower than 1.7 are not supported.

## 4.2.2.2. Modifying the namespace

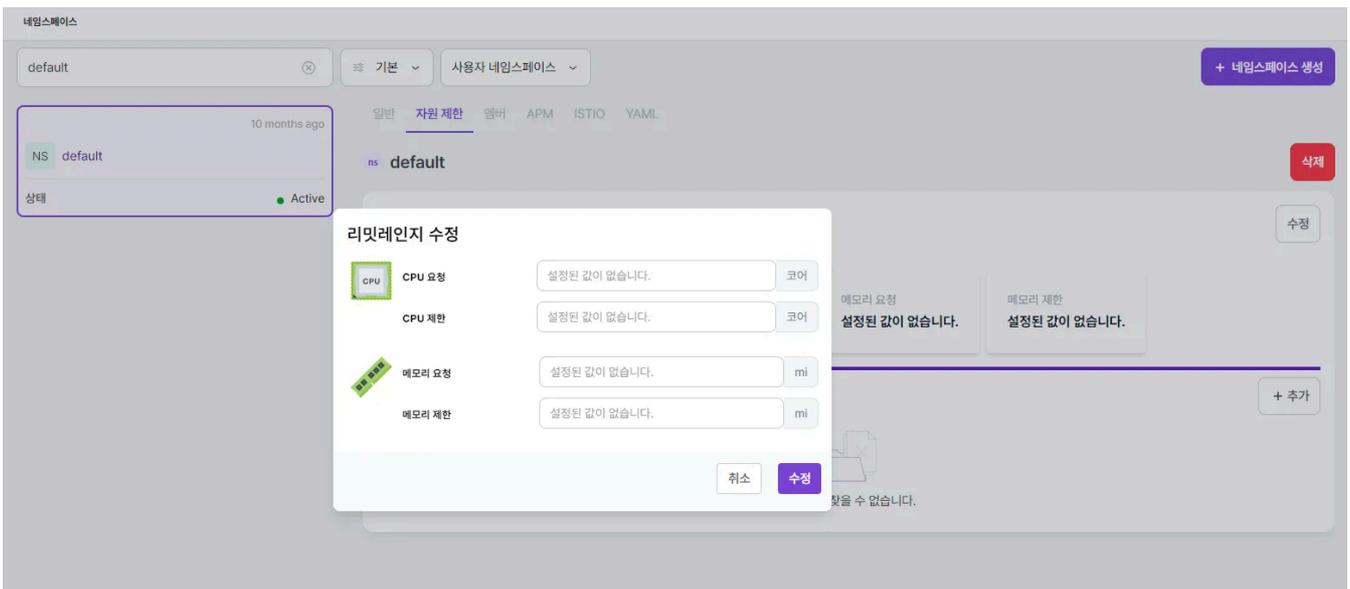
### 4.2.2.2.1. General Information Settings

You can change namespace labels, annotations, and pod node selectors. Use the + 추가, 수정, and 삭제 buttons to set values, edit, or delete each item. When registering each item, set it in key/value format.

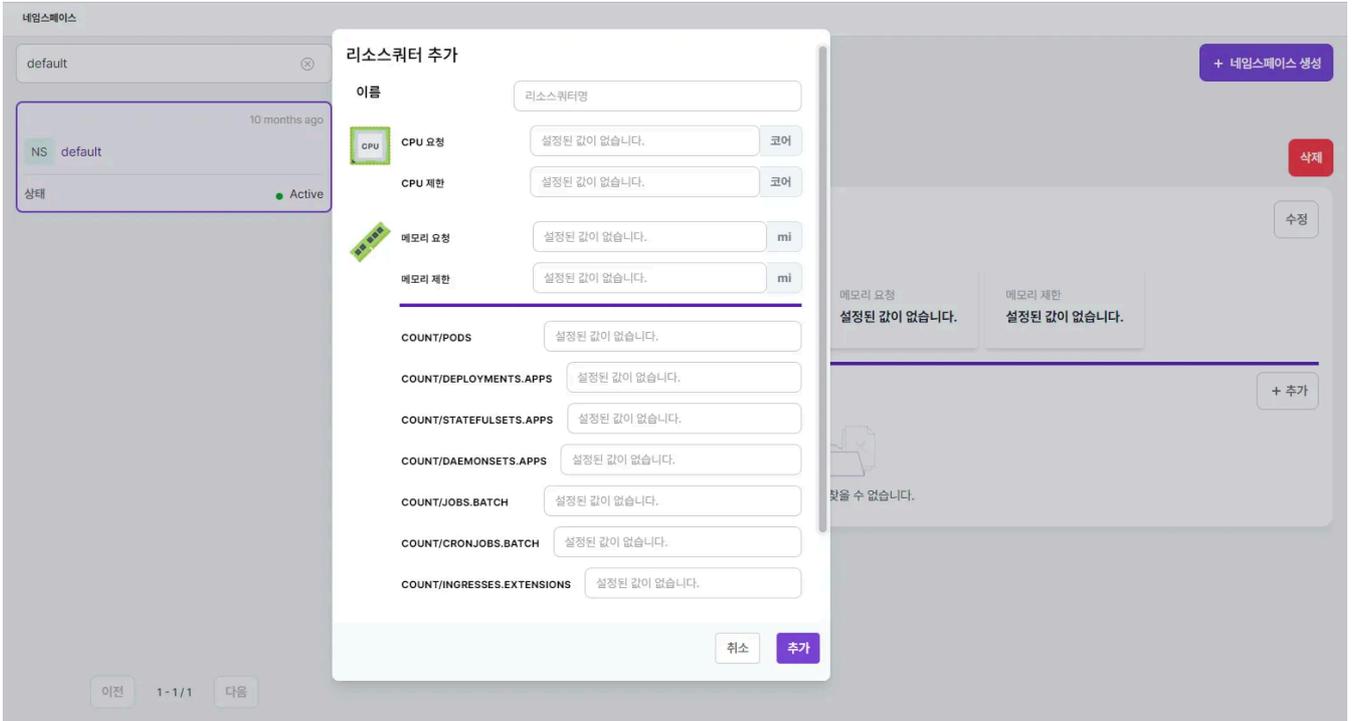


### 4.2.2.2.2. Setting resource limits

Kubernetes' limit ranges and resource quotas can be used to limit resources per namespace. If the requested value exceeds the limit, creation is restricted.



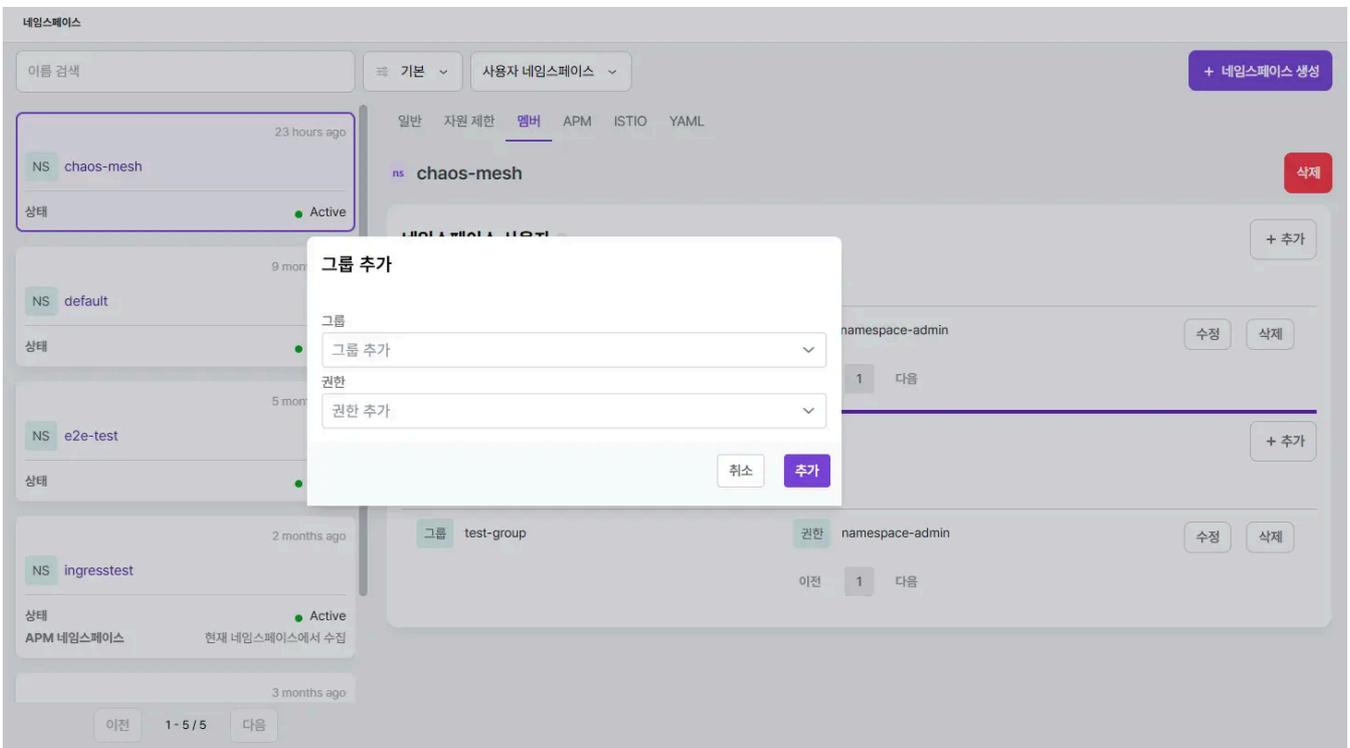
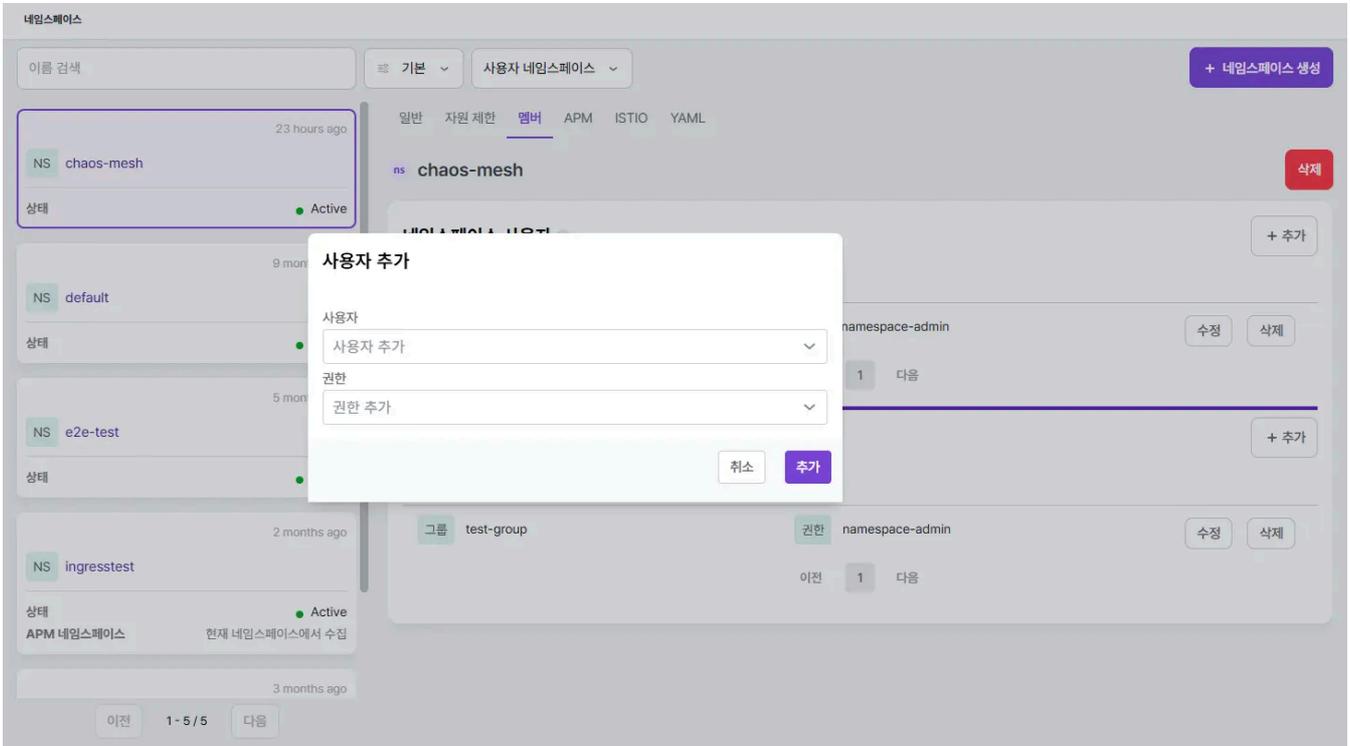
<b>item</b>	<b>explanation</b>
CPU requests	Minimum CPU requirements per container
CPU limit	Maximum CPU usage per container
Memory request	Minimum memory requirements per container
Memory limit	Maximum memory usage per container



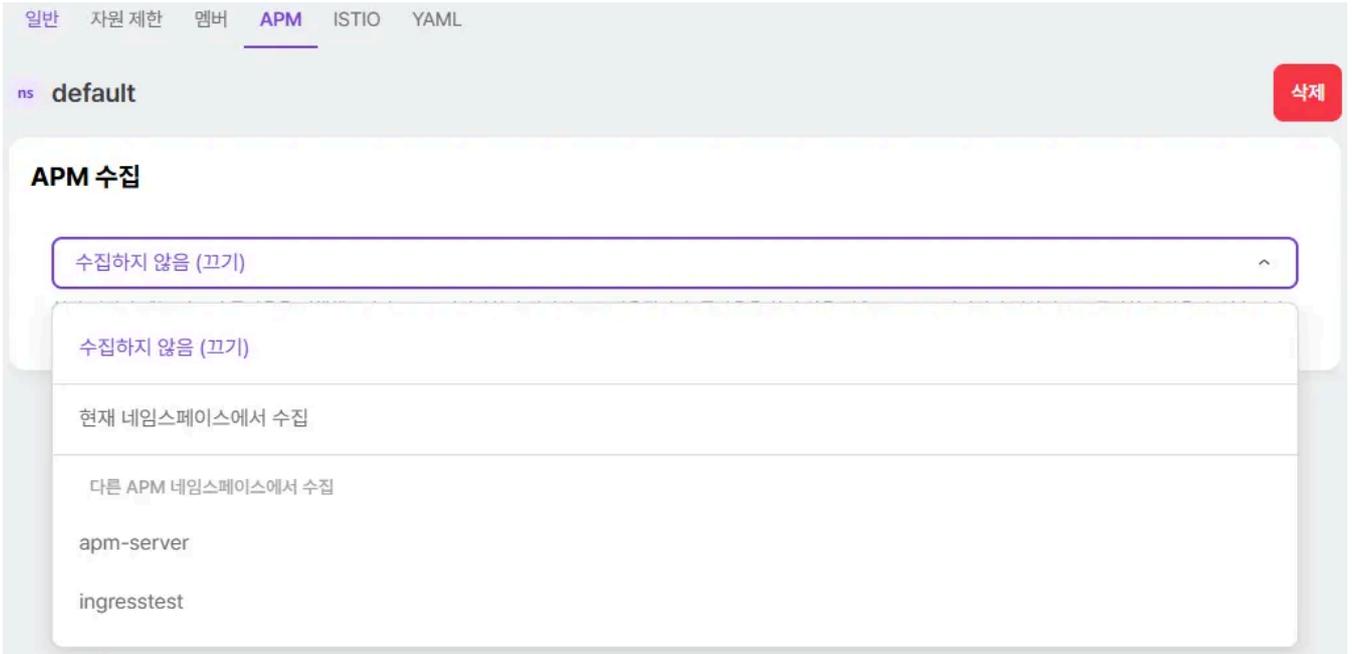
item	explanation
name	Resource Quota Name
CPU requests	Limit the total CPU demand for pods deployed in a namespace.
CPU limit	Limit the total maximum CPU usage for pods deployed in a namespace.
Memory request	Limit the total memory requirement for pods deployed to a namespace.
Memory limit	Limit the total amount of memory usage for pods deployed to a namespace.
COUNT/PODS	The total number of pods that can be deployed in the namespace.
COUNT/DEPLOYMENTS.APPS	The total number of deployments that can be deployed to the namespace.
COUNT/STATEFULSETS.APPS	The total number of StatefulSets that can be deployed to a namespace.
COUNT/DAEMONSETS.APPS	The total number of DaemonSets that can be deployed to a namespace.
COUNT/JOBS.BATCH	Total number of jobs that can be deployed to the namespace
COUNT/CRONJOBS.BATCH	The total number of cron jobs that can be deployed to a namespace.
COUNT/INGRESSES.EXTENSIONS	The total number of Ingresses that can be deployed to a namespace.
COUNT/SERVICES	Total number of services that can be deployed to a namespace
COUNT/PERSISTENTVOLUMECLAIMS	The total number of persistent volume claims that can be deployed in the namespace.

### 4.2.2.2.3. Member Settings

Configure users and groups who can use the namespace. Permissions can be set individually for each user or group. + 추가 Select the button to add users or groups, or use the 수정 , 삭제 buttons to the right of each user or group to change permissions.



### 4.2.2.2.4. APM Settings



You can change the APM collection settings for the current namespace. Only namespaces with APM collection enabled can be selected as collection targets.

**WARNING**

After modification, APM will not function properly if the target application for collection is not rolled out.

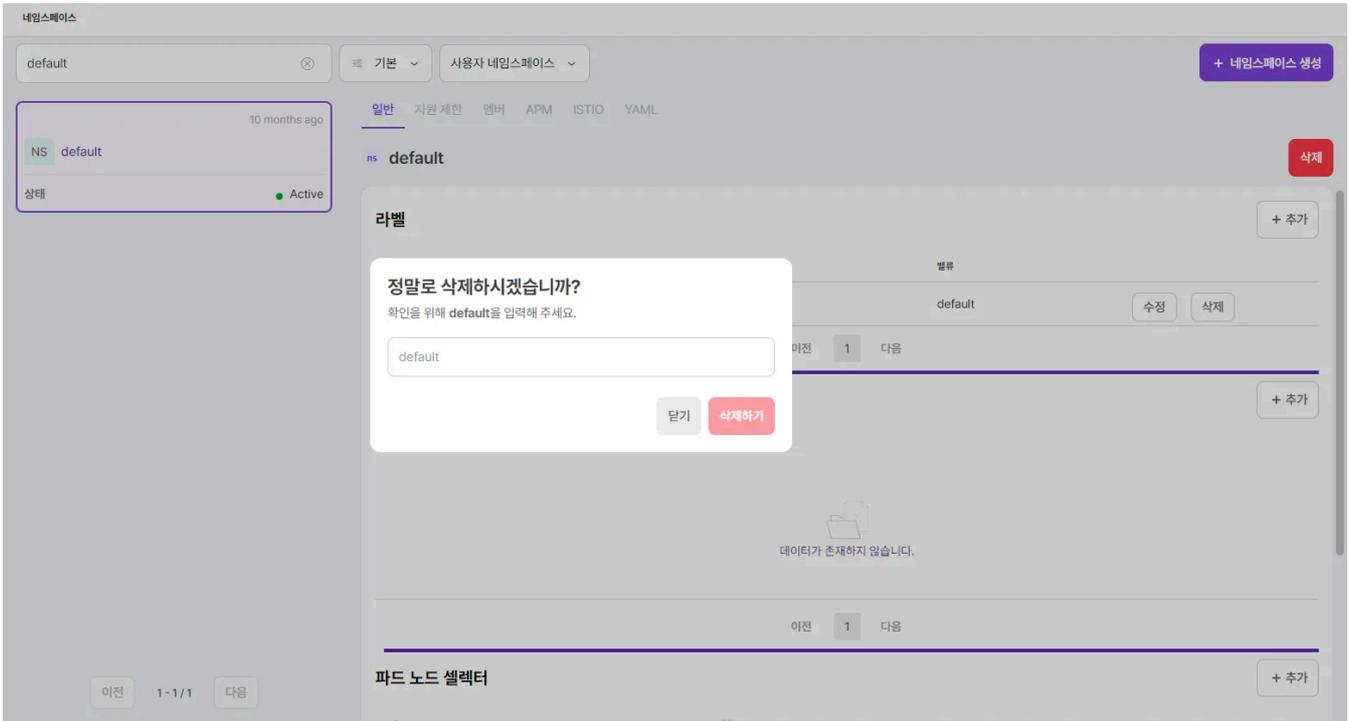


**NOTE**

If you select a namespace that has been deleted or has an inactive APM collection server as a collection target, a warning message will be displayed.

### 4.2.2.3. Deleting a namespace

삭제 You can delete that namespace by selecting the button in the upper right corner .



**WARNING**

Deleting a namespace where an APM server is deployed may cause APM collection in other namespaces that use that APM server to stop.

We recommend checking the APM settings in other namespaces before deleting.



**NOTE**

When deleting an APM collection target namespace, a warning message is displayed in the delete modal.

### 4.2.3. Node

A cluster consists of one or more nodes, each representing a physical or virtual machine. Kubernetes runs pods on these nodes. Each node is managed by the control plane and contains the services required to run pods. Nodes are divided into master (or control plane) nodes and worker nodes based on their roles.

노드

이름 ↑	상태	롤	패드	CPU	메모리	
dev-accordion1	● Ready	control-plane	14% 15/110	4% 0.3248 Core	40% 3,083,795 Gi	Cordon Drain 라벨 수정
dev-accordion2	● Ready	control-plane	11% 12/110	3% 0.2378 Core	49% 3,300,779 Gi	Cordon Drain 라벨 수정
dev-accordion3	● Ready	control-plane	12% 13/110	5% 0.3728 Core	53% 4,103,795 Gi	Cordon Drain 라벨 수정
dev-accordion4	● Ready	worker	40% 80/200	4% 0.86476 Core	55% 25,760,47168 Gi	Cordon Drain 라벨 수정
dev-accordion5	● Ready	worker	66% 131/200	5% 0.80476 Core	70% 32,848,47168 Gi	Cordon Drain 라벨 수정

이전 1 다음

The information provided in the node menu is as follows:

item	explanation
name	Node name
situation	Ready Node status ( displayed as if normal )
Roll	Node Role ( control-plain or worker )
Pad	Status of pods deployed on the node and detailed list of pods
CPU	CPU usage status on the node
memory	Memory usage status on the node
Node Event	A list of events that occurred on the node within the last hour.

If you want more detailed information, you can select the node to view the details page.

The screenshot shows the 'acc-master' node details page. At the top, there are three circular progress indicators for CPU (3%), Memory (메모리, 18%), and Disk (디스크, 40%). Below these are five colored boxes showing resource usage: CPU (0.26/8.00 Core), Memory (2.83/15.64 Gi), Disk (77.15/191.02 Gi), Pods (13/200), and Total Image Count (총 이미지 수, 28). The '라벨' (Labels) section lists various Kubernetes labels. The '어노테이션' (Annotations) section shows a large JSON object. Below this is a '노드 이벤트' (Node Events) section. At the bottom, there is a '파드' (Pods) table listing various pods with their status, ready count, IP, and restart count.

Age	Namespace	Name	Status	Ready	Pod IP	Restart Count
6 hours ago	acc-system	pgdata-backup-node-28759260-1gdvlp	Succeeded	0/2	10.20.200.221	2
4 weeks ago	kube-system	kube-proxy-4vd2v	Running	1/1	10.20.200.221	4
1 month ago	kube-system	coredns-97bd8d8c5-qkscz	Running	1/1	172.32.183.176	5
2 months ago	kube-system	kube-scheduler-acc-master	Running	1/1	10.20.200.221	5
2 months ago	kube-system	kube-controller-manager-acc-master	Running	1/1	10.20.200.221	5
2 months ago	kube-system	kube-apiserver-acc-master	Running	1/1	10.20.200.221	9
2 months ago	acc-system	filebeat-filebeat-g2q2v	Running	1/1	172.32.183.174	5
2 months ago	acc-system	node-exporter-7b128	Running	2/2	10.20.200.221	5
2 months ago	kube-system	calico-kube-controllers-665d779c9-8khpc	Running	1/1	172.32.183.175	7
2 months ago	kube-system	etcd-acc-master	Running	1/1	10.20.200.221	6
2 months ago	kube-system	calico-node-bzvvv	Running	1/1	10.20.200.221	5
2 months ago	acc-global	gateway-proxy-s9g9s	Running	1/1	172.32.183.173	10
2 months ago	acc-system	accordion-data-provisioner-5d4789cd9b-scds9	Running	1/1	172.32.183.172	8

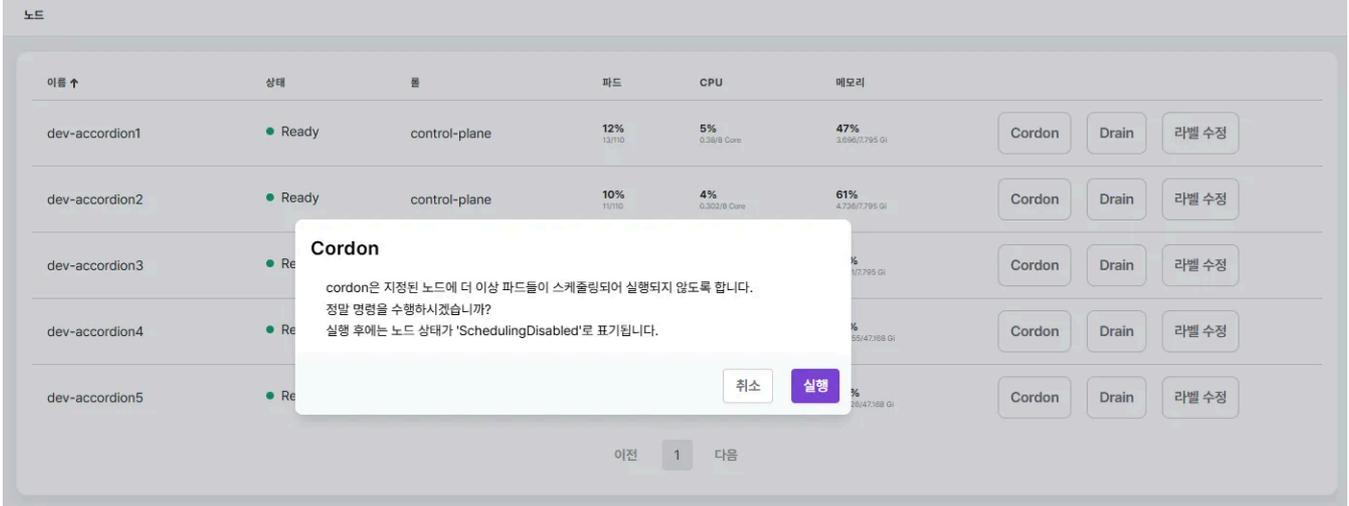
The node menu (or node details screen) allows you to perform commands on each node Cordon and Drain change the label of the node.

**TIP**

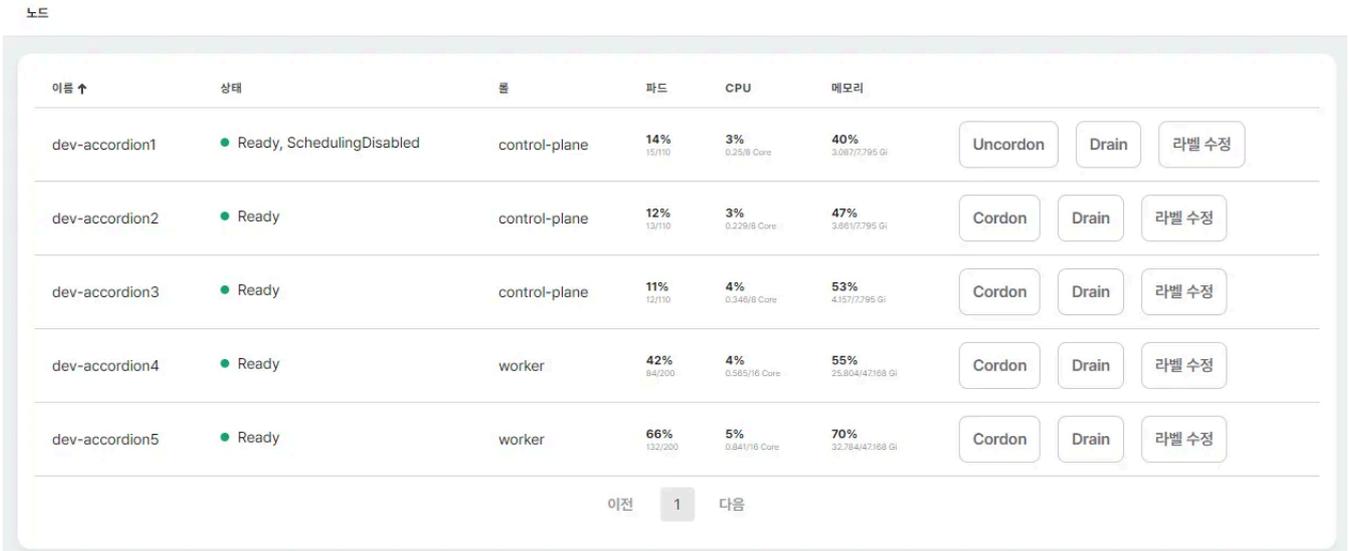
The documentation guides you through the setup process from the node menu.

### 4.2.3.1. Cordon

Cordon You can use the button to exclude a node from Kubernetes resource deployments, preventing pods from being deployed. In this case, a SchedulingDisabled is added to the node status.



Nodes excluded from Kubernetes resource deployments using Cordon Uncordon can be added back to the Kubernetes resource deployment using the button. Once added as a Kubernetes resource deployment target, SchedulingDisabled the role is removed.



### 4.2.3.2. Drain

Drain You can use the button to move pods deployed on a node to another node. In this case, a node status `SchedulingDisabled` is added, similar to `Cordon`.

#### IMPORTANT

Pods deployed as `DaemonSets` are an exception and do not move to other pods.

The screenshot shows a table of nodes with columns for name, status, role, pods, CPU, and memory. A modal dialog titled 'Drain' is open, displaying the following text:

Drain은 노드 점검을 위해 지정된 노드에 있는 파드들을 다른 곳으로 이동시키는 기능입니다.  
 (--ignore-daemonsets 옵션이 추가됩니다.)  
 정말 명령을 수행하시겠습니까?  
 실행 후에는 노드 상태가 'SchedulingDisabled'로 표기됩니다.

Below the text is a progress bar showing 0% completion. At the bottom of the dialog are buttons for '취소' (Cancel) and '실행' (Execute).

Drain You can check the progress by selecting the button while the pod is moving to another node with Drain .

### 4.2.3.3. Editing labels

Change the label of a node.

The screenshot displays a management interface for Kubernetes nodes. A modal window is open for the node 'dev-accordion1' (IP: 10.20.200.201). The modal contains a table of labels with columns for '키' (Key) and '밸류' (Value). The table lists four labels: 'beta.kubernetes.io/arch' (amd64), 'beta.kubernetes.io/os' (linux), 'kubernetes.io/arch' (amd64), and 'kubernetes.io/hostname' (dev-accordion1). Each label has a '삭제' (Delete) button. At the top of the modal, there are input fields for '라벨 이름' (Label Name) and '라벨 밸류' (Label Value), along with a '추가' (Add) button. A '닫기' (Close) button is located at the bottom right of the modal. The background shows a list of five nodes, all in a 'Ready' state, with their respective CPU and memory usage percentages and labels.

이름 ↑	상태	종류	하드	CPU	메모리
dev-accordion1	Ready			38%	2,827,795 Gi
dev-accordion2	Ready			46%	3,585,795 Gi
dev-accordion3	Ready			51%	4,005,795 Gi
dev-accordion4	Ready			55%	23,789,47168 Gi
dev-accordion5	Ready			70%	23,803,47168 Gi

키	밸류	삭제
라벨 이름	라벨 밸류	추가
beta.kubernetes.io/arch	amd64	삭제
beta.kubernetes.io/os	linux	삭제
kubernetes.io/arch	amd64	삭제
kubernetes.io/hostname	dev-accordion1	삭제

## 4.2.4. Application

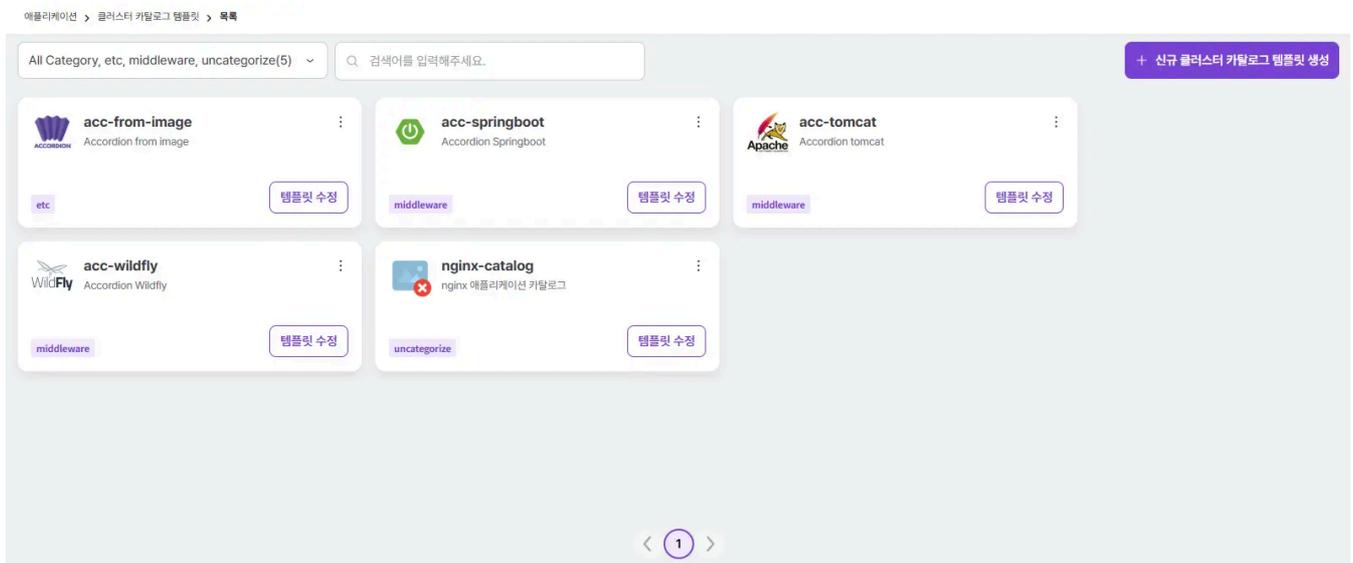
### 4.2.4.1. Cluster Catalog Template

Users can create cluster-level templates for catalogs using the Cluster Catalog Templates option in the Applications menu.

These templates are used to create catalogs that can be used across clusters.

#### TIP

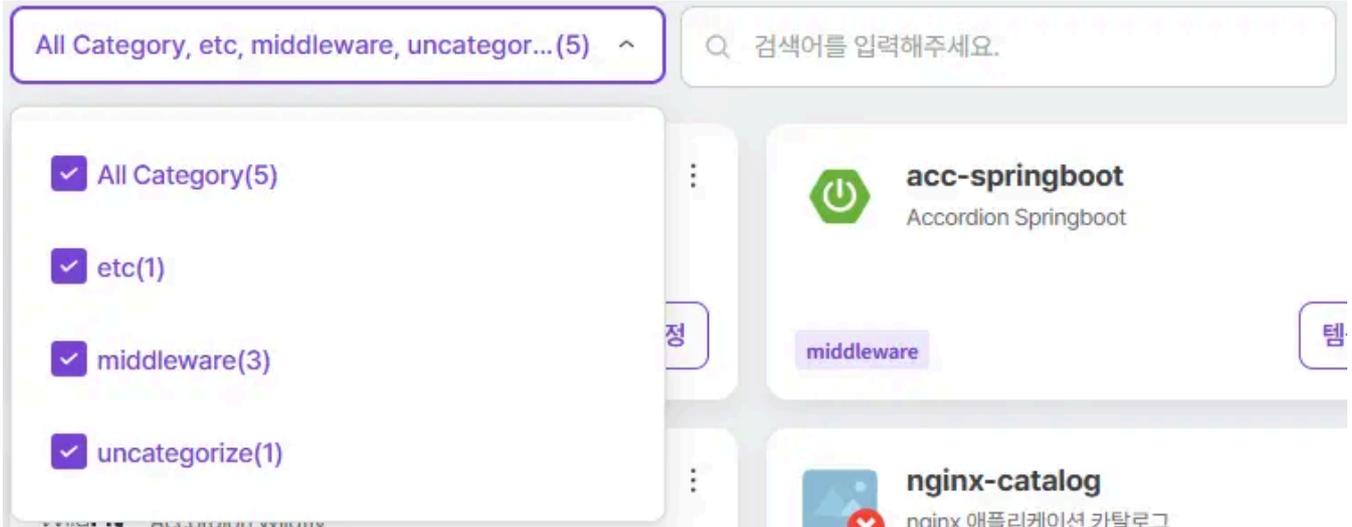
- You can also create a catalog template directly when creating a catalog from the Catalog menu in the namespace scope.
- Creating a catalog template in advance can make creating a catalog a bit simpler.



The information that appears on the displayed card is as follows:

item	explanation
image	Display registered images when creating a cluster catalog template
name	Located at the top center with the name of the corresponding cluster catalog template
summation	A centrally located summary description of the corresponding cluster catalog template.
Category	ui.accordions.co.kr/category: <카테고리> The text entered in the format of the catalog YAML annotations is displayed.
scope	If it is a namespace level, 네임스페이스 the label is located at the bottom

### 4.2.4.1.1. Template Category Filter and Search

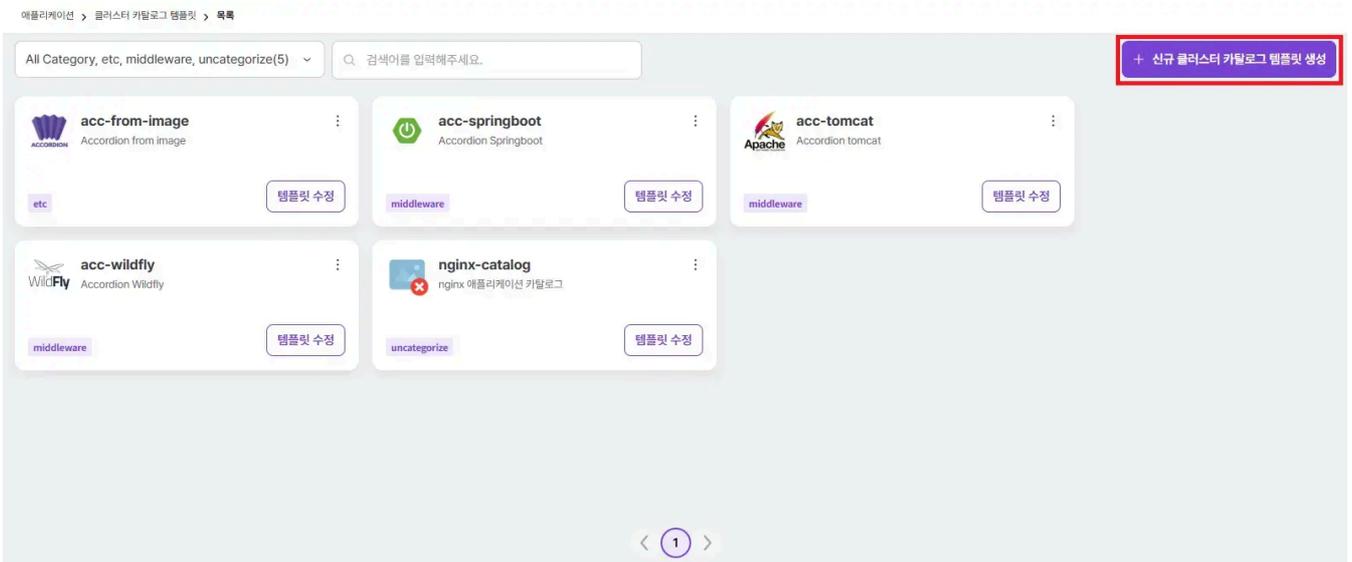


Catalog templates provide category filter and search functions.

#### TIP

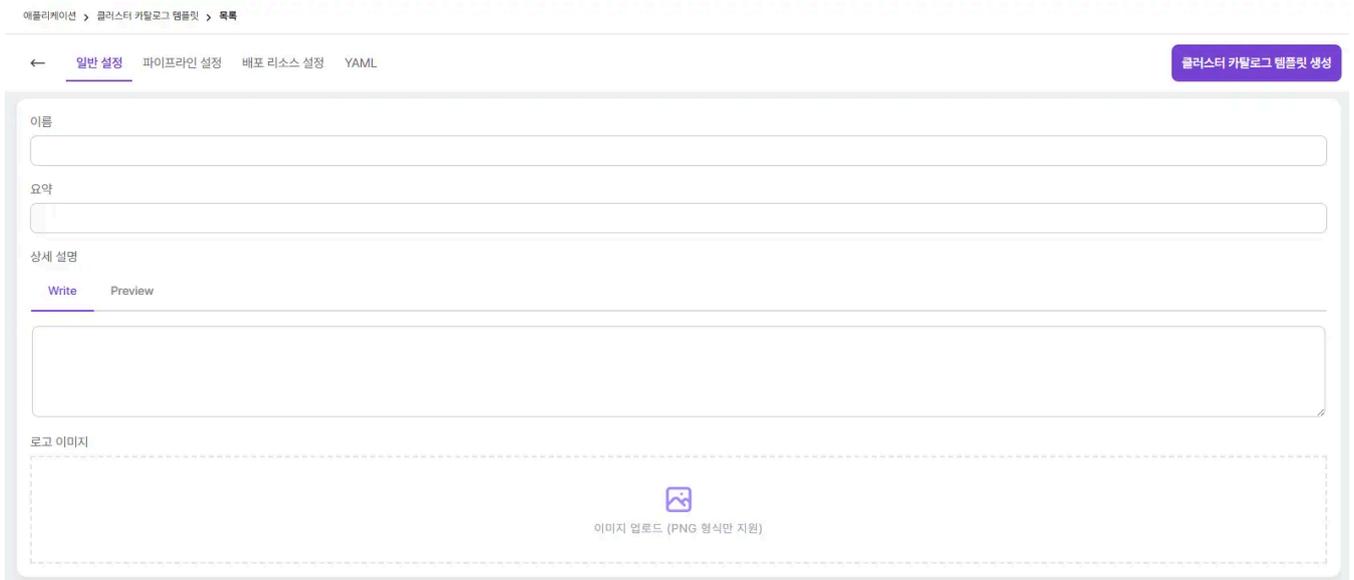
Categories `ui.accordions.co.kr/category: <카테고리>` are based on text entered in the format of annotations in the catalog YAML.

### 4.2.4.1.2. Creating a Template



신규 클러스터 카탈로그 템플릿 생성 You can create a new template by selecting the button.

### 4.2.4.1.2.1. General Settings



The basic information for the catalog template you are entering is as follows:

item	explanation
name	Name of the cluster catalog template
summation	A brief description of the template (displayed in the list information after creation)
Detailed description	Detailed description of the template (displayed when the Detailed Description button is selected after creation)
Logo image	Logo image for the template (if not set, set to the template's default logo)

### 4.2.4.1.2.2. Pipeline Configuration



Set the pipeline template that will be included by default in the template. The pipeline template is created in the Cluster Pipeline Templates section of the Build tab.

Once all settings are complete, select the Create button in the upper right corner to create a template.

### 4.2.4.1.2.3. Setting up deployment resources

애플리케이션 > 클러스터 카탈로그 템플릿 > 목록

← 일반 설정 파이프라인 설정 배포 리소스 설정 YAML

클러스터 카탈로그 템플릿 생성

RESOURCE: RESOURCE VALUES

```

1 cm:
2   data:
3     - key: os
4       value: linux
5     - key: arch
6       value: amd64
7

```

RESOURCE: RESOURCE YAML

```

1 apiVersion: v1
2 kind: ConfigMap
3 metadata:
4   name: {{{ CATALOG_NAME }}}
5 data:
6   {{- range $i, $e := .values.cm.data}}
7     {{{ $e.key }}: {{{ $e.value }}}
8   {{- end}}

```

RESOURCE: VALUESchema YAML

```

1 type: object
2 properties:
3   cm:
4     type: object
5     properties:
6       data:
7         type: array
8         description: 데이터
9         items:
10        type: object
11        properties:
12          key:
13            type: string
14            pattern: ^[-_a-zA-Z0-9]+$
15            maxLength: 253
16          value:
17            type: string
18            format: textarea
19

```

Deployment resource settings are written using a YAML editor. There are three items to write.

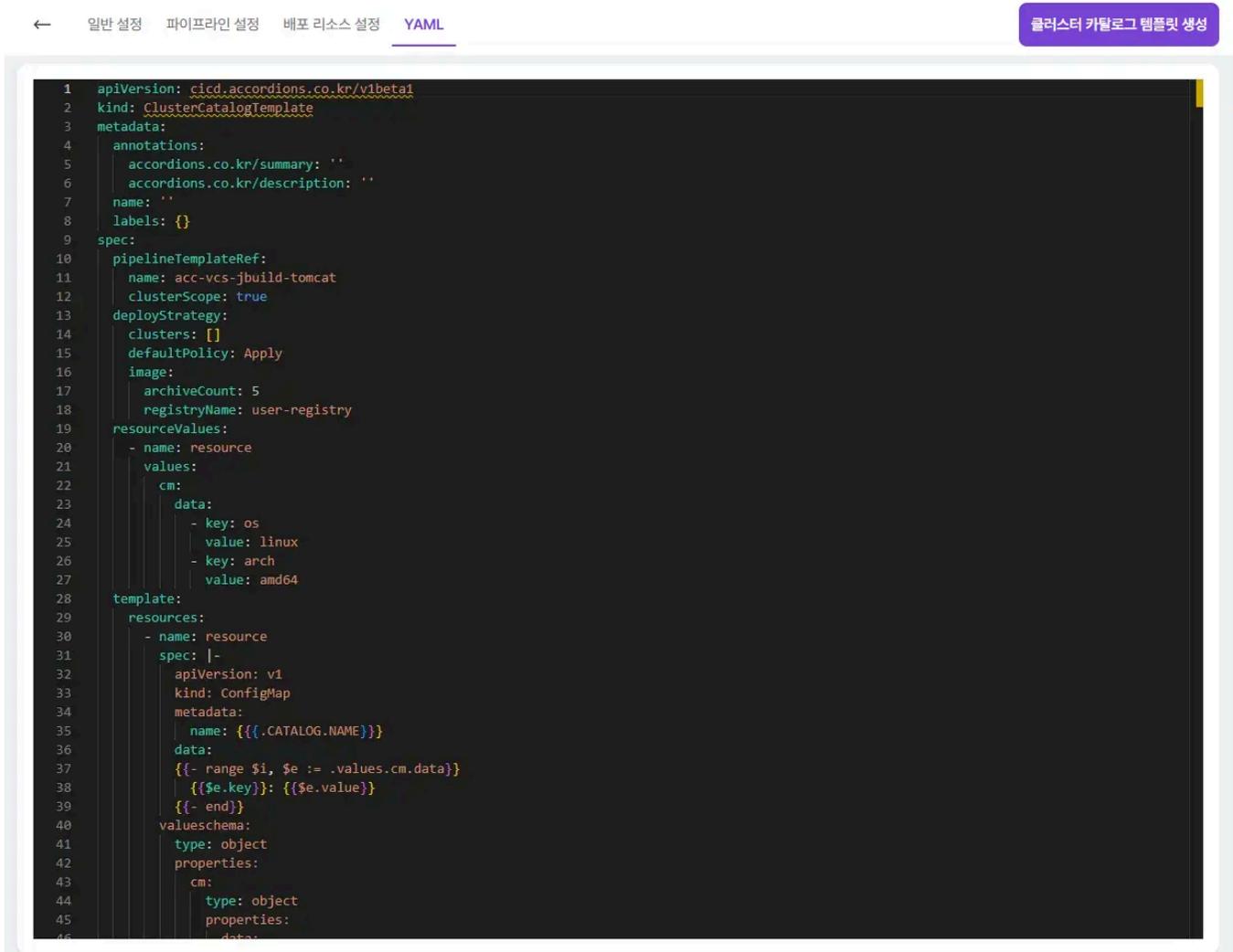
item	explanation
values.yaml	Defines the values passed to the template. These values are used in resource.yaml.
resource.yaml	Define the specifications for resources to be deployed to Kubernetes in YAML. Here, you can define environment variables and valueschemas used in the catalog.
valueschema.yaml	Define the valueschema to be used in resource.yaml.

**TIP**

- For usage of valuschema, refer to valueschema in the cluster task template in the Build tab.

#### 4.2.4.1.2.4. YAML

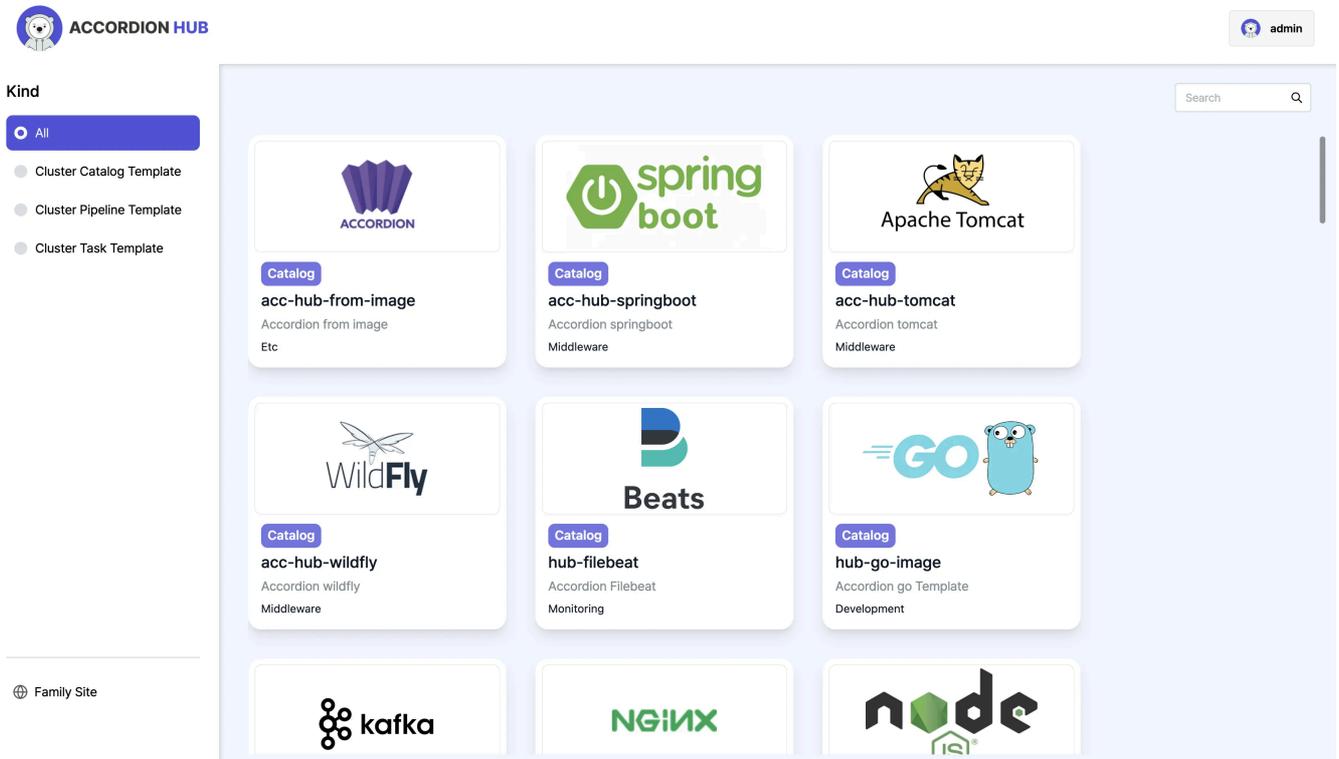
You can edit the entire template in the YAML tab, without using the Settings tab above. This makes it easy to copy and paste content from other templates.



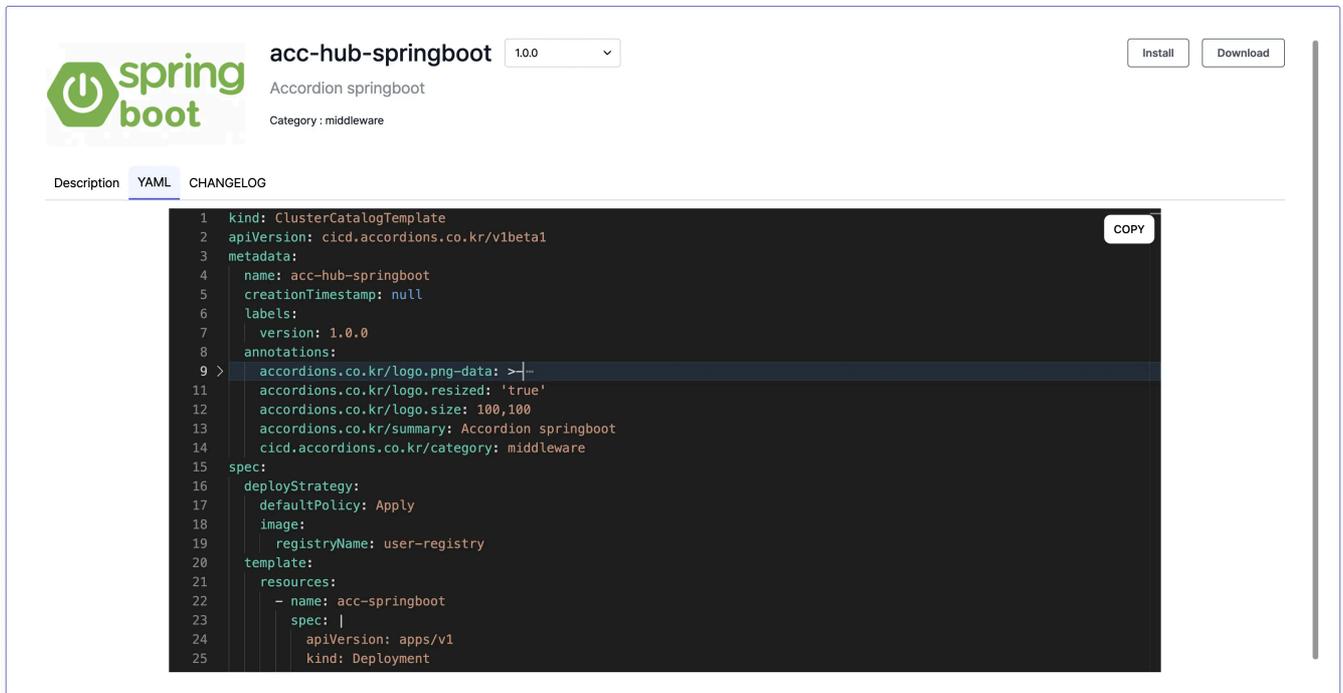
```
1  apiVersion: ccd.accordions.co.kr/v1beta1
2  kind: ClusterCatalogTemplate
3  metadata:
4    annotations:
5      accordions.co.kr/summary: ''
6      accordions.co.kr/description: ''
7    name: ''
8    labels: {}
9  spec:
10 pipelineTemplateRef:
11   name: acc-vcs-jbuild-tomcat
12   clusterScope: true
13 deployStrategy:
14   clusters: []
15   defaultPolicy: Apply
16   image:
17     archiveCount: 5
18     registryName: user-registry
19 resourceValues:
20   - name: resource
21     values:
22       cm:
23         data:
24           - key: os
25             value: linux
26           - key: arch
27             value: amd64
28 template:
29   resources:
30     - name: resource
31       spec: |-
32         apiVersion: v1
33         kind: ConfigMap
34         metadata:
35           name: {{{.CATALOG.NAME}}}
36         data:
37           {{- range $i, $e := .values.cm.data}}
38             {{{$.key}}}: {{{$.value}}}
39           {{- end}}
40         valueschema:
41           type: object
42           properties:
43             cm:
44               type: object
45               properties:
46                 data:
```

We are running an accordion hub site that provides various templates, and you can easily create templates by copying/pasting the template YAML within the site.

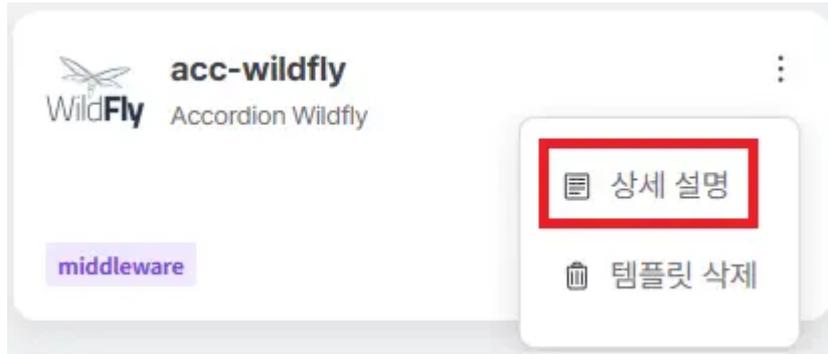
### Main screen



### Detail screen



### 4.2.4.1.3. Detailed Description



**상세 설명** You can view detailed information about a cluster catalog template by selecting the button located on the cluster catalog template card you want to view .

**acc-wildfly**

가벼우면서 강력한 모듈화된 웹 애플리케이션 서버인 Wildfly를 기본으로 하여 소스빌드(war), 컨테이너 이미지 빌드, 클러스터에 배포 과정(CI/CD)을 포함한 아코디언에서 제공하는 카탈로그입니다.

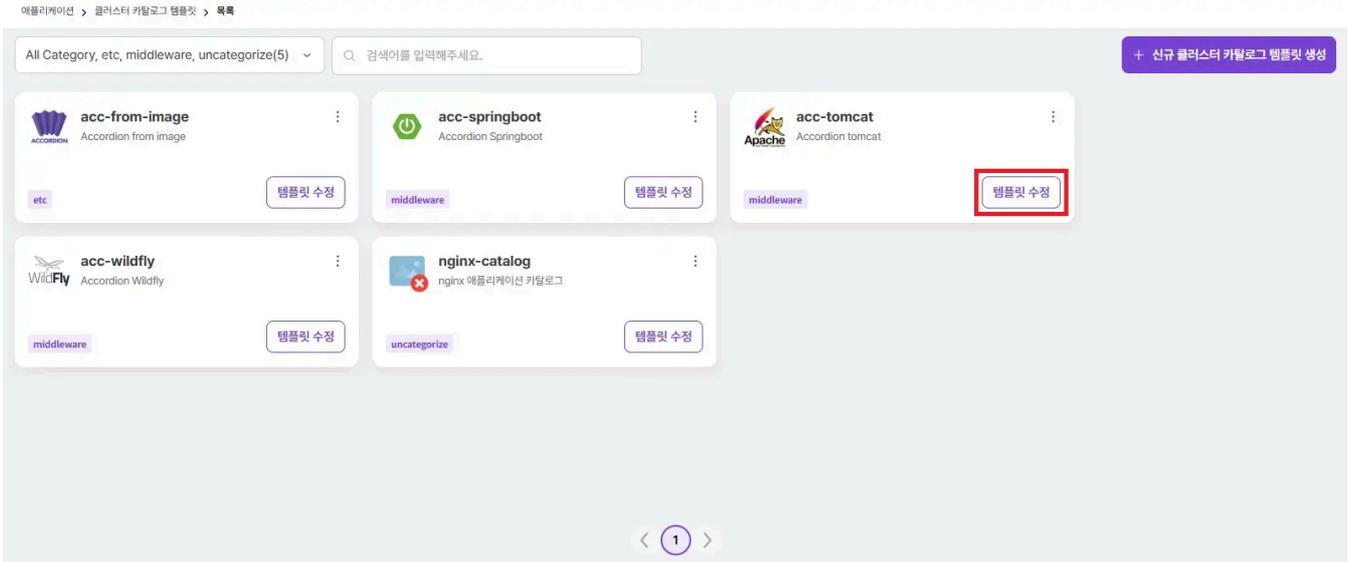
1. 스펙

- WildFly
- J2EE8 Specifcataion
- Support for JDK8, 11
- Session Clustering( jgroups , kubernetes.KUBE\_PING)
- 기본 메모리 설정
  - 컨테이너 1.5 GB ( resource.limit=1.5Gi )
  - 할당된 컨테이너의 60% 를 힙메모리 사용 (-XX:InitialRAMPercentage=60.0 -XX:MaxRAMPercentage=60.0)

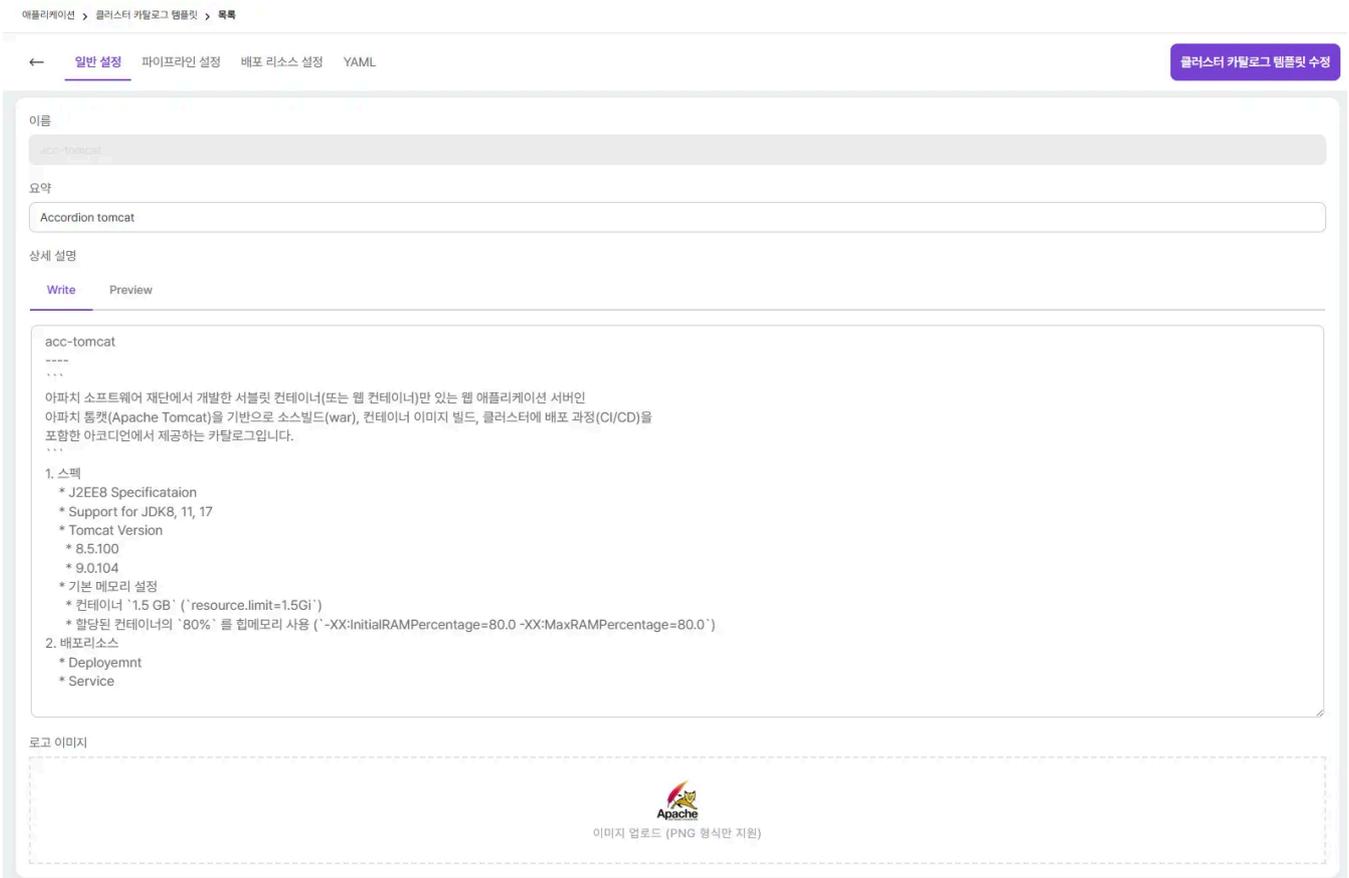
2. 배포리소스

- Deployemnt
- Service

### 4.2.4.1.4. Modifying the template

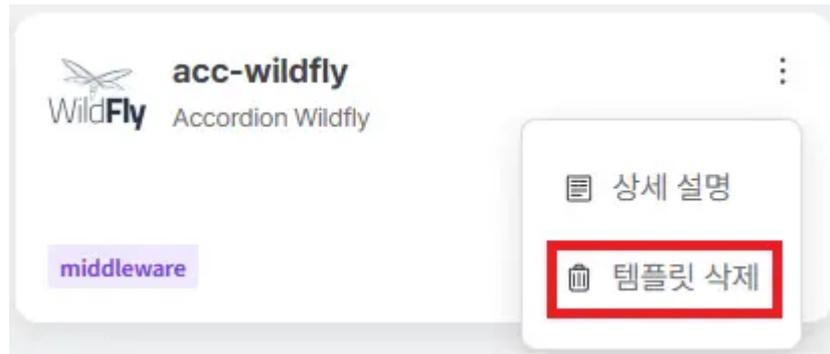


To modify an existing cluster catalog template, **템플릿 수정** select the button at the bottom right of the target template card.

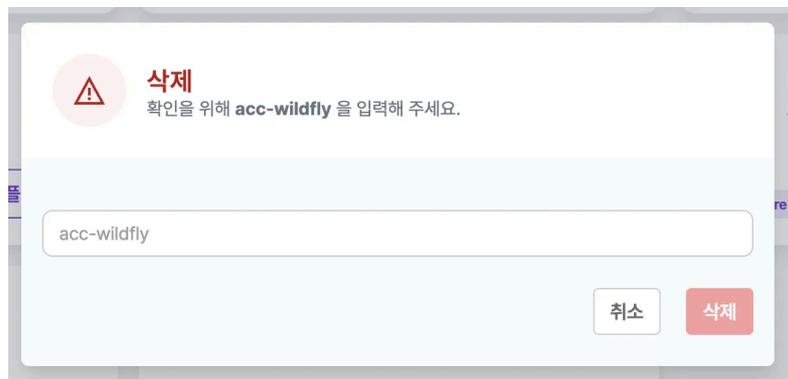


Edit the items you want to edit, then **클러스터 카탈로그 템플릿 수정** select the button in the upper right corner to reflect the template edits.

#### 4.2.4.1.5. Deleting a Template



To delete a created cluster catalog template,  click the button in the upper right corner of the target template card and then **템플릿 삭제** select the button.



Delete by entering the name of the template you want to delete in the modal.

### 4.2.4.2. Helm

Users can deploy applications to a cluster using Helm in the Applications menu. This is primarily used when deploying service-type applications, such as MySQL and Redis.

**TIP**

- To deploy with Helm, 헬름 you need to set up a repository and chart in the global scope menu.
- Applications that require builds 카탈로그 are deployed using the menu in the namespace scope.

애플리케이션 > 헬름 > 헬름 앱

이름 ↓	네임 스페이스	개정	업데이트	상태	차트	앱 버전	원치
test-aggr	huu	1	2024-03-06 14:33:55	deployed	nginx-15.1.2	1.25.1	삭제
test	default	1	2024-03-26 15:04:22	deployed	nginx-15.1.2	1.25.1	삭제
test	huu	5	2024-03-05 10:13:35	deployed	nginx-15.4.0	1.25.3	삭제
spin-containerd-shim-installer	hwpark	1	2024-02-20 16:24:30	deployed	spin-containerd-shim-installer-0.10.0	0.10.0	삭제
opensearch-dashboards	alert	2	2023-12-27 11:31:38	deployed	opensearch-dashboards-1.3.0	1.3.0	삭제
opensearch	alert	1	2023-12-27 13:05:55	deployed	opensearch-1.9.0	1.3.0	삭제
mysql	mjdev	1	2024-01-04 10:04:16	deployed	mysql-9.14.1	8.0.35	삭제
mysql	alert	1	2023-11-09 14:22:06	deployed	mysql-9.14.1	8.0.35	삭제
locust	ingresstest	5	2024-07-02 22:23:59	deployed	locust-0.31.5	2.15.1	삭제
locust	stress	1	2024-06-27 14:37:24	deployed	locust-0.31.5	2.15.1	삭제

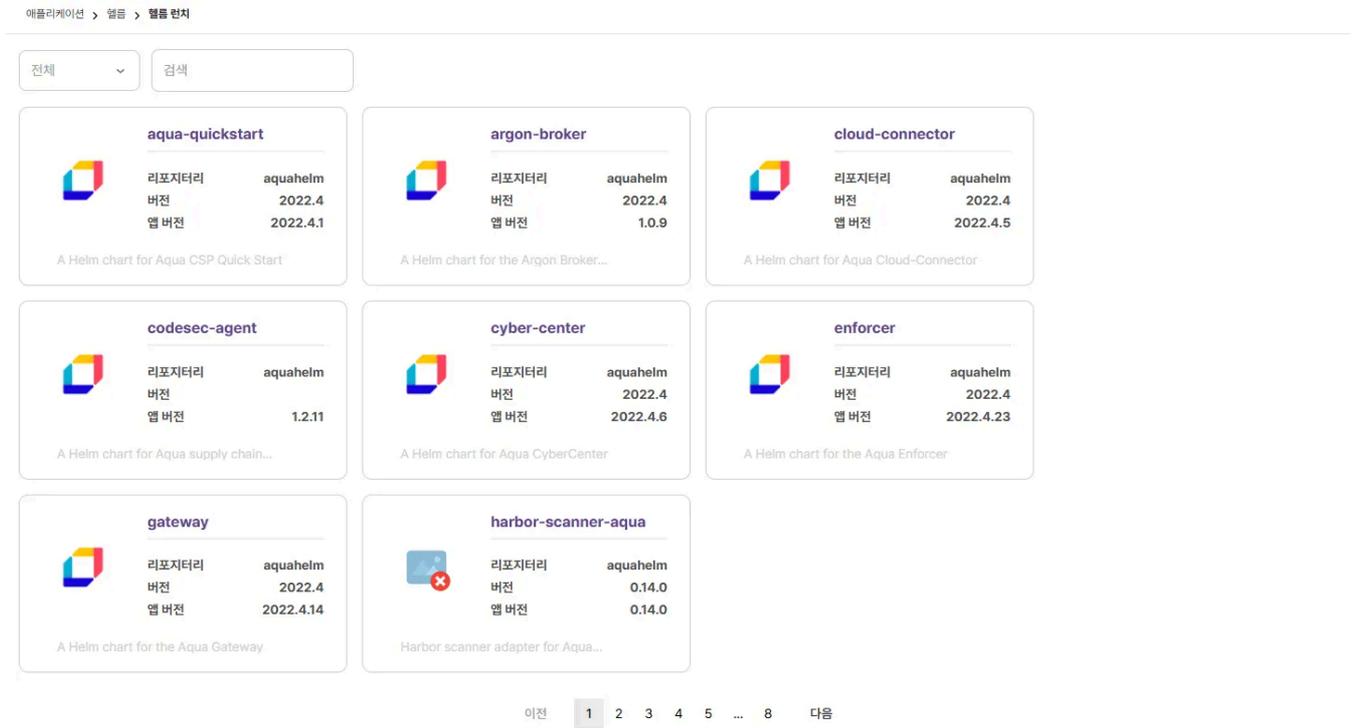
이전 1 2 다음

The information provided is as follows:

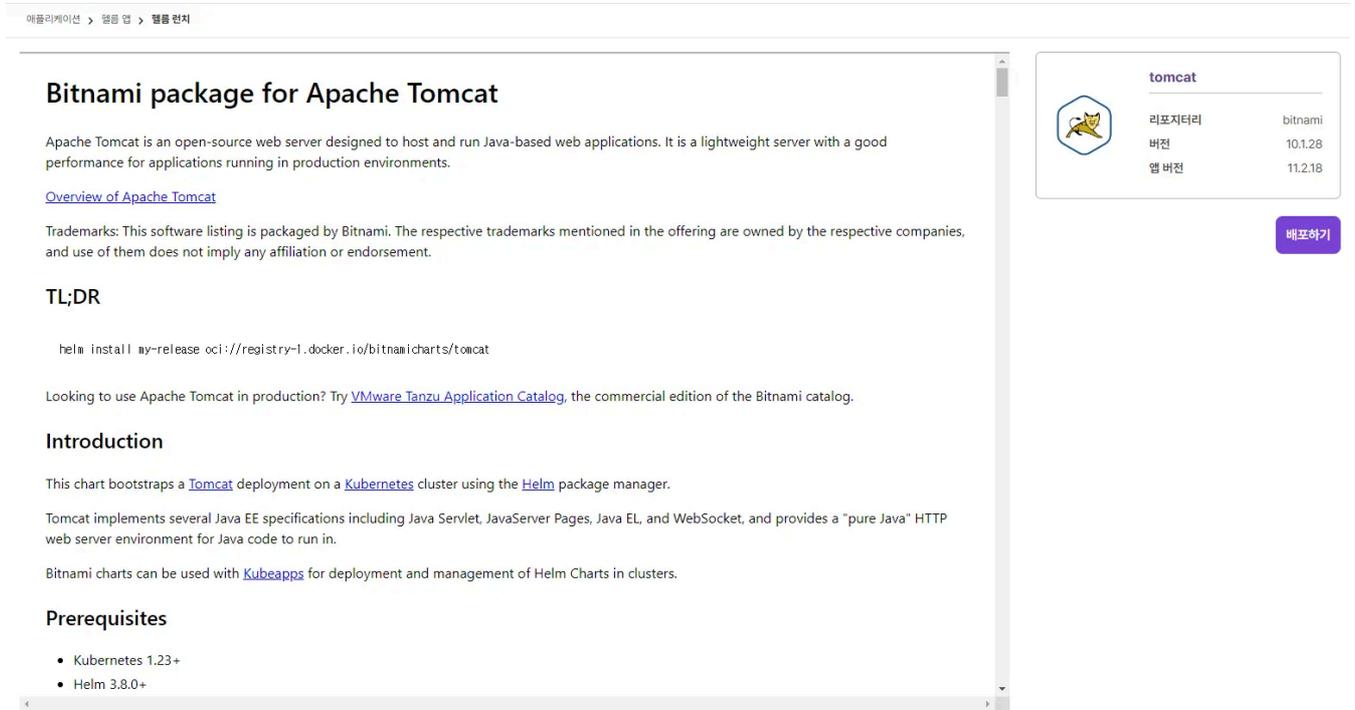
item	explanation
name	Application name deployed using Helm chart
namespace	The namespace in which the application is deployed
revision	Number of updates
Update	Update time
situation	Distribution status
chart	Helm chart used when deploying the application
App version	App version set in Helm chart

### 4.2.4.2.1. Application Deployment

To deploy your application with Helm, **런치** select the button in the upper right corner to view a list of charts.



When you select a chart to distribute, you can view the chart's details.



**배포하기** Selecting a button allows you to set the values required for distribution.

애플리케이션 > 헬름 > 헬름 런치

YAML 미리보기

```

1 # Copyright Broadcom, Inc. All Rights Reserved.
2 # SPDX-License-Identifier: APACHE-2.0
3
4 ## @section Global parameters
5 ## Global Docker image parameters
6 ## Please, note that this will override the image parameters, including dependencies, configured to use the global v
7 ## Current available global Docker image parameters: imageRegistry, imagePullSecrets and storageClass
8 ##
9
10 ## @param global.imageRegistry Global Docker image registry
11 ## @param global.imagePullSecrets Global Docker registry secret names as an array
12 ## @param global.defaultStorageClass Global default StorageClass for Persistent Volume(s)
13 ## @param global.storageClass DEPRECATED: use global.defaultStorageClass instead
14 ##
15 global:
16   imageRegistry: ""
17   ## E.g.
18   ## imagePullSecrets:
19   ##   - myRegistryKeySecretName
20   ##
21   imagePullSecrets: []
22   defaultStorageClass: ""
23   storageClass: ""
24   ## Security parameters
25   ##
26   security:
27     ## @param global.security.allowInsecureImages Allows skipping image verification
28     allowInsecureImages: false
29     ## Compatibility adaptations for Kubernetes platforms
30     ##
31   compatibility:
32     ## Compatibility adaptations for Openshift

```

**tomcat**



리포지터리	bitnami
버전	10.1.40
앱 버전	11.7.3

Target Namespace

런치 취소

In the YAML editor on the left, you can configure values to be applied when deploying the chart as an application. Target Namespace The and on the right set the namespace to deploy and the name of the application to be deployed. Once the settings are complete , you can preview the Kubernetes resources to be deployed by clicking the button 애플리케이션명 in the upper left . YAML 미리보기

TIP

When deploying an application from the Helm menu in the namespace scope, only the application name is set without selecting a namespace.

Once you've completed the creation and 런치 selected the button, your application will be de - ployed to the actual cluster.

### 4.2.4.2.2. Viewing application information

To view application details, select the target application from the application list. The application details screen provides information about resources, status, and history.

애플리케이션 > 애플 > mysql

## mysql

Resources Status History

스태이트풀셋

# ↑	클러스터	네임 스페이스	이름
1	host-cluster-200	alert	mysql

서비스

# ↑	클러스터	네임 스페이스	이름	타입	클러스터 IP	포트/노드포트	EXTERNAL_IP
1	host-cluster-200	alert	mysql-headless	ClusterIP	None	3306	-
2	host-cluster-200	alert	mysql	ClusterIP	-	3306/TCP	-

컨피그맵

# ↑	클러스터	네임 스페이스	이름
1	host-cluster-200	alert	mysql

시크릿

# ↑	클러스터	네임 스페이스	이름
1	host-cluster-200	alert	mysql

The Resources tab provides information about the Kubernetes resources that make up your application.

#### TIP

Resource information can only be retrieved for information such as pods and services that are essential for running the application.

애플리케이션 > 애플 > mysql

## mysql

Resources Status History

차트들(을) 선택하세요. 업그레이드

별류

```

1 architecture: standalone
2 auth:
3   createDatabase: true
4   customPasswordFiles: {}
5   database: petstore
6   defaultAuthenticationPlugin: ""
7   existingSecret: ""
8   password: admin
9   replicationPassword: ""
10  replicationUser: replicator
11  rootPassword: root
12  usePasswordFiles: false
13  username: admin
14  clusterDomain: cluster.local
15  commonAnnotations: {}
16  commonLabels: {}
17  diagnosticMode:
18    args:
19      - infinity
20    command:
21      - sleep
22    enabled: false
23  extraDeploy: []
24  fullnameOverride: ""
25  global:
26    imagePullSecrets: []
27    imageRegistry: ""
28    storageClass: accordion-storage
29  image:
30    debug: false

```

상태

```

1 config:
2   architecture: standalone
3   auth:
4     createDatabase: true
5     customPasswordFiles: {}
6     database: petstore
7     defaultAuthenticationPlugin: ""
8     existingSecret: ""
9     password: admin
10    replicationPassword: ""
11    replicationUser: replicator
12    rootPassword: root
13    usePasswordFiles: false
14    username: admin
15    clusterDomain: cluster.local
16    commonAnnotations: {}
17    commonLabels: {}
18    diagnosticMode:
19      args:
20        - infinity
21      command:
22        - sleep
23      enabled: false
24    extraDeploy: []
25    fullnameOverride: ""
26    global:
27      imagePullSecrets: []
28      imageRegistry: ""
29      storageClass: accordion-storage
30    image:

```

The Status tab provides settings and deployment status information.

애플리케이션 > 애플 > mysql

### mysql

Resources Status History

#### 별류

```

1 architecture: standalone
2 auth:
3   createDatabase: true
4   customPasswordFiles: {}
5   database: petstore
6   defaultAuthenticationPlugin: ""
7   existingSecret: ""
8   password: admin
9   replicationPassword: ""
10  replicationUser: replicator
11  rootPassword: root
12  usePasswordFiles: false
13  username: admin
14  clusterDomain: cluster.local
15  commonAnnotations: {}
16  commonLabels: {}
17  diagnosticMode:
18    args:
19      - infinity
20    command:
21      - sleep
22    enabled: false
23  extraDeploy: []
24  fullnameOverride: ""
25  global:
26    imagePullSecrets: []
27    imageRegistry: ""
28    storageClass: accordion-storage
29  image:
30    debug: false

```

#### 상태

```

1 config:
2   architecture: standalone
3   auth:
4     createDatabase: true
5     customPasswordFiles: {}
6     database: petstore
7     defaultAuthenticationPlugin: ""
8     existingSecret: ""
9     password: admin
10    replicationPassword: ""
11    replicationUser: replicator
12    rootPassword: root
13    usePasswordFiles: false
14    username: admin
15    clusterDomain: cluster.local
16    commonAnnotations: {}
17    commonLabels: {}
18    diagnosticMode:
19      args:
20        - infinity
21      command:
22        - sleep
23      enabled: false
24    extraDeploy: []
25    fullnameOverride: ""
26    global:
27      imagePullSecrets: []
28      imageRegistry: ""
29      storageClass: accordion-storage
30    image:

```

차트들(들) 선택하세요. ^ 업그레이드

- cloudnativeapp/mysql
- bitnami/mysql

You can upgrade the deployed application by selecting the chart in the upper right corner and clicking the Upgrade button.

애플리케이션 > 애플 > mysql

### mysql

Resources Status History

계정 #	업데이트	상태	차트	앱 버전	롤백
1	2023-11-09 14:22:06	deployed	mysql-9.14.1	8.0.35	<span style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 5px;">롤백</span>

The History tab provides information about the application's update history and the ability to revert to a specific update.

### 4.2.4.2.3. Deleting an application

To delete a deployed application, 삭제 select the button to the right of the target application.

애플리케이션 > 설정 > 헬륨 앱

런치

이름 ↓	내임 스페이스	개정	업데이트	상태	차트	앱 버전	
test-aggr	huu	1	2024-03-06 14:33:55	deployed	nginx-15.1.2	1.25.1	삭제
test	default	1	2024-03-26 15:04:22	deployed	nginx-15.1.2	1.25.1	삭제
test	huu	5	2024-03-05 10:13:35	deployed	nginx-15.4.0	1.25.3	삭제
spin-containerd-shim-installer	hwpa				spin-containerd-shim-installer-0.10.0	0.10.0	삭제
opensearch-dashboards	alert				opensearch-dashboards-1.3.0	1.3.0	삭제
opensearch	alert				opensearch-1.9.0	1.3.0	삭제
mysql	mjdev	1	2024-01-04 10:04:16	deployed	mysql-9.14.1	8.0.35	삭제
mysql	alert	1	2023-11-09 14:22:06	deployed	mysql-9.14.1	8.0.35	삭제
locust	ingresstest	5	2024-07-02 22:23:59	deployed	locust-0.31.5	2.15.1	삭제
locust	stress	1	2024-06-27 14:37:24	deployed	locust-0.31.5	2.15.1	삭제

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**삭제**  
애플리케이션을(들) 삭제하시겠습니까?

취소 삭제

## 4.2.5. Build

### 4.2.5.1. Cluster Task Template

Cluster task templates manage templates that are commonly used across the cluster.

Task specifications frequently used in pipelines can be registered in advance as templates for easy application.

When creating a task template, use **valueschema** and **environment variables** .

**valueschema** can define the format of the values to be entered by the user, and can create flexible templates.

Depending on the data format, there are three main types, and the detailed types are as follows.

- **Basic** : Literal data
- **Kubernetes** : Kubernetes Resources
- **See also** : Including other schemas

category	type	explanation
basic	boolean	true, false
basic	number	Number format
basic	string	String format
Kubernetes	kubernetes	Refers to Kubernetes resources that are available for general use.
Kubernetes	configmapName	Only checks whether configmap exists and references metadata.name
Kubernetes	configmapData	Refer to the data element of configmap
Kubernetes	secretName	Only checks whether secret exists and references metadata.name
Kubernetes	secretData	Refer to the data element of secret
reference	array	Contains objects of the same type
reference	object	Types that contain other objects
reference	anyOf	Choose one of several types

#### 4.2.5.1.1. Environment Variables

The following environment variables are reserved in the pipeline. `acc-showcase-env` Please refer to the pipeline template for usage instructions.

<b>meaning</b>	<b>Environment variable expressions</b>
Pipeline name	{{{.PIPELINE.NAME}}}
Pipeline Namespace	{{{.PIPELINE.NAMESPACE}}}
Pipeline UID	{{{.PIPELINE.UID}}}
Pipeline instance name	{{{.PIPELINE.INSTANCE}}}
Build name	{{{.BUILD.NAME}}}
Build version	{{{.BUILD.VERSION}}}
Build generator name	{{{.BUILD.CREATOR.USERNAME}}}
Build Creator Group	{{{.BUILD.CREATOR.GROUPS}}}

## 4.2.5.1.2. Basic types of valueschema

### 4.2.5.1.2.1. boolean

Restricts input values to boolean format.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - c
    args:
      - |
        echo -e "bVal: {{.values.bVal}}";
        echo -e "bDefaultVal: {{.values.bDefaultVal}}";
        echo -e "bEnumVal: {{.values.bEnumVal}}";
  valueschema:
    type: object
    properties:
      bVal:
        type: boolean
        description: "기본형: boolean타입"
      bDefaultVal:
        type: boolean
        description: "기본값이 있는 boolean타입"
        default: true
      bEnumVal:
        type: boolean
        description: "boolean 타입, enum : 값의 범위 지정"
        enum:
          - true
```

bDefaultVal [?](#)

bEnumVal [?](#)

bVal [?](#)

### 4.2.5.1.2.2. number

Restricts input values to numeric format.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        echo -e "nVal: {{.values.nVal}}";
        echo -e "nDefaultVal: {{.values.nDefaultVal}}";
  valueschema:
    type: object
    properties:
      nVal:
        type: number
        description: "기본형: number타입"
        maximum: 100 # (옵션) 해당 값보다 크다면 오류
        minimum: 1 # (옵션) 해당 값보다 작다면 오류
      nDefaultVal:
        type: number
        description: "기본값이 있는 number타입"
        default: -1
```

nDefaultVal ?

nVal ?

### 4.2.5.1.2.3. string

Input values can be defined in string format and restricted using various formats.

type	explanation
date	Date format (YYYY-MM-DD)
email	Email format
ip	ipv4 format
type	uri format
uuid	uuid format
ssh-private	SSH PEM PRIVATE format
ssh-public	ssh-rsa xxxx accordion@example.com
textarea	Multiline in general format

```
spec:
  container:
    image: busybox
    command:
      - sh
      - c
    args:
      - |
        echo -e "date : {{.values.date}}";
        echo -e "email : {{.values.email}}";
        echo -e "ip : {{.values.ip}}";
        echo -e "uri : {{.values.uri}}";
        echo -e "uuid : {{.values.uuid}}";
        echo -e "textarea : {{.values.textarea}}";
        echo -e "sshPublic : {{.values.sshPublic}}";
  valueschema:
    type: object
    properties:
      date:
        type: string
        description: "date 형식 (YYYY-MM-DD)"
        format: date
      email:
        type: string
        description: "email 형식"
        format: email
      ip:
        type: string
        description: "ip 형식"
```

format: **ip**  
 uri:  
 type: **string**  
 description: "**uri 형식**"  
 format: **uri**  
 uuid:  
 type: **string**  
 description: "**uuid 형식**"  
 format: **uuid**  
 textarea:  
 type: **string**  
 description: "**멀티라인 형식 지원**"  
 format: **textarea**  
 sshPublic:  
 type: **string**  
 description: "**ssh public 형식**"  
 format: **ssh-public**

date ?

email ?

ip ?

sshPublic ?

textarea ?

uri ?

uuid ?

### 4.2.5.1.3. Kubernetes Types of valueschema

#### 4.2.5.1.3.1. kubernetes

Allows input values to select Kubernetes resources.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - c
    args:
      - |
        echo -e "kVal: {{.values.kVal}}";
  valueschema:
    type: object
    properties:
      kVal:
        type: kubernetes
        description: "kubernetes의 값을 참조"
        x-kube-group: "cicd.accordions.co.kr" # (필수) 쿠버네티스 리소스의 그룹 의미
        x-kube-version: "v1beta1" # (필수) 쿠버네티스 리소스의 버전 의미
        x-kube-resource: "tasktemplates" # (필수) 쿠버네티스 리소스의 리소스명 의미
        x-kube-namespace: "namespace 이름" # (옵션) 쿠버네티스 리소스의 네임스페이스 의미
        x-kube-fields: "metadata.name" # (옵션) jsonpath 유사한 형식으로 "{}" 는 생략 가능
        x-kube-optional: true # (옵션) true이면서 사용자 입력값이 없다면 공백("")
```

kVal ?

- acc-copy-to-pvc
- acc-dockerfile-from-build
- acc-dockerfile-tomcat
- acc-image-kaniko
- acc-shell
- acc-shell-checkfile
- acc-shell-echo
- acc-src-ant
- acc-src-gradle
- acc-src-mvn
- acc-vcs-git
- acc-vcs-svn
- e2e-kaniko
- test

### 4.2.5.1.3.2. configmapData

Allows input values configmap to select a resource and data reference a field.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        echo -e "cmData: {{.values.cmVal}}";
  valueschema:
    type: object
    properties:
      cmVal:
        type: configmapData
        description: "configmap.data의 값을 참조"
        x-kube-key: "strkey"          # (옵션) 해당값이 없다면, data전체를 json직렬화
        x-kube-optional: true       # (옵션) true이면서 사용자 입력값이 없다면 공백("")
```

cmVal ?

생성

수정

istio-ca-root-cert

kube-root-ca.crt

### 4.2.5.1.3.3. configmapName

Allows input values configmap to select a resource and metadata.name reference the value.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        echo -e "cmName: {{.values.cmNameVal}}";
  valueschema:
    type: object
    properties:
      cmNameVal:
        type: configmapName
        description: "configmap의 이름을 참조"
        x-kube-labelSelector: ""      # (옵션) 라벨 선택터
        x-kube-optional: true        # (옵션) true이면서 사용자 입력값이 없다면 공백("")
```

cmNameVal ?

생성

수정

istio-ca-root-cert

kube-root-ca.crt

#### 4.2.5.1.3.4. secretData

Allows the input value `secret` to select a resource and `data` references the decoded value of the field.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        echo -e "secretData: {{.values.secretVal}}";
  valueschema:
    type: object
    properties:
      secretVal:
        type: secretData
        description: "secret.data의 값을 참조"
        x-kube-key: "username" # (옵션) 해당값이 없다면, data전체를 json직렬화
        x-kube-type: "kubernetes.io/basic-auth" # (옵션) ssecret.type과 일치하는지 유효성 검사
        x-kube-labelSelector: "" # (옵션) 라벨 셀렉터
        x-kube-optional: true # (옵션) true이면서 사용자 입력값이 없다면 공백("")
```

secretVal ?

생성

수정

testt-email5d8jl

### 4.2.5.1.3.5. secretName

Allows input values `secret` to select a resource and `metadata.name` reference the value.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        echo -e "secretName: {{.values.secretNameVal}}";
  valueschema:
    type: object
    properties:
      secretNameVal:
        type: secretName
        description: "secret의 이름을 참조"
        x-kube-type: "kubernetes.io/basic-auth" # (옵션) ssecret.type과 일치하는지 유효성 검사
        x-kube-labelSelector: "" # (옵션) 라벨 선택터
        x-kube-optional: true # (옵션) true이면서 사용자 입력값이 없다면 공백("")
```

secretNameVal ?

생성

수정

testt-email5d8jl

## 4.2.5.1.4. Reference type of valueschema

### 4.2.5.1.4.1. array

Receives input values in array format.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - c
    args:
      - |
        echo -e "numArr: {{.values.numArr}}";
        echo -e "strArr: {{.values.strArr}}";
        {{- range $i, $e:= .values.strArr}}
        {{print "echo -e \"\telement[" $i "]: " $e "\";"}}
        {{- end}}
        echo -e "uniqueArr: {{.values.uniqueArr}}";
  valueschema:
    type: object
    properties:
      numArr:
        type: array
        description: "숫자 배열"
        items:
          type: number
      strArr:
        type: array
        minItems: 1
        maxItems: 3
        description: "문자 배열 (1~3)"
        items:
          type: string
      uniqueArr:
        type: array
        description: "중복 요소가 없는 배열"
        uniqueItems: true
        items:
          type: string
```

numArr ?

추가

strArr ?

strArr 1

추가

uniqueArr ?

추가

#### 4.2.5.1.4.2. object

Receives input values in object format.

```
spec:  
  container:  
    image: busybox  
    command:  
      - sh  
      - -c  
    args:  
      - |  
        echo -e "data.key: {{.values.data.key}}";  
        echo -e "data.value: {{.values.data.value}}";  
  valueschema:  
    type: object  
    properties:  
      data:  
        type: object  
        properties:  
          key:  
            type: string  
          value:  
            type: string
```

data

key

value

### 4.2.5.1.4.3. anyof

It receives input values by selecting one of several objects.

```
spec:
  container:
    image: busybox
    command:
      - sh
      - -c
    args:
      - |
        {{- if eq .values.secret.type "kubernetes.io/basic-auth"}}
        {{print "echo \"" .values.secret.type "\";"}}
        {{print "echo \"" .values.secret.username "\";"}}
        {{print "echo \"" .values.secret.password "\";"}}

        {{- else if eq .values.secret.type "kubernetes.io/ssh-auth"}}
        {{print "echo \"" .values.secret.type "\";"}}
        {{print "echo \"" .values.secret.privatekey "\";"}}
        {{- end}}
  valueschema:
    type: object
    properties:
      secret:
        anyOf:
          - title: basic
            properties:
              type:
                type: string
                enum:
                  - kubernetes.io/basic-auth
            username:
              type: string
            password:
              type: string
          - title: ssh
            properties:
              type:
                type: string
                enum:
                  - kubernetes.io/ssh-auth
            privatekey:
              type: string
              format: ssh-private
```

secret

basic ▾  
basic  
ssh

type

kubernetes.io/basic-auth ▾

username

## 4.2.5.1.5. Defining UI options for valueschema

### 4.2.5.1.5.1. x-ui-format

Defines the presentation style for the UI. (Default: list)

- list
  - Displays each property on a separate line in a basic list format.

포트 설정 (Ports) ?

포트 설정 1

containerPort

name

nodePort

protocol

servicePort

삭제

포트 설정 추가

- table
  - Each property is displayed in a column in a table format.
    - Detailed options
      - x-ui-table-width
        - x-ui-format: table The option applies only if:
          - Each number represents a proportion of the column.
          - If the number of properties does not match, the option field is ignored.

#### Usage Example 1: Port Settings

```
ports:
  description: 포트 설정
  items:
  properties:
```

```

containerPort:
  maximum: 65535
  minimum: 1
  multipleOf: 1
  type: number
name:
  default: ""
  type: string
nodePort:
  default: 0
  maximum: 65535
  minimum: 0
  multipleOf: 1
  type: number
protocol:
  default: TCP
  enum:
    - TCP
    - UDP
    - SCTP
  type: string
servicePort:
  maximum: 65535
  minimum: 1
  multipleOf: 1
  type: number
type: object
type: array
x-ui-format: table
x-ui-table-width: 4 2 2 2 2

```

#### 포트 설정 (Ports) ?

containerPort	name	nodePort	protocol	servicePort
8080	http-port	0	TCP	8080

[포트 설정 추가](#)

As above, each property row is displayed according to the specified ratio.

#### Usage Example 2: Setting Labels

```

labels:
  items:
    properties:
      key:
        pattern: ([A-Za-z0-9][-A-Za-z0-9_])*[A-Za-z0-9]
        type: string

```

```

value:
  default: ""
  pattern: (([A-Za-z0-9][-A-Za-z0-9_]*)?[A-Za-z0-9])?
  type: string
type: object
x-ui-displayName: 라벨
type: array
x-ui-basic-option: true
x-ui-displayName: 라벨
x-ui-format: table

```

라벨

key	value
<input type="text"/>	<input type="text"/>

라벨 추가

It is a frequently used key-value UI format used for labels, annotations, etc.

- count
  - type: number If available, it provides a UI that allows you to change the number in that field.

#### Example usage: Setting up Replicas

```

replicas:
  default: 1
  minimum: 0
  type: number
  x-ui-format: count
  x-ui-displayName: 레플리카 파드 수

```

레플리카 파드 수

- switch
  - type: boolean If available, it provides a UI that allows you to change the boolean value of that field.

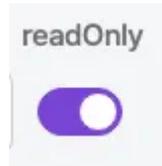
#### Usage example: ReadOnly setting

```

readOnly:
  default: false

```

```
type: boolean
x-ui-format: switch
```



- radio
  - type: string If and enum when this exists, it provides a UI that allows selecting values defined as an enum list, with available options.

#### Example usage: Setting ImagePullPolicy

```
imagePullPolicy:
  default: Always
  description: 이미지를 가져오는 전략
  enum:
    - Always
    - IfNotPresent
    - Never
  type: string
  x-ui-format: radio
```



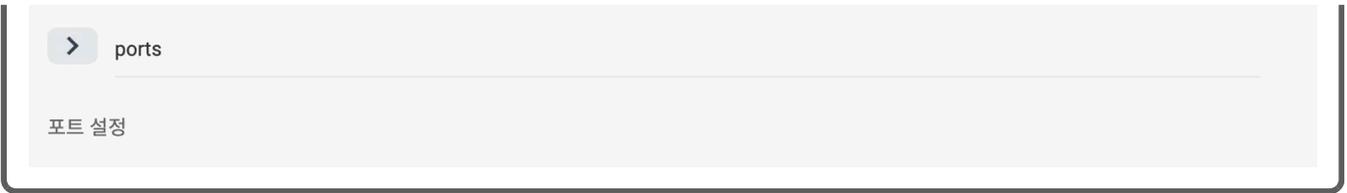
#### 4.2.5.1.5.2. x-ui-collapsible

The Collapse and Expand buttons are displayed, defining options that can be used to specify default values.

- true: hidden
- false: display

#### Usage examples

```
ports:
  ...
  x-ui-collapsible: true
```



#### 4.2.5.1.5.3. x-ui-order

The default is alphabetical sorting, with user defined options to change the UI layout.

##### Usage examples

```
propertyA:
  type: string
  x-ui-order: 2
propertyB:
  type: string
  x-ui-order: 1
```

propertyB

propertyA

As above, the UI is displayed in a user-defined order, not alphabetically.

#### 4.2.5.1.5.4. x-ui-basic-option

Defines the UI that is displayed by default when creating a catalog.

- true: Shown by default when created
- false: not displayed by default when created (only displayed in global settings)

##### Usage examples

```
ports:
  ...
  x-ui-basic-option: true
```

#### 4.2.5.1.5.5. x-ui-displayName

Defines the name of the UI in which the key value is displayed.

##### Usage examples

```
ports:
  ...
  x-ui-displayName: 포트 설정
```

### 4.2.5.1.5.6. x-ui-display

Defines options for showing/hiding the UI.

- visible : Displays the UI.
- hidden : Hide the UI.

### 4.2.5.1.5.7. x-ui-type: kubernetes

type: string This option is only supported if the user has a specific Kubernetes list available in the UI.

**NOTE**

type: kubernetes x-kube- This is a different option from the one used in . x-ui-type- In the case of op - tions, this option is not related to the CICD module and only affects the user UI.

### Detailed options

Options	explanation
x-ui-kube-resource	Resource name
x-ui-kube-group	Resource group (default: core) - example: apps , storage.k8s.io
x-ui-kube-version	Resource version (default: v1) - example: v1beta1 , v2 , v2beta2
x-ui-kube-scope	Defines the scope (cluster, namespace) of Kubernetes resources. - cluster : Resources in cluster scope - namespace : Resources in namespace scope (default)
x-ui-kube-fields	(Required) Reference field for the resource to be displayed in the UI list. metadata.name - It is recommended to define basically .
x-ui-kube-labelSelector	Label selector passed when requesting a list of resources

## Usage examples

## RESOURCE YAML

```

apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: {{{.CATALOG.NAME}}}
spec:
  accessModes:
  - {{.values.accessMode}}
  resources:
    requests:
      storage: {{.values.size}}
  storageClassName: {{.values.storageClass}}
  volumeMode: Filesystem

```

## VALUESHEMA YAML

```

properties:
  accessMode:
    type: string
  size:
    type: string
  storageClass:
    description: 스토리지 클래스
    type: string
  x-ui-kube-fields: metadata.name
  x-ui-kube-group: storage.k8s.io
  x-ui-kube-labelSelector: ""
  x-ui-kube-resource: storageclasses
  x-ui-kube-scope: cluster
  x-ui-kube-version: v1
  x-ui-type: kubernetes
type: object

```

accessMode

size

storageClass ?

A list of available storage classes is displayed as above.

## 4.2.5.2. Cluster Pipeline Template

Cluster pipeline templates manage pipelines that are commonly used across a cluster.

Frequently used pipeline specifications in the catalog can be registered as templates in advance for easy application.

When creating a cluster pipeline template, use the cluster task template.

When combining two or more cluster task templates, it is necessary to set the relationship between the cluster task templates.

### 4.2.5.2.1. Creating a Cluster Pipeline Template

+ 클러스터 파이프라인 템플릿 생성 You can create it by entering cluster pipeline template YAML information in the screen that appears when you select the button.

빌드 > 클러스터 파이프라인 템플릿

← 클러스터 파이프라인 템플릿 목록 클러스터 파이프라인 템플릿 생성

```

1 apiVersion: ccd.accordions.co.kr/v1beta1
2 kind: ClusterPipelineTemplate
3 metadata:
4   annotations:
5     accordions.co.kr/summary: ""
6     accordions.co.kr/description: ""
7   name: ""
8 spec:
9   tasks: []

```

```

apiVersion: ccd.accordions.co.kr/v1beta1
kind: ClusterPipelineTemplate
metadata:
  annotations:
    # 해당 클러스터 파이프라인 템플릿의 요약
    accordions.co.kr/summary: ""
    # 해당 클러스터 파이프라인 템플릿의 설명
    accordions.co.kr/description: ""
  name: "test01"
spec:
  tasks:
    - name: vcs-get
      templateRef:

```

```

clusterScope: true
name: acc-vcs-git
- depends: vcs-get.Succeeded
name: image-build
templateRef:
clusterScope: true
name: acc-image-kaniko

```

When writing specifications for a task, set the name and relationship with other tasks, and write detailed information based on the task template.

The task name should conform to the Kubernetes naming policy, and the task relationship should contain information about the conditions under which the task should be performed. This 이름.상태 can be entered in the format . The following values can be entered for the status.

situation	explanation
Terminated	The user stopped the build
Succeeded	The task is completed with an exit code of 0.
Running	The state in which the task is being performed
Failed	The task was performed but completed with a non-zero exit code.
Error	The task failed to execute or terminated abnormally.
Pending	A state in which a task waits before being performed
Unknown	Ended due to unknown reason

Here's how to write a relationship:

- It must be entered in the form of a task 이름.상태 , and the status must be entered.
- && , || it is also possible to create logical expressions by adding .
  - && is an expression meaning and , and A.상태 && B.상태 expresses the case where both state A and state B are present.
  - || is an expression meaning or , A.상태 || B.상태 and if it is , it expresses either state A or state B.
- (이름.상태 || 이름.상태) && 이름.상태 Prioritization such as this is also possible.

```

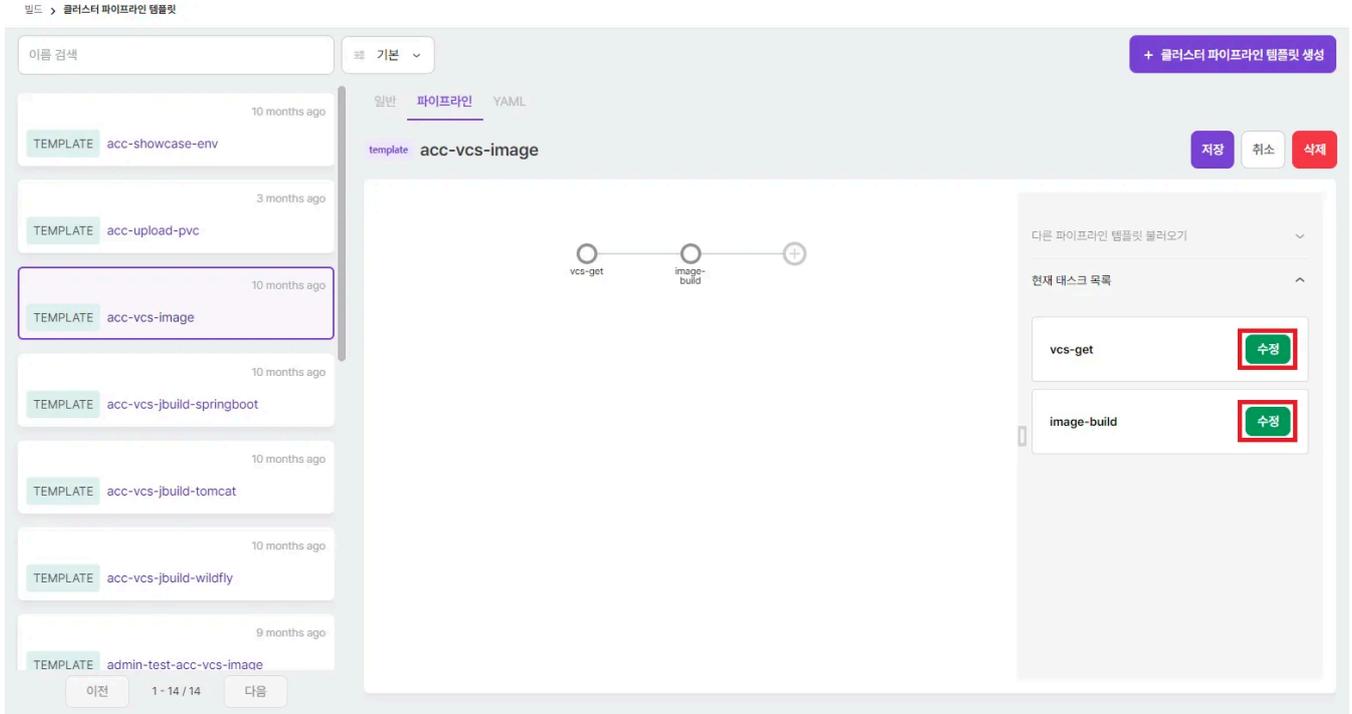
spec:
tasks:
- name: vcs-get
templateRef:
clusterScope: true
name: acc-vcs-git

```

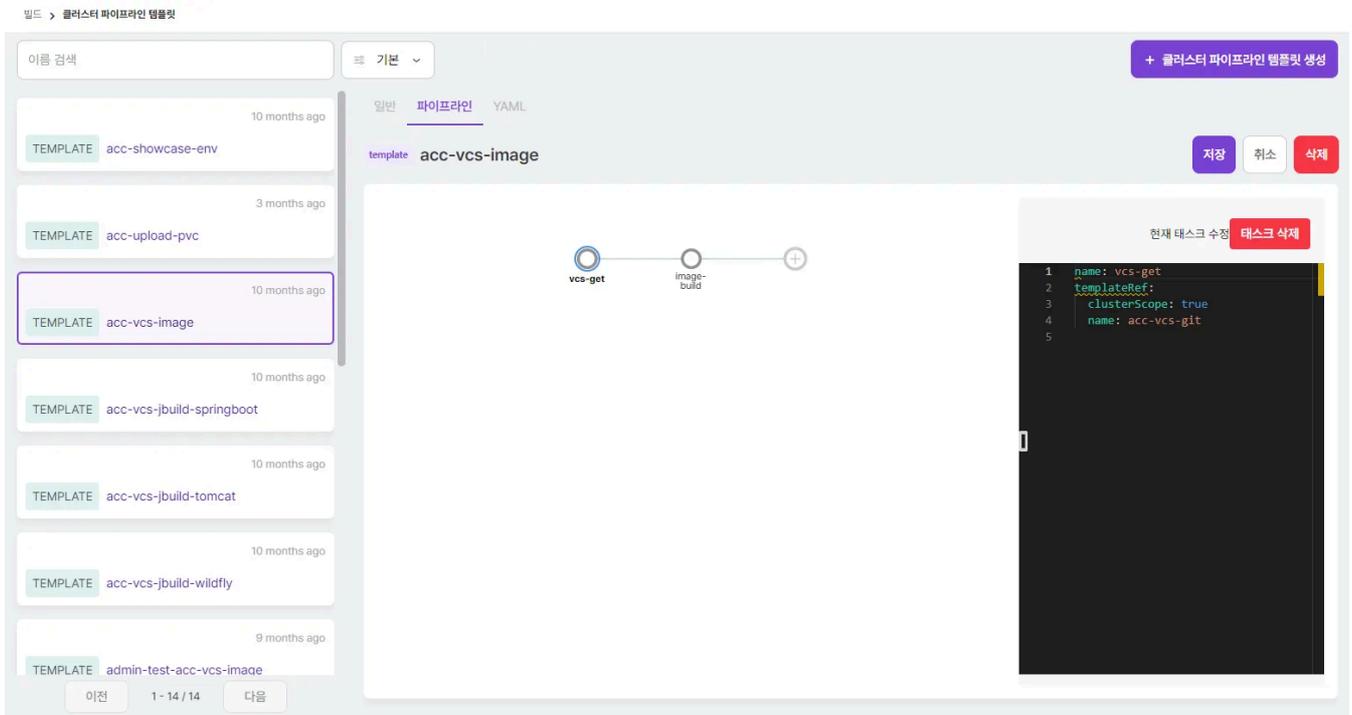
```
- name: test-task
  templateRef:
    clusterScope: true
    name: test-task-template
- depends: (test-task.Succeeded || test-task.Running) && vcs-get.Succeeded
  name: image-build
  templateRef:
    clusterScope: true
    name: acc-image-kaniko
```

### 4.2.5.2.2. Modifying a Cluster Pipeline Template

If you need to change information about a task in a cluster pipeline template, or if you need to create a blank cluster pipeline template and then make changes, select the button **파이프라인** on the tab . 수정



수정 Select the button for the task you want to edit .

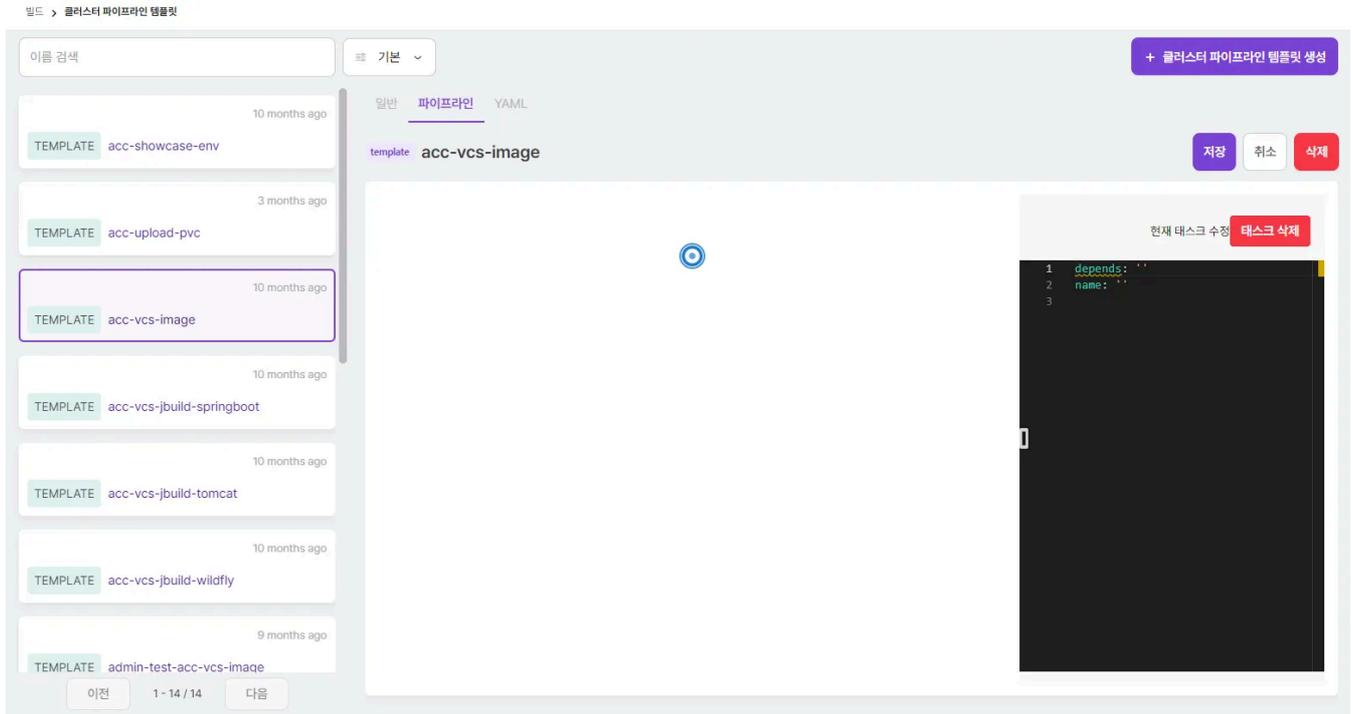


**NOTE**

For cluster pipeline templates without tasks, + you can configure tasks by modifying them and selecting the button for an empty task.

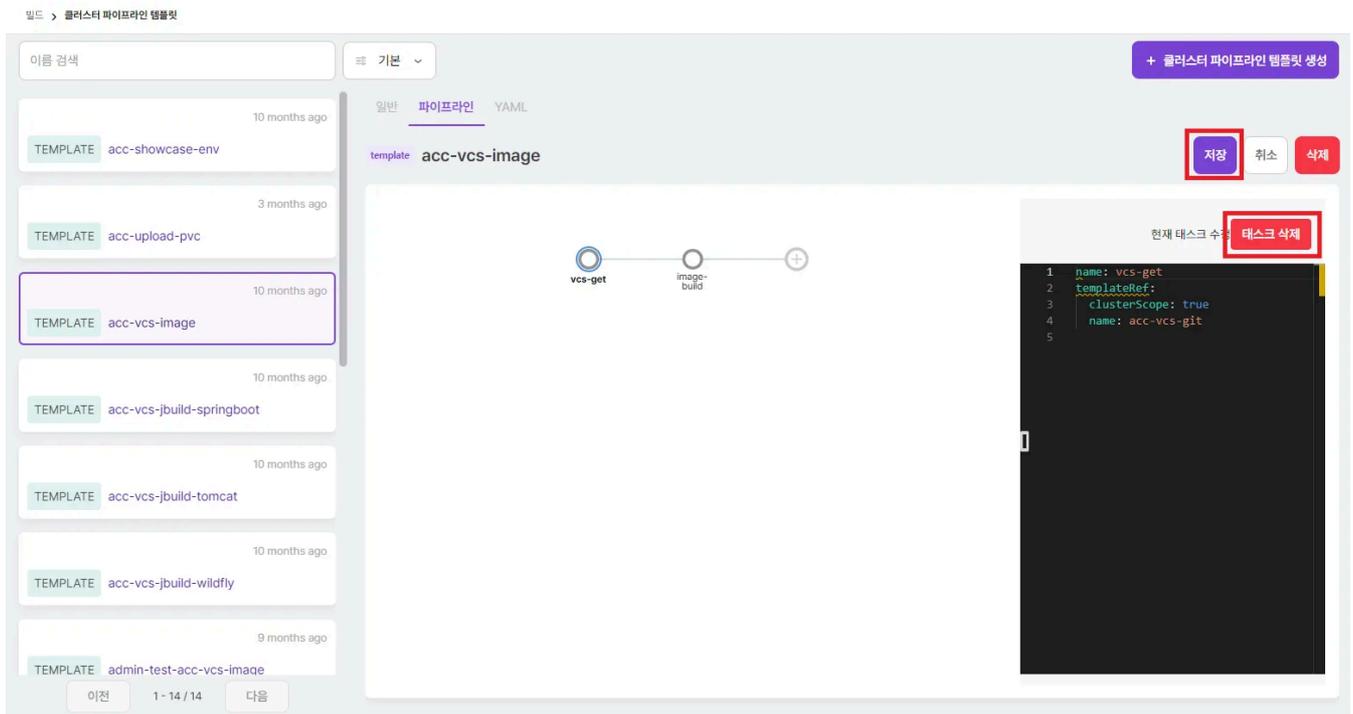
### 4.2.5.2.3. Creating a Task

파이프라인 수정 Click the button on the tab , + select the button, and then enter the YAML that appears.



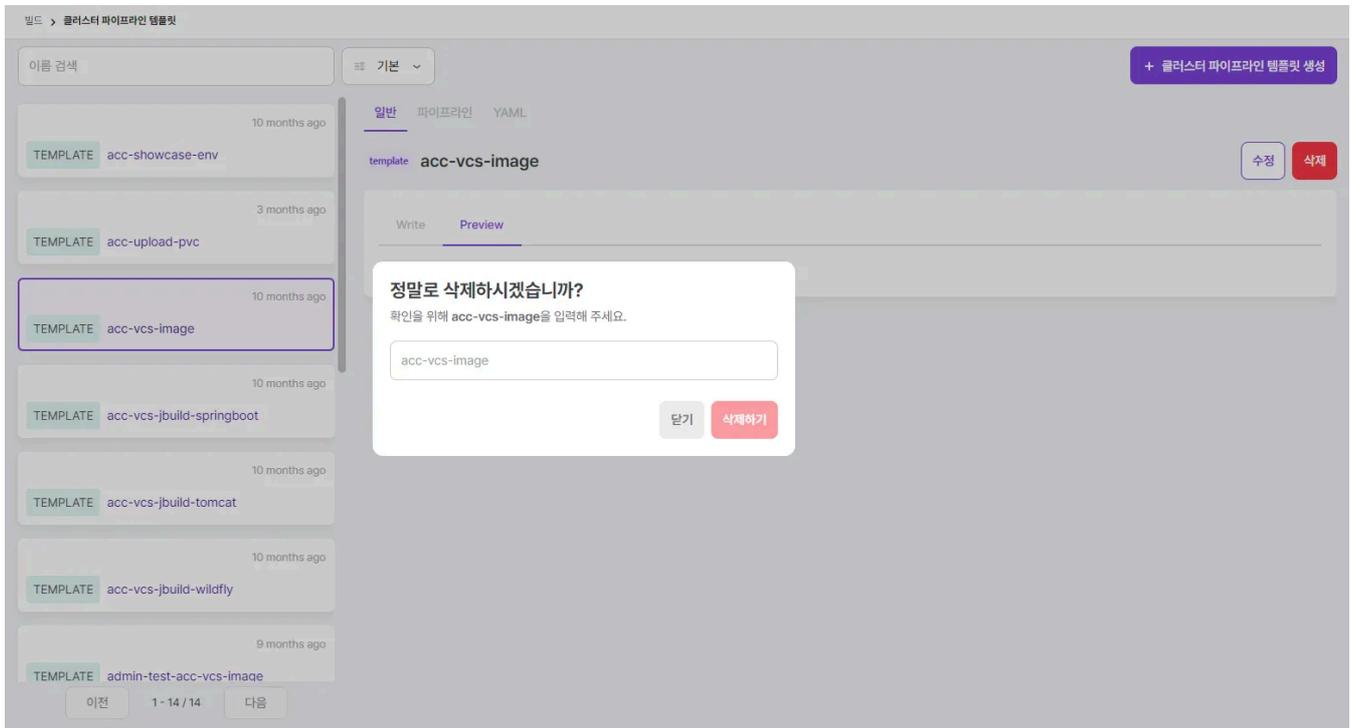
### 4.2.5.2.4. Deleting a Task

파이프라인 Select the tab at the top . Then, select the task you want to delete 수정 , click the button, and then click the button 태스크 삭제 in the upper right corner . 저장



#### 4.2.5.2.5. Deleting a Cluster Pipeline Template

Select the cluster pipeline template you want to delete and 삭제 click the button in the upper right corner.



In the modal that appears, enter your name and 삭제하기 select the button.

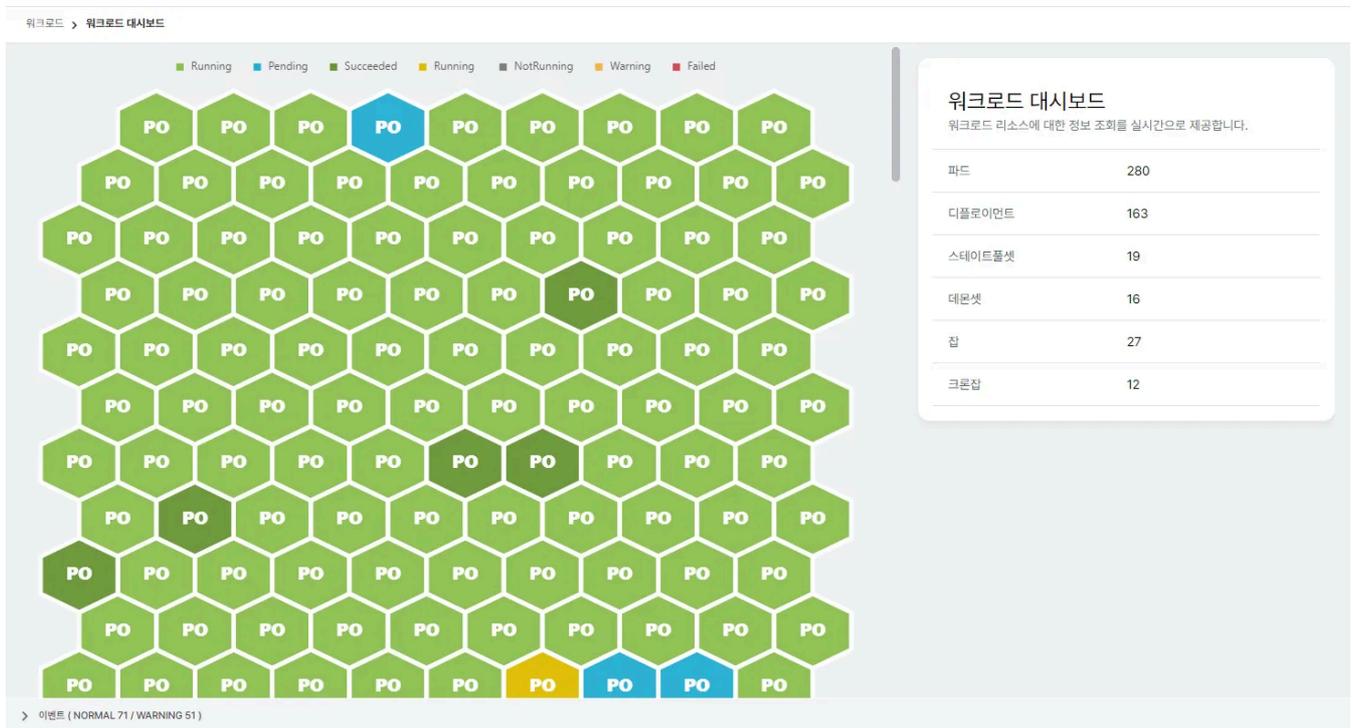
## 4.2.6. Workload

A workload refers to an application running on Kubernetes. In Kubernetes, a workload runs on a set of pods, which are collections of running containers. The following types of workloads exist:

- Deployment
- StatefulSet
- Demon Set
- ReplicaSet
- Job
- cron job
- Pad

### 4.2.6.1. Workload Dashboard

The workload dashboard provides information about the status of workloads deployed on the cluster.



Selecting a workload in the chart will display detailed information about that workload.

워크로드 > 워크로드 대시보드

Running Succeeded NotRunning

### 워크로드 대시보드

워크로드 리소스에 대한 정보 조회를 실시간으로 제공합니다.

종류	Pod
이름	node-exporter-96vp9
네임스페이스	acc-system
상태	Running
Ready	1/1
생성 시간	2025-03-06 14:07:20
이벤트	
메시지 수	시간

데이터가 존재하지 않습니다.

> 이벤트 (NORMAL 143 / WARNING 3)

For pods, Running if there are containers that are not operating properly, the status is , it shows the list of containers in that pod.

워크로드 > 워크로드 대시보드

### 워크로드 대시보드

워크로드 리소스에 대한 정보 조회를 실시간으로 제공합니다.

종류	Pod	
이름	test-aggr-nginx-687bb678b7-8dxdpq	
네임스페이스	huu	
상태	Running	
Ready	0/1	
컨테이너 목록		
이름 ↑	상태	원인
nginx	● waiting	CrashLoopBackOff
생성 시간	2024-09-10 17:01:06	
이벤트		
메시지 수	시간	

Back-off restarting failed container nginx in pod test-aggr-nginx-687bb678b7-8dxdpq\_huu(eaf08199-756d-418d-9b73-c055b5c22661)

> 이벤트 (NORMAL 72 / WARNING 51)

### 4.2.6.2. Pad

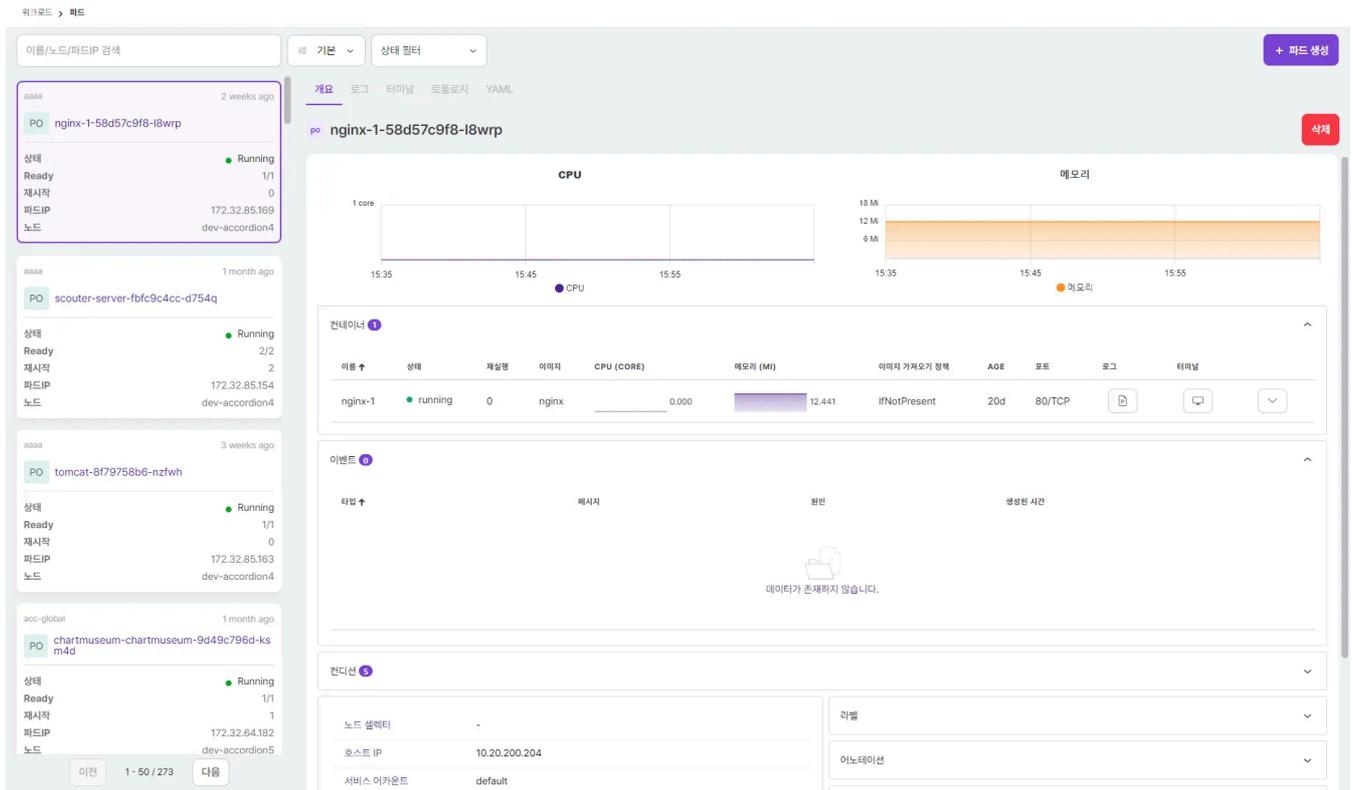
Provides information about the deployed pods.

Using tabs, you can view Kubernetes resource information, container logs, access terminals, and view topology for a pod.

Container logs and terminal access are available for each container in the pod.

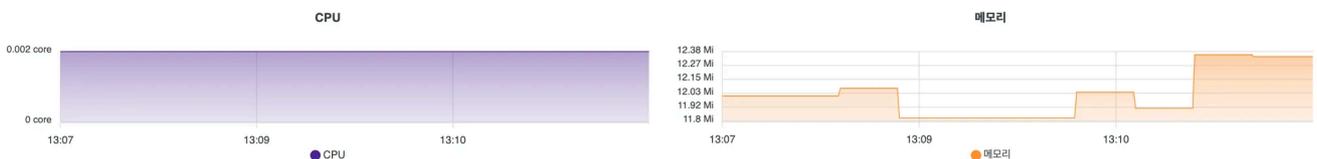
#### 4.2.6.2.1. Overview

Provides metrics, containers, events, status, and details of deployed pods.



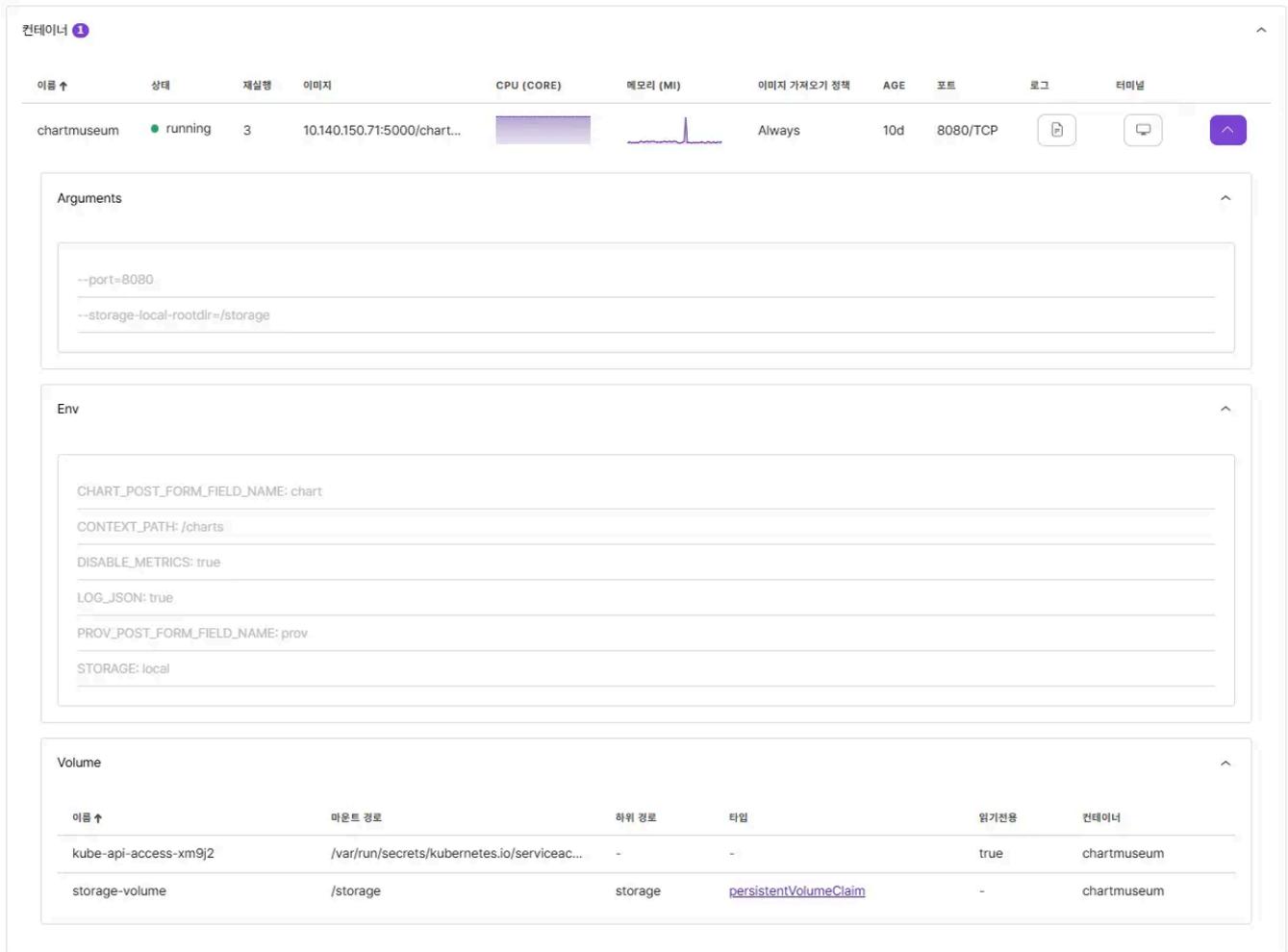
##### 4.2.6.2.1.1. Metric Information

Metric information provides CPU and memory usage for 5 minutes from the current time.



### 4.2.6.2.1.2. Container Information

Provides information about containers in deployed pods. Selecting a container table column displays information about Arguments, Env, and Volume.



item	explanation
name	Container name
situation	Container status
Rerun	Number of container restarts
image	Container image name
CPU	Container CPU usage for 5 minutes
memory	Container Memory Usage for 5 minutes
Image Import Policy	Container restart policy
AGE	Time elapsed since container creation
log	View container logs
Terminal	Container terminal access

<b>item</b>	<b>explanation</b>
Expand button	View container Arguments, Env, and Volume information

### 4.2.6.2.1.3. Event Information

Provides information about events occurring in the pod.

이벤트 <span style="background-color: #000080; color: white; border-radius: 50%; padding: 2px 5px;">2</span>			
타입 ↑	메시지	원인	생성된 시간
Normal	Pulling image "10.20.200.200:30001/accregistry/tomtes-9acd269e-45851c1c:22"	Pulling	6m 49s
Normal	Back-off pulling image "10.20.200.200:30001/accregistry/tomtes-9acd269e-45851c1c:22"	BackOff	19d

item	explanation
Type	<ul style="list-style-type: none"> <li>Normal: Events that occur during normal operations</li> <li>Warning: Event caused by an error</li> </ul>
message	Event message
cause	Reason for the event
Time of creation	Time elapsed since event creation

### 4.2.6.2.1.4. Condition Information

컨디션 <span style="background-color: #000080; color: white; border-radius: 50%; padding: 2px 5px;">5</span>				
타입 ↑	상태	업데이트	메시지	원인
ContainersReady	True	10d	-	-
Initialized	True	227d	-	-
PodReadyToStartContainers	True	54d	-	-
PodScheduled	True	227d	-	-
Ready	True	10d	-	-

item	explanation
Type	Name of the pod condition <ul style="list-style-type: none"> <li>PodReadyToStartContainers: The pod is ready to start containers.</li> <li>PodScheduled: The pod has been scheduled to a node.</li> <li>ContainersReady: All containers in the pod are ready.</li> <li>Initialized: All initialization containers have completed successfully.</li> <li>Ready: The pod is ready to handle requests and should be added to the load-balancing pool of all matching services.</li> </ul>
situation	Whether the condition is applicable
Update	The time it takes for the pod to transition from one state to another
message	Details about the last state transition

<b>item</b>	<b>explanation</b>
cause	Reason for the final change in condition

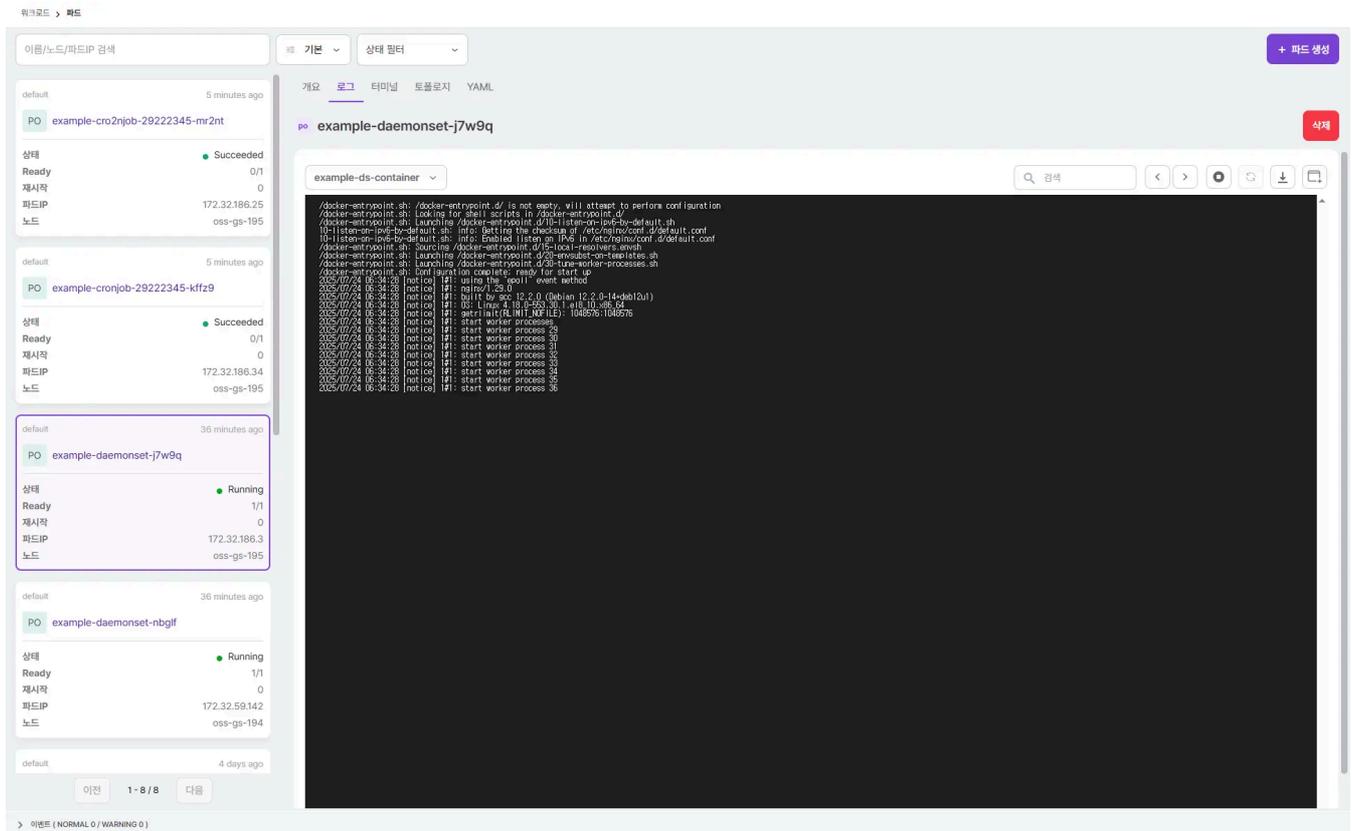
### 4.2.6.2.1.5. Pad Details

Provides details about the pad.

노드 선택터	-	리벨	▼
호스트 IP	10.140.150.71	어노테이션	▼
서비스 아카운트	default	톨러레이션	▼
DNS 정책	ClusterFirst	어피니티	▼
재시작 정책	Always		
활성 마감 시간	-		
서비스 품질 클래스 (QoSClass)	BestEffort		

### 4.2.6.2.1.6. Log

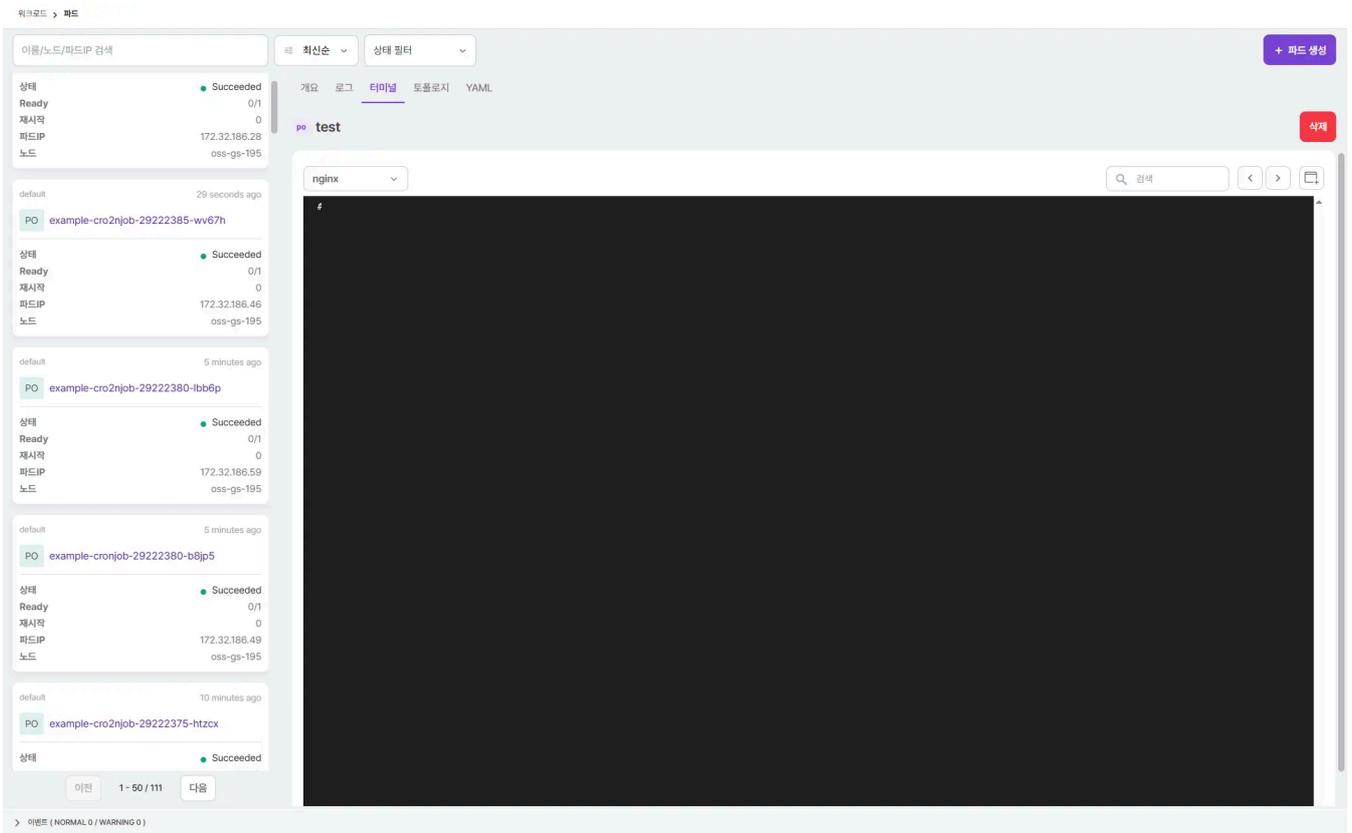
Provides logs for containers within a pod.



item	explanation
	Select a container within a pod to view the logs of the selected container.
	It provides text search within the log. Enter text in the search field < and > use the icon to find the text. The searched text is highlighted and shaded.
	Logs are output in real time, but  pressing the button pauses them. While outputting in real time  , the button is disabled . When paused,  its icon changes to a status. The previously disabled  (Refresh) button becomes enabled. Pressing the Refresh button reflects the most recent logs from the time the button was paused to the time it was pressed.
	Download the log.
	Open the log in a new browser window to check.

### 4.2.6.2.1.7. Terminal

Terminal access is possible for containers within the pod.



item	explanation
	Select a container within the pod and connect to the terminal of the selected container.
	It provides text search within the terminal. Enter text in the search field < and > use the icon to find the text. The searched text is highlighted and shaded.
	Open the terminal in a new browser window and connect.



**NOTE**

**NOTE**

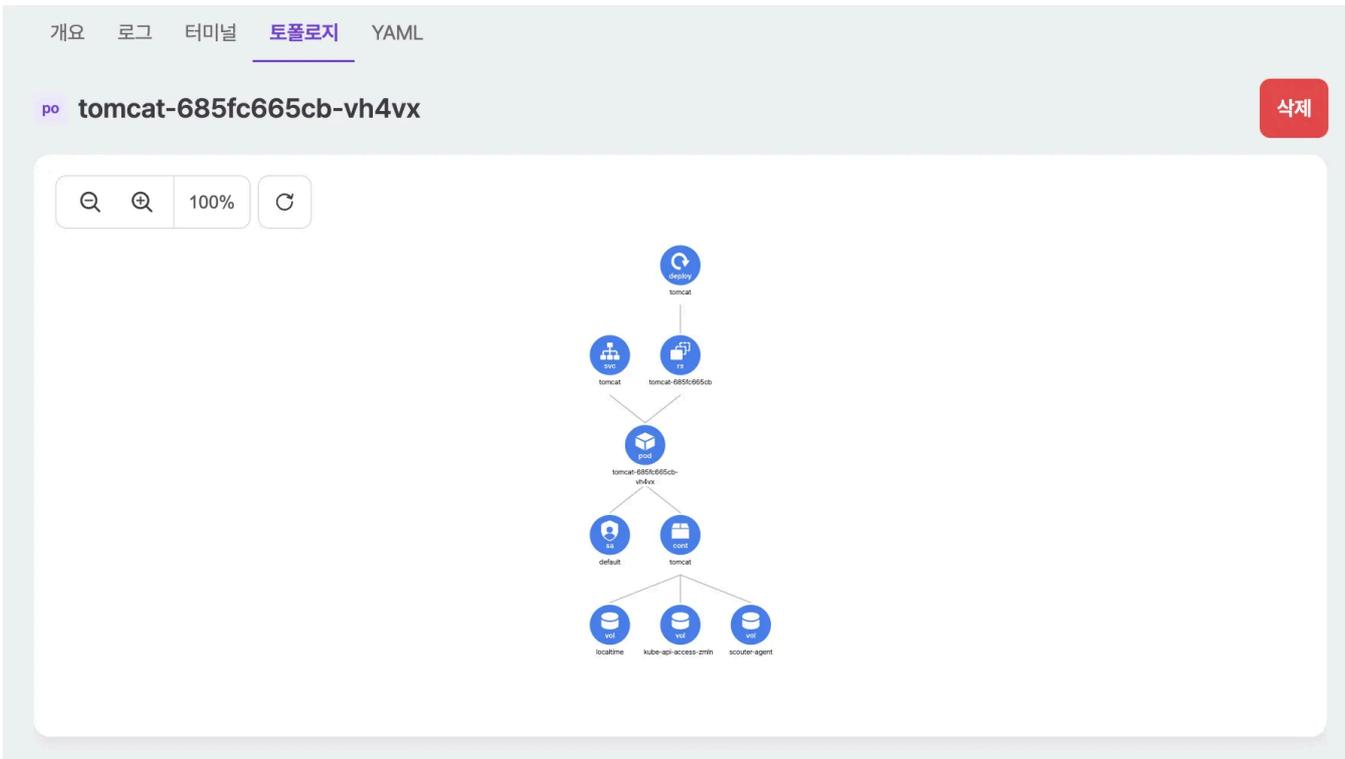
- When the connection is terminated, a 'Reconnect' button will appear, allowing you to restart the terminal session.
- A new terminal session is automatically started when a container is changed or a pod is restarted.
- If the connection fails, it will automatically attempt to reconnect, and you can also manually click the reconnect button.
- If the pod is in the Succeeded state, the container will be terminated and displayed as above.

### 4.2.6.2.1.8. Topology

Shows resources related to a pod in topological form.

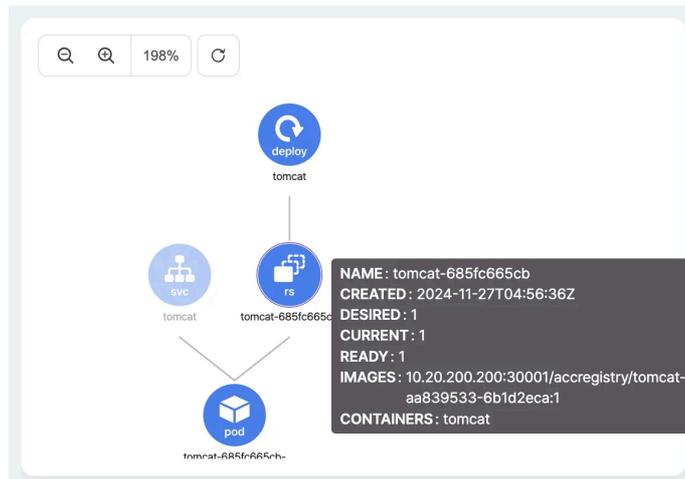
The resources output from the pod topology are as follows.

- Pods, Deployments, ReplicaSets, StatefulSets, DaemonSets, Jobs
- service
- Service account
- Persistent Volume Claim
- Secret, ConfigMap
- Containers, volumes (These resources are resources that simply output associations, so clicking them does not move the screen.)



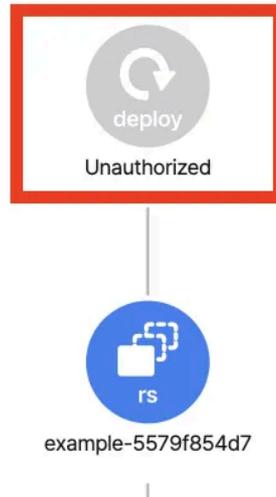
When hovering over a resource, only directly related resources are activated, and information related to the resource is displayed in a tooltip.

Clicking a resource takes you to the corresponding resource screen.



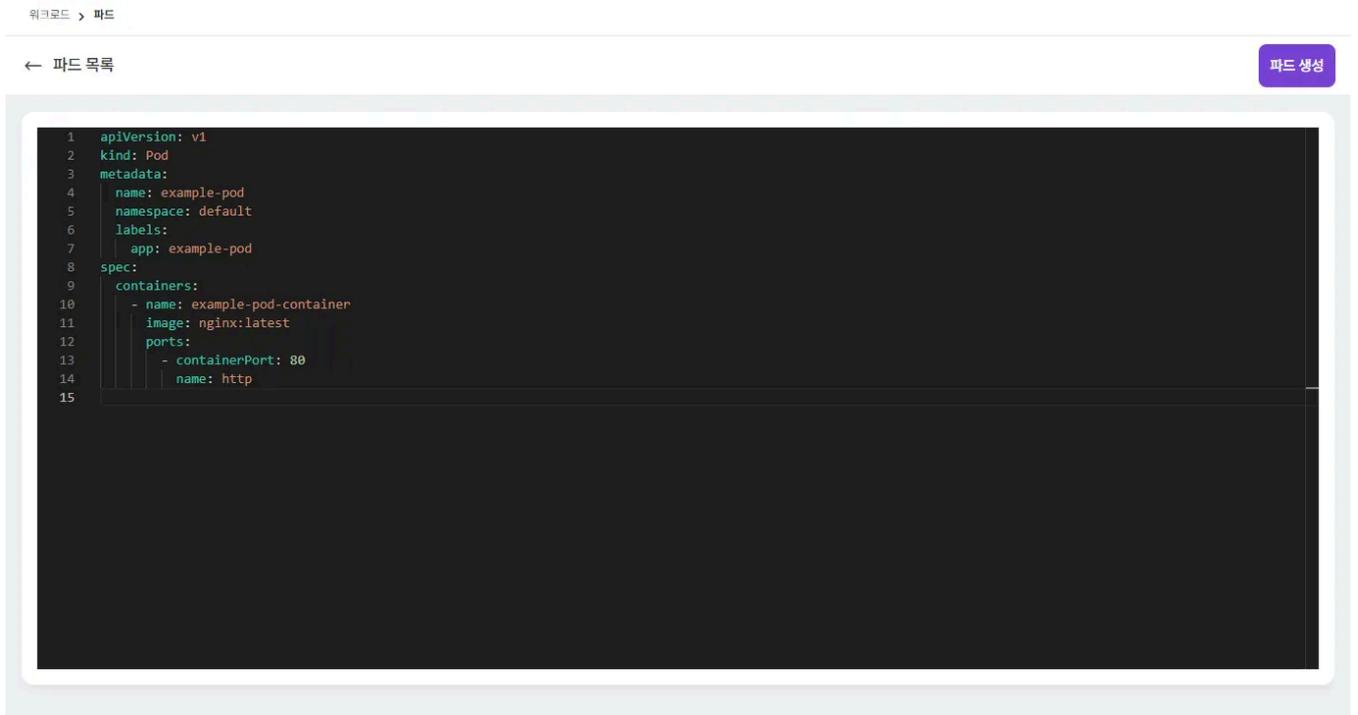
Clicking the refresh button in the upper left corner will reload the topology.

If there is a resource without permission in the relationship, only the resource type is displayed as a disabled node without the resource name, as in the image, and the screen does not move when clicked.



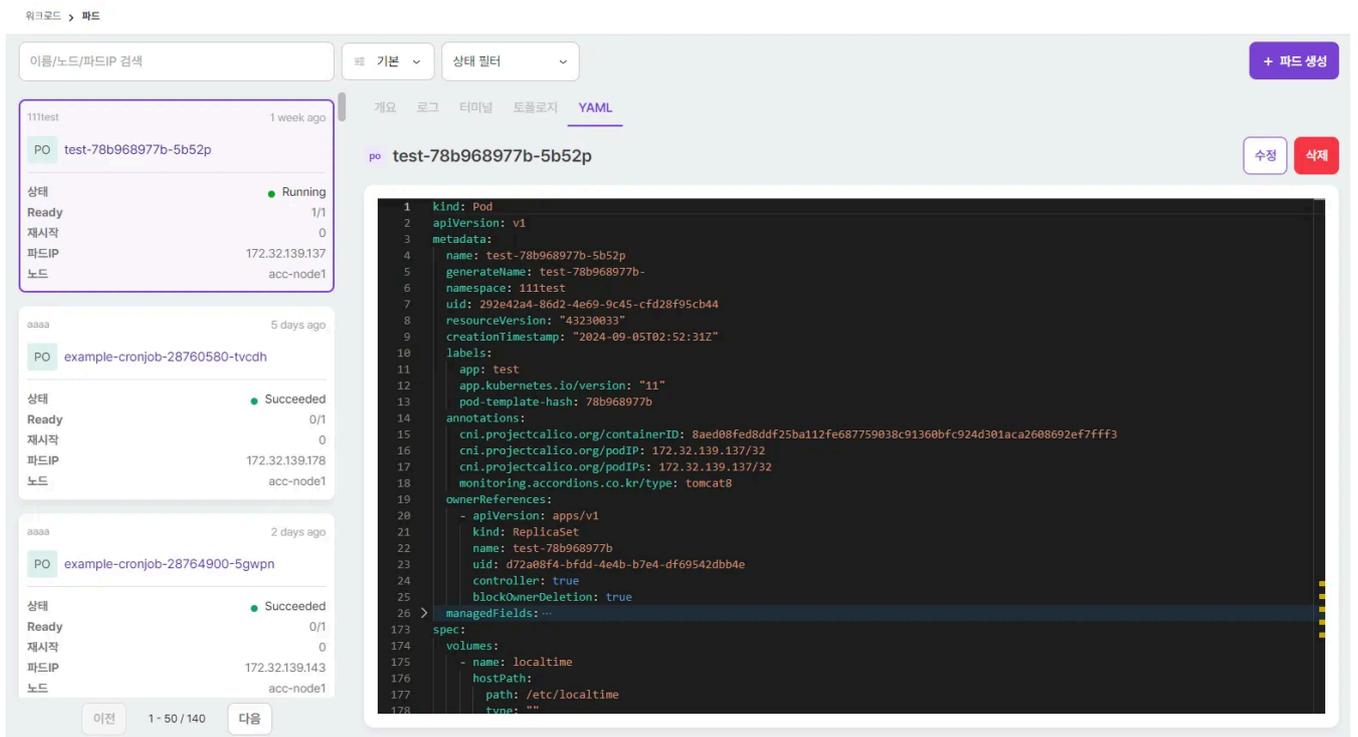
### 4.2.6.2.2. Creating a pod

+ 파드 생성 You can create it by entering Kubernetes pod resource information on the screen that appears when you select .



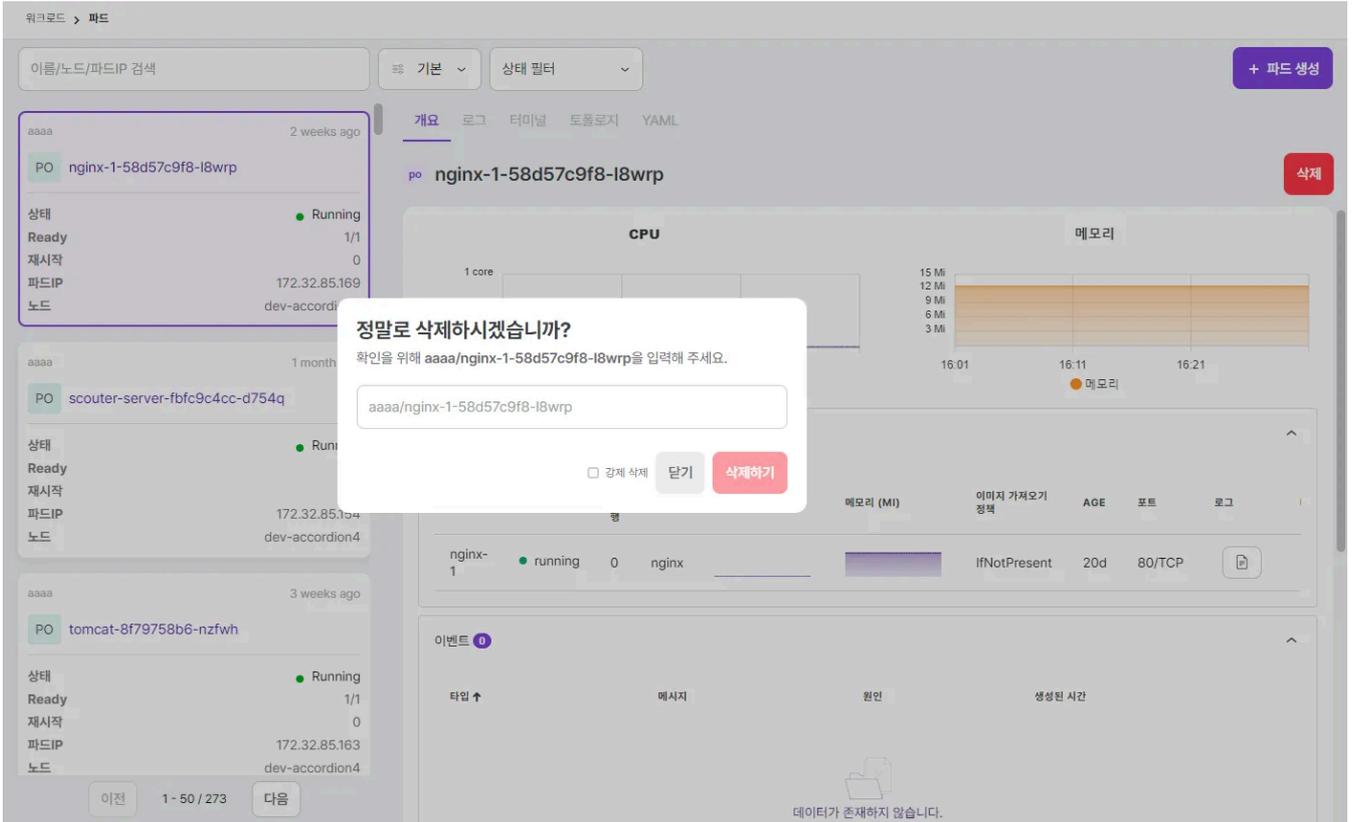
### 4.2.6.2.3. Pod Modification

Select the pod you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.



### 4.2.6.2.4. Deleting a pod

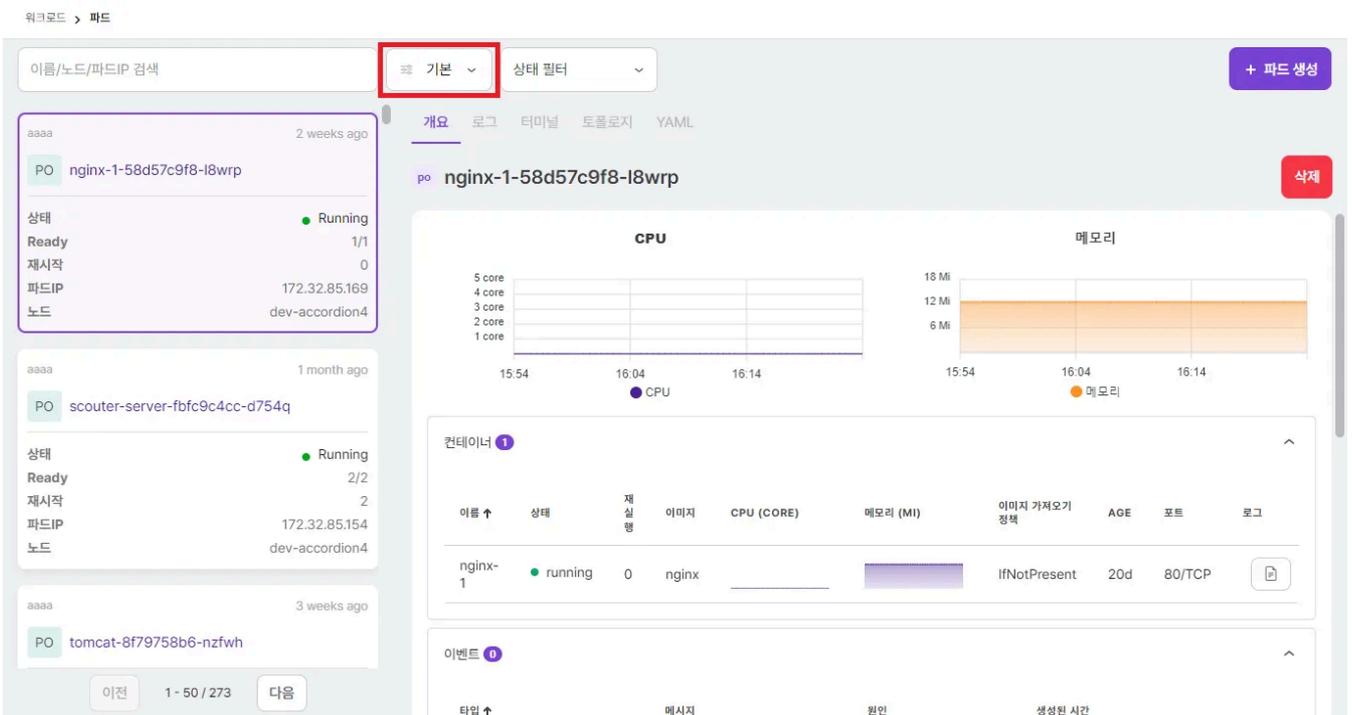
Select the pad you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and pod name in the modal.

### 4.2.6.2.5. Pad Sorting

Search by specifying the sorting of the pads.



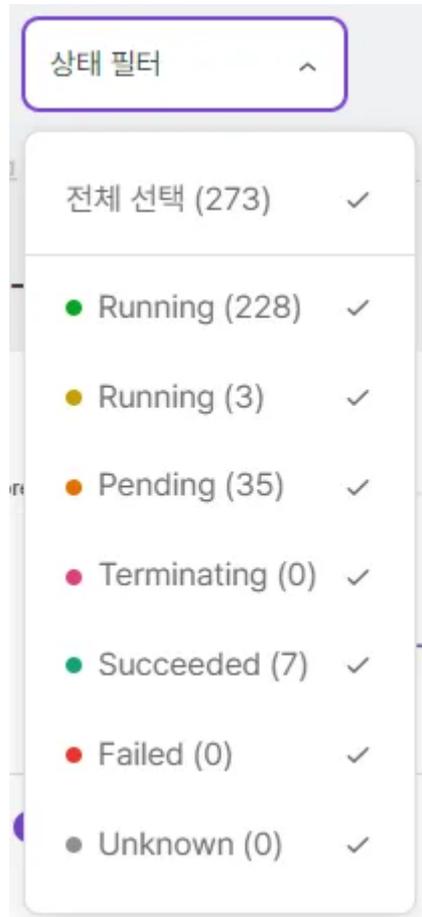
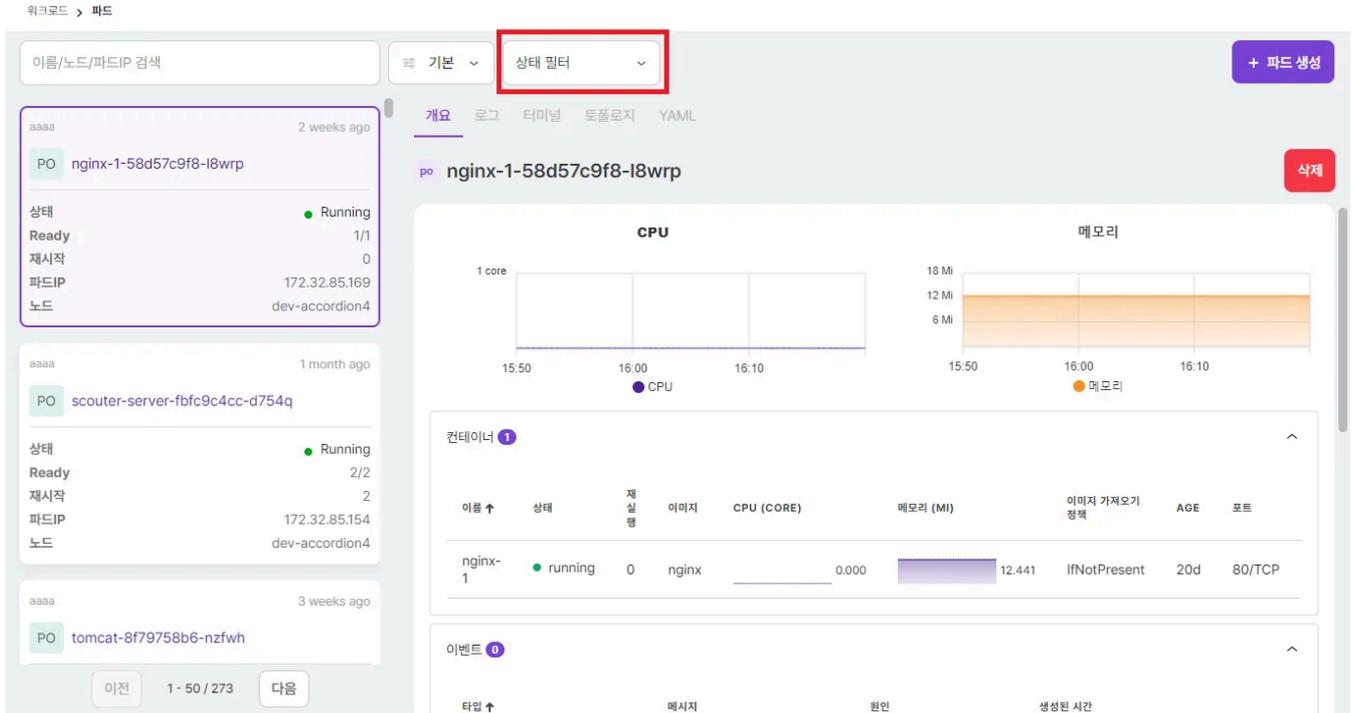


name	explanation
Latest	Search for pods in order of their most recent execution time.
Oldest	Search for pods in descending order of running time.
Sort by name (ascending)	Search for pods in ascending order of pod name.
Sort by name (descending)	Search for pods in descending order of pod name.
Sort by namespace (ascending)	Look up pods in ascending order of namespace name.
Sort by namespace (descending)	Look up pods in descending order of namespace name.
Nodes (ascending)	Search for pods in ascending order of the node name to which the pod belongs.
Nodes (descending)	Search for pods in descending order of the node name to which the pod belongs.
Pad IP (ascending)	Search for pods in ascending order of pod IP.

<b>name</b>	<b>explanation</b>
Pad IP (descending)	Search for pods in descending order of pod IP.

### 4.2.6.2.6. Search for pod status filtering

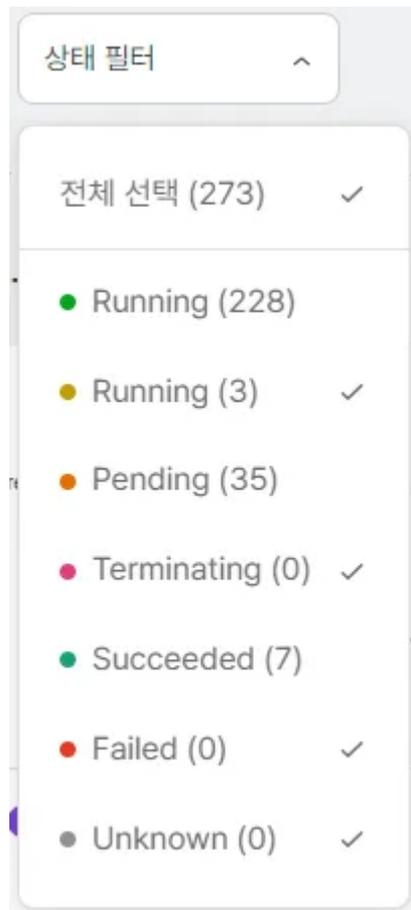
Used when querying only the status of a specific pad.



item	explanation
● Running	It refers to a pod that is in operation.
● Running	Refers to a pod that is running but contains abnormal containers.
● Pending	This means that the pod is not ready to run.
● Terminating	It means the pod is ending.
● Succeeded	Indicates a pod that has been successfully terminated.
● Failed	A pod whose internal container has terminated due to failure.
● Unknown	This means that the status of the pod cannot be obtained.

전체 선택 You can select or deselect the filtering status of Pods in bulk through .

Filtering status can be multi-selected. The default 전체 선택 is .



### 4.2.6.3. Deployment

Provides information about deployed deployments.

#### 4.2.6.3.1. Overview

Provides metrics, pods, events, conditions, and details of deployed deployments.

워크로드 > 디플로이먼트

이름 검색  기본 오토스케일 필터 + 디플로이먼트 생성

aaa 6 months ago

DEPLOY scouter-server

Ready 1/1  
업데이트 1  
Available 1

aaa 5 months ago

DEPLOY tomcat

Ready 1/1  
업데이트 1  
Available 1

acc-global 1 year ago

DEPLOY alert-apiserver

Ready 0/0  
업데이트 0  
Available 0

acc-global 1 year ago

DEPLOY chartmuseum-chartmuseum

이전 1 - 50 / 93 다음

개요 오토스케일 토폴로지 YAML

deploy scouter-server 1/1 스케일 수정

CPU 메모리

파드

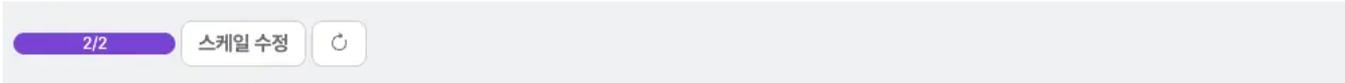
이름 ↑	상태	AGE	재 실 행	노드	파드 IP	CPU (CORE)	메모리 (MI)	로그	터미널
scouter-server-56f8fb4...	Running	116d	19	dev-accordion5	172.32.64.128	0.009	915.484		

이벤트

컨디션

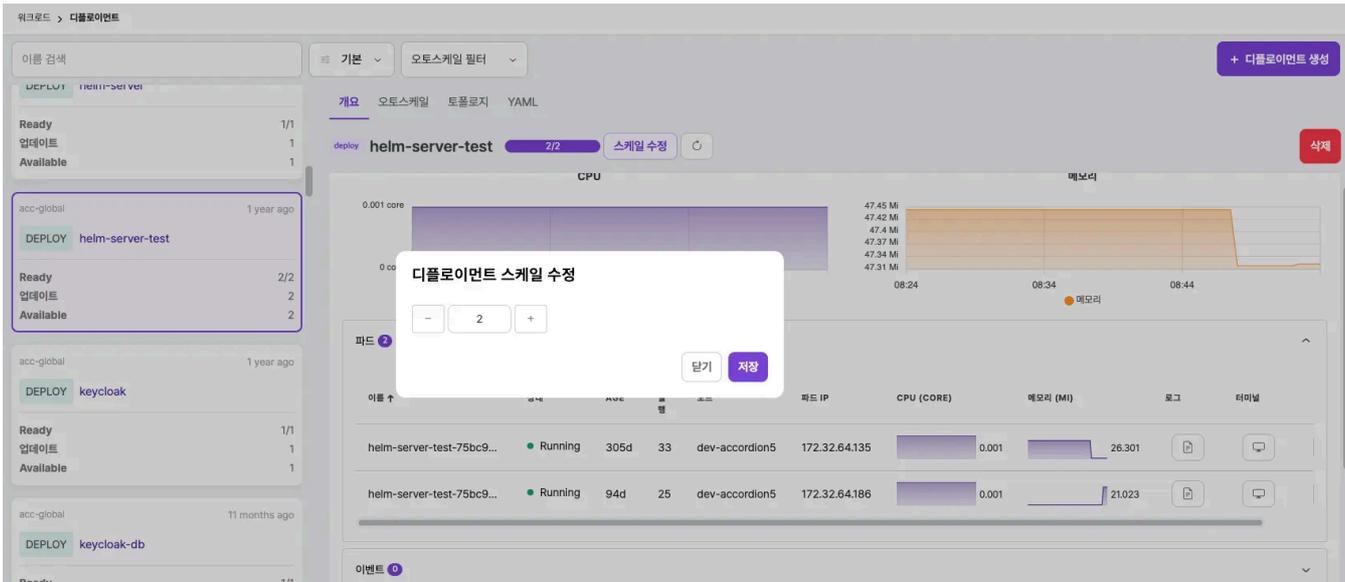
선택터 app=scouter-server 라벨

### 4.2.6.3.1.1. Scale and Rollout



You can modify the Replicas of a Deployment by clicking **the Scale Modification** button in the modal that appears.

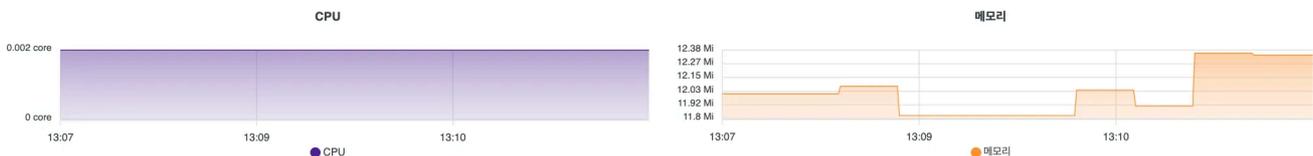
A separate rollout button is provided to the right of the scale adjustment button to restart the deployment in a rolling manner.



item	explanation
Scale correction	Adjust the replicas of the deployment.
Rollout	Rolling restart the deployment.

### 4.2.6.3.1.2. Metric Information

Metric information provides CPU and memory usage for 5 minutes from the current time.



### 4.2.6.3.1.3. Pad Information

Provides information about deployed pods. Clicking on it takes you to the corresponding pod screen.



item	explanation
name	Pad name
situation	Pad status
AGE	The time elapsed since the pod was created
Rerun	Number of pod reruns
Node	Node where the pod is deployed
Pad IP	Pad unique IP
CPU (CORE)	CPU usage
Memory (MI)	MEMORY usage
log	View Pad Log
Terminal	Connect to the pod terminal
delete	Delete Pad

### 4.2.6.3.1.4. Event Information

Provides information about events occurring in the pod.

The screenshot shows an event list table with the following data:

타입	메시지	원인	생성된 시간
Normal	Scaled up replica set example-deployment-bd5f4b49 to 1	ScalingReplicaSet	1m 54s
Normal	Scaled up replica set example-deployment-6cb9f959b4 to 1	ScalingReplicaSet	58s

item	explanation
Type	Event Type <ul style="list-style-type: none"> <li>• Normal: Events that occur during normal operations</li> <li>• Warning: Event caused by an error</li> </ul>
message	Event message

<b>item</b>	<b>explanation</b>
cause	Reason for the event
Time of creation	Time elapsed since event creation

### 4.2.6.3.1.5. Condition Information

타입 ↑	상태	업데이트	메시지	원인
Available	True	54d	Deployment has minimum availability.	MinimumReplicasAvailable
Progressing	True	227d	ReplicaSet "chartmuseum-chartmuseum-598ffb4cf" has s...	NewReplicaSetAvailable

item	explanation
Type	Name of the deployment condition <ul style="list-style-type: none"> <li>Available: The deployment is available (based on the deployment's replica count).</li> <li>Progressing: Displays the progress of the deployment to the ReplicaSet.</li> <li>ReplicaFailure: This condition is added when creation/deletion of pods in a deployment fails.</li> </ul>
situation	Whether the condition is applicable
Update	The time it takes for a deployment to transition from one state to another.
message	Details about the last state transition
cause	Reason for the final change in condition

### 4.2.6.3.1.6. Details

Provides details about the deployment.

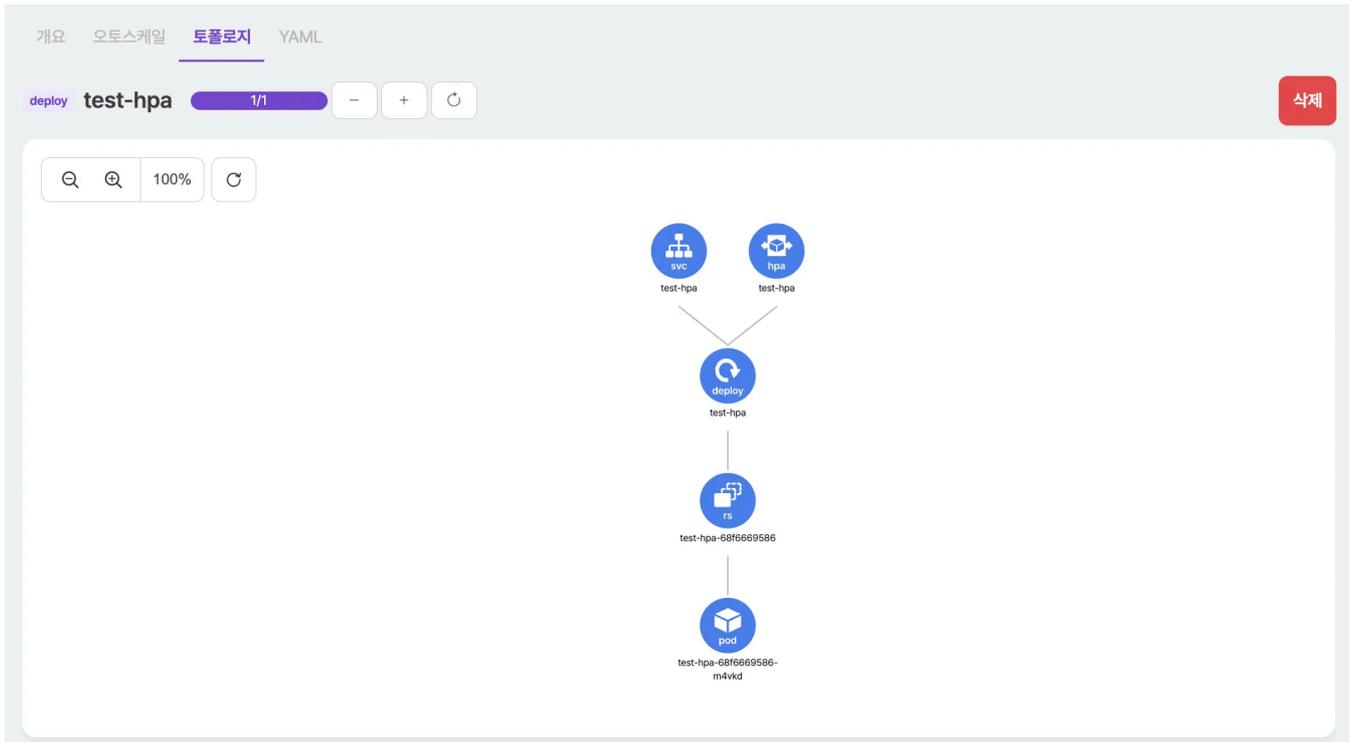
선택터	app=manual-webserver	라벨	▼
노드 선택터	-	어노테이션	▼
소유자 참조	-	롤러레이션	▼
전략 유형	RollingUpdate	어피니티	▼
최대 불가	25%		
최대 서지	25%		
진행 기간 시간(초)	600		
최소 대기 시간(초)	-		

### 4.2.6.3.1.7. Topology

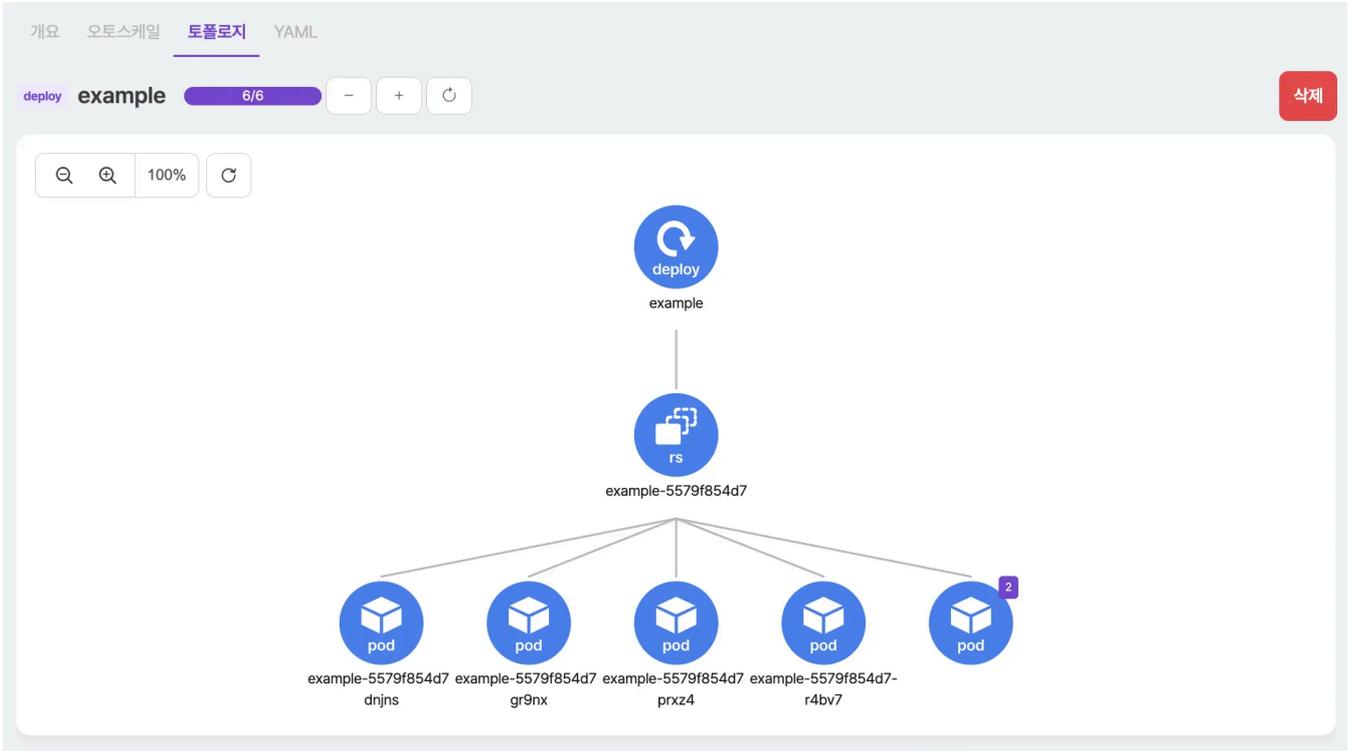
This view displays resources related to a deployment in topological form. Since the basic functionality is identical to that of a pod, refer to the pod topology .

The resources output from the deployment's topology are as follows:

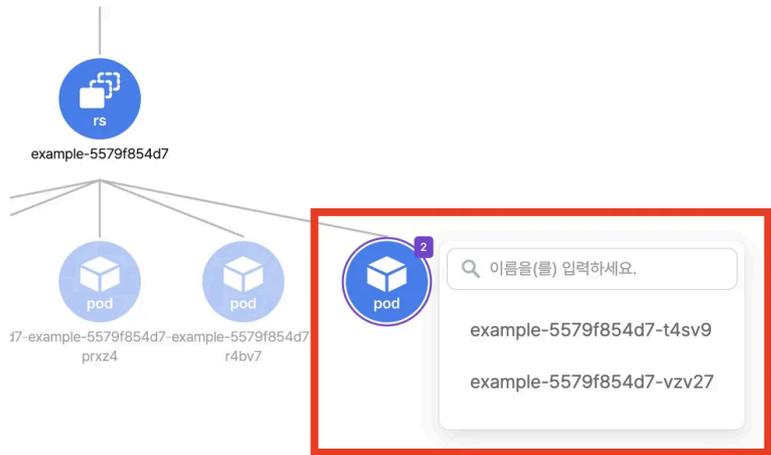
- Deployment, ReplicaSet, Pod
- HPA
- service



The maximum number of pods output horizontally in the deployment topology is 5. If the number of pods is 6 or more, the node outputting the remaining number of pods is displayed as follows.

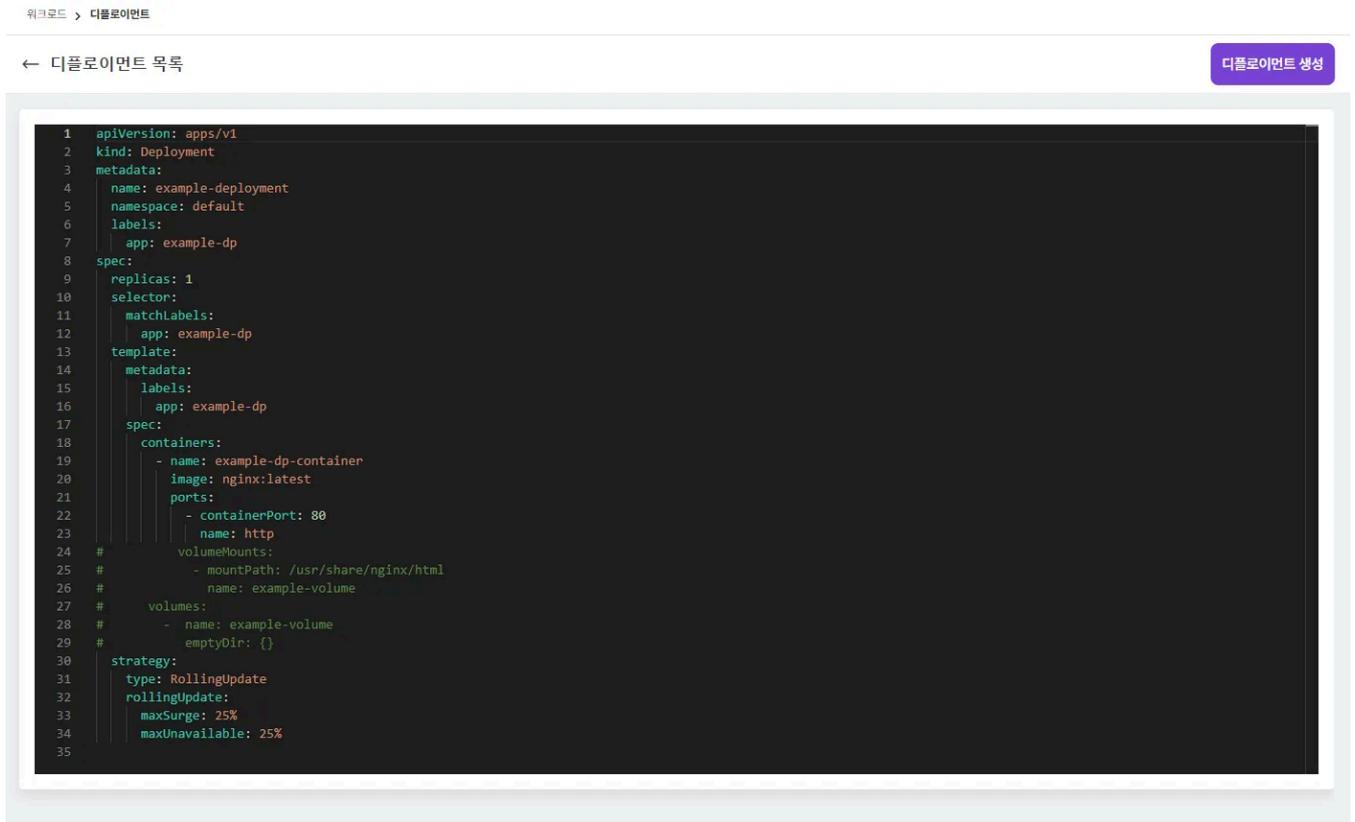


When you click on a node containing a number, a list appears in a drop-down form, and when you click on the pod name, you are taken to the corresponding resource screen.



### 4.2.6.3.2. Creating a Deployment

+ 디플로이먼트 생성 You can create it by entering Kubernetes deployment resource information on the screen that appears when you select .



### 4.2.6.3.3. Modifying the Deployment

Select the deployment you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply the changes.

Additionally, 오토스케일 you can configure autoscaling for your deployments using buttons. Autoscaling can be divided into metric-based autoscaling and time-based autoscaling, depending on the triggering criteria.

**TIP**

Accordion provides autoscaling capabilities for deployments and stateful sets.

Time-based autoscale	Metric-based autoscale
<p data-bbox="140 192 699 226">Scaling the number of pods over a specific time</p> <ul data-bbox="197 293 756 566" style="list-style-type: none"><li>• Start Schedule: Set the scaling start time</li><li>• Start Target Pods: The target number of pods when scaling starts.</li><li>• End Schedule: Set the scaling end time</li><li>• Terminate Target Pods: The target number of pods at the end of scaling.</li></ul> <p data-bbox="169 598 252 627"><b>NOTE</b></p> <p data-bbox="197 654 679 734">Start Target Pods must be greater than End Target Pods.</p>	<p data-bbox="812 192 1422 226">Scale the number of pods based on the metric value</p> <ul data-bbox="869 293 1415 566" style="list-style-type: none"><li>• Min Pods: Minimum number of pods</li><li>• Max Pods: The maximum number of pods when scaling.</li><li>• Autoscale Criteria: The metric that serves as the scaling criterion.</li><li>• Setting: Threshold at which scaling occurs</li></ul> <p data-bbox="834 598 917 627"><b>NOTE</b></p> <p data-bbox="869 654 1351 734">Max Pods must be a greater value than Min Pods.</p>

When setting time-based auto-scaling, write it in the cron schedule format as follows.

hour	Acceptable values	Allowable special characters
minute	0-59	* /, -
city	0-23	* /, -
date	1-13	* /, - ?
moon	1-12 or JAN-DEC	* /, -
day of the week	0-6 or SUN-SAT	* /, - ?

An example of time-based autoscale settings is shown below.

```

Start Schedule: 1 9 1 11 *
Start Target Pods: 3
End Schedule: 1 9 1 12 *
End Target Pods: 1

= Every year at 9:01 AM on November 1st, the number of pods increases to 3, and every year at 9:01 AM
on December 1st, the number of pods decreases to 1.
    
```

Metric-based autoscaling is applied by default based on CPU and memory usage. Accordion also supports scaling based on metrics collected by Scouter, as follows:

- apm\_ActiveService
- apm\_TPS
- apm\_GcTime
- apm\_ElapsedTime

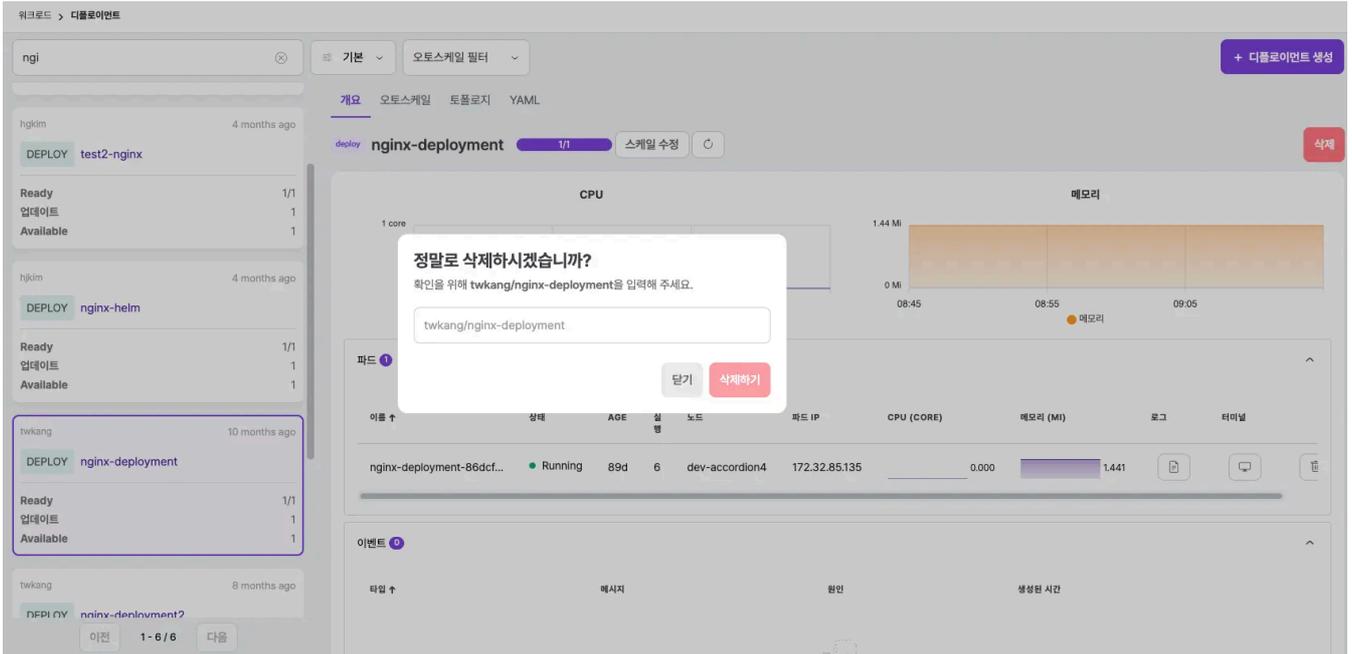
When setting up metric-based autoscaling, the availability of autoscaling and the types of metrics available vary depending on the pod's resource settings and scouter monitoring settings. These criteria are as follows:

condition	Available autoscale criteria
Padris O / APM Monitoring O	CPU, Memory + apm_ActiveService, apm_TPS, apm_GcTime, apm_ElapsedTime
Padris O / APM Monitoring X	CPU, Memory
Padris X / APM Monitoring O	apm_ActiveService, apm_TPS, apm_GcTime, apm_ElapsedTime

<b>condition</b>	<b>Available autoscale criteria</b>
Padrisos X / APM Monitoring X	Metric-based autoscaling is not available

### 4.2.6.3.4. Deleting a Deployment

Select the deployment you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and deployment name in the modal.

## 4.2.6.4. StatefulSet

Provides information about deployed StatefulSets.

### 4.2.6.4.1. Overview

Provides metrics, pods, events, status, and details of deployed StatefulSets.

워크로드 > 스테이트풀셋

이름 검색

기본 | 오토스케일 필터

+ 스테이트풀셋 생성

acc-system 1 month ago  
STS alertmanager-main  
Ready 1/1

acc-system 1 year ago  
STS logstash-logstash  
Ready 1/1

acc-system 1 year ago  
STS minio  
Ready 1/1

acc-system 1 year ago  
STS opensearch-cluster-master  
Ready 1/1

acc-system 1 month ago  
STS prometheus-prometheus-operator-prometheus  
이전 1 - 8 / 8 다음

개요 | 오토스케일 | 토폴로지 | YAML

sts alertmanager-main 1/1 | 스케일 수정 | 삭제

CPU | 메모리

0.003 core  
0.002 core  
08:46 08:56 09:06

66 Mi  
63 Mi  
60 Mi  
57 Mi  
54 Mi  
51 Mi  
48 Mi  
08:46 08:56 09:06

파드

이름 ↑	상태	AGE	재 실 형	노드	파드 IP	CPU (CORE)	메모리 (MI)	로그	터미널
alertmanager-main-0	Running	60d	6	dev-accordion4	172.32.85.155	0.002	55.949		

이벤트

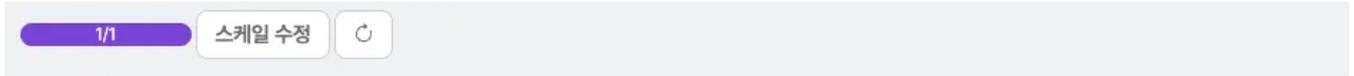
컨디션

선택어

alertmanager-main, app.kubernetes.io/instance=main, app.kubernetes.io/managed-by=prometheus-operator, app.kubernetes.io/name=alertmanager

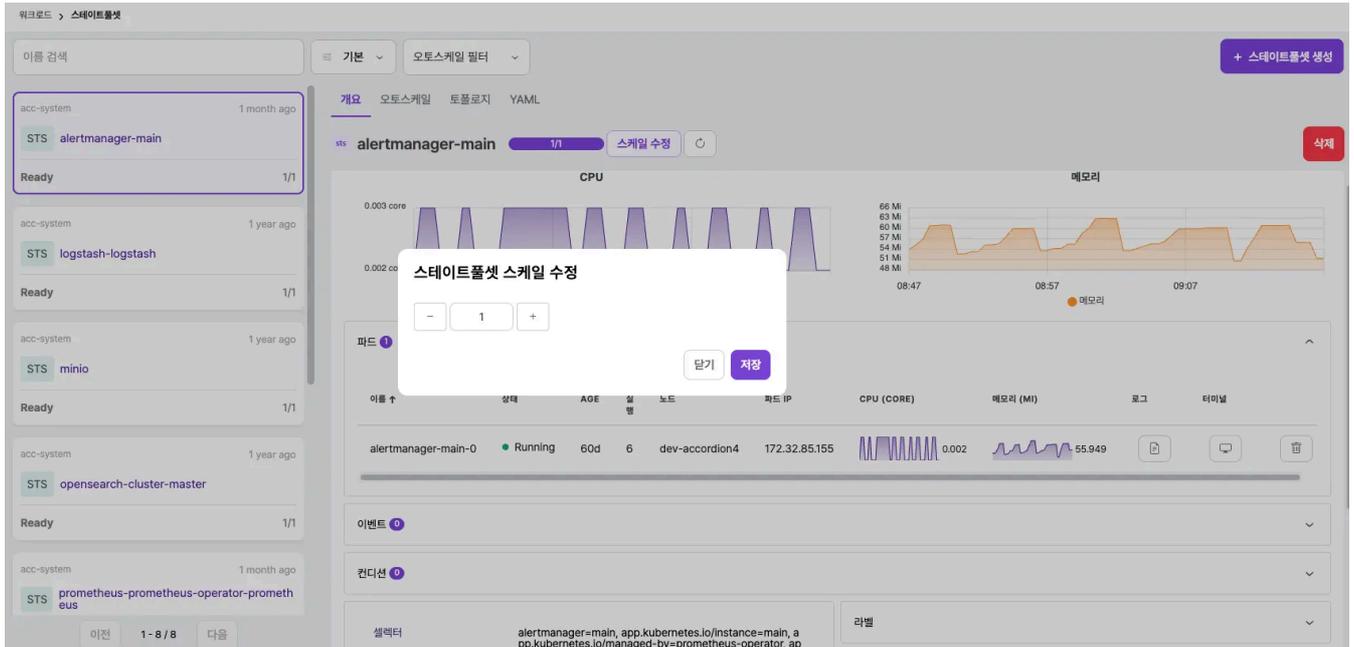
라벨

### 4.2.6.4.1.1. Scale and Rollout



You can modify the Replicas of a StatefulSet by clicking the **Scale Modification** button in the modal that appears.

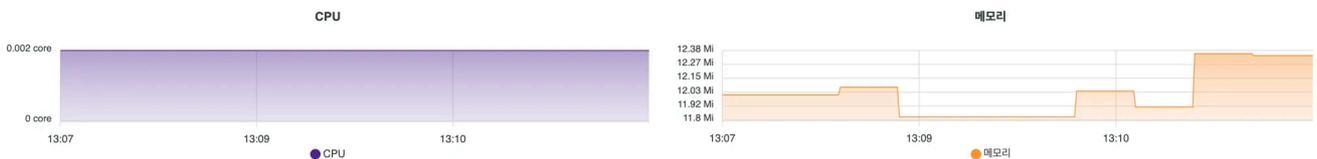
A separate rollout button is provided to the right of the scale modification button, allowing you to restart the stateful set in a rolling manner.



item	explanation
Scale correction	Adjust the replicas of a StatefulSet.
Rollout	Rolling restart of a StatefulSet.

### 4.2.6.4.1.2. Metric Information

Metric information provides CPU and memory usage for 5 minutes from the current time.



### 4.2.6.4.1.3. Pod Information

Please refer to the deployment pod information as it is the same as the deployment .

### 4.2.6.4.1.4. Event Information

Please refer to the pod event information as it is the same as the pod content .

### 4.2.6.4.1.5. Details

Provides details about a StatefulSet.

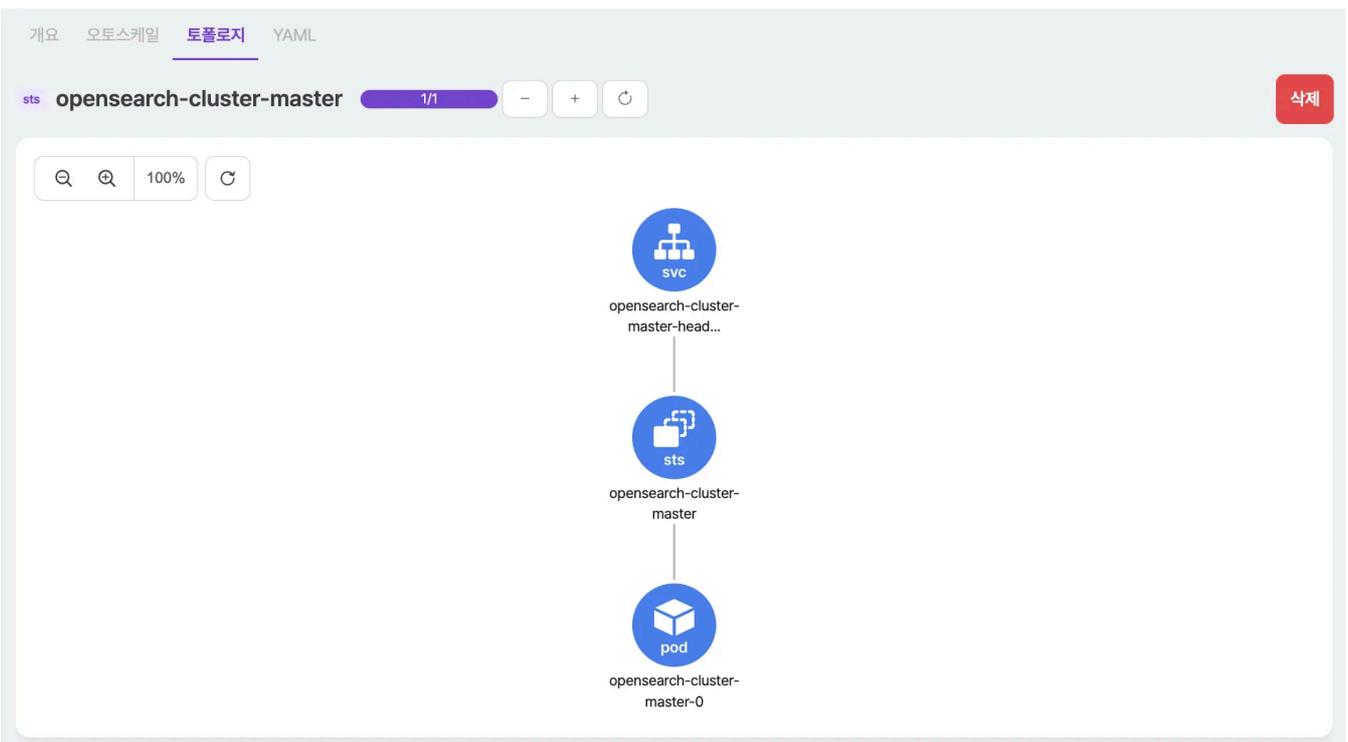
셀렉터	alertmanager=main, app.kubernetes.io/instance=main, app.kubernetes.io/managed-by=prometheus-operator, app.kubernetes.io/name=alertmanager	라벨	▼
노드 셀렉터	-	어노테이션	▼
소유자 참조	-	롤러레이션	▼
파드 관리 정책	Parallel	어피니티	▼
업데이트 전략	RollingUpdate	볼륨 클레임 템플릿	▼

### 4.2.6.4.1.6. Topology

This view displays resources associated with a StatefulSet in topological form. Since the basic functionality is identical to that of a Pod, refer to Pod Topology .

The resources output from the StatefulSet topology are as follows:

- StatefulSet, Pod
- service



The maximum number of pods output horizontally in the StatefulSet topology is 5, and the functionality is the same as that of a Deployment, so please refer to the Deployment topology description .

#### 4.2.6.4.2. Creating a StatefulSet

+ 스테이트풀셋 생성 You can create it by entering Kubernetes StatefulSet resource information on the screen that appears when you select .

```

1  apiVersion: apps/v1
2  kind: StatefulSet
3  metadata:
4    name: example-statefulset
5    namespace: default
6    labels:
7      app: example-sts
8  spec:
9    serviceName: example-svc
10   replicas: 1
11   selector:
12     matchLabels:
13       app: example-sts
14   template:
15     metadata:
16       labels:
17         app: example-sts
18     spec:
19       containers:
20         - name: example-sts-container
21           image: nginx:latest
22           ports:
23             - containerPort: 80
24               name: http
25           volumeMounts:
26             - mountPath: /data
27               name: example-data
28   volumeClaimTemplates:
29     - metadata:
30       name: example-data
31     spec:
32       accessModes:
33         - ReadWriteOnce
34       storageClassName: example-storageclass
35       resources:
36         requests:
37           storage: 1Gi
38

```

#### 4.2.6.4.3. Modifying a StatefulSet

Select the StatefulSet you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

StatefulSets can also be configured for autoscaling, just like Deployments.

#### TIP

See the Deployment Autoscale Guide

#### 4.2.6.4.4. Deleting a StatefulSet

Select the StatefulSet you want to delete and 삭제 select the button on the right.

The screenshot displays the Accordion interface for managing StatefulSets. A modal dialog is open, asking for confirmation to delete the StatefulSet 'alertmanager-main' in the 'acc-system' namespace. The modal text reads: '정말로 삭제하시겠습니까?' (Are you really going to delete this?) and '확인을 위해 acc-system/alertmanager-main을 입력해 주세요.' (Please enter acc-system/alertmanager-main for confirmation). The input field contains 'acc-system/alertmanager-main'. There are '닫기' (Close) and '삭제하기' (Delete) buttons.

The background interface shows a list of StatefulSets on the left, including 'alertmanager-main', 'logstash-logstash', 'minio', and 'opensearch-cluster-master'. The right side shows the details for the selected 'alertmanager-main' StatefulSet, including a 'CPU' and '메모리' (Memory) graph, and a table of pods.

이름 ↑	상태	AGE	재 실 형	노드	파드 IP	CPU (CORE)	메모리 (MI)
alertmanager-main-0	Running	97d	2	dev-accordion5	172.32.64.137	0.001	

Delete by entering the namespace and stateful set name in the modal.

### 4.2.6.5. Demonset

Provides information about the deployed DaemonSet.

#### 4.2.6.5.1. Overview

Provides metrics, pods, events, status, and details of a deployed DaemonSet.

The screenshot shows the Accordion interface for a DaemonSet named 'gateway-proxy'. On the left, a list of DaemonSets is shown, including 'gateway-proxy', 'filebeat-filebeat', 'ingress-nginx-controller', 'nginx-daemon-set', 'node-exporter', and 'fluentd-ds'. The main area displays the 'gateway-proxy' details, including a '3/3' rollout indicator, CPU and memory usage graphs, a table of pods, and an events section.

이름 #	상태	AGE	재실행	노드	팟드 IP	CPU (CORE)	메모리 (Mi)	로그
gateway-proxy-69kqv	Running	96d	2	dev-accordion3	172.32.37.145	0.007	11.094	[Log]
gateway-proxy-hs5bd	Running	96d	2	dev-accordion2	172.32.190.62	0.002	10.195	[Log]
gateway-proxy-klbv2	Running	96d	1	dev-accordion1	172.32.149.233	0.002	11.176	[Log]

#### 4.2.6.5.1.1. Rollout

A purple pill-shaped indicator shows '3/3' pods, with a circular refresh icon to its right.

item	explanation
Rollout	Rolling restart of the Demon Set.

#### 4.2.6.5.1.2. Metric Information

Metric information provides CPU and memory usage for 5 minutes from the current time.



### 4.2.6.5.1.3. Pod Information

Please refer to the deployment pod information as it is the same as the deployment .

### 4.2.6.5.1.4. Event Information

Please refer to the pod event information as it is the same as the pod content .

### 4.2.6.5.1.5. Details

Provides details about the Daemon Set.

선택터	app=gateway-proxy	라벨	▼
노드 선택터	-	어노테이션	▼
Age	227d	틀러레이션	▼
소유자 참조	-	어피니티	▼
업데이트 전략	RollingUpdate		

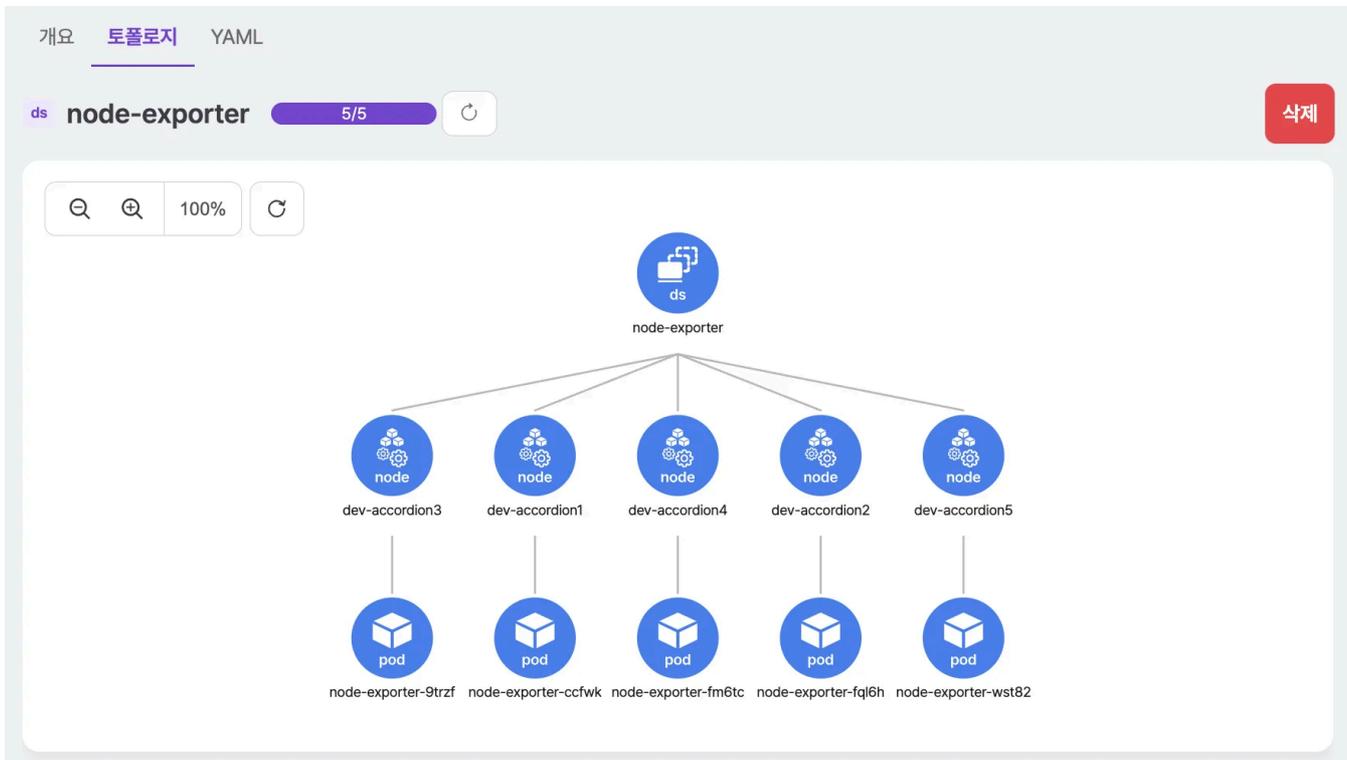
### 4.2.6.5.1.6. Topology

This shows resources related to a DaemonSet in topological form.

Since the basic functionality is identical to that of a Pod, refer to Pod Topology .

The resources output from the topology of DaemonSet are as follows:

- DaemonSet, Node, Pod



### 4.2.6.5.2. Creating a DaemonSet

+ 데몬셋 생성 You can create it by entering Kubernetes DaemonSet resource information on the screen that appears when you select .

워크로드 > 데몬셋

← 데몬셋 목록 데몬셋 생성

```

1  apiVersion: apps/v1
2  kind: DaemonSet
3  metadata:
4    name: example-daemonset
5    namespace: default
6    labels:
7      app: example-ds
8  spec:
9    selector:
10     matchLabels:
11       app: example-ds
12   template:
13     metadata:
14       labels:
15         app: example-ds
16     spec:
17       containers:
18         - name: example-ds-container
19           image: nginx:latest
20           ports:
21             - containerPort: 80
22               name: http
23           volumeMounts:
24             - mountPath: /usr/share/nginx/html
25               name: example-volume
26       volumes:
27         - name: example-volume
28           emptyDir: {}
29

```

### 4.2.6.5.3. Daemonset Modification

Select the daemon set you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply it.

### 4.2.6.5.4. Deleting DaemonSet

Select the DaemonSet you want to delete and 삭제 select the button on the right.

The screenshot displays the Accordion dashboard interface. A modal dialog is open in the center, asking for confirmation to delete a daemonset. The modal text is as follows:

정말로 삭제하시겠습니까?  
확인을 위해 acc-global/gateway-proxy을 입력해 주세요.

The input field contains: acc-global/gateway-proxy

Buttons: 닫기 (Close), 삭제하기 (Delete)

The background interface shows a list of daemonsets on the left and a detailed view of the 'gateway-proxy' daemonset on the right. The detailed view includes a table with the following data:

이름 ↑	상태	AGE	재실명	노드	파드 IP	CPU (CORE)	메모리 (
gateway-proxy-69kqv	Running	99d	2	dev-accordion3	172.32.37.145	0.001	
gateway-proxy-...	Running	99d	2	dev-accordion2	172.32.190.62	0.000	

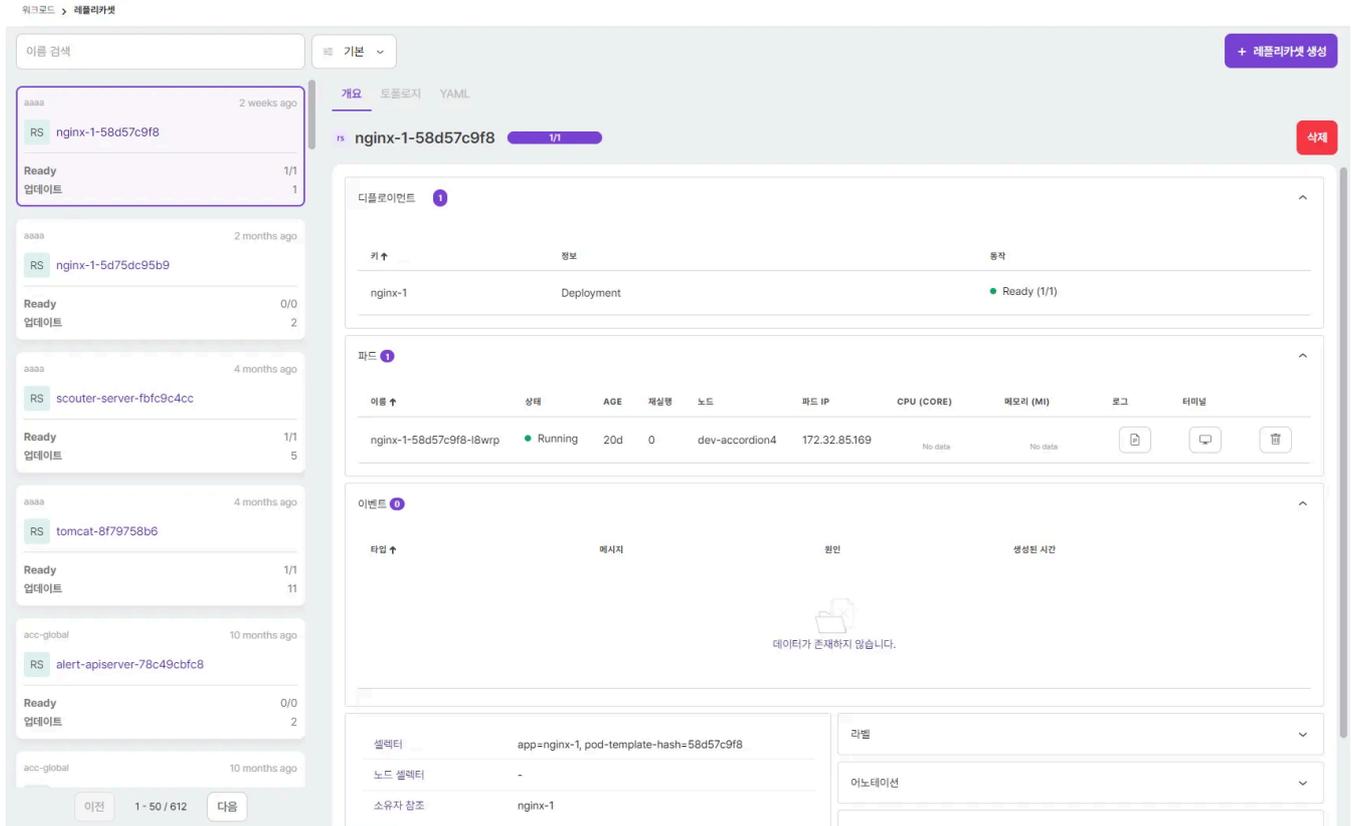
Delete by entering the namespace and daemonset name in the modal.

## 4.2.6.6. ReplicaSet

Provides information about the deployed replica set.

### 4.2.6.6.1. Overview

Provides deployment, pod, event, and details information of a deployed ReplicaSet.



#### 4.2.6.6.1.1. Deployment Information

It provides deployment information that is the ownerReference of the replica set, and clicking on it takes you to the deployment screen.

#### 4.2.6.6.1.2. Pod Information

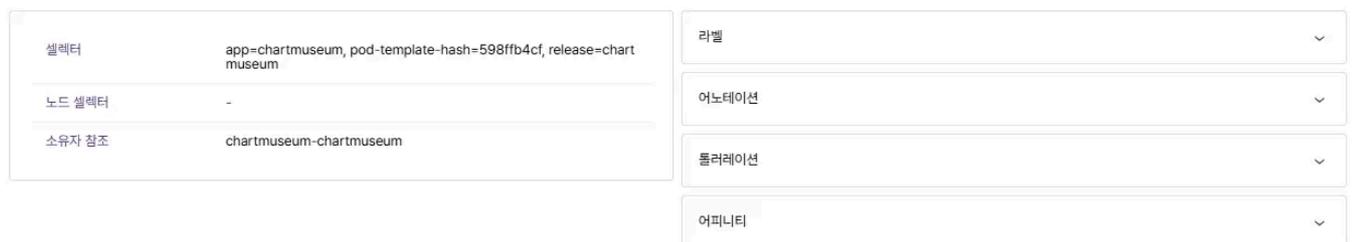
Please refer to the deployment pod information as it is the same as the deployment .

#### 4.2.6.6.1.3. Event Information

Please refer to the pod event information as it is the same as the pod content .

#### 4.2.6.6.1.4. Details

Provides details about the replica set.



### 4.2.6.6.1.5. Topology

This shows the resources associated with a ReplicaSet in topological form. Since the basic functionality is identical to that of a Pod, refer to Pod Topology .

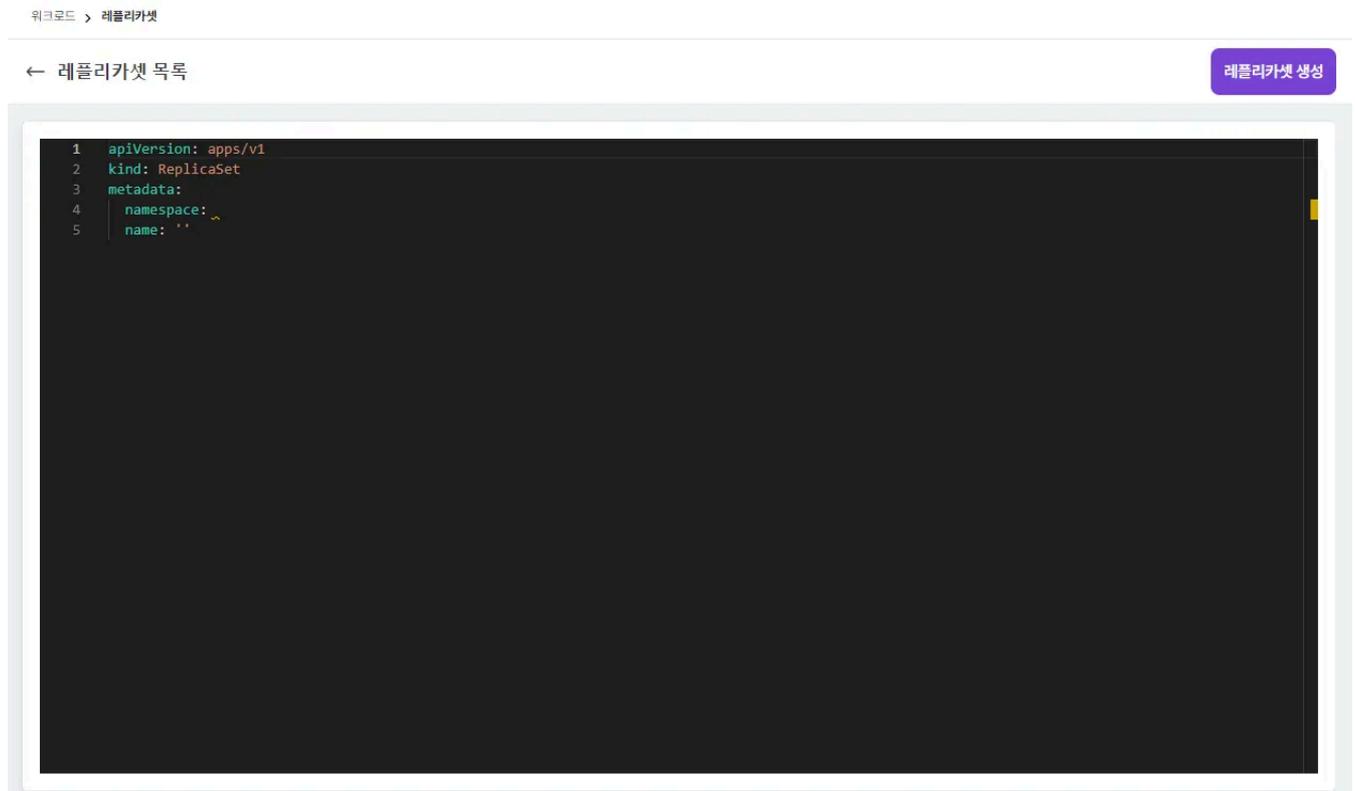
The resources output from the topology of the replica set are as follows:

- Deployment, ReplicaSet, Pod

The maximum number of pods output horizontally in the topology of a replica set is 5, and the function is the same as that of a deployment, so please refer to the description of the deployment topology .

### 4.2.6.6.2. Creating a ReplicaSet

+ 레플리카셋 생성 You can create it by entering Kubernetes ReplicaSet resource information on the screen that appears when you select .

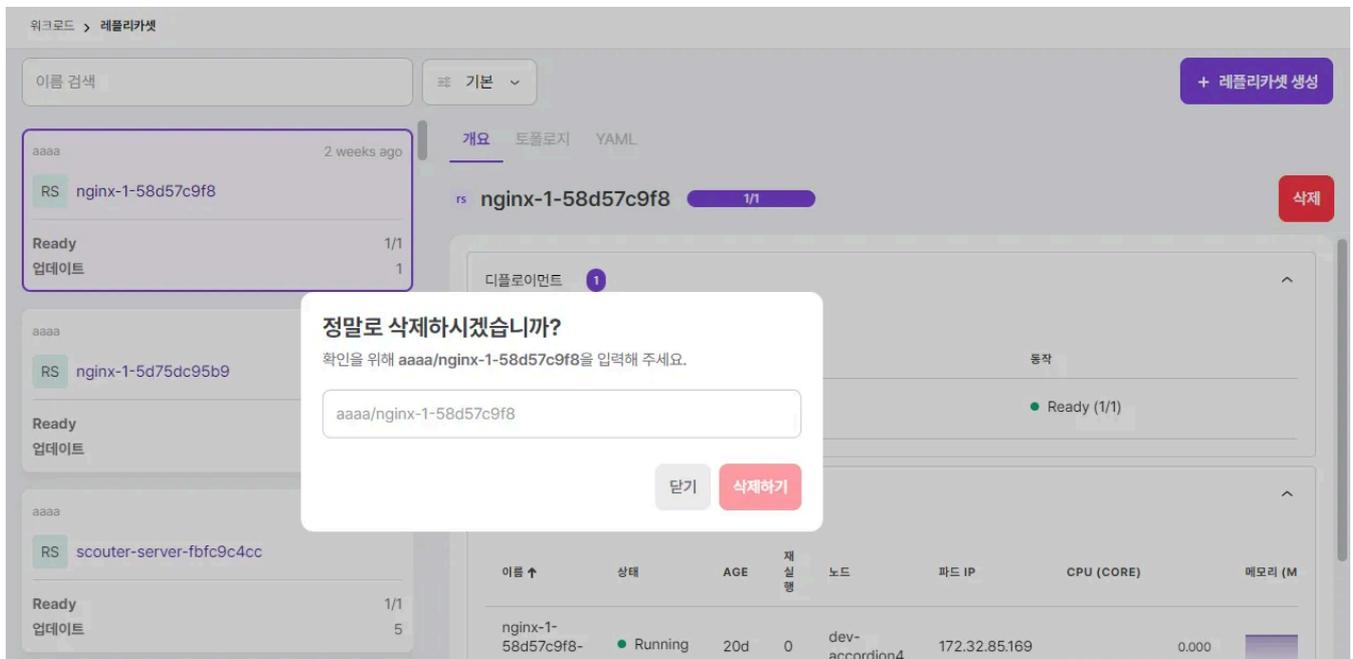


### 4.2.6.6.3. Modifying a ReplicaSet

Select the replica set you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

### 4.2.6.6.4. Deleting a ReplicaSet

Select the replica set you want to delete and 삭제 select the button on the right.



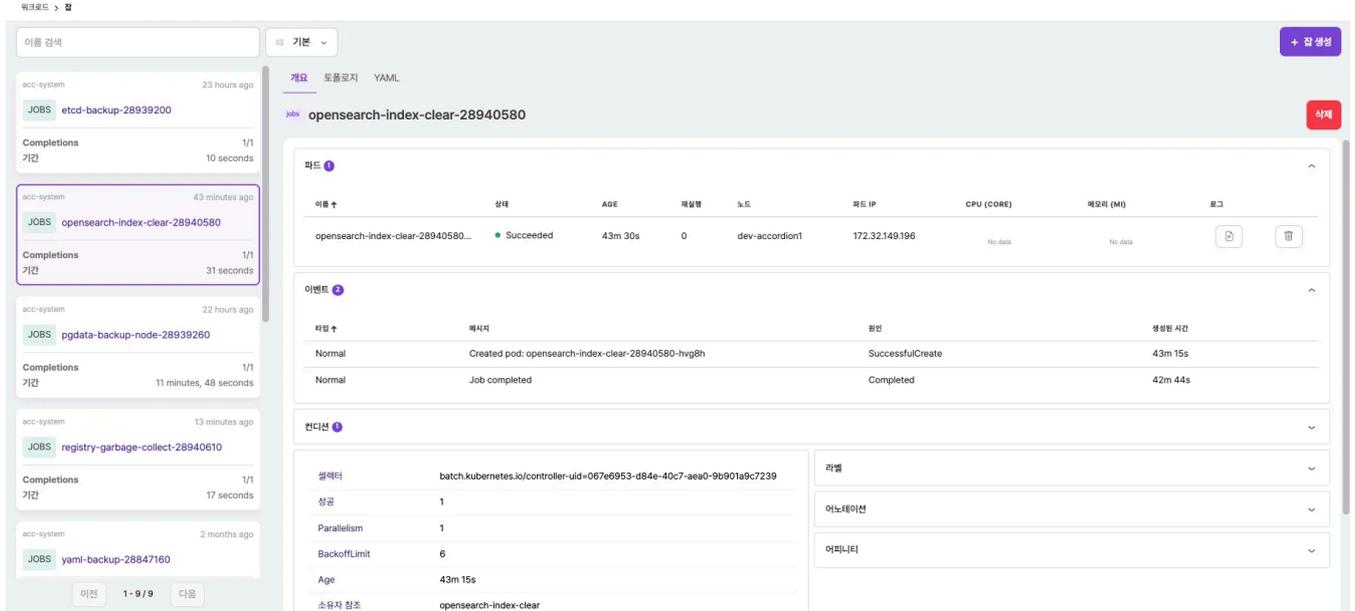
Delete by entering the namespace and replica set name in the modal.

### 4.2.6.7. Miscellaneous

Provides distributed job information.

#### 4.2.6.7.1. Overview

Provides information about the pods, events, status, and details of the deployed job.



##### 4.2.6.7.1.1. Pod Information

Please refer to the deployment pod information as it is the same as the deployment .

##### 4.2.6.7.1.2. Event Information

Please refer to the pod event information as it is the same as the pod content .

##### 4.2.6.7.1.3. Details

Provides details about the job.

선택터	batch.kubernetes.io/controller-uid=067e6953-d84e-40c7-aea0-9b901a9c7239	라벨	▼
성공	1	어노테이션	▼
Parallelism	1	어피니티	▼
BackoffLimit	6		
Age	43m 15s		
소유자 참조	opensearch-index-clear		
시작 시간	2025-01-10 00:00:00		
완료 시간	2025-01-10 00:00:31		
활성 마감 시간	-		

### 4.2.6.7.1.4. Topology

Shows resources related to a job in topological form.

Since the basic functionality is identical to that of a pod, refer to the pod topology .

The resources output from the job's topology are as follows:

- Cronjob, job, pad

The screenshot shows a web interface for viewing a topology. At the top, there are tabs for '개요', '토폴로지', and 'YAML'. Below the tabs, the title is 'jobs etcd-backup-28936320' and there is a red '삭제' button. The main area contains a topological diagram with three nodes connected vertically by lines. The top node is a blue circle with a clock icon, labeled 'cronjob' and 'etcd-backup'. The middle node is a blue circle with a grid icon, labeled 'job' and 'etcd-backup-28936320'. The bottom node is a blue circle with a cube icon, labeled 'pod' and 'etcd-backup-28936320-j6rkh'. On the left side of the diagram area, there are search and zoom controls: a search icon, a magnifying glass icon, '100%', and a refresh icon.

### 4.2.6.7.2. Job Creation

+ 잡 생성 You can create a Kubernetes job by entering the resource information on the screen that appears when you select . You can enter it in FORM/YAML when creating it.

← 잡 목록
FORM  YAML  **잡 생성**

---

**이름** \*

**네임스페이스** \*

**컨테이너명** \*

**컨테이너 이미지** \*

**명령어**

**인수**

**환경 변수**

키	값
<input type="text" value="추가"/>	

**포트**

포트명	포트	프로토콜
<input type="text" value="추가"/>		

**리소스**

CPU 요청	CPU 제한
<input type="text" value="CPU 요청을 입력하세요."/>	<input type="text" value="CPU 제한을 입력하세요."/>
메모리 요청	메모리 제한
<input type="text" value="메모리 요청을 입력하세요."/>	<input type="text" value="메모리 제한을 입력하세요."/>

**Completions**

**Parallelism**

**재시작 정책**

**BackoffLimit**

item	explanation
name	Job name
namespace	Namespace where the job will be created
Container name	Name of the container to be run in the job
Container images	Container image to be run on the job
Command	Command to be executed when the container starts
factor	Arguments to be passed to the command
Environment variables	Environment variables in containers
port	Network port to be used by the container

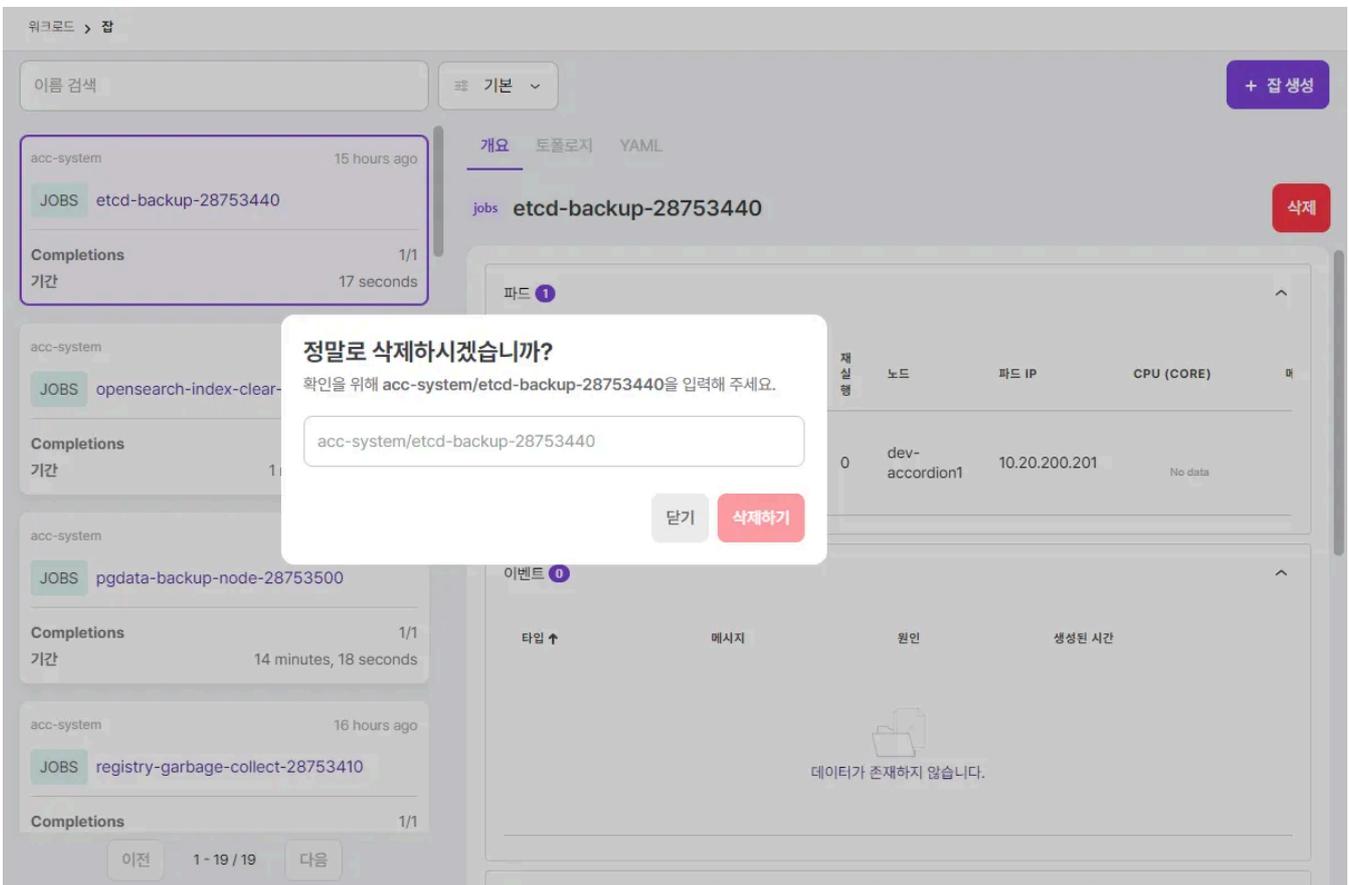
item	explanation
Resources	CPU and memory resources to be allocated to the container <ul style="list-style-type: none"> <li>• Requests: Minimum required amount</li> <li>• Limits: Specifies the maximum allowable amount</li> </ul>
complete	The number of pods that a job must complete successfully
Parallel processing	Number of pod instances to run concurrently
Restart policy	Set whether to restart and policy if job fails <ul style="list-style-type: none"> <li>• OnFailure: Restart on failure</li> <li>• Never: Do not restart on failure</li> </ul>
Backoff limit	Job pod's number of retries is limited, if exceeded, the job fails

### 4.2.6.7.3. Miscellaneous modifications

Select the job you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

### 4.2.6.7.4. Delete Job

삭제 Select the job you want to delete and select the button on the right .



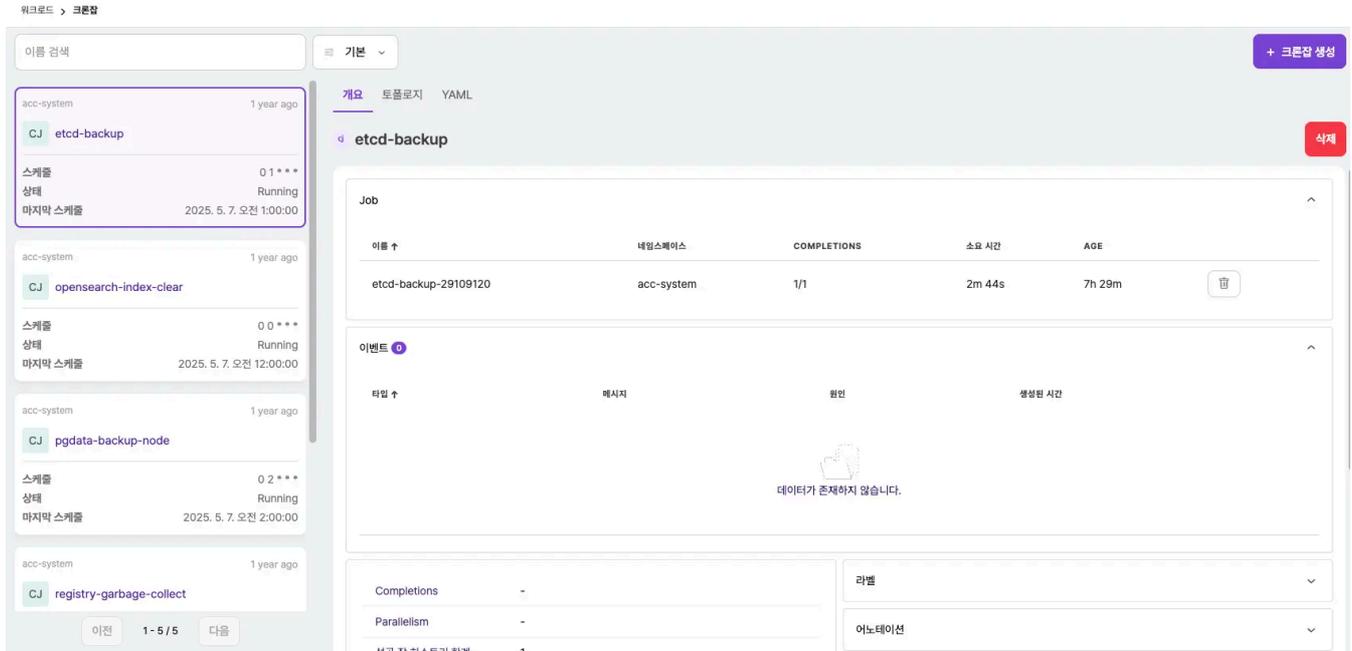
Delete by entering the namespace and job name in the modal.

## 4.2.6.8. Cronjob

Provides information about deployed cron jobs.

### 4.2.6.8.1. Overview

Provides job, event, and details information of deployed cron jobs.



#### 4.2.6.8.1.1. Miscellaneous information

Provides information about deployed jobs. Clicking on it takes you to the job screen.



item	explanation
name	Job name
namespace	The namespace where the job was created
COMPLETIONS	Number of completed jobs created by cron jobs
time taken	Time it takes for a job to run and complete
AGE	Time elapsed since the job was created
delete	Delete job

#### 4.2.6.8.1.2. Event Information

Please refer to the pod event information as it is the same as the pod content .

### 4.2.6.8.1.3. Details

Provides details about the cron job.

Completions	-
Parallelism	-
성공 잡 히스토리 한계	1
실패 잡 히스토리 한계	1
소유자 참조	-
동시성 정책	Allow
마지막 스케줄 시간	7h 51m
시작 마감 시간(초)	-
활성 마감 시간	-
일시 정지	false

라벨 ▼

---

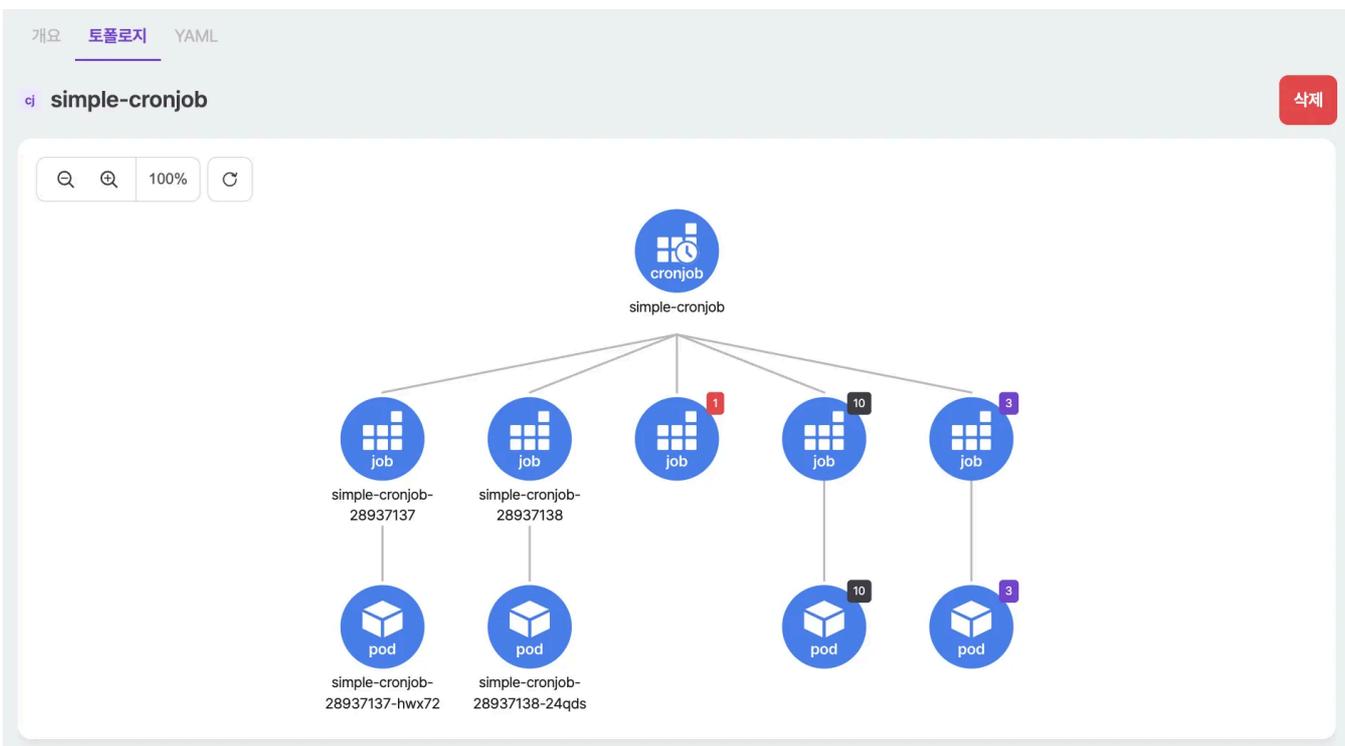
어노테이션 ▼

### 4.2.6.8.1.4. Topology

This shows resources related to cron jobs in topology form. Since the basic functionality is identical to that of pods, refer to pod topology .

The resources output from the cron job's topology are as follows:

- Cronjob, job, pod



Running Jobs and pods in status are output with node and resource names, just like in the existing topology.

Running Except for resources in status, nodes are output to show the total number of resources, categorized by status. The criteria and colors for classification are as follows.



situation	explanation
completed	Job completed successfully
failed	The job was executed but failed to complete for an unexpected reason.
error	A problem occurred before the job was executed and it was not executed.

When you click on a node that outputs a count, a drop-down list of jobs or pods in the corresponding status is displayed, and clicking on it takes you to the corresponding resource screen.



### 4.2.6.8.2. Creating a cron job

+ 크론잡 생성 You can create a Kubernetes cronjob resource by entering information on the screen that appears when you select . When creating, you can enter information in FORM/YAML and configure general settings and container settings.

#### 4.2.6.8.2.1. General Settings

워크로드 > 크론잡

← 크론잡 목록 FORM  YAML [크론잡 생성](#)

1 일반 설정    2 컨테이너 설정

이름

네임스페이스

스케줄

재시작 정책

[다음: 컨테이너 설정 →](#)

item	explanation
name	Cronjob name
namespace	Namespace where cron jobs will be created
schedule	Define the time when the job will run in cron format
Restart policy	Set whether to restart the Pod created by the cron job if it fails and set the policy. <ul style="list-style-type: none"> <li>OnFailure restarts on failure</li> <li>Never restarts</li> </ul>

## 4.2.6.8.2.2. Container Configuration

위코드 > 크론잡

← 크론잡 목록 FORM  YAML [크론잡 생성](#)

1 일반 설정    2 컨테이너 설정

컨테이너

컨테이너 1

name \*

image \*

args

args 1

[삭제](#)

args 2

[삭제](#)

args 3

[삭제](#)

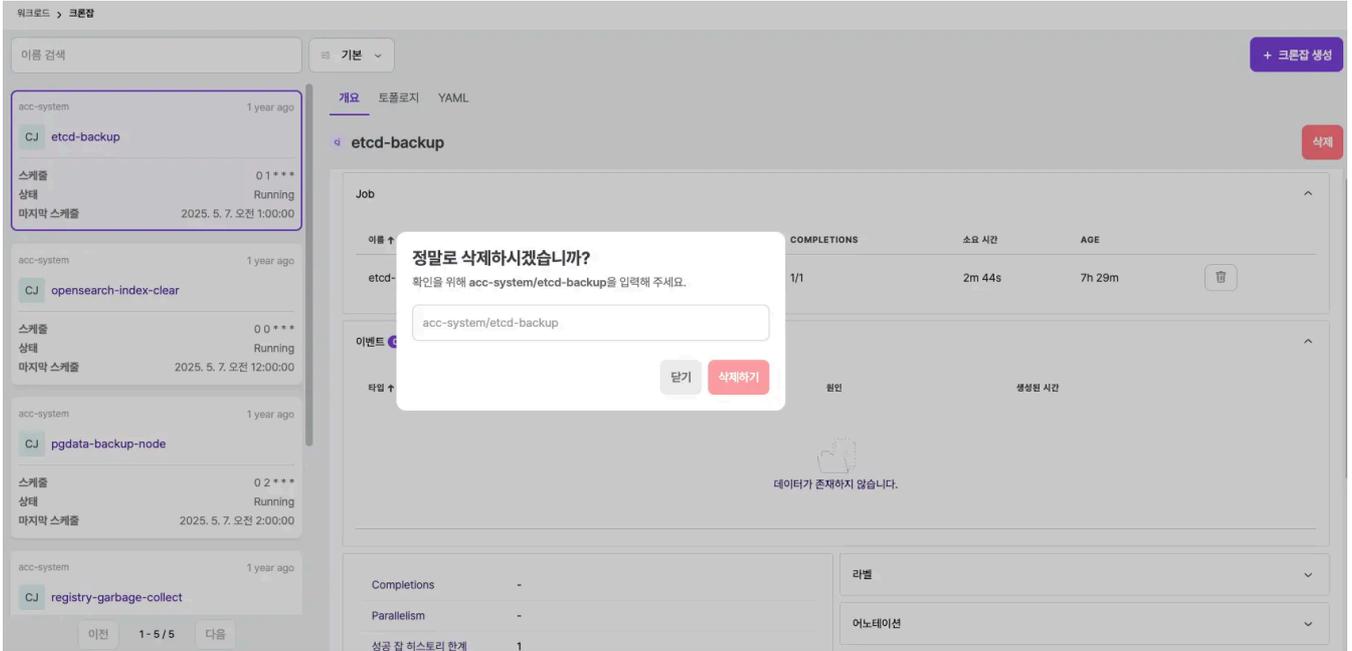
item	explanation
name	The name of the container to be run in the cron job
image	Container image to be run in cron job
args	Command to be executed when the container starts

### 4.2.6.8.3. Cronjob modification

Select the cron job you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

### 4.2.6.8.4. Delete cron job

Select the cron job you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and cronjob name in the modal.

## 4.2.7. Composition

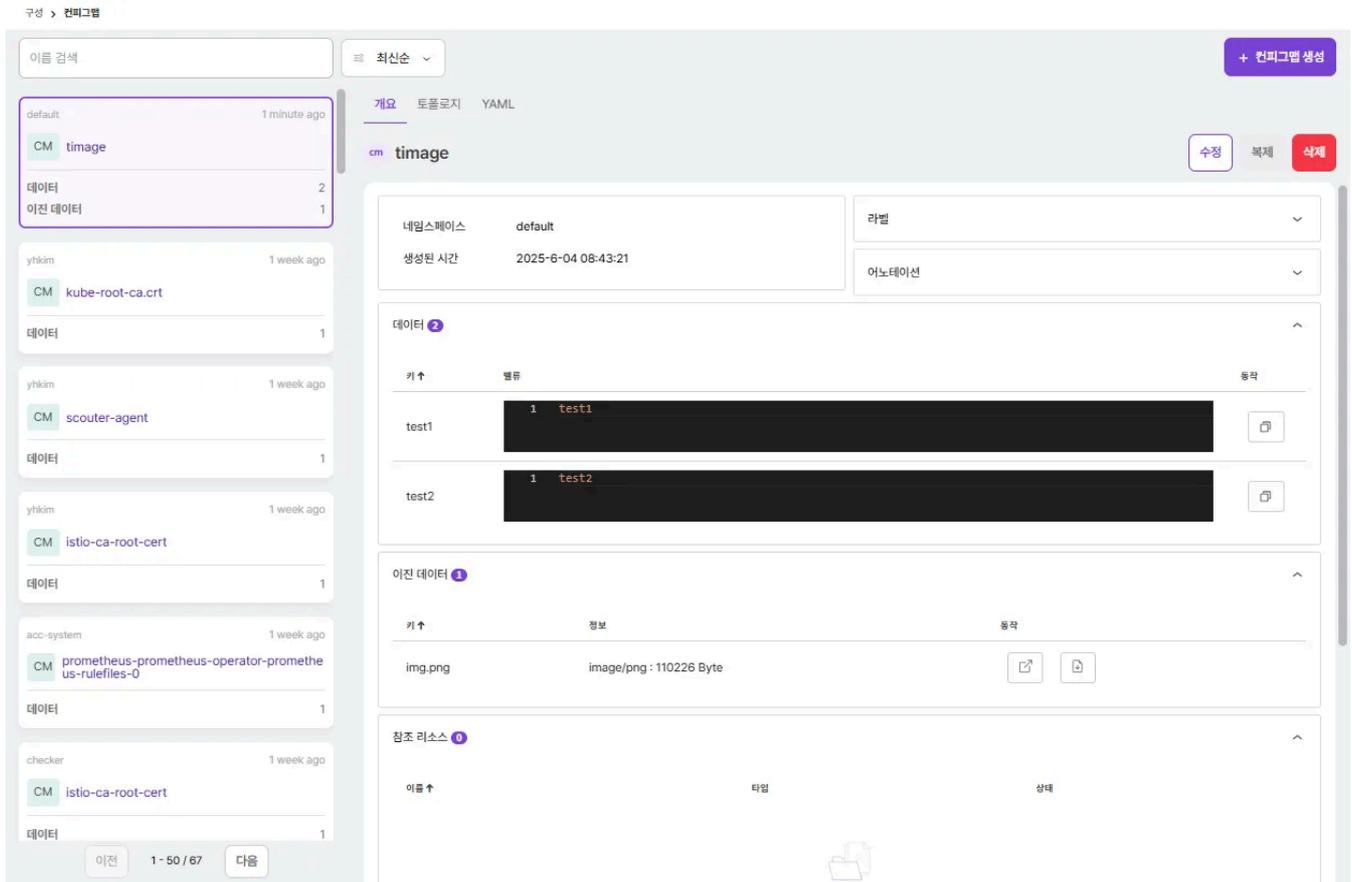
ConfigMap and Secret store the component information required for an application (or work - load) to run properly. Additionally, you can configure HPA for autoscaling and LimitRange for resource restrictions.

### 4.2.7.1. ConfigMap

ConfigMap stores non-confidential data as key-value pairs.

#### 4.2.7.1.1. Overview

Provides details of the deployed configmap, data, binary data, reference resources, and events.



#### 4.2.7.1.1.1. Details

Provides details about the configmap.



### 4.2.7.1.1.2. Data

It provides data information for the config map and provides a copy button on the right.

데이터 2			동작
키 ↑	값		
test1	1 test1		
test2	1 test2		

### 4.2.7.1.1.3. Binary data

It provides binary data information of the config map and provides preview and download buttons on the right.

이진 데이터 1			동작
키 ↑	정보		
img.png	image/png : 110226 Byte		

### 4.2.7.1.1.4. Reference Resources

Provides reference resource information for the config map and moves to the corresponding resource when clicked.

참조 리소스 2		
이름 ↑	타입	상태
gateway-proxy	DaemonSet	● Ready (1/1)
gateway-proxy-qm4bc	Pod	● Running

### 4.2.7.1.1.5. Event Information

Provides information about events occurring in the config map.

타입 ↑	메시지	원인	생성된 시간
Normal	Created	Created	3s

item	explanation
Type	Event Type <ul style="list-style-type: none"> <li>• Normal: Events that occur during normal operations</li> <li>• Warning: Event caused by an error</li> </ul>
message	Event message
cause	Reason for the event
Time of creation	Time elapsed since event creation

### 4.2.7.1.1.6. Topology

This displays resources related to a ConfigMap in topology form.

Since the basic functionality is identical to that of a pod, refer to the pod topology . The resources output from the ConfigMap topology are as follows.

- ConfigMap
- Pod

개요 토폴로지 YAML

cm **argocd-tls-certs-cm** 수정 복제 삭제

🔍 🔍 100% 🔄

```

graph TD
    CM[cm  
argocd-tls-certs-cm] --- P1[pod  
argocd-applicationset-control...]
    CM --- P2[pod  
argocd-notifications-controlle...]
    CM --- P3[pod  
argocd-repo-server-9646985c8-b...]
    CM --- P4[pod  
argocd-server-67b76b54d7-nzj2p]
          
```

### 4.2.7.1.2. Creating a ConfigMap

+ 컨피그맵 생성 You can create a Kubernetes ConfigMap resource by entering information on the screen that appears when you select . You can enter it in FORM/YAML when creating it.

구성 > 컨피그맵

← 컨피그맵 목록 FORM  YAML 컨피그맵 생성

이름

네임스페이스

### 4.2.7.1.3. Modifying the ConfigMap

Select the config map you want to modify, 수정 click the button on the right to modify the in - formation, and then 컨피그맵 수정 click the button to apply it.

구성 > 컨피그맵

← 컨피그맵 목록 FORM  YAML 컨피그맵 수정

이름

네임스페이스

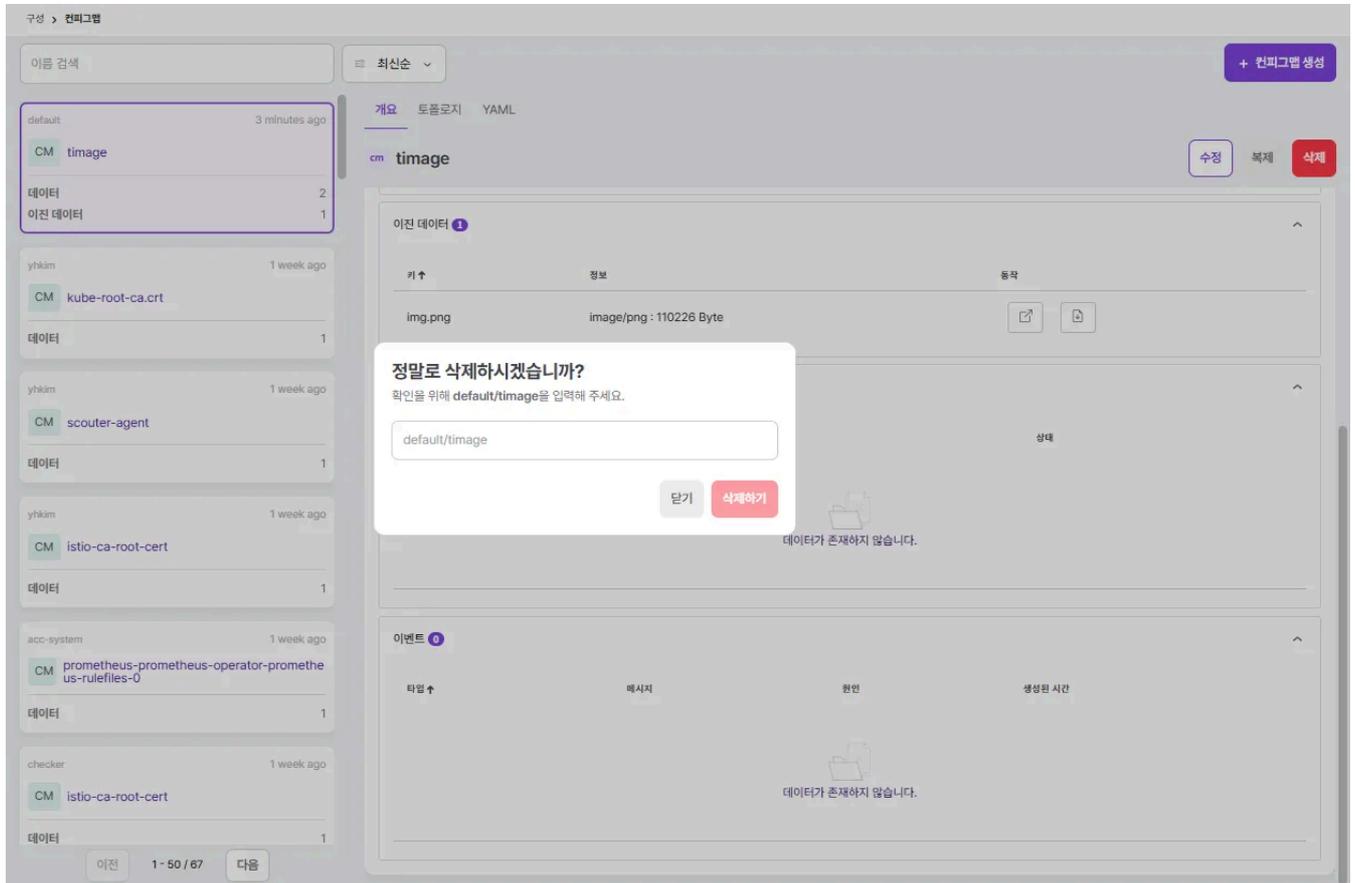
### 4.2.7.1.4. Duplicate ConfigMap

ConfigMap can be replicated to other clusters and namespaces.



### 4.2.7.1.5. Deleting a ConfigMap

Select the config map you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and configmap name in the modal.

### 4.2.7.2. Secret

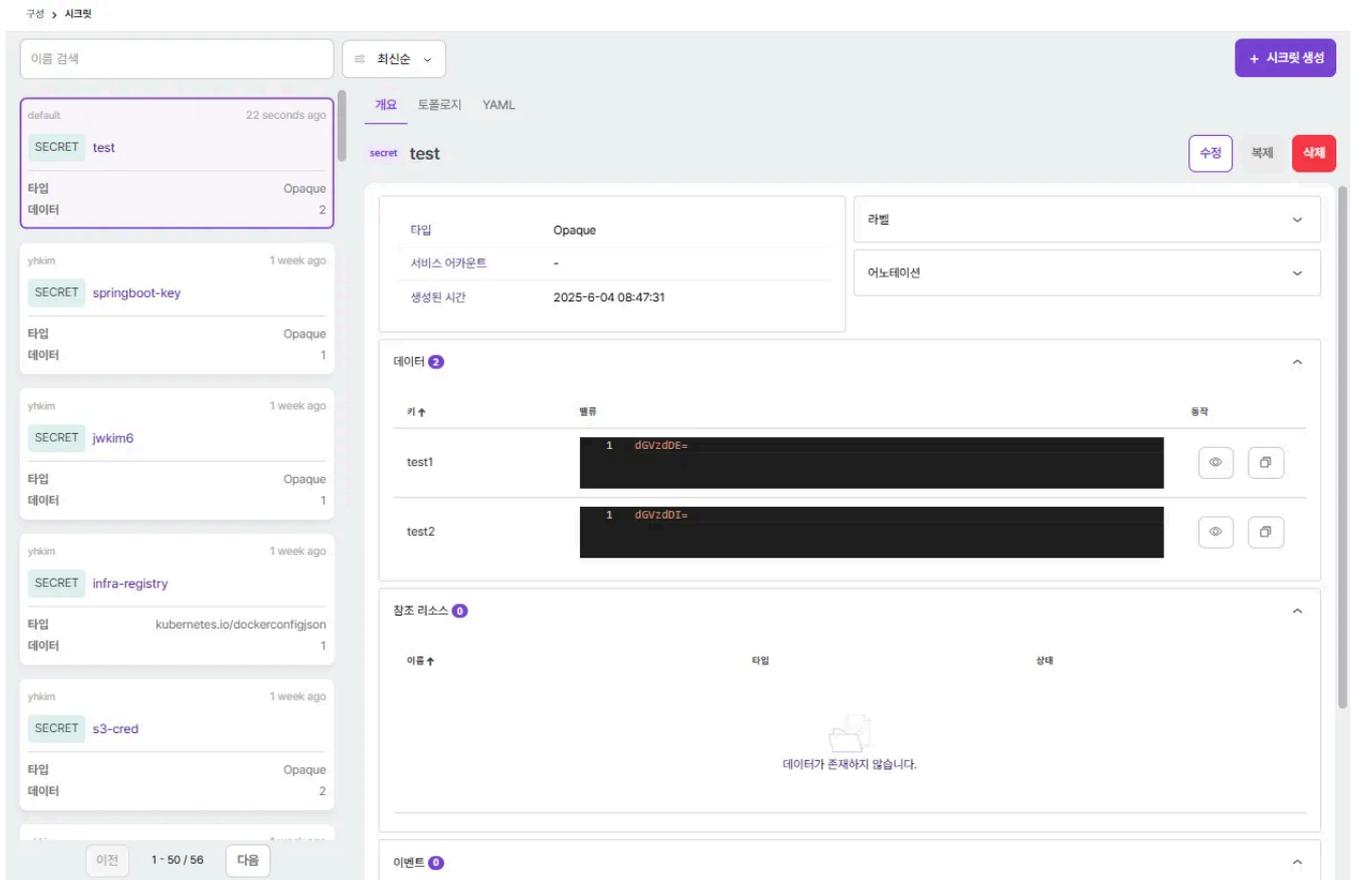
Secrets store and manage sensitive information such as passwords, OAuth tokens, Docker registries, and SSH keys. Secrets are more secure and flexible than defining them in workloads.

#### IMPORTANT

Sensitive information should be securely stored using secrets, not configmaps. Information stored in secrets is encoded in base64 and displayed when retrieved.

#### 4.2.7.2.1. Overview

Provides details of the deployed secret, data, reference resources, and events.



##### 4.2.7.2.1.1. Details

Provides details about the secret.



### 4.2.7.2.1.2. Data

It provides the secret's data information and provides a view of the base64 decoded value and a copy button on the right.



### 4.2.7.2.1.3. Reference Resources

Since the content is identical to ConfigMap, please refer to the ConfigMap reference resource .

### 4.2.7.2.1.4. Event Information

Since the contents are the same as the ConfigMap, refer to the ConfigMap event information .

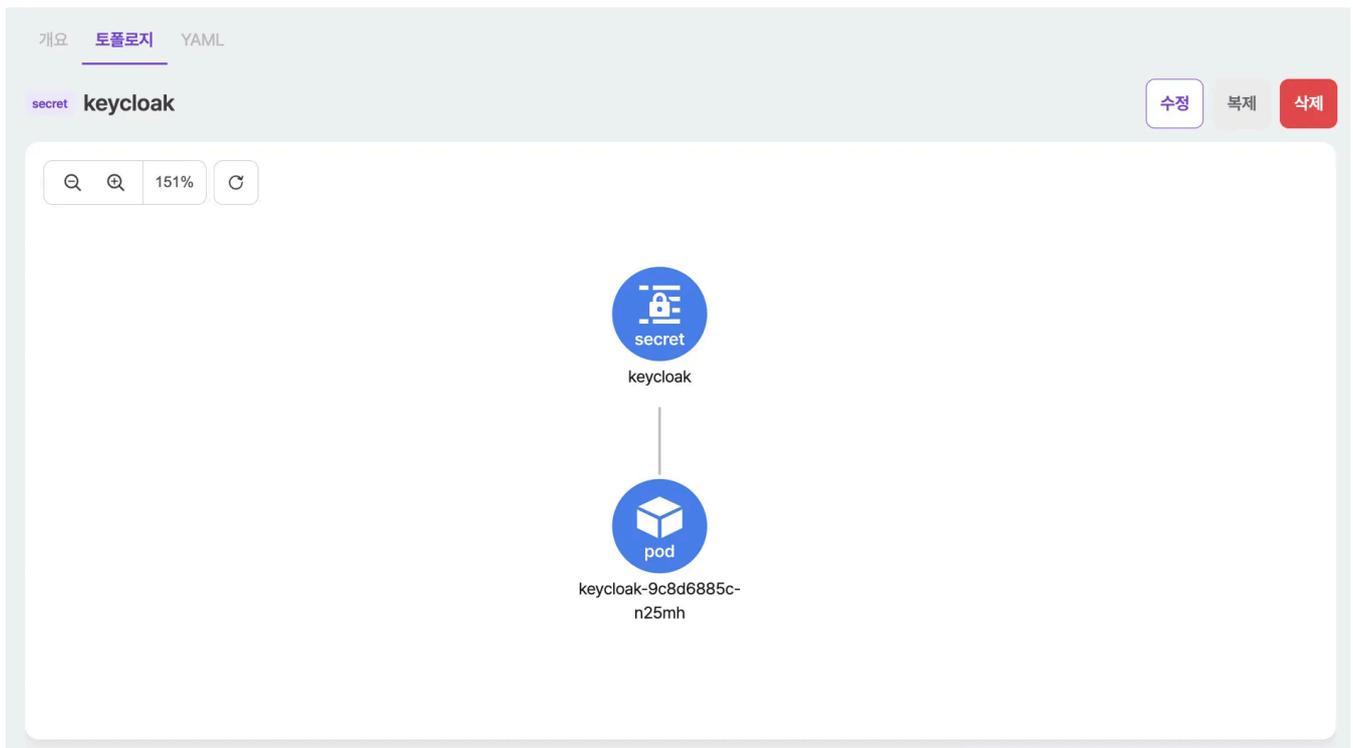
### 4.2.7.2.1.5. Topology

This shows resources related to a secret in topology form.

Since the basic functionality is identical to that of a pod, refer to the pod topology .

The resources output from the secret topology are as follows.

- Secret
- Pod



### 4.2.7.2.2. Creating a Secret

+ 시크릿 생성 You can create a Kubernetes secret resource by entering its information on the screen that appears when you select . When creating, you can enter it in FORM/YAML.

구성 > 시크릿

← 시크릿 목록 FORM  YAML 시크릿 생성

**이름**

**네임스페이스**

**시크릿 타입**

**Data**

키	밸류	
	1	삭제

추가

### 4.2.7.2.3. Secret Modification

Select the secret you want to edit, 수정 click the button on the right to edit the information, and then 시크릿 수정 click the button to reflect the changes.

구성 > 시크릿

← 시크릿 목록 FORM  YAML 시크릿 수정

**이름**

**네임스페이스**

**시크릿 타입**

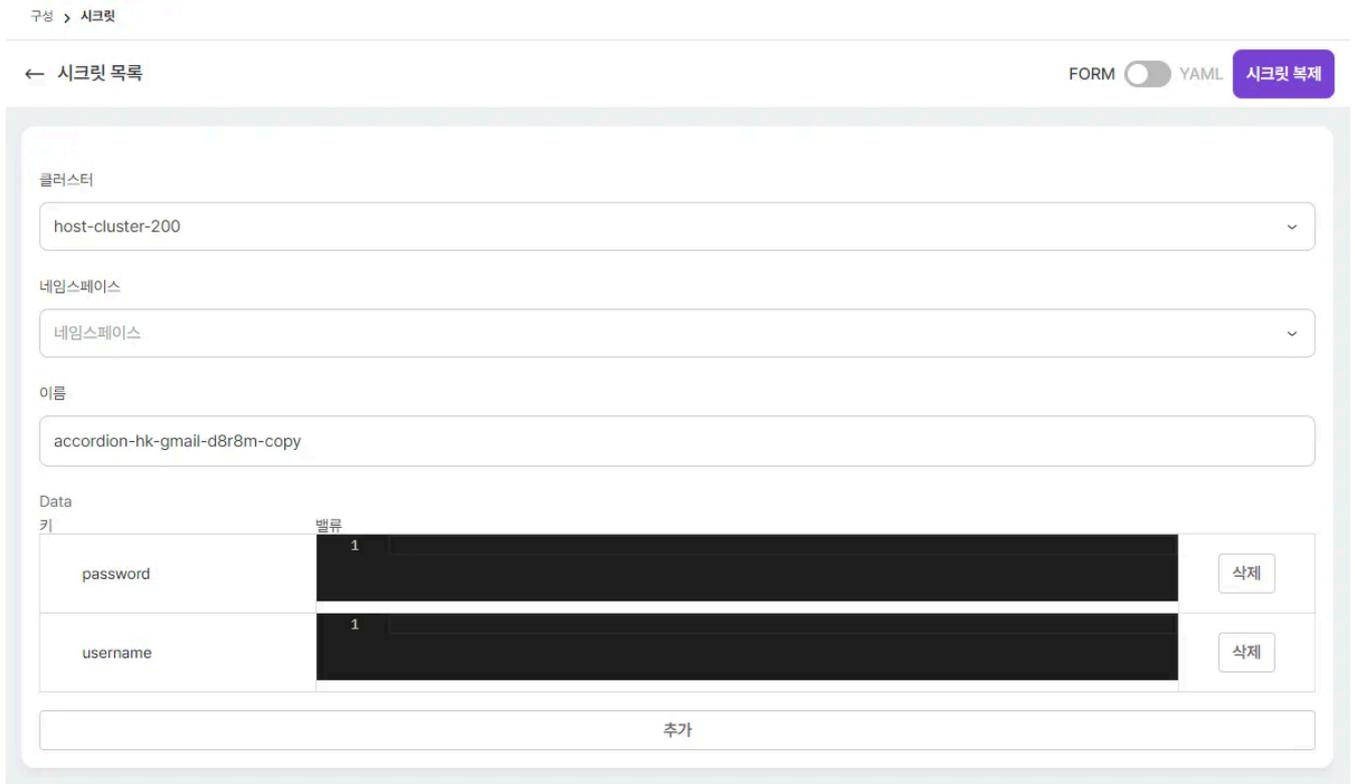
**Data**

키	밸류	
helloworld	1	삭제
token	1	삭제

추가

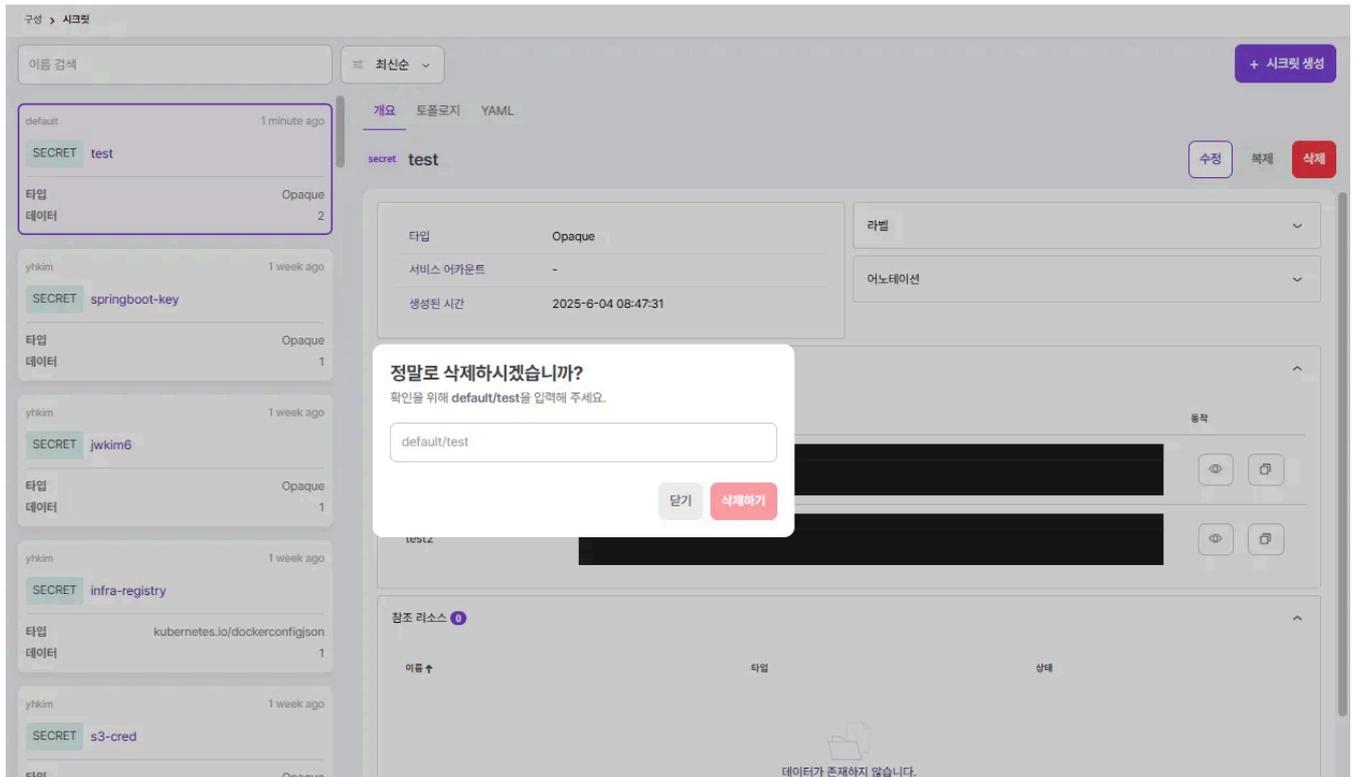
### 4.2.7.2.4. Secret Replication

Secrets can be replicated to other clusters and namespaces.



### 4.2.7.2.5. Delete Secret

Select the secret you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and secret name in the modal.

### 4.2.7.3. HPA

HPA is a Kubernetes resource that horizontally scales and manages pods. It scales pods based on resource metrics.

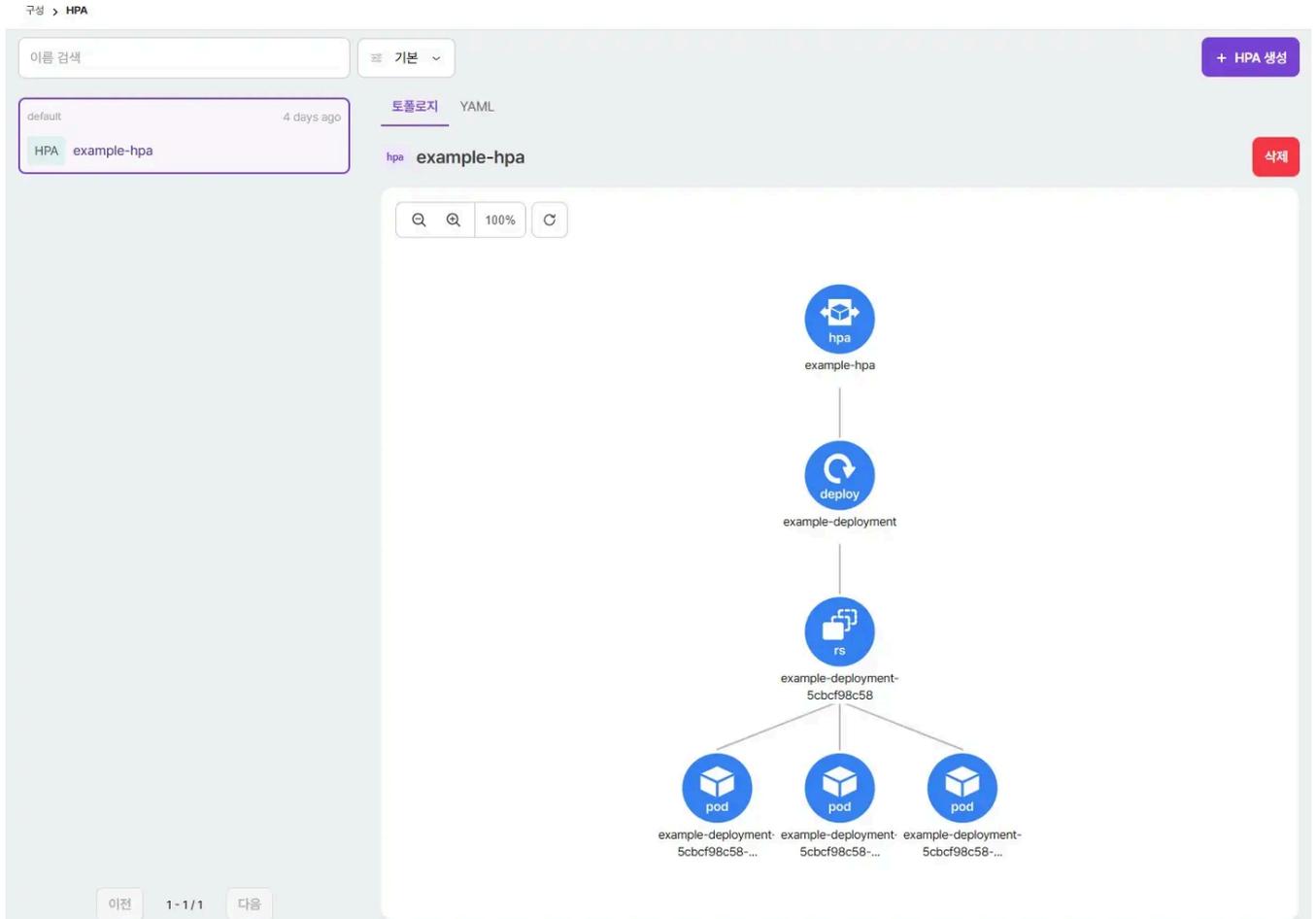
#### 4.2.7.3.1. Topology

This shows resources related to HPA in topological form.

Since the basic functionality is identical to that of pods, refer to the pod topology

. The resources output from the HPA topology are as follows.

- HPA
- Deployment, ReplicaSet, StatefulSet
- Pod



### 4.2.7.3.2. HPA Creation

+ HPA 생성 You can create it by entering Kubernetes HPA resource information on the screen that appears when you select .

구성 > HPA

← HPA 목록 HPA 생성

```

1  apiVersion: autoscaling/v2
2  kind: HorizontalPodAutoscaler
3  metadata:
4    name: example-hpa
5    namespace: default
6  spec:
7    scaleTargetRef:
8      apiVersion: apps/v1
9      kind: Deployment
10     name: example-deployment
11   minReplicas: 1
12   maxReplicas: 10
13   metrics:
14     - type: Resource
15       resource:
16         name: cpu
17         target:
18           type: Utilization
19           averageUtilization: 50
20

```

### 4.2.7.3.3. HPA Modification

Select the HPA you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

구성 > HPA

이름 검색 ☰ 기본 + HPA 생성

default 4 days ago

HPA example-hpa

토폴로지 YAML

hpa example-hpa 수정 삭제

```

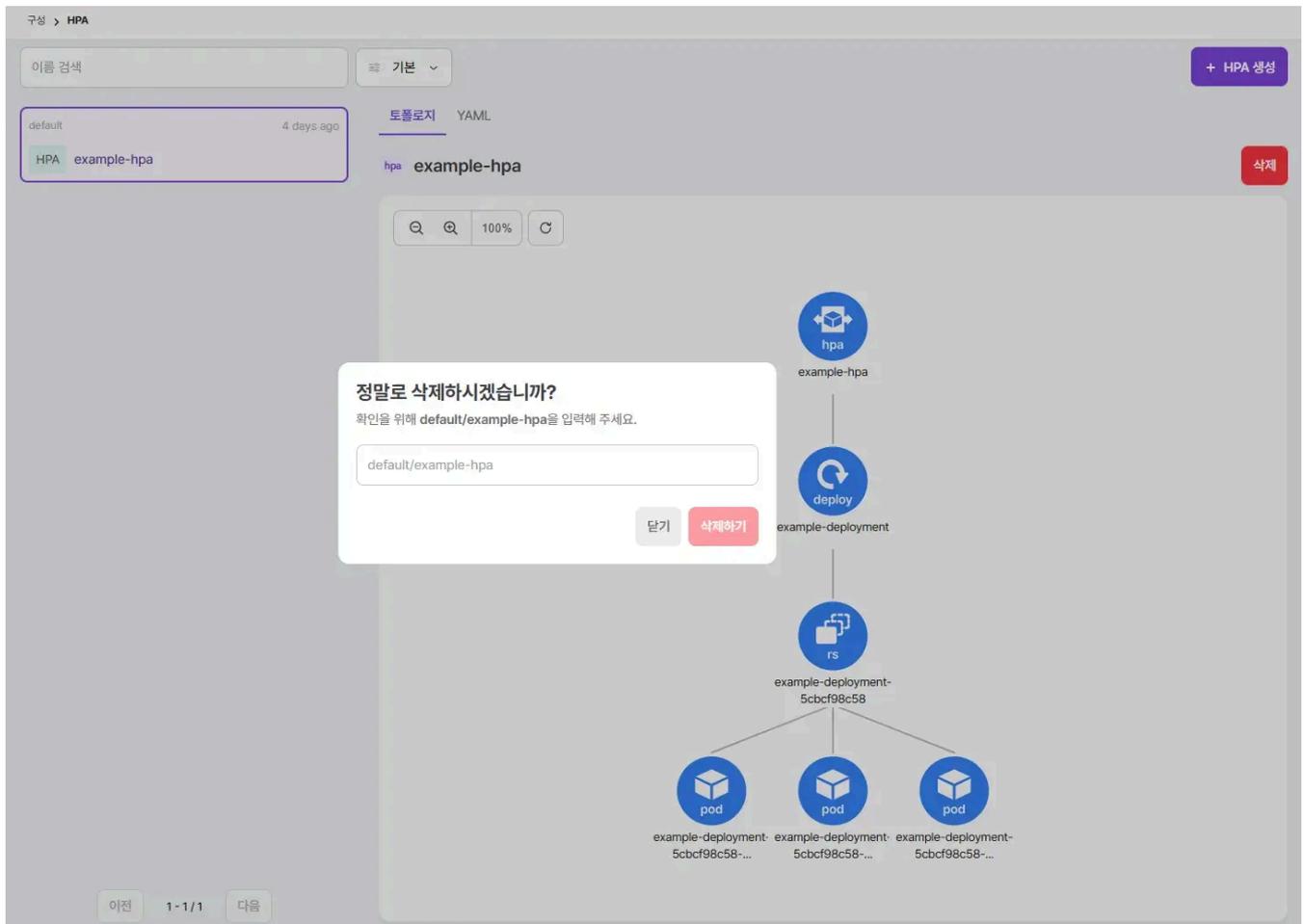
1 kind: HorizontalPodAutoscaler
2 apiVersion: autoscaling/v1
3 metadata:
4   name: example-hpa
5   namespace: default
6   uid: ce60311c-6464-409f-b60c-a3eb1e7a682b
7   resourceVersion: "50636107"
8   creationTimestamp: "2025-01-03T01:10:57Z"
9   annotations:
10    autoscaling.alpha.kubernetes.io/conditions: >-
11    [{"type":"AbleToScale","status":"True","lastTransitionTime":"2025-01-07T01:10:57Z","reason":"HPA controller was able to update the target scale to 2"},{"type":"ScalingActive","status":"True","lastTransitionTime":"2025-01-07T01:10:57Z","reason":"HPA was able to successfully calculate a replica count from cpu resource utilization (percentage of request)"}]
12    autoscaling.alpha.kubernetes.io/current-metrics: >-
13    [{"type":"Resource","resource":{"name":"cpu","currentAverageUtilization":0.05}}]
14
15
16
17
18
19
20

```

이전 1 - 1 / 1 다음

#### 4.2.7.3.4. HPA deletion

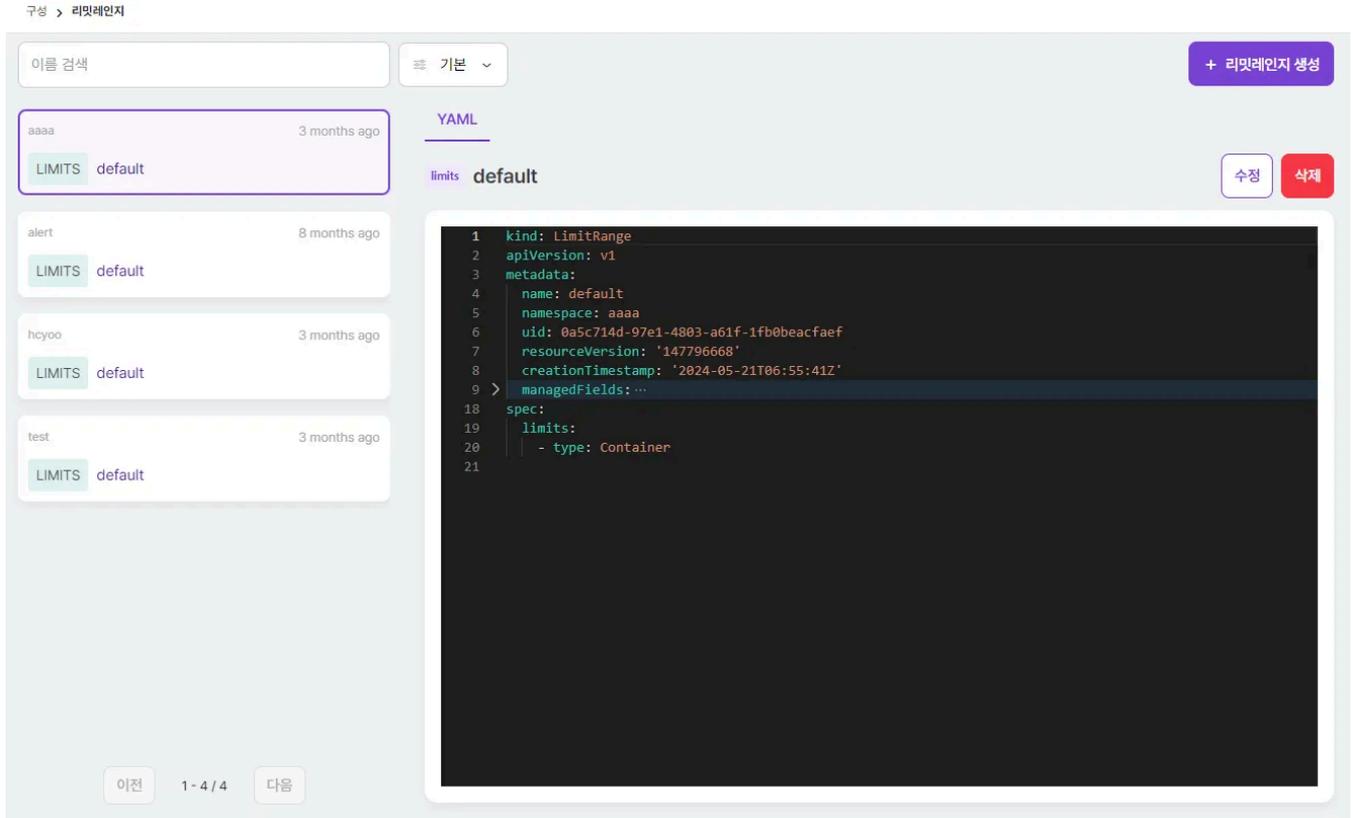
Select the HPA you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and HPA name in the modal.

### 4.2.7.4. Limit range

LimitRange restricts resource allocation to pods (or containers) in a namespace. It specifies minimum and maximum system resource (CPU or memory) usage per pod (or container), minimum and maximum storage requests per storage class, and more.



#### 4.2.7.4.1. Creating a limit range

+ 리밋레인지 생성 You can create it by entering Kubernetes limit range resource information on the screen that appears when you select .

구성 &gt; 리밋레인지

← 리밋레인지 목록

리밋레인지 생성

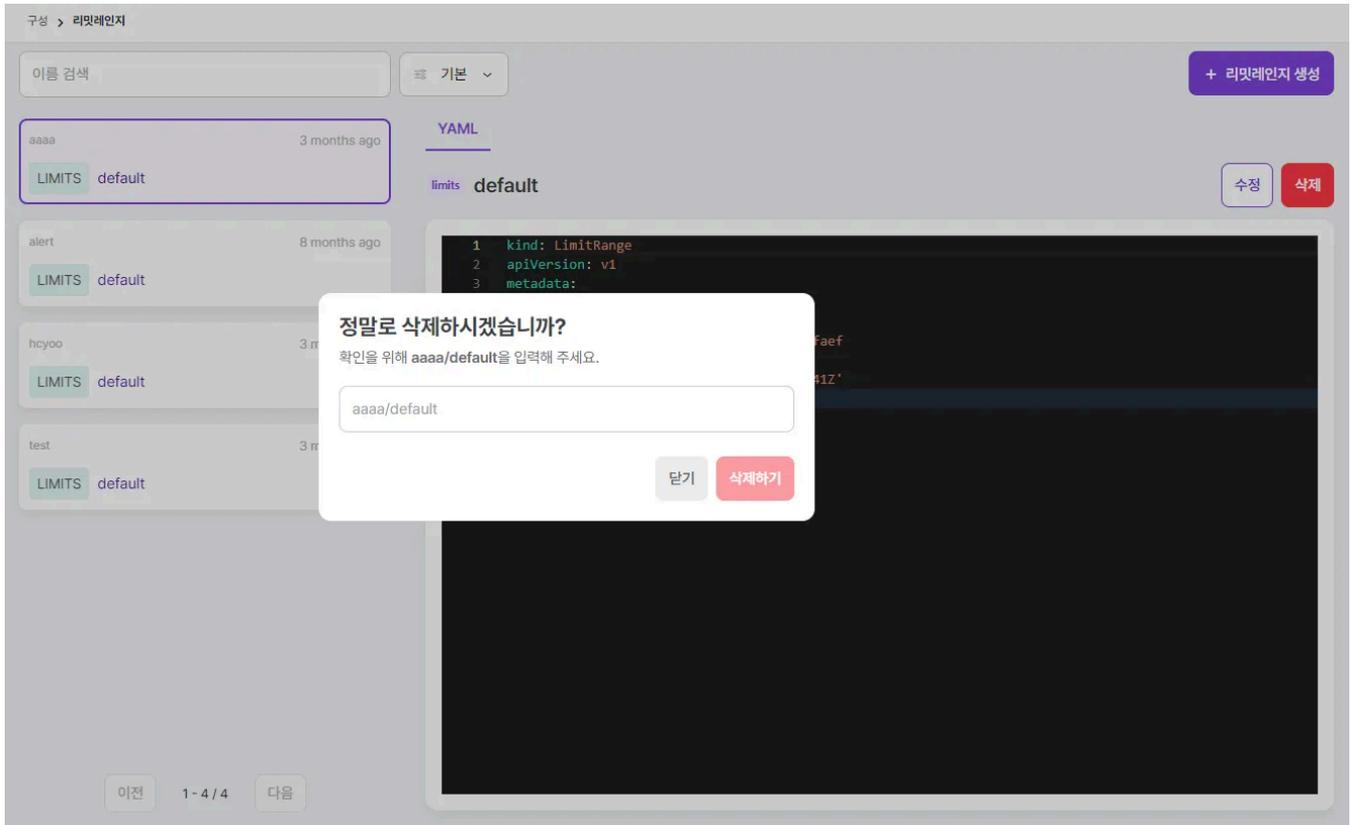
```
1  apiVersion: v1
2  kind: LimitRange
3  metadata:
4    name: example-limit-range
5    namespace: default
6  spec:
7    limits:
8      - default:
9          memory: "512Mi"
10         defaultRequest:
11             memory: "256Mi"
12         max:
13             memory: "1Gi"
14         min:
15             memory: "256Mi"
16         type: Container
17
```

#### 4.2.7.4.2. Limit range modification

Select the limit range you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

#### 4.2.7.4.3. Delete limit range

Select the limit range you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and limit range name in the modal.

## 4.2.8. Network

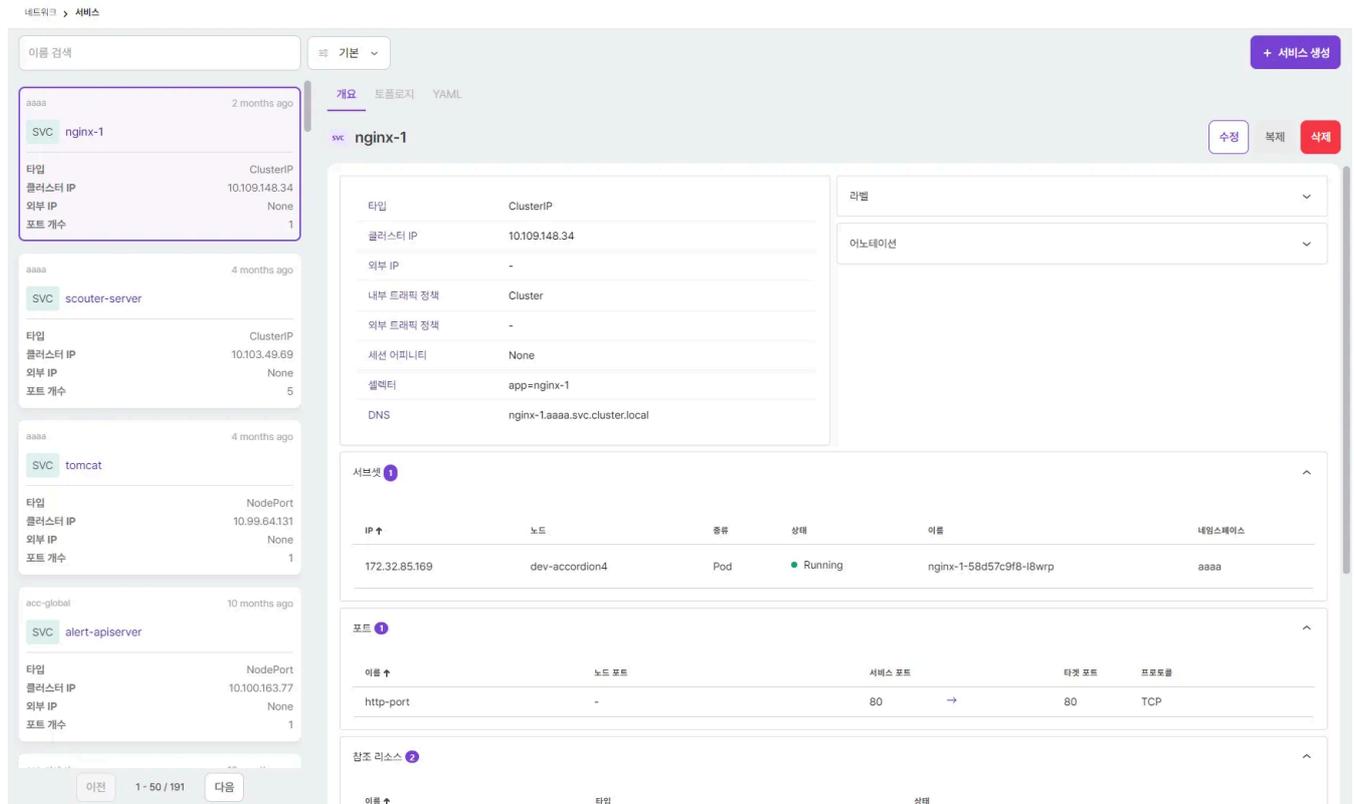
Manages network settings for workloads to communicate.

### 4.2.8.1. Services

Provides a single DNS for a set of pods for applications and workloads and performs load balancing.

#### 4.2.8.1.1. Overview

Provides details about the service, its subsets, ports, reference resources, and events.



#### 4.2.8.1.1.1. Details

Provides details about the service.



### 4.2.8.1.1.2. Subset

It provides pod information based on the endpoint information mapped to the service, and moves to the corresponding resource when clicked.

IP ↑	노드	종류	상태	이름	네임스페이스
172.32.50.201	dwhan-host-master	Pod	● Running	prometheus-prometheus-operator-prometheus-0	acc-system

### 4.2.8.1.1.3. Port

Provides port information for the service and a button to connect to the node port.

이름 ↑	노드 포트	서비스 포트	타겟 포트	프로토콜
grpc	<input type="text" value="30003"/>	→ 10901	→	grpc TCP

### 4.2.8.1.1.4. Reference Resources

Provides reference resource information for the service and moves to the corresponding resource when clicked.

이름 ↑	타입	상태
prometheus	Deployment	● Ready (1/1)
prometheus-prometheus-operator-prometheus	Statefulset	● Ready (1/1)

### 4.2.8.1.1.5. Event Information

Provides information about events occurring in the service.

타입 ↑	메시지	원인	생성된 시간
Normal	Scheduled for sync	Sync	3m 41s

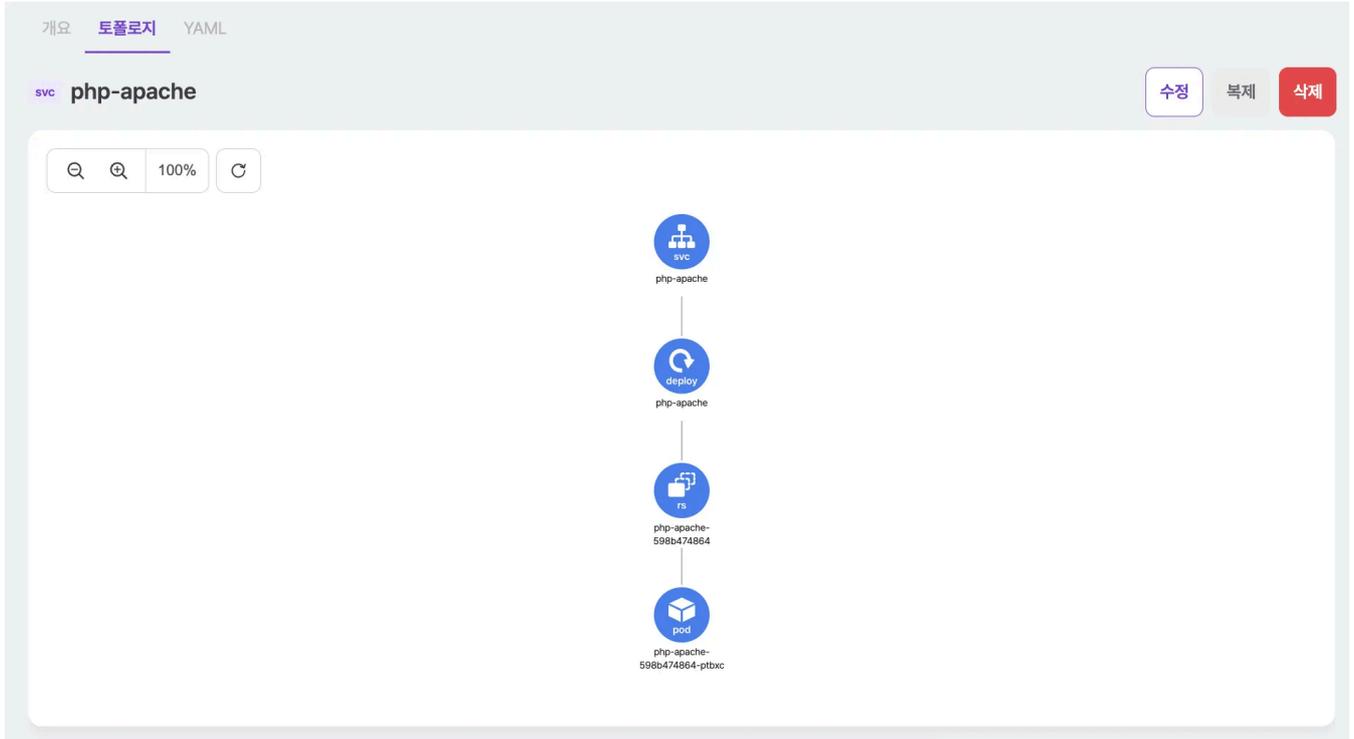
item	explanation
Type	Event Type <ul style="list-style-type: none"> <li>Normal: Events that occur during normal operations</li> <li>Warning: Event caused by an error</li> </ul>
message	Event message
cause	Reason for the event
Time of creation	Time elapsed since event creation



### 4.2.8.1.1.6. Topology

This displays resources related to a service in topological form. Since the basic functionality is identical to that of a pod, refer to the pod topology . The resources output from the service topology are as follows.

- Deployment, ReplicaSet, DaemonSet, StatefulSet, Pod
- service



### 4.2.8.1.2. Creating a Service

+ 서비스 생성 You can create a Kubernetes service resource by entering information on the screen that appears when you select . You can enter it in FORM/YAML when creating it.

← 서비스 목록 FORM  YAML  서비스 생성

**이름**

**네임스페이스**

**셀렉터**

키	밸류	
		추가

**서비스 타입**

**클러스터 IP**

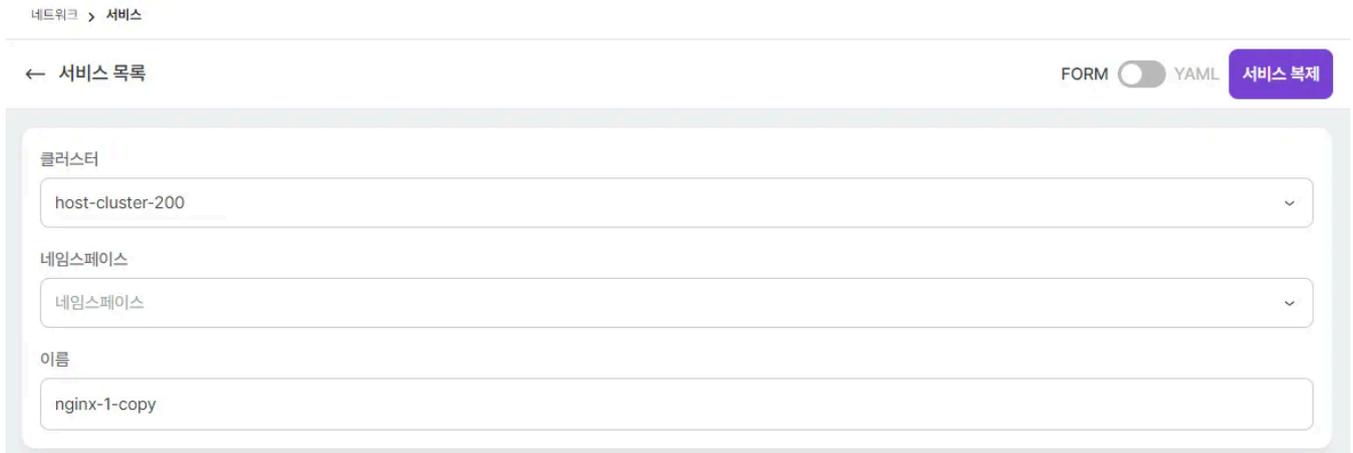
포트명	포트	프로토콜	타겟 포트	
				추가

### 4.2.8.1.3. Service Modification

Select the service you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

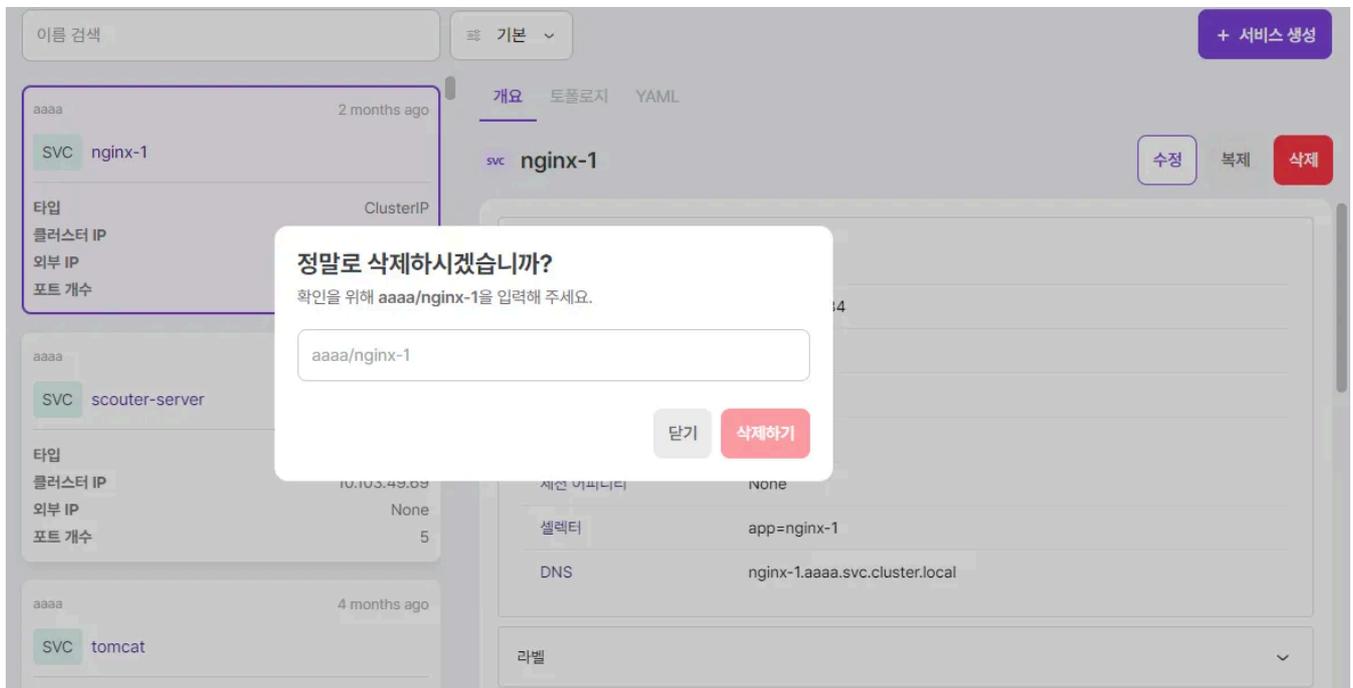
### 4.2.8.1.4. Service Replication

Services can be replicated to other clusters and namespaces.



### 4.2.8.1.5. Deleting a Service

Select the service you want to delete and 삭제 select the button on the right.



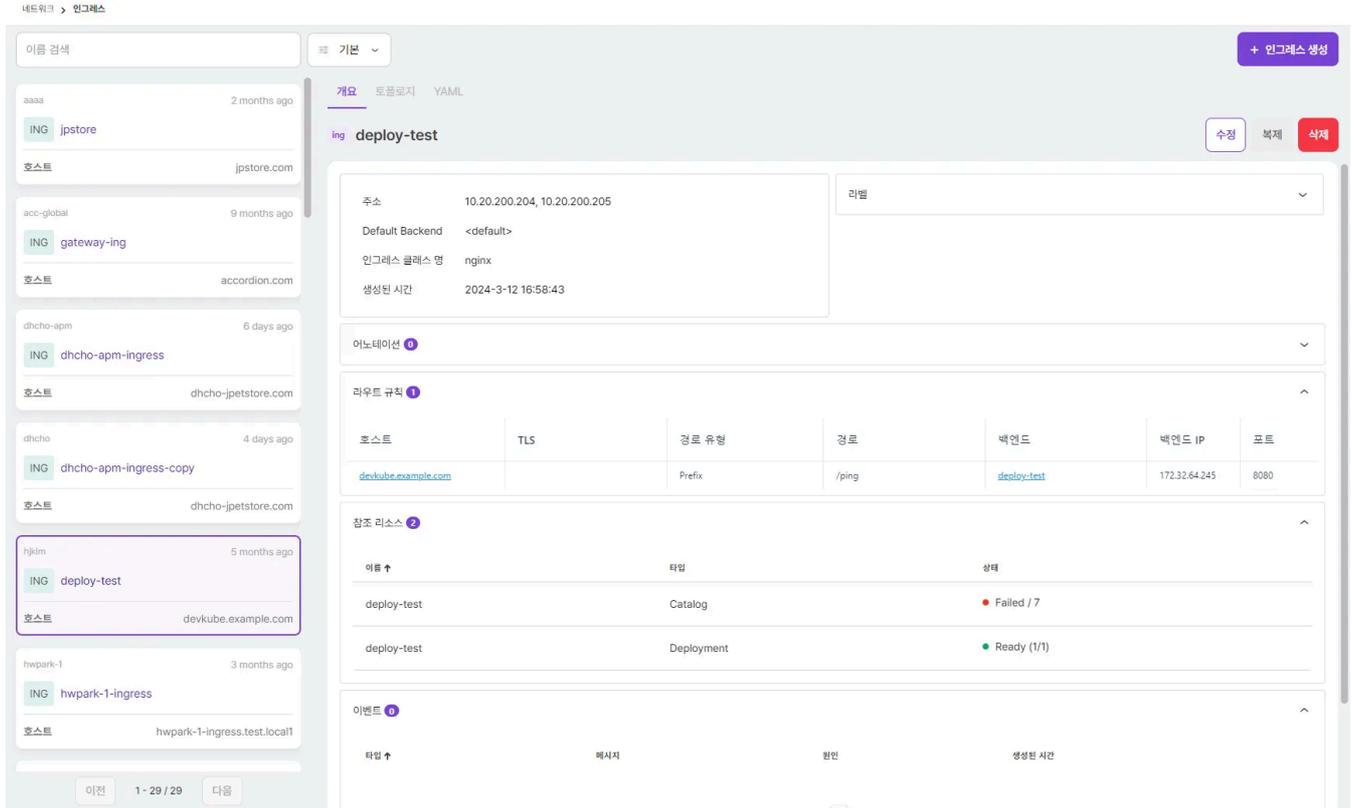
Delete by entering the namespace and service name in the modal.

## 4.2.8.2. Ingress

Ingress exposes HTTP and HTTPS routes to services within the cluster from outside the cluster. Ingress can be configured to provide externally accessible URLs to services, load balance traffic, SSL/TLS termination, and name-based virtual hosting.

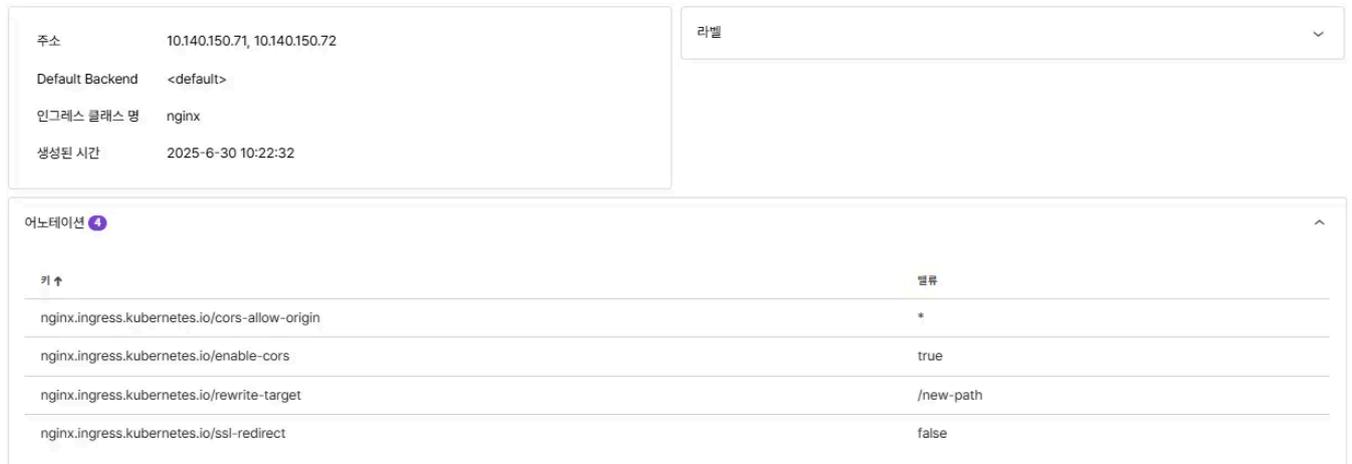
### 4.2.8.2.1. Overview

Provides details about Ingress, route rules, referenced resources, and events.



#### 4.2.8.2.1.1. Details

Provides details about Ingress.



### 4.2.8.2.1.2. Route Rules

호스트	TLS	경로 유형	경로	백엔드	백엔드 IP	포트
jpetstore.com		Prefix	/	jpetstore	172.32.111.34	8080

item	explanation
Host	The host name from which the network request comes
TLS	Secret information for https settings
Path type	<ul style="list-style-type: none"> <li>ImplementationSpecific: According to the settings of IngressClass</li> <li>Exact: Matches the URL path exactly</li> <li>Prefix: Matches based on the URL path prefix split by /</li> </ul>
channel	Request path
Backend	Services associated with hosts and paths
Backend IP	IP of the service
port	Port of the service

### 4.2.8.2.1.3. Reference Resources

Please refer to the service reference resource as the service and content are identical .

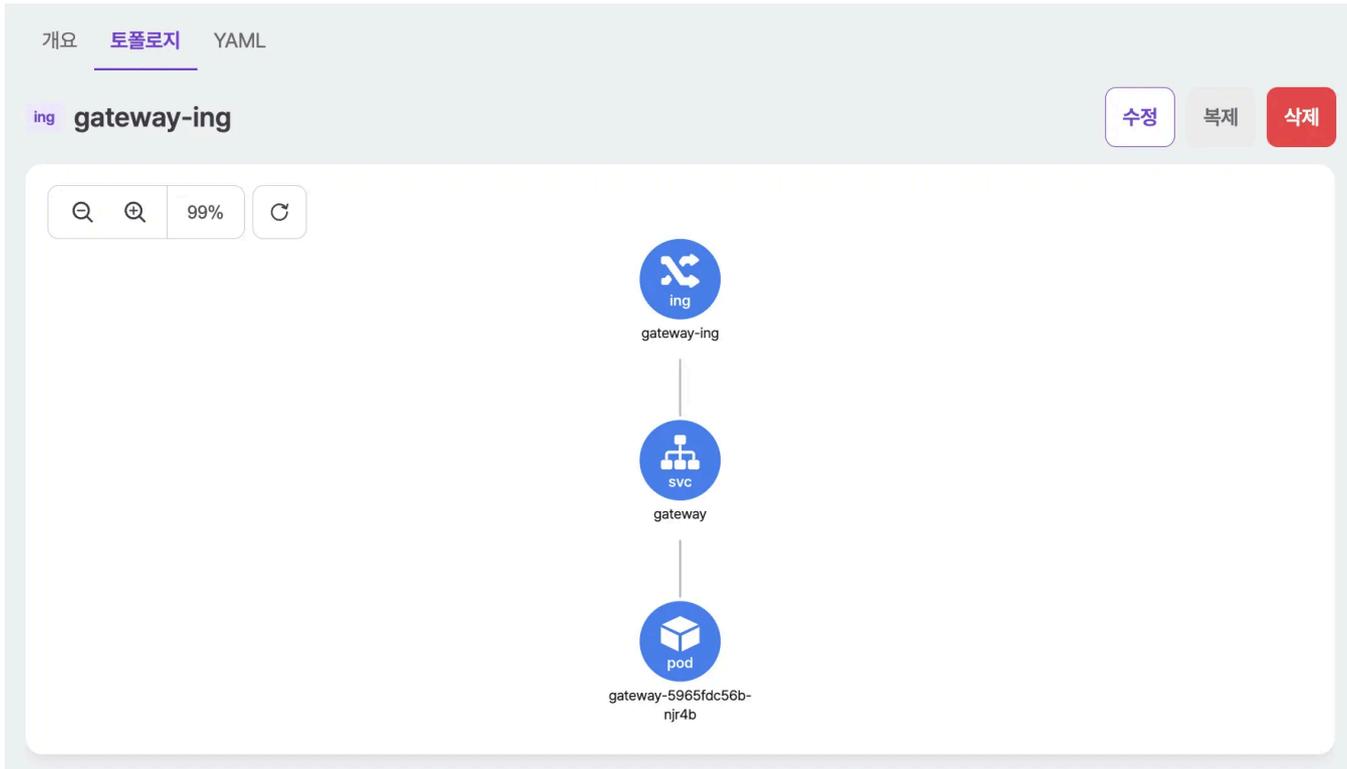
### 4.2.8.2.1.4. Event Information

Please refer to the service event information as the service and content are the same .

### 4.2.8.2.1.5. Topology

This shows resources related to Ingress in topological form. Since the basic functionality is identical to that of Pods, refer to Pod Topology . The resources output from the Ingress topology are as follows.

- Ingress, service
- Pad
- Secret



### 4.2.8.2.2. Creating an Ingress

+ 인그레스 생성 You can create a Kubernetes Ingress resource by entering information on the screen that appears when you select . You can enter it in FORM/YAML when creating it.

← 인그레스 목록 FORM  YAML  **인그레스 생성**

**이름 \***

**네임스페이스 \***

**라벨**

추가

**어노테이션**

추가

**인그레스 클래스 명**

### 4.2.8.2.3. Ingress fix

Select the ingress you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

### 4.2.8.2.4. Ingress Replication

Ingress can be replicated to other clusters and namespaces.

The screenshot shows the 'Ingress 목록' (Ingress List) page. At the top right, there are tabs for 'FORM' and 'YAML', and a purple button labeled '인그레스 복제' (Ingress Replicate). The main form contains the following fields:

- 클러스터** (Cluster): host-cluster-200
- 네임스페이스** (Namespace): 네임스페이스
- 이름** (Name): deploy-test-copy
- 라우트 규칙** (Route Rule):
  - 도메인 주소** (Domain Address): devkube.example.com
  - 경로** (Path): Prefix (dropdown), /ping
  - 서비스** (Service): (dropdown)
  - 포트** (Port): (dropdown)
  - 삭제** (Delete): (button)

### 4.2.8.2.5. Deleting Ingress

Select the Ingress you want to delete and 삭제 select the button on the right.

The screenshot shows the 'Ingress 목록' (Ingress List) page with a modal dialog for deleting an ingress. The modal has the following content:

- 제목** (Title): 정말로 삭제하시겠습니까? (Are you really going to delete?)
- 내용** (Content): 확인을 위해 hjkim/deploy-test을 입력해 주세요. (Please enter hjkim/deploy-test for confirmation.)
- 입력란** (Input Field): hjkim/deploy-test
- 버튼** (Buttons): 닫기 (Close), 삭제하기 (Delete)

The background shows a list of ingress resources with columns for '이름 검색' (Name Search), '기본' (Basic), and '+ 인그레스 생성' (+ Create Ingress). The selected ingress is 'ing deploy-test' with buttons for '수정' (Edit), '복제' (Replicate), and '삭제' (Delete).

Delete by entering the namespace and ingress name in the modal.

## 4.2.8.3. Network Policy

Network policies can define rules for traffic to control network traffic.

### 4.2.8.3.1. Topology

This shows resources related to a network policy in topology form.

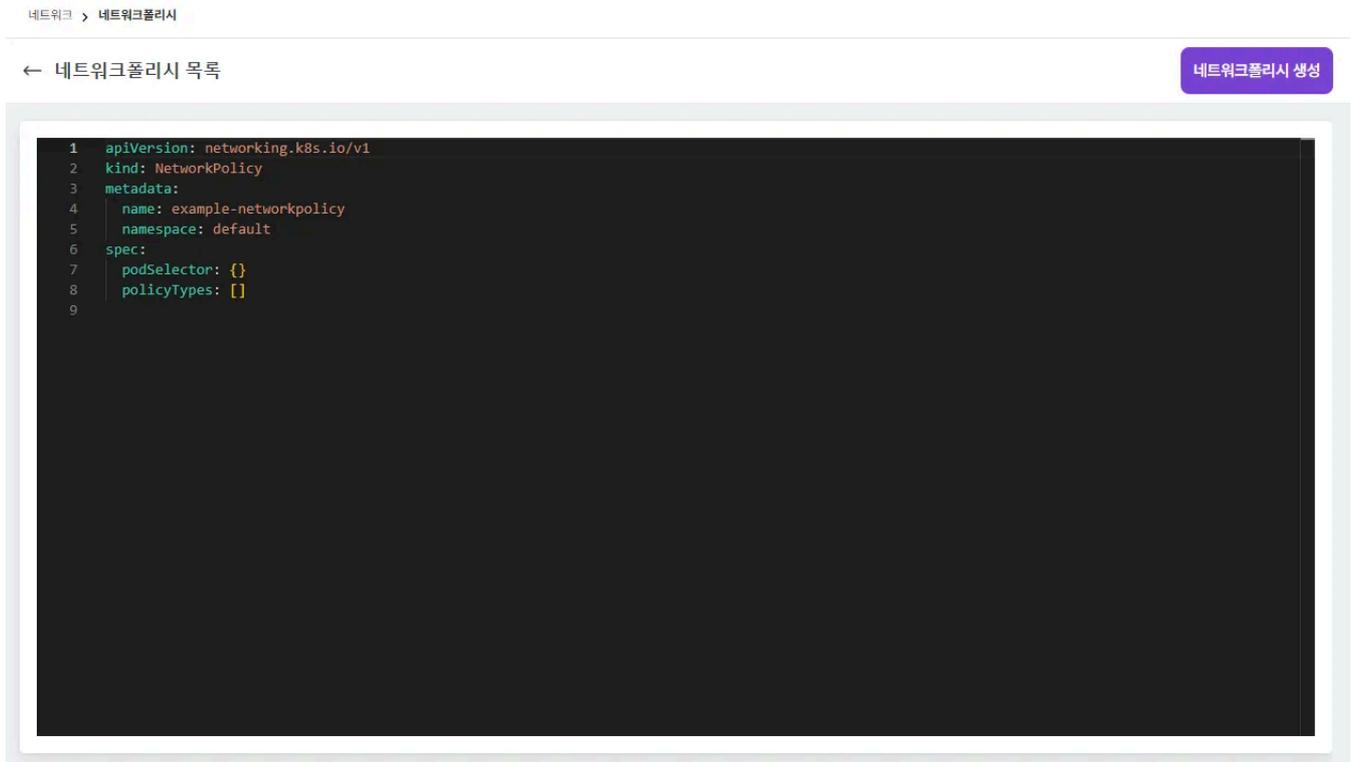
Since the basic functionality is identical to that of a pod, refer to the pod topology

. The resources output from the network policy topology are as follows.

- Network Policy
- Pod

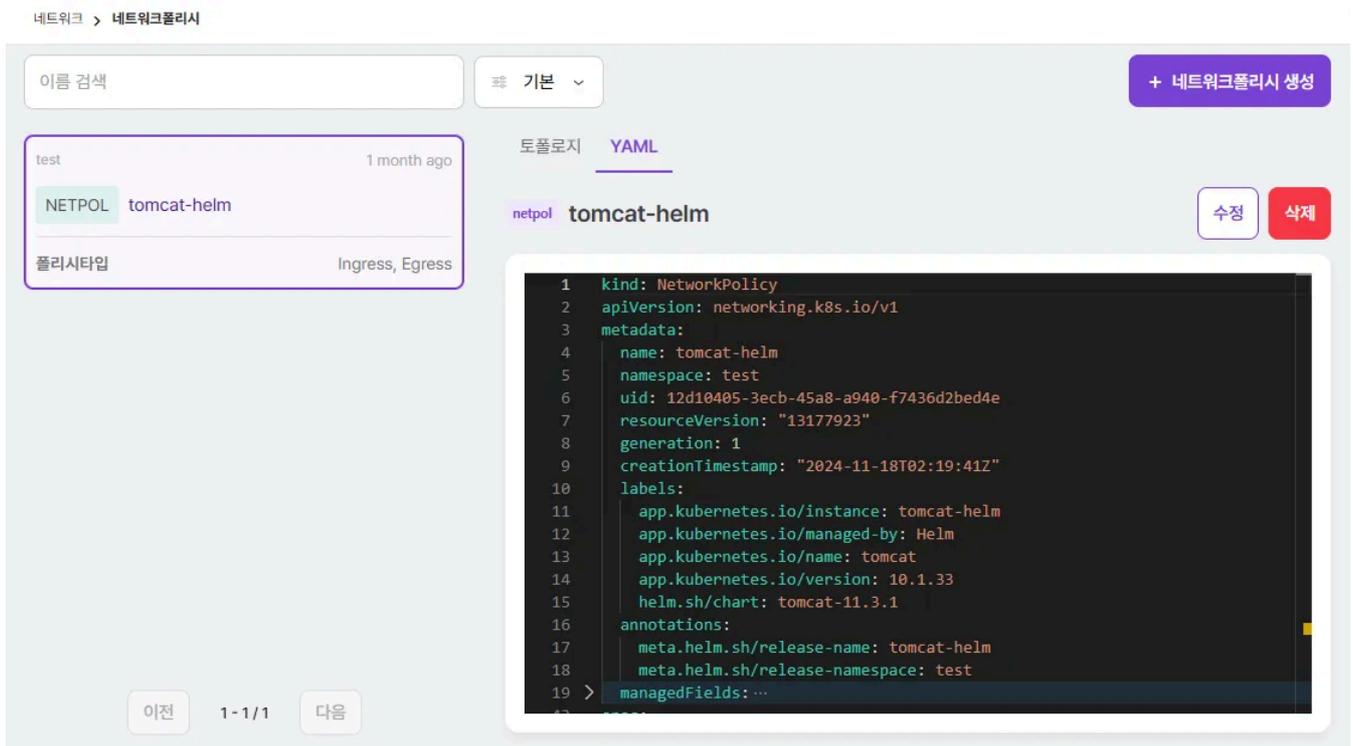
### 4.2.8.3.2. Creating a Network Policy

+ 네트워크폴리시 생성 You can create it by entering Kubernetes network policy resource information on the screen that appears when you select .



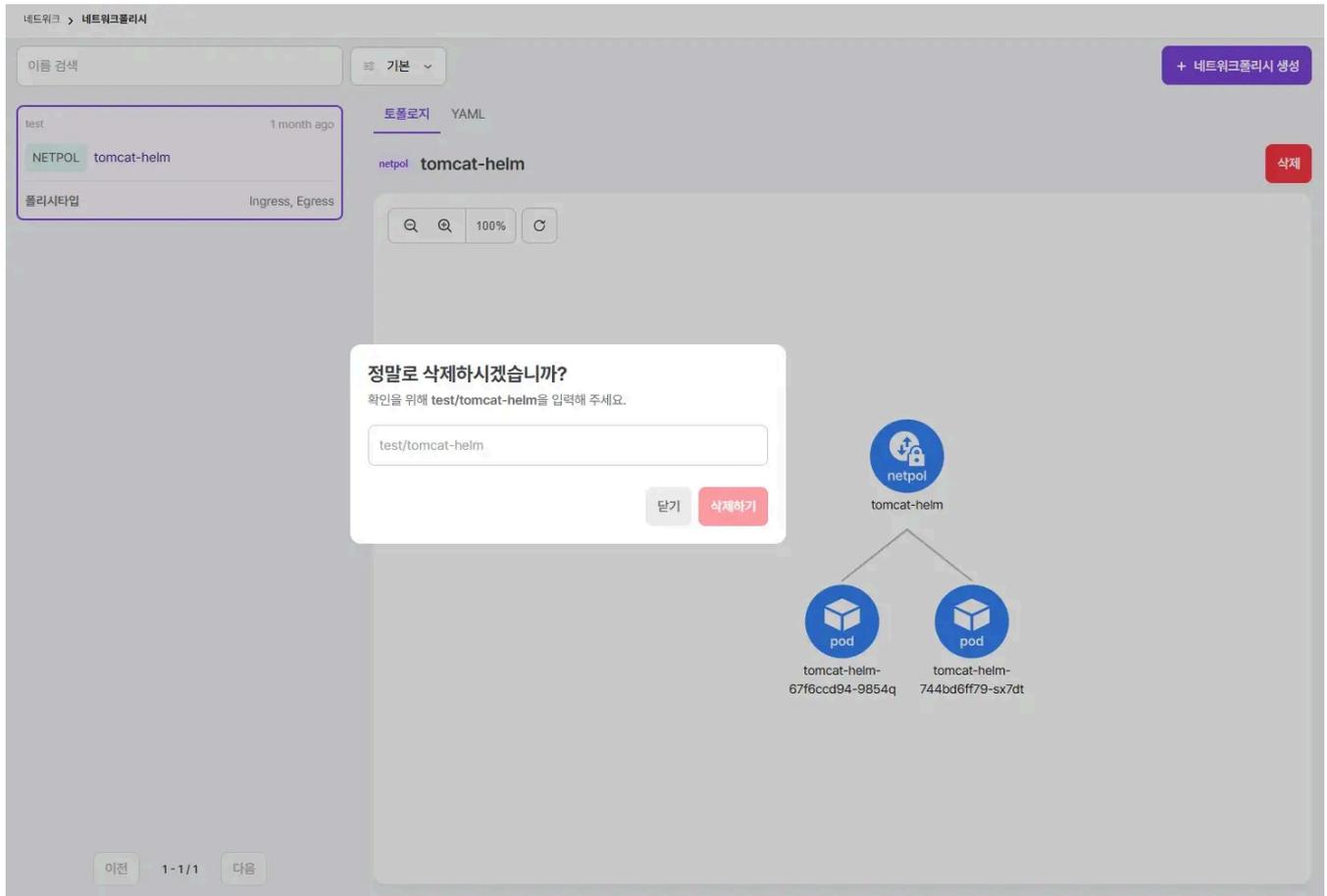
### 4.2.8.3.3. Modifying Network Policy

Select the network policy you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.



#### 4.2.8.3.4. Delete network policy

Select the network policy you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and network policy name in the modal.

## 4.2.9. Storage

In a container environment, disks have different characteristics than in a standard environment. Files stored within a container are temporary, and if the container is deleted, the stored content is also deleted. Considering the situation where pods operate as a collection of containers, data sharing must also be considered. Storage resources can address these issues. Storage resources preserve data even when a container is deleted and provide a way to share data across a collection of pods.

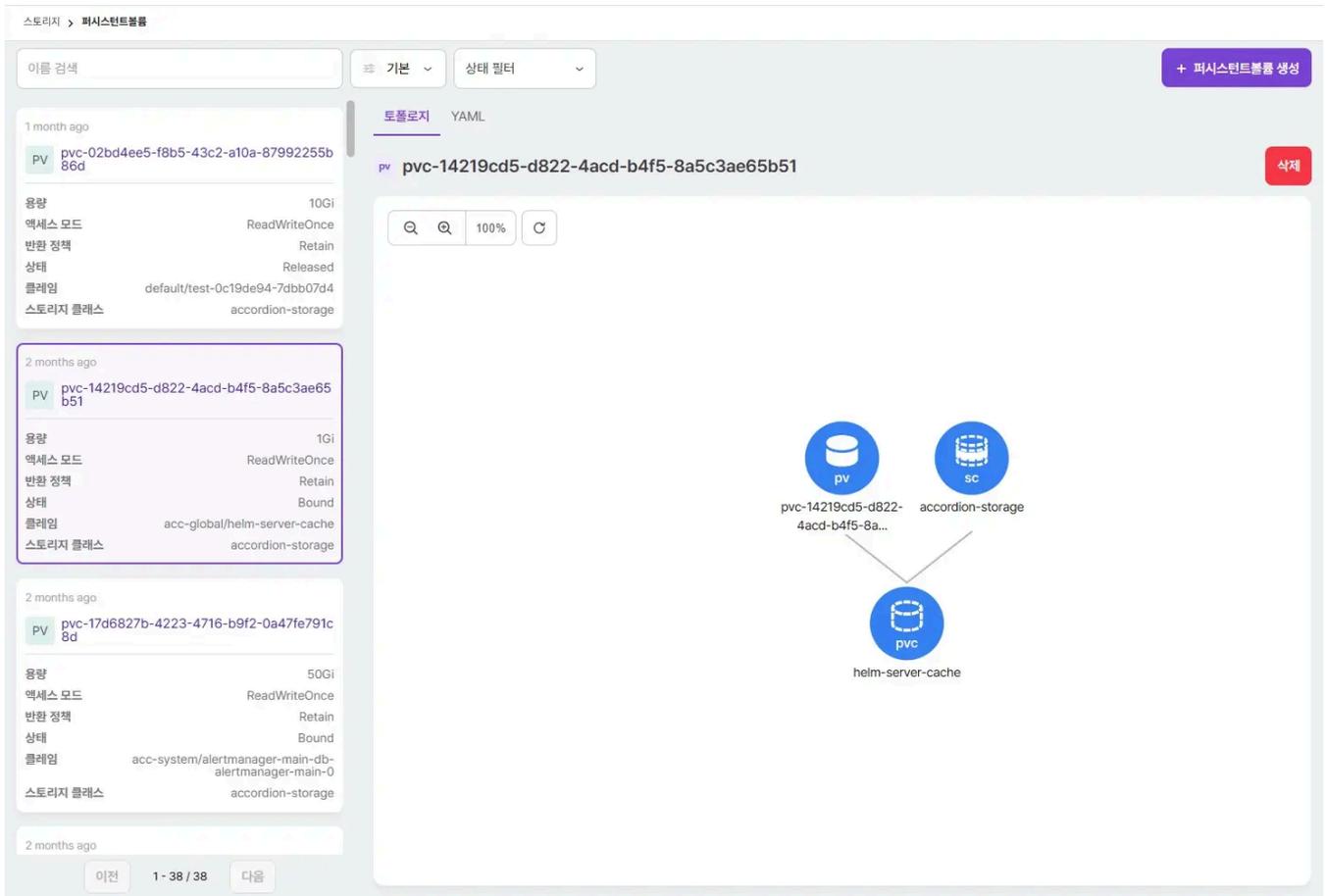
### 4.2.9.1. Persistent Volume

PersistentVolumes are storage in a cluster that you provision or dynamically provision using storage classes.

#### 4.2.9.1.1. Topology

This displays resources related to a PersistentVolume in topology form. Since the basic functionality is identical to that of a Pod, refer to the Pod Topology . The resources displayed in the PersistentVolume topology are as follows:

- Persistent volumes, storage classes
- Persistent Volume Claim



### 4.2.9.1.2. Creating a Persistent Volume

+ 퍼시스턴트볼륨 생성 You can create a Kubernetes PersistentVolume by entering the resource information on the screen that appears when you select .

스토리지 > 퍼시스턴트볼륨

← 퍼시스턴트볼륨 목록

+ 퍼시스턴트볼륨 생성

```

1  apiVersion: v1
2  kind: PersistentVolume
3

```

### 4.2.9.1.3. Modifying PersistentVolumes

Select the persistent volume you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply the changes.

스토리지 > 퍼시스턴트볼륨

이름 검색

기본

상태 필터

+ 퍼시스턴트볼륨 생성

1 month ago

PV pvc-02bd4ee5-f8b5-43c2-a10a-87992255b86d

용량	10Gi
액세스 모드	ReadWriteOnce
반환 정책	Retain
상태	Released
클레임	default/test-0c19de94-7dbb07d4
스토리지 클래스	accordion-storage

2 months ago

PV pvc-14219cd5-d822-4acd-b4f5-8a5c3ae65b51

용량	1Gi
액세스 모드	ReadWriteOnce
반환 정책	Retain
상태	Bound

이전

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다음

도플로지 YAML

pv pvc-14219cd5-d822-4acd-b4f5-8a5c3ae65b51

수정

삭제

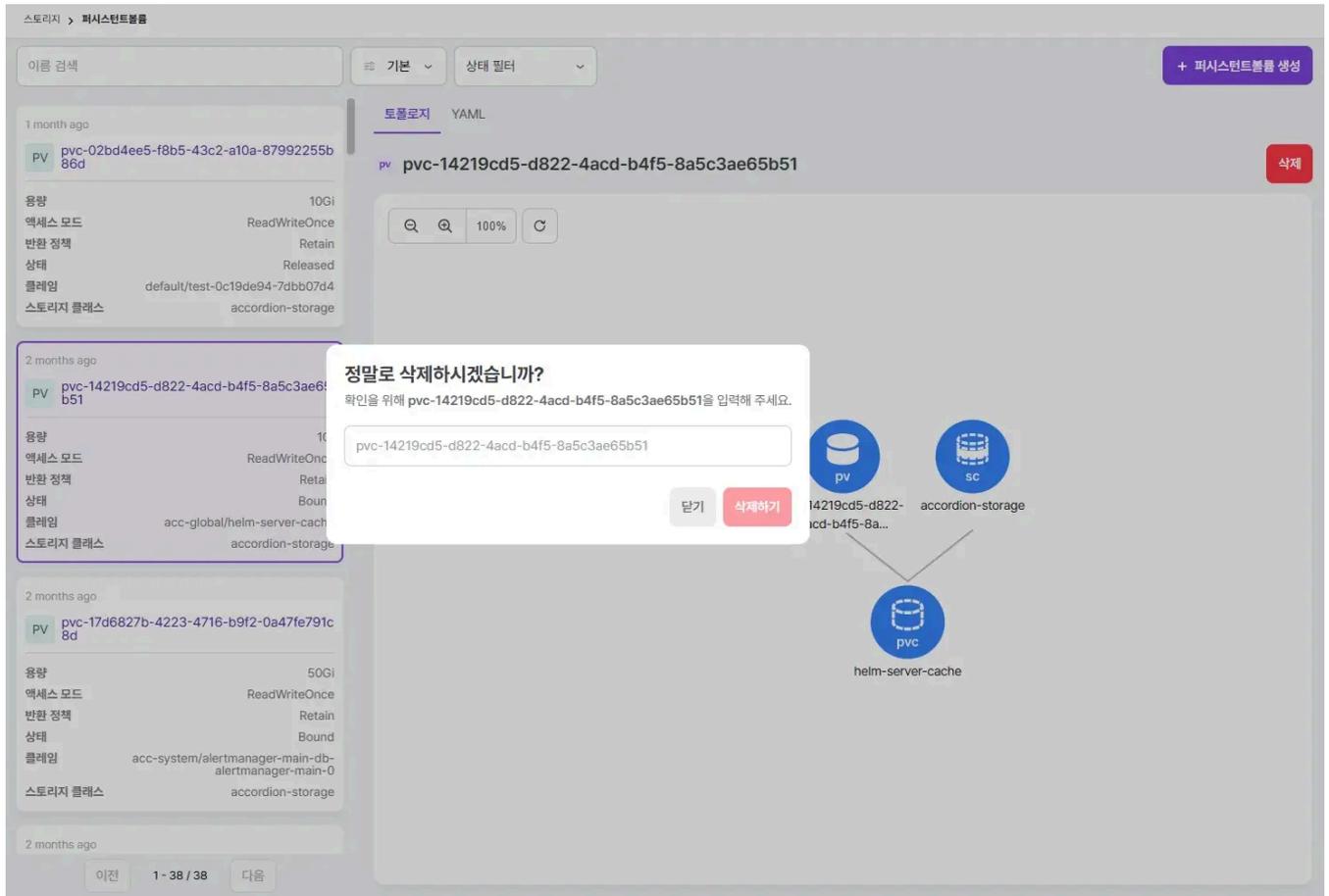
```

1  kind: PersistentVolume
2  apiVersion: v1
3  metadata:
4    name: pvc-14219cd5-d822-4acd-b4f5-8a5c3ae65b51
5    uid: cb30e666-dc31-403f-93cc-3924e055e7a6
6    resourceVersion: "6040"
7    creationTimestamp: "2024-10-29T08:26:16Z"
8  annotations:
9    pv.kubernetes.io/provisioned-by: accordion-data-provisioner
10  finalizers:
11    - kubernetes.io/pv-protection
12  managedFields: ...
53  spec:
54    capacity:
55      storage: 1Gi
56    nfs:
57      server: 10.10.0.84
58      path: >-
59    /volume3/stg-server/stg-host-cluster/acc-global-helm-server-cache-pvc-1

```

### 4.2.9.1.4. Deleting a PersistentVolume

Select the persistent volume you want to delete and 삭제 select the button on the right.



Delete by entering the persistent volume name in the modal.

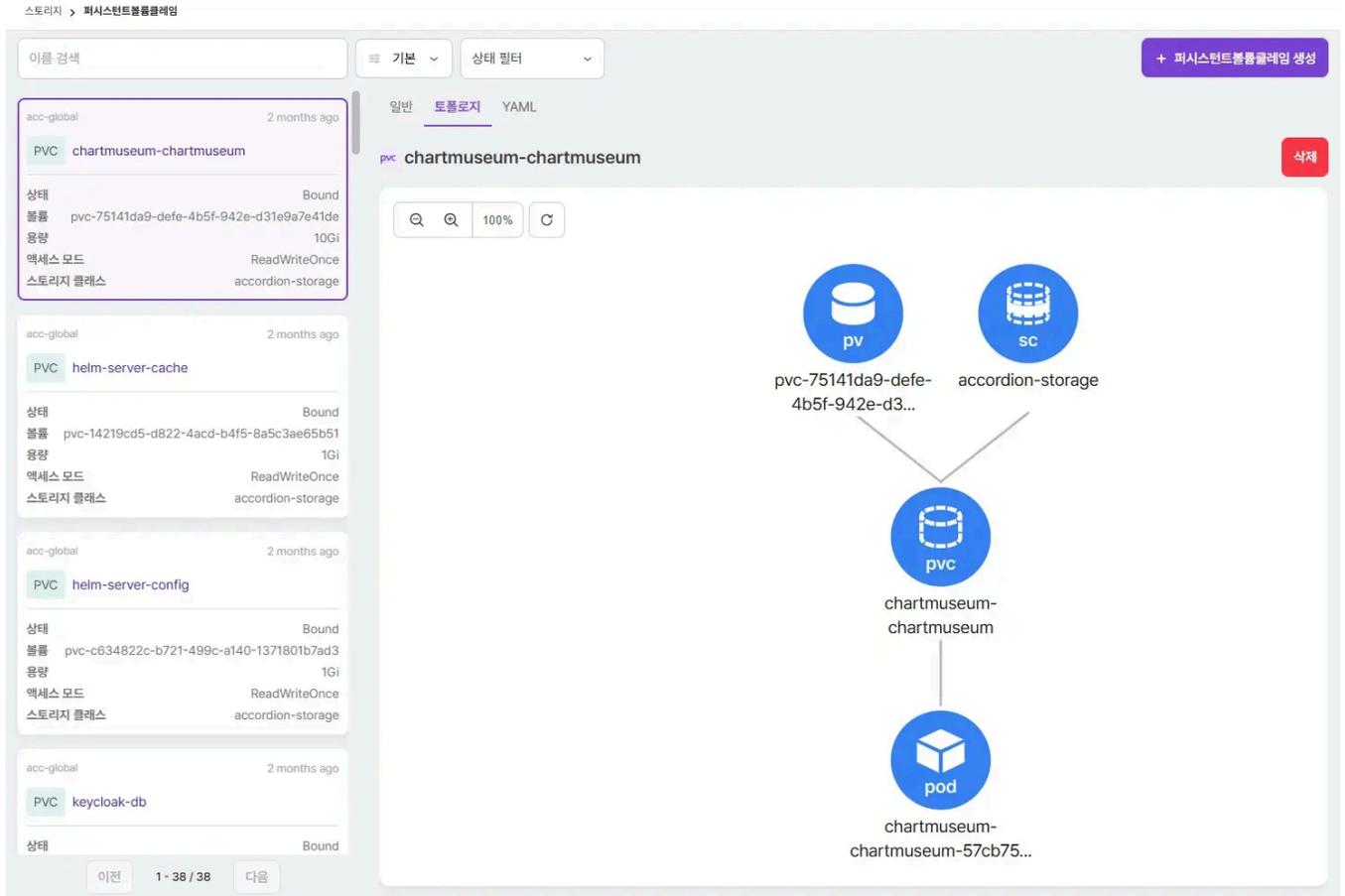
## 4.2.9.2. Persistent Volume Claims

A PersistentVolumeClaim is a request for user storage. A PersistentVolumeClaim uses PersistentVolume resources and can request a specific size and access mode.

### 4.2.9.2.1. Topology

This shows the resources associated with a PersistentVolumeClaim in topology form. Since the basic functionality is identical to that of a Pod, refer to the Pod Topology . The resources displayed in the PersistentVolumeClaim topology are as follows:

- Persistent volumes, storage classes
- Persistent Volume Claim
- Pod



### 4.2.9.2.2. Creating a Persistent Volume Claim

+ 퍼시스턴트볼륨클레임 생성 You can create a Kubernetes PersistentVolumeClaim resource by entering information on the screen that appears when you select . You can enter information in FORM/YAML when creating.

스토리지 > 퍼시스턴트볼륨클레임

← 퍼시스턴트볼륨클레임 목록 FORM  YAML  [퍼시스턴트볼륨클레임 생성](#)

**이름 \***

**네임스페이스 \***

**소스**

스토리지 클래스  라벨 선택터

**스토리지 클래스**

**선택터**

키	밸류	
		<input type="button" value="추가"/>

**액세스 모드 \***

ReadWriteOnce  ReadOnlyMany  ReadWriteMany  ReadWriteOncePod

**볼륨 모드 \***

파일 시스템  블록

**용량 \***

 Gi

### 4.2.9.2.3. Modifying a PersistentVolumeClaim

Select the persistent volume claim you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

스토리지 > 퍼시스턴트볼륨클레임

이름 검색

기반

상태 필터

+ 퍼시스턴트볼륨클레임 생성

acc-global 2 months ago

PVC chartmuseum-chartmuseum

---

상태 Bound

볼륨 pvc-75141da9-defe-4b5f-942e-d31e9a7e41de

용량 10Gi

액세스 모드 ReadWriteOnce

스토리지 클래스 accordion-storage

acc-global 2 months ago

PVC helm-server-cache

---

상태 Bound

볼륨 pvc-14219cd5-d822-4acd-b4f5-8a5c3ae65b51

용량 1Gi

액세스 모드 ReadWriteOnce

스토리지 클래스 accordion-storage

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일반 토폴로지 YAML

pvc chartmuseum-chartmuseum

수정

삭제

```

1 kind: PersistentVolumeClaim
2 apiVersion: v1
3 metadata:
4   name: chartmuseum-chartmuseum
5   namespace: acc-global
6   uid: 75141da9-defe-4b5f-942e-d31e9a7e41de
7   resourceVersion: "4888"
8   creationTimestamp: "2024-10-29T08:25:19Z"
9   labels:
10    app: chartmuseum-chartmuseum
11    release: chartmuseum
12 annotations:
13   kubectl.kubernetes.io/last-applied-configuration: >
14     {"apiVersion":"v1","kind":"PersistentVolumeClaim","metadata":{"annotat
15   pv.kubernetes.io/bind-completed: "yes"
16   pv.kubernetes.io/bound-by-controller: "yes"
17   release-name: chartmuseum
18   release-namespace: acc-global
19   volume.beta.kubernetes.io/storage-provisioner: accordion-data-provisioner
20   volume.kubernetes.io/storage-provisioner: accordion-data-provisioner

```

#### 4.2.9.2.4. Deleting a PersistentVolumeClaim

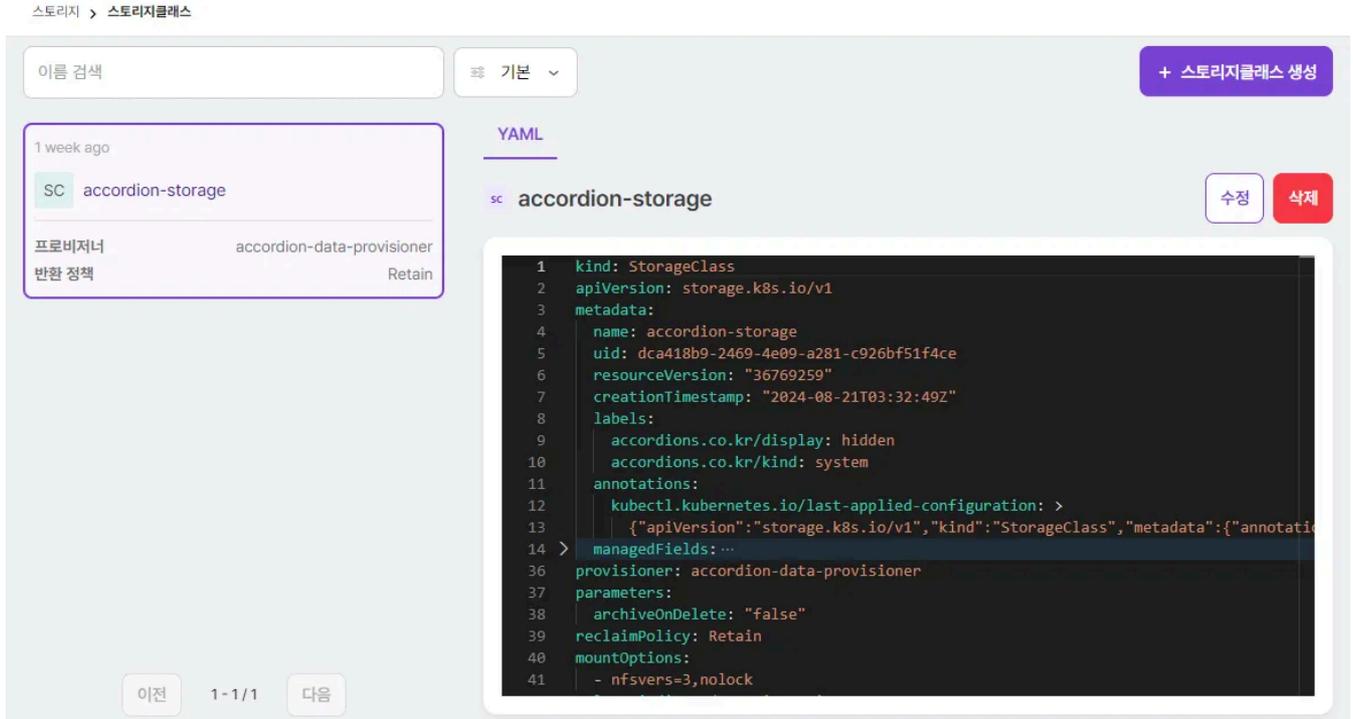
Select the persistent volume claim you want to delete and 삭제 select the button on the right.

The screenshot shows the Accordion interface for managing PersistentVolumeClaims (PVCs). On the left, a list of PVCs is displayed, including 'chartmuseum-chartmuseum', 'helm-server-cache', 'helm-server-config', and 'keycloak-db'. The 'chartmuseum-chartmuseum' PVC is selected. On the right, a detailed view of this PVC is shown, including its status (Bound), volume ID, capacity (10Gi), access mode (ReadWriteOnce), and storage class (accordion-storage). A red '삭제' (Delete) button is visible in the top right corner of the PVC details panel. A modal dialog is open in the center, asking '정말로 삭제하시겠습니까?' (Are you sure you want to delete?). The dialog contains the text '확인을 위해 acc-global/chartmuseum-chartmuseum을 입력해 주세요.' (Please enter acc-global/chartmuseum-chartmuseum for confirmation.) and a text input field with the value 'acc-global/chartmuseum-chartmuseum'. There are '닫기' (Close) and '삭제하기' (Delete) buttons at the bottom of the modal. In the background, a dependency diagram shows the PVC connected to a Storage Class (SC) and a Persistent Volume (PV), which are both connected to a pod labeled 'chartmuseum-chartmuseum-57cb75...'.

Delete by entering the namespace and persistent volume claim name in the modal.

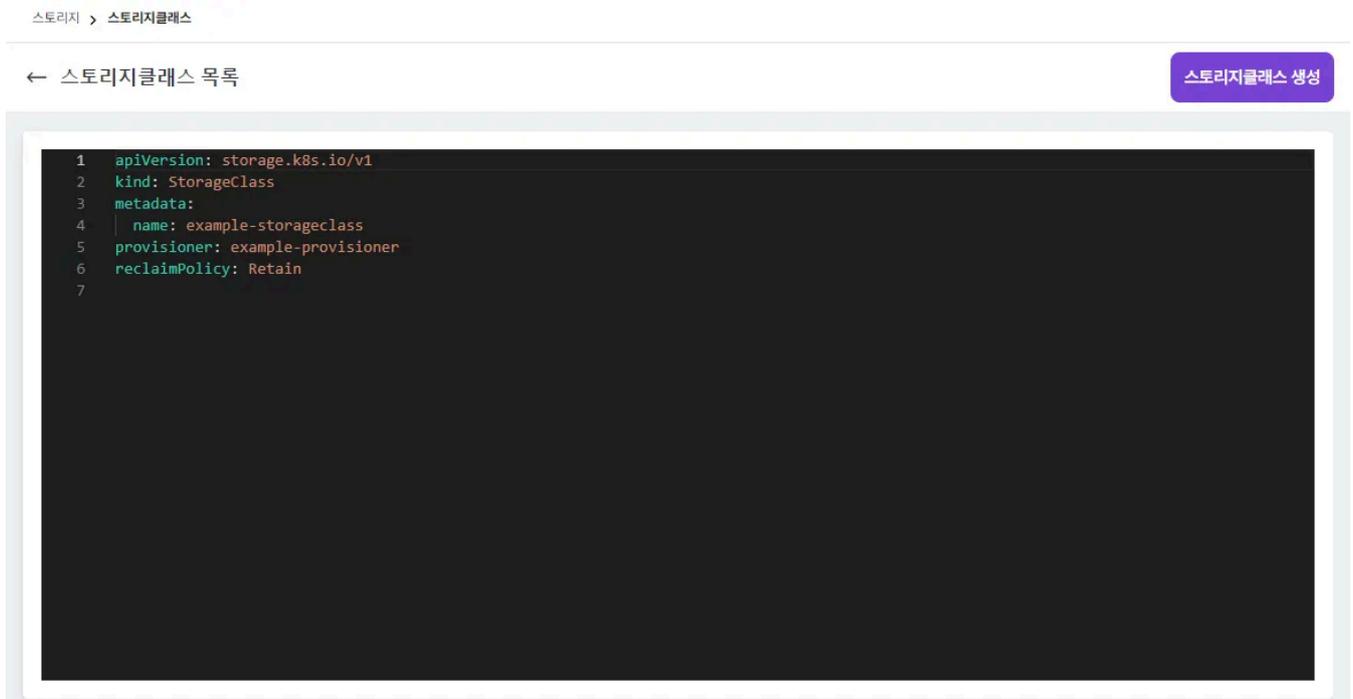
### 4.2.9.3. Storage Class

A storage class dynamically provisions persistent volumes that belong to that storage class.



#### 4.2.9.3.1. Creating a Storage Class

+ 스토리지클래스 생성 You can create it by entering Kubernetes storage class resource information on the screen that appears when you select .



### 4.2.9.3.2. Modifying the storage class

Select the storage class you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

### 4.2.9.3.3. Deleting a Storage Class

Select the storage class you want to delete and 삭제 select the button on the right.

The screenshot shows the Accordion interface for managing storage classes. On the left, a list of storage classes is displayed, including 'accordion-storage' (created 7 hours ago), 'jenkins-pv' (8 months ago), and 'kikim-test' (5 months ago). The 'accordion-storage' class is selected, and its details are shown on the right, including the 'YAML' editor. A modal dialog is open in the center, asking for confirmation to delete the storage class. The dialog text is as follows:

정말로 삭제하시겠습니까?  
 확인을 위해 accordion-storage를 입력해 주세요.  
  
 닫기 삭제하기

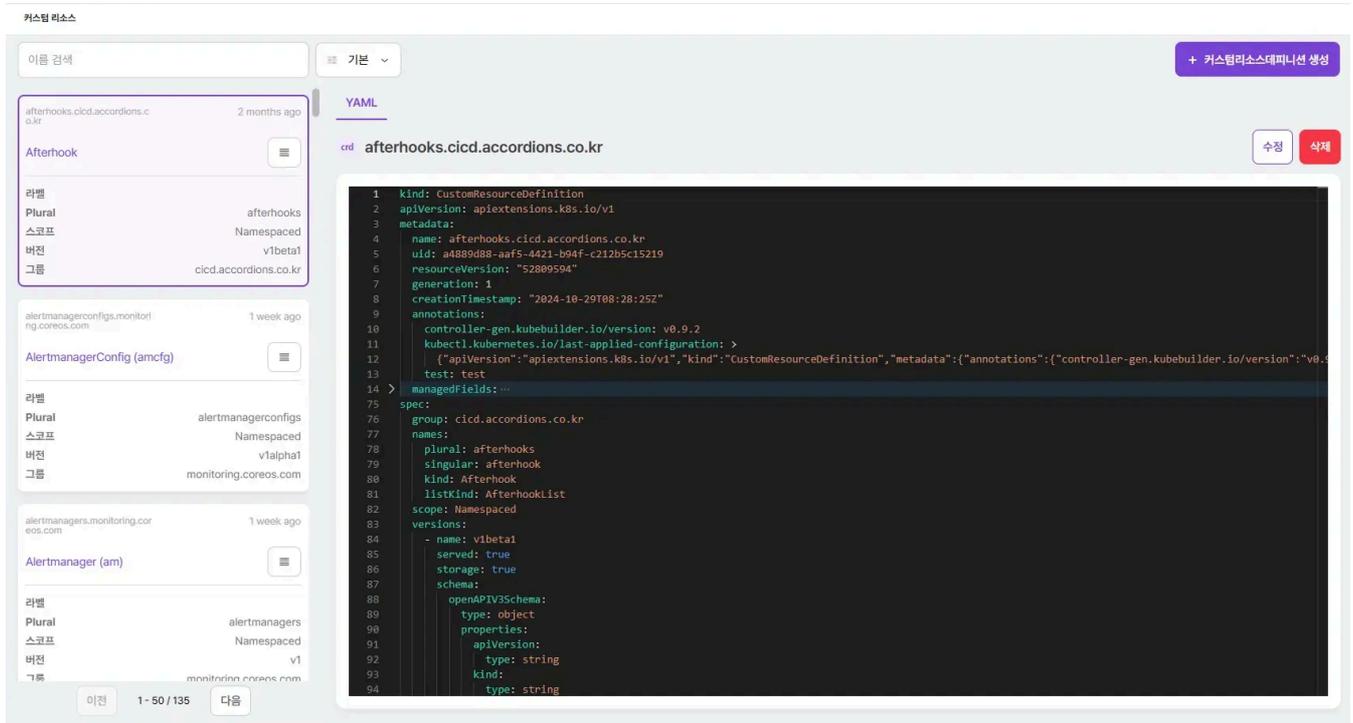
The background shows the YAML editor with the following content:

```
1 kind: StorageClass
2 apiVersion: storage.k8s.io/v1
3 metadata:
4   name: accordion-storage
5   uid: 28d27d49-875f-498d-b46b-9b14d7ab8d6f
...
39 reclaimPolicy: Delete
40 mountOptions:
41   - nfsvers=3,noexec,nolock
42 volumeBindingMode: WaitForFirstConsumer
43
```

Delete by entering the storage class name in the modal.

## 4.2.10. Custom Resources

Custom resources allow you to create user-defined objects. In addition to the resources provided by Kubernetes, you can use resources within Kubernetes itself.



### 4.2.10.1. Creating a Custom Resource

+ 커스텀리소스데피니션 생성 You can create a Kubernetes custom resource by entering resource information on the screen that appears when you select .

커스텀 리소스

← 커스텀리소스데피니션 목록

커스텀리소스데피니션 생성

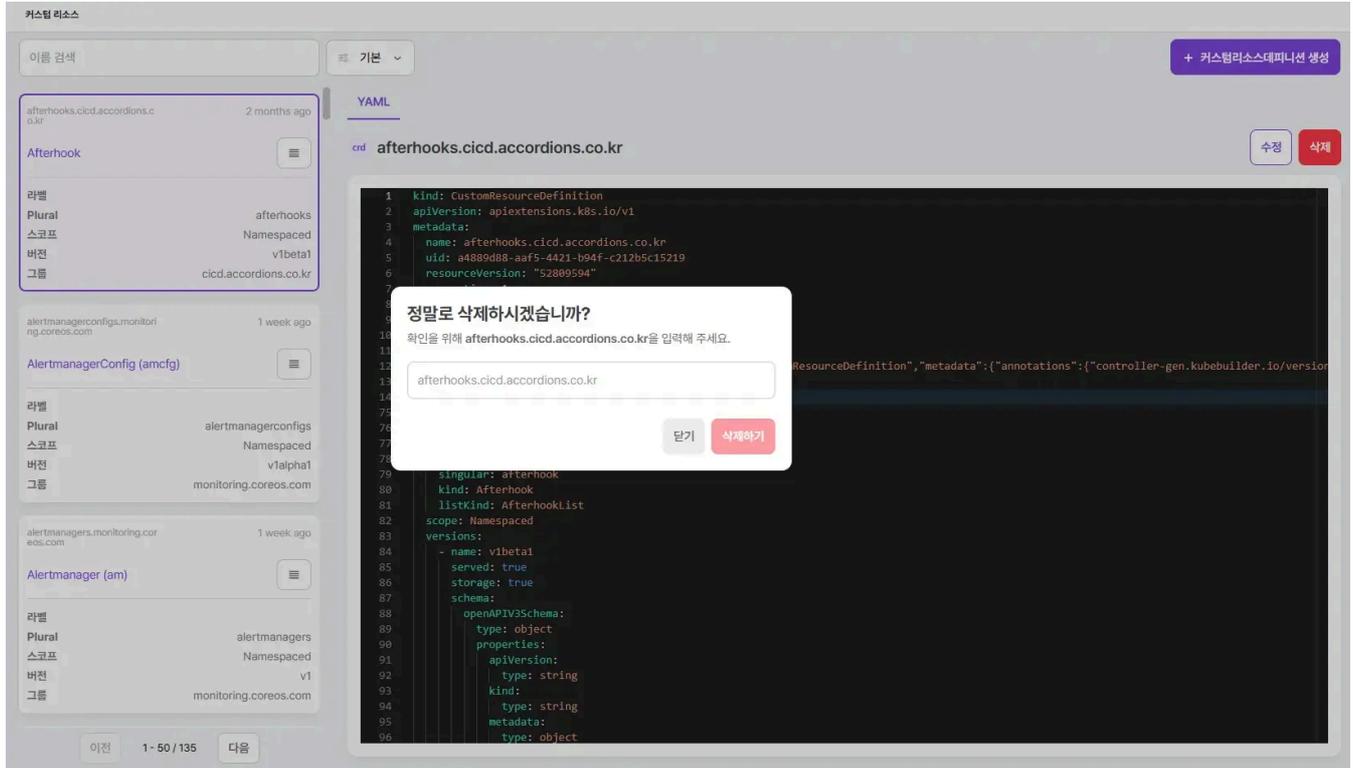
```
1 apiVersion: apiextensions.k8s.io/v1
2 kind: CustomResourceDefinition
3
```

### 4.2.10.2. Modifying Custom Resources

Select the custom resource you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply it.

### 4.2.10.3. Deleting a Custom Resource

Select the custom resource you want to delete and 삭제 select the button on the right.



Delete by entering the custom resource name in the modal.

## 4.2.11. Access Control

Access control controls user access to resources based on Kubernetes' RBAC (Role-Based Access Control).

### 4.2.11.1. Roll

Roles specify permissions for APIs or resources in a specific namespace.

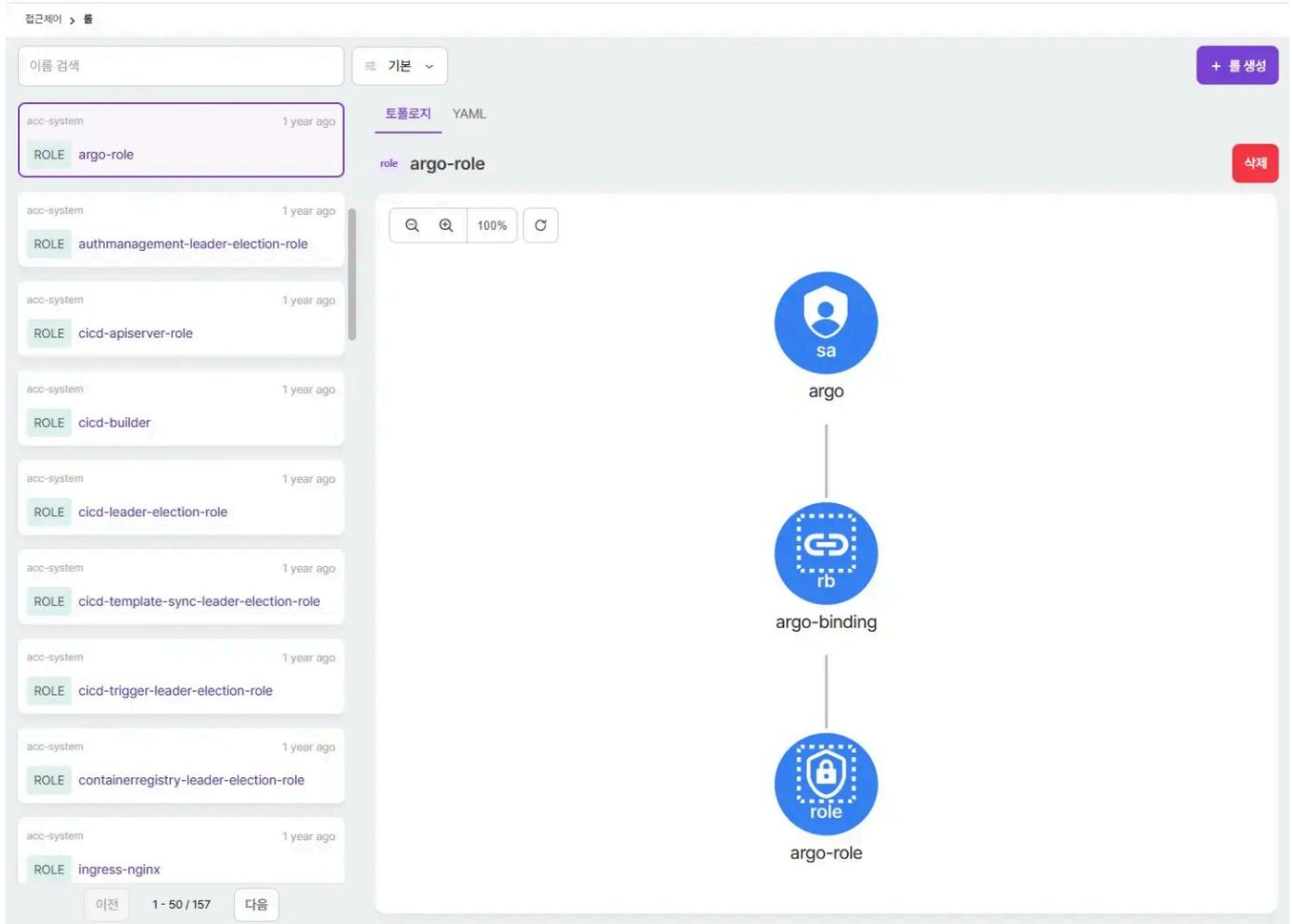
#### 4.2.11.1.1. Topology

This displays resources related to a role in topology form.

Since the basic functionality is identical to that of a pod, refer to the pod topology .

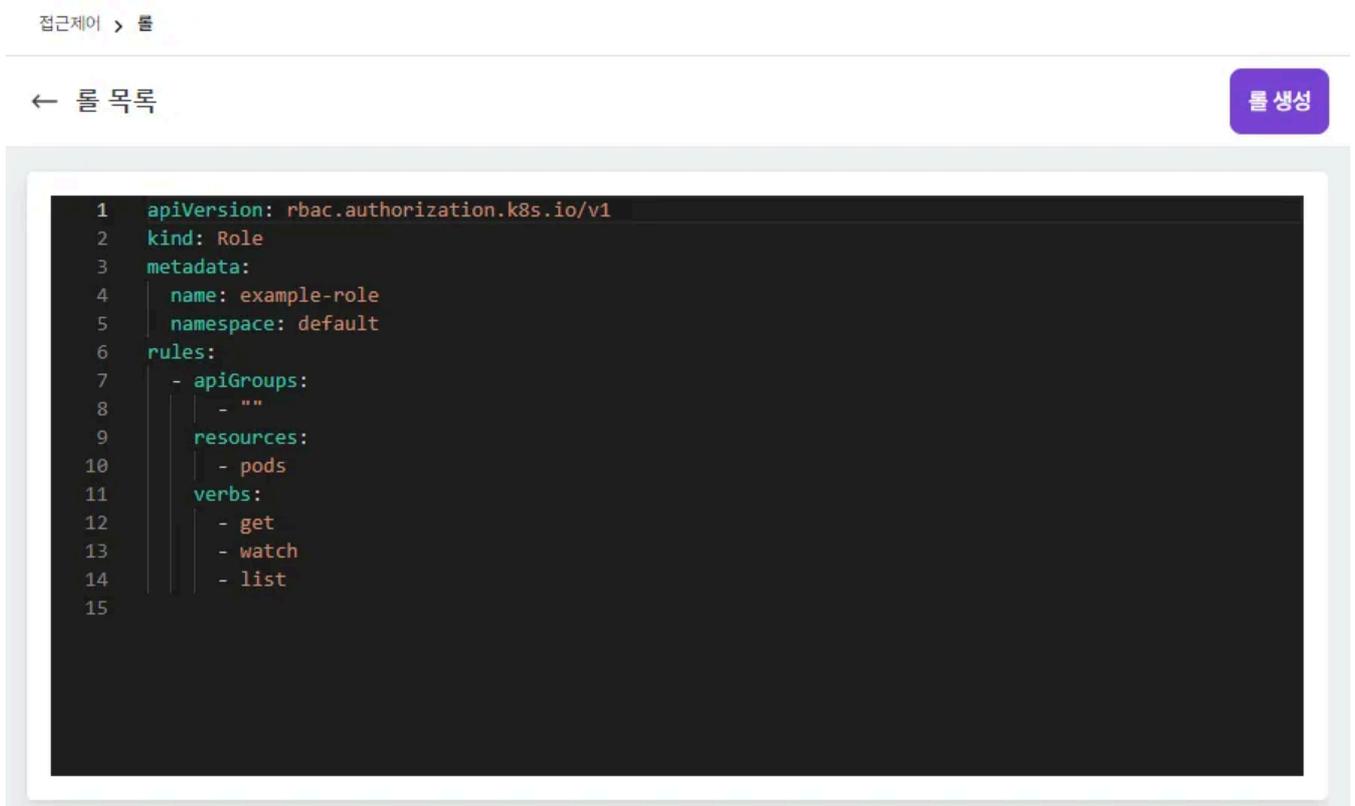
The resources output from the role topology are as follows.

- Service account
- Roll binding
- Roll



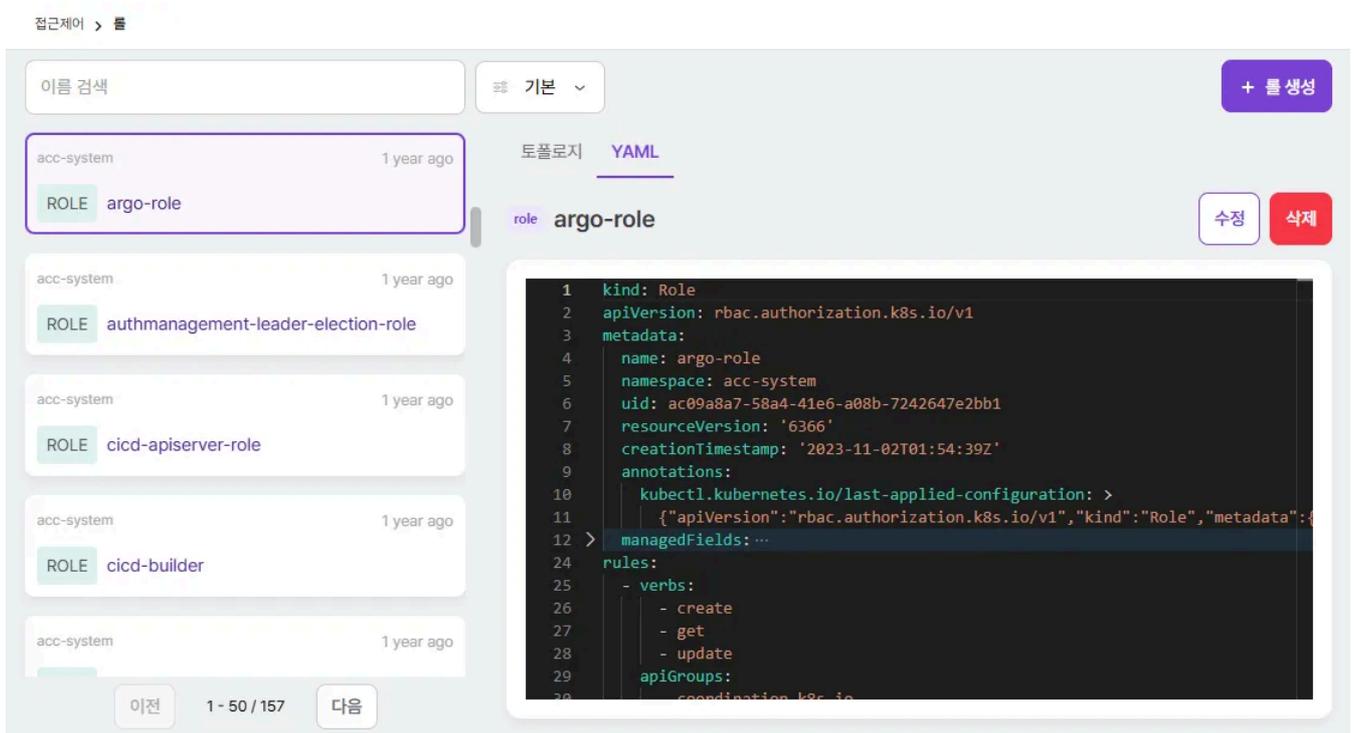
### 4.2.11.1.2. Role Creation

+ 를 생성 You can create it by entering Kubernetes role resource information on the screen that appears when you select .



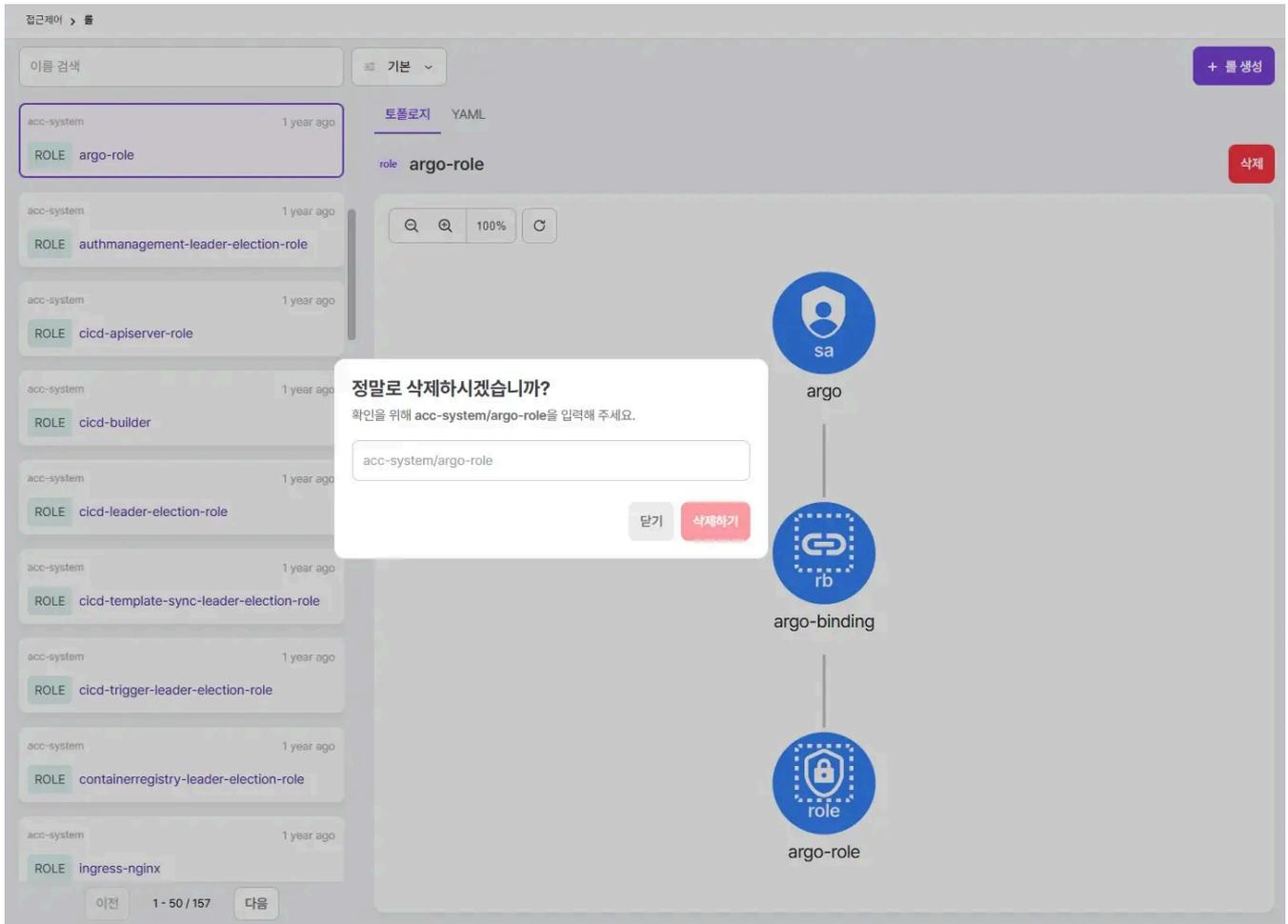
### 4.2.11.1.3. Roll Fix

Select the role you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.



#### 4.2.11.1.4. Delete Roll

Select the role you want to delete and 삭제 select the button on the right.



Delete by entering the namespace and role name in the modal.

### 4.2.11.2. Roll binding

Role binding associates a role/cluster role with a service account in a specific namespace, allowing the specified service accounts to use the specified role.

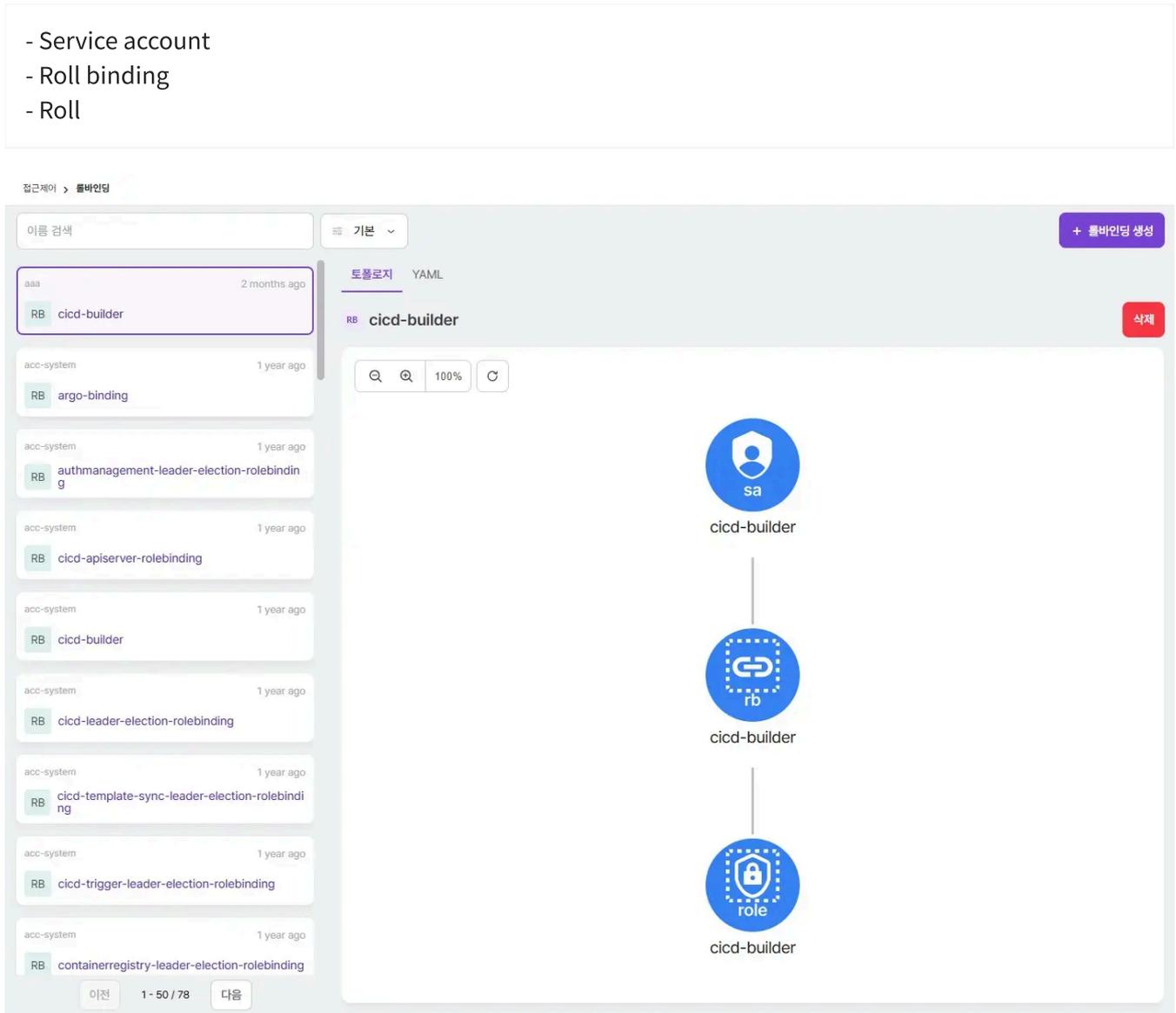
#### 4.2.11.2.1. Topology

This shows resources related to role binding in topology form.

Since the basic functionality is identical to that of pods, refer to the pod topology .

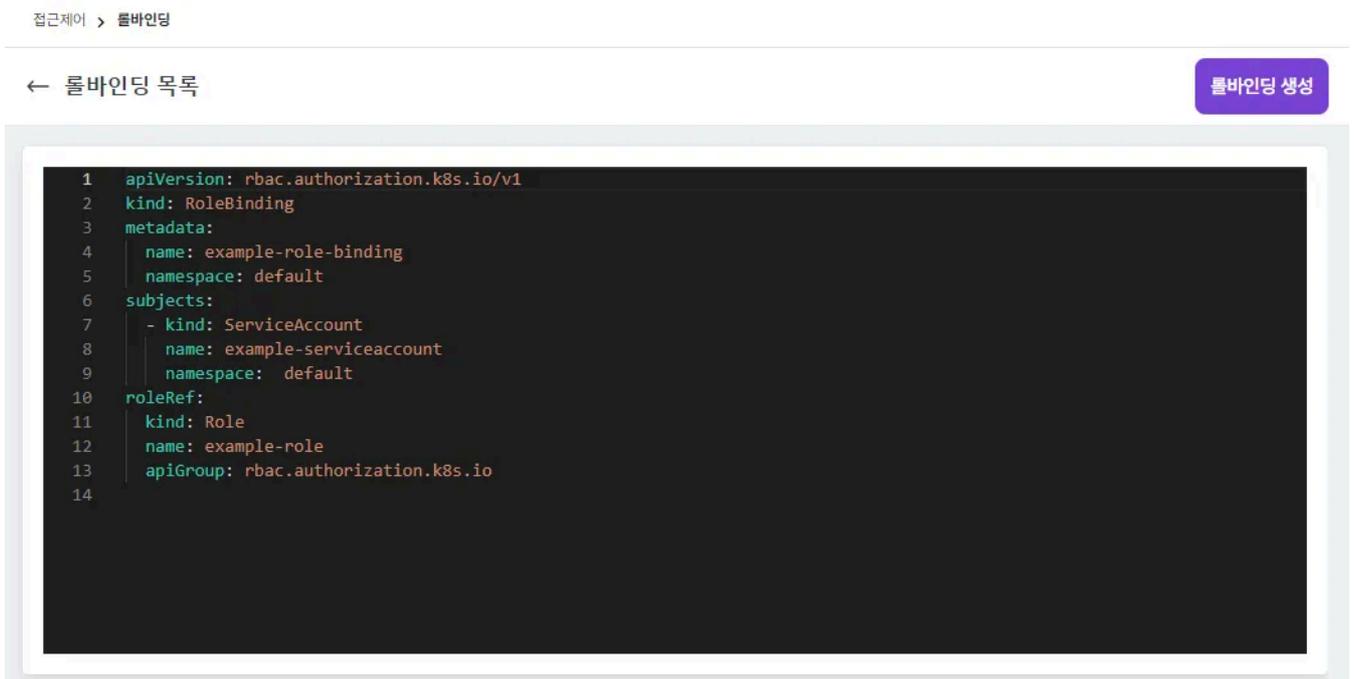
The resources output from the role binding topology are as follows.

- Service account
- Roll binding
- Roll



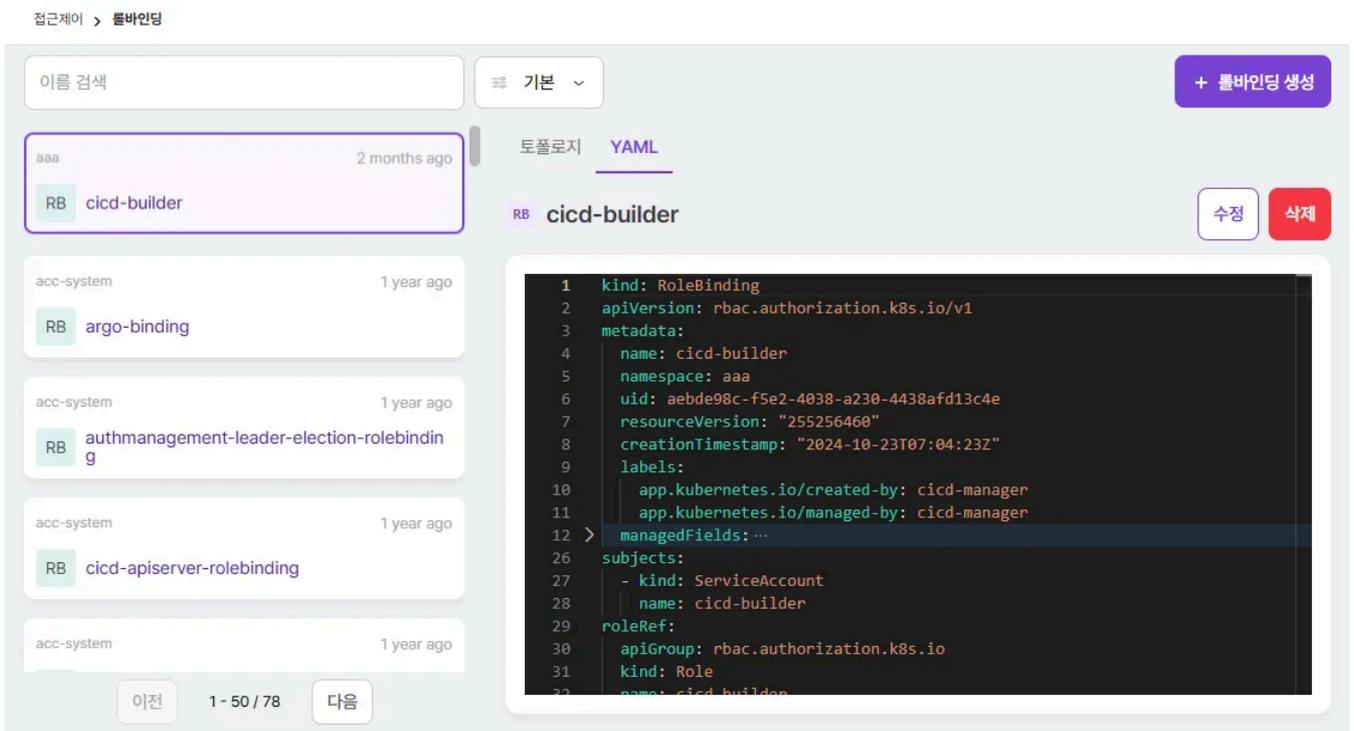
### 4.2.11.2.2. Creating a Roll Binding

+ 롤바인딩 생성 You can create it by entering Kubernetes role binding resource information on the screen that appears when you select .



### 4.2.11.2.3. Roll binding fix

Select the role binding you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.



#### 4.2.11.2.4. Deleting roll binding

Select the roll binding you want to delete and 삭제 select the button on the right.

The screenshot shows the 'Accordion' interface for managing role bindings. On the left, a list of role bindings is displayed, including 'aaa/cicd-builder' (2 months ago), 'argo-binding' (1 year ago), and others. The 'aaa/cicd-builder' entry is selected. On the right, the details for 'cicd-builder' are shown, including a '삭제' (Delete) button. A modal dialog is open in the center, asking '정말로 삭제하시겠습니까?' (Are you sure you want to delete?). The dialog contains the text '확인용 위해 aaa/cicd-builder를 입력해 주세요.' (Please enter aaa/cicd-builder for confirmation) and a text input field with 'aaa/cicd-builder' entered. There are '닫기' (Close) and '삭제하기' (Delete) buttons at the bottom of the modal.

Delete by entering the namespace and role binding name in the modal.

### 4.2.11.3. Cluster roll

Cluster roles specify permissions for APIs or resources in the cluster.

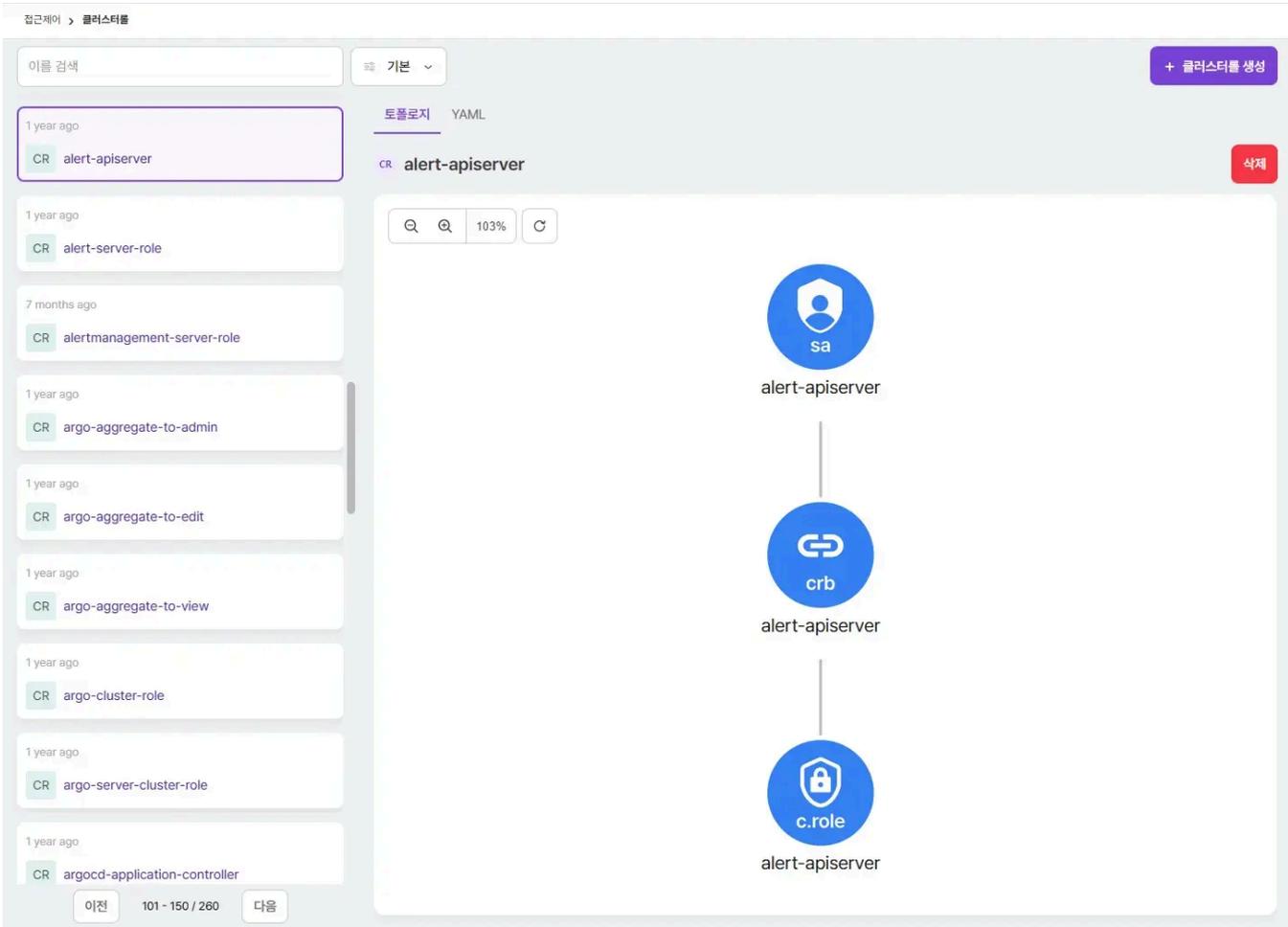
#### 4.2.11.3.1. Topology

This shows resources related to a cluster role in topological form.

Since the basic functionality is identical to that of a pod, refer to the pod topology .

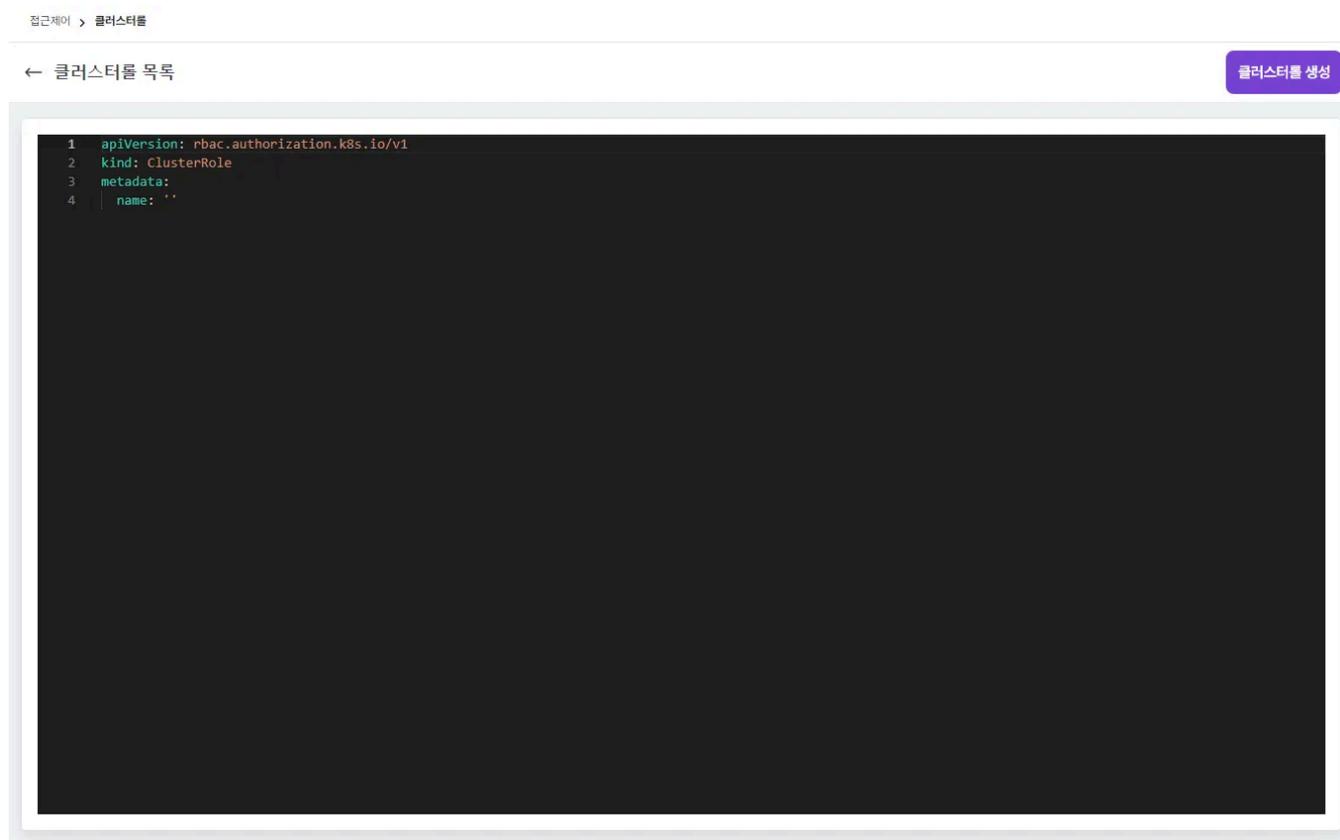
The resources output from the topology of the cluster role are as follows.

- Service account
- Cluster roll binding
- Cluster roll



### 4.2.11.3.2. Creating a Cluster Role

+ 클러스터를 생성 You can create a Kubernetes cluster by entering resource information on the screen that appears when you select .



### 4.2.11.3.3. Cluster Role Modification

Select the cluster role you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.

접근제어 > 클러스터들

이름 검색 ☰ 기본 + 클러스터를 생성

1 year ago 도플로지 YAML

CR alert-apiserver 수정 삭제

1 year ago  
CR alert-apiserver

1 year ago  
CR alert-server-role

7 months ago  
CR alertmanagement-server-role

1 year ago  
CR argo-aggregate-to-admin

1 year ago

이전 101 - 150 / 260 다음

```

1 kind: ClusterRole
2 apiVersion: rbac.authorization.k8s.io/v1
3 metadata:
4   name: alert-apiserver
5   uid: 3fbec954-5bac-464d-96e4-216ccb2138c6
6   resourceVersion: "9335"
7   creationTimestamp: "2023-11-02T01:59:01Z"
8   annotations:
9     kubectl.kubernetes.io/last-applied-configuration: >
10    [{"apiVersion":"rbac.authorization.k8s.io/v1","kind":"ClusterRole","meta
11 > managedFields: ...
23 rules:
24   - verbs:
25     - get
26     - list
27     - watch
28     apiGroups:
29     - management.accordions.co.kr
30     resourceNames:

```

#### 4.2.11.3.4. Deleting a Cluster Role

Select the cluster role you want to delete and 삭제 select the button on the right.

The screenshot shows the '클러스터롤' (Cluster Roles) page in the Accordion interface. On the left, a list of cluster roles is displayed, including 'alert-apiserver', 'alert-server-role', 'alertmanagement-server-role', 'argo-aggregate-to-admin', 'argo-aggregate-to-edit', 'argo-aggregate-to-view', 'argo-cluster-role', 'argo-server-cluster-role', and 'argocd-application-controller'. The 'alert-apiserver' role is selected. On the right, the details for 'alert-apiserver' are shown, including a '삭제' (Delete) button. A modal dialog is open, asking '정말로 삭제하시겠습니까?' (Are you sure you want to delete?). The dialog contains the text '확인을 위해 alert-apiserver를 입력해 주세요.' (Please enter alert-apiserver for confirmation.) and a text input field with 'alert-apiserver' entered. There are '닫기' (Close) and '삭제하기' (Delete) buttons in the dialog.

Delete by entering the cluster role name in the modal.

### 4.2.11.4. Cluster Roll Binding

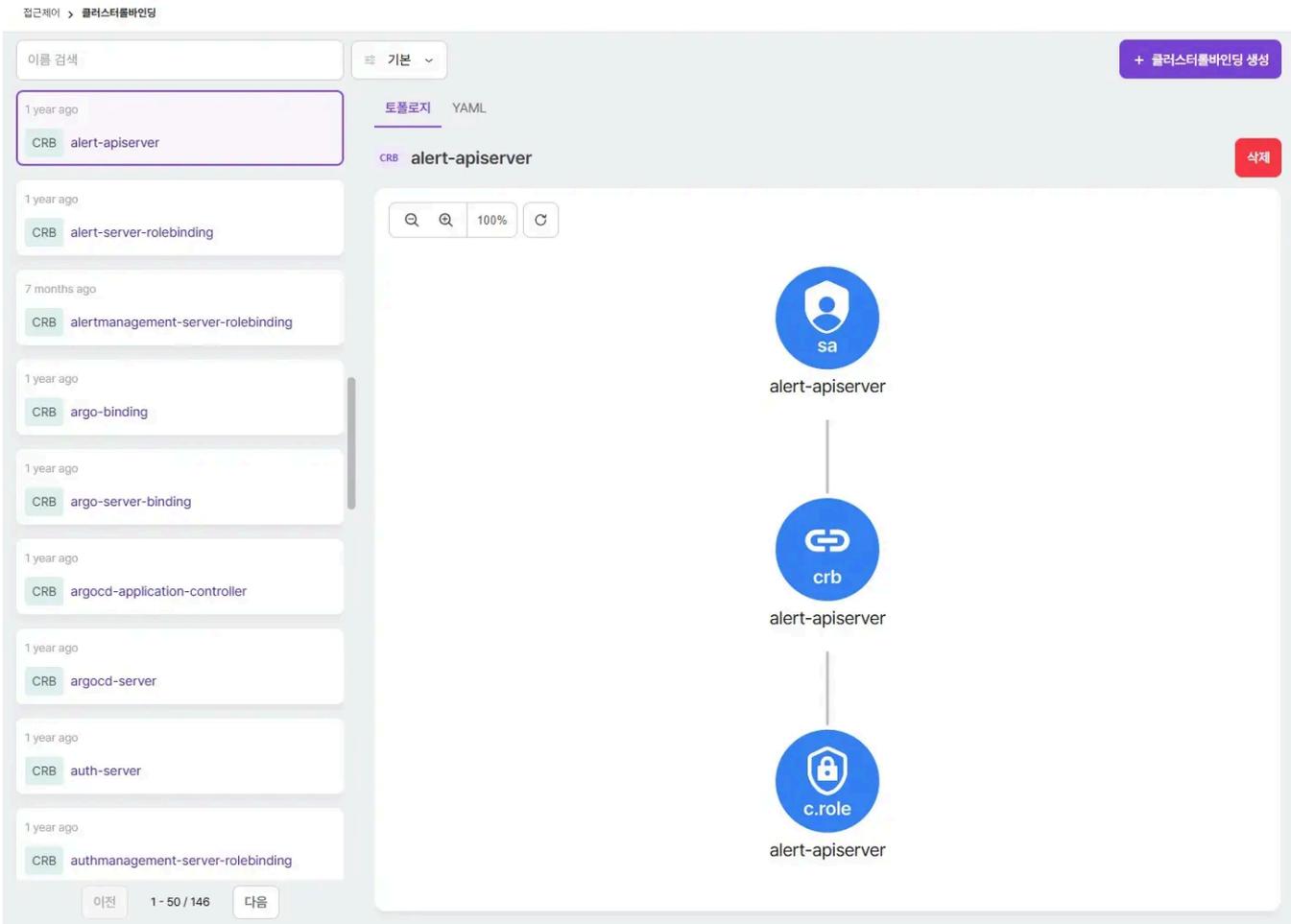
Cluster role binding links a cluster role to a service account, allowing the specified service accounts to use the specified cluster role.

#### 4.2.11.4.1. Topology

This shows resources related to cluster role binding in topological form. Since the basic functionality is identical to that of pods, refer to pod topology .

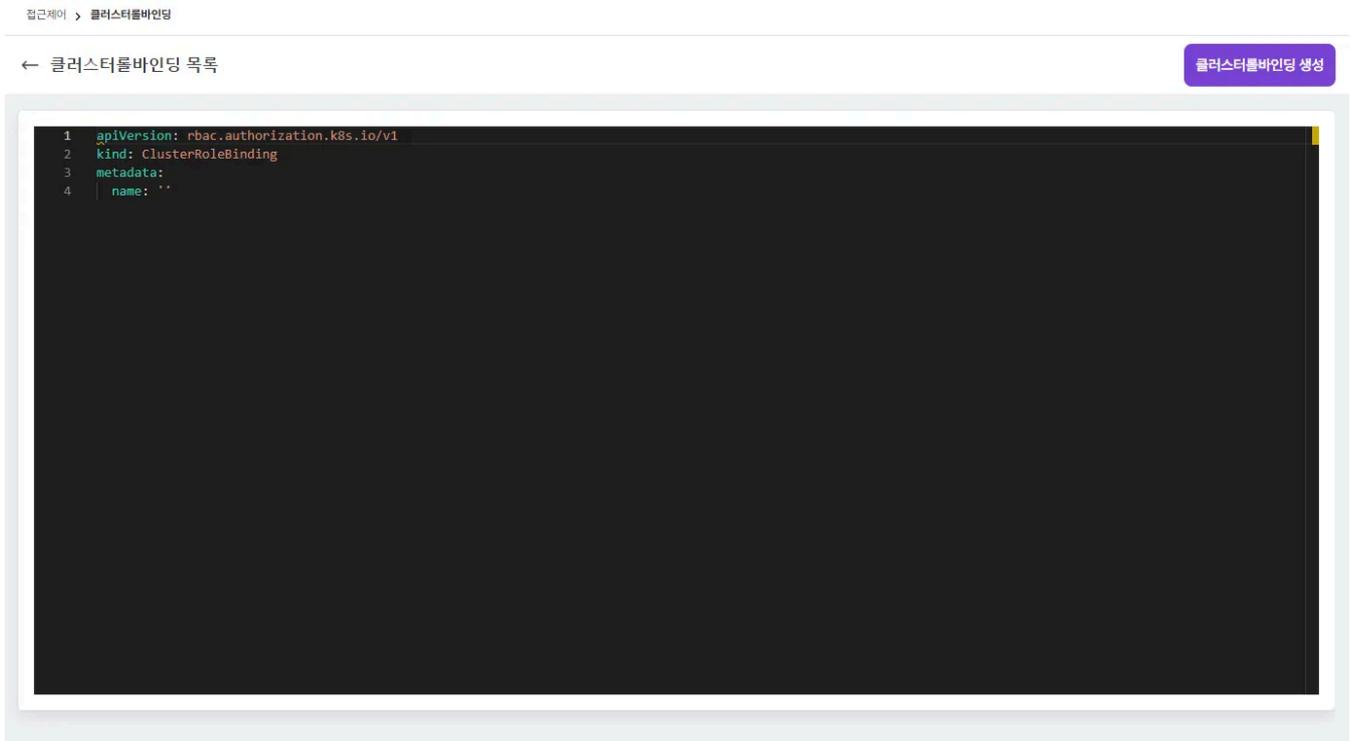
The resources output from the topology of cluster role binding are as follows:

- Service account
- Cluster roll binding
- Cluster roll



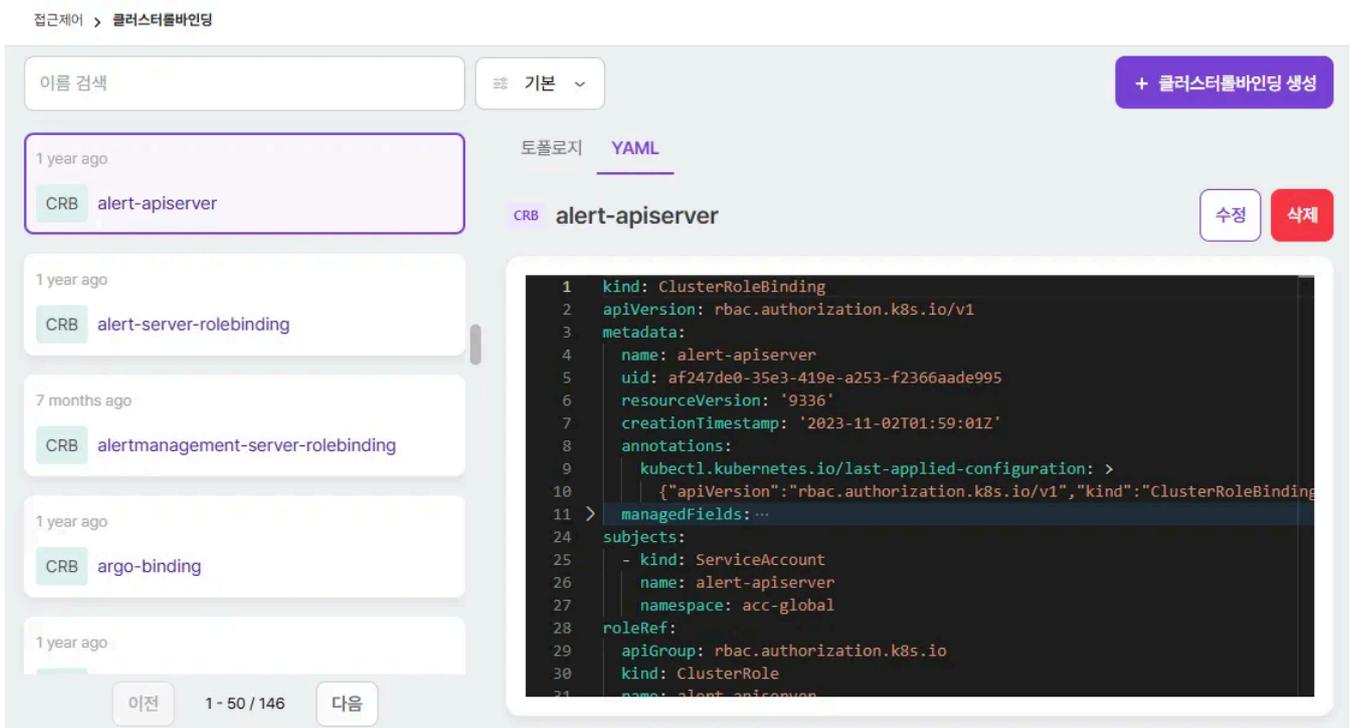
### 4.2.11.4.2. Creating a Cluster Role Binding

+ 클러스터롤바인딩 생성 You can create a Kubernetes cluster role binding resource by entering the resource information on the screen that appears when you select .



### 4.2.11.4.3. Cluster Role Binding Modification

Select the cluster role binding you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply.



#### 4.2.11.4.4. Deleting a Cluster Role Binding

Select the cluster role binding you want to delete and 삭제 select the button on the right.

The screenshot displays the '클러스터롤바인딩' (Cluster Role Bindings) management interface. On the left, a list of CRBs is shown, with 'alert-apiserver' selected. On the right, the details for 'alert-apiserver' are visible, including a diagram showing its components: 'sa', 'crb', and 'c.role'. A modal dialog is open in the center, asking for confirmation to delete the selected CRB. The dialog text reads: '정말로 삭제하시겠습니까?' (Are you sure you want to delete?), '확인을 위해 alert-apiserver를 입력해 주세요.' (Please enter alert-apiserver for confirmation.), and a text input field containing 'alert-apiserver'. There are '닫기' (Close) and '삭제하기' (Delete) buttons at the bottom of the modal.

Delete by entering the cluster role binding name in the modal.

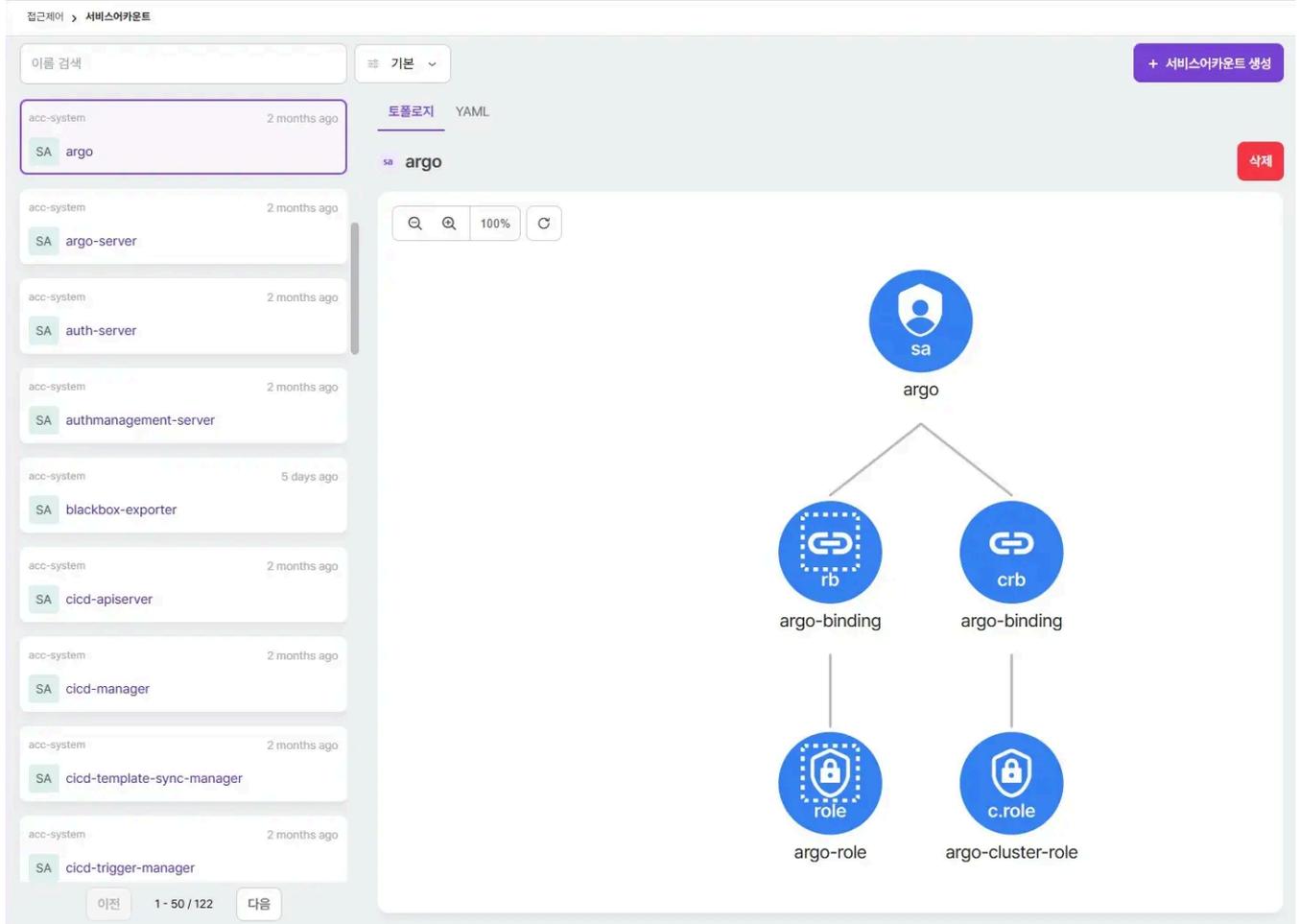
### 4.2.11.5. Service Account

A service account is a resource that identifies the permissions of a pod when accessing the Kubernetes API.

#### 4.2.11.5.1. Topology

This displays resources related to a service account in topology form. Since the basic functionality is identical to that of a pod, refer to the pod topology . The resources displayed in the service account topology are as follows.

- Service account
- Roll binding, cluster roll binding
- Roll, cluster roll



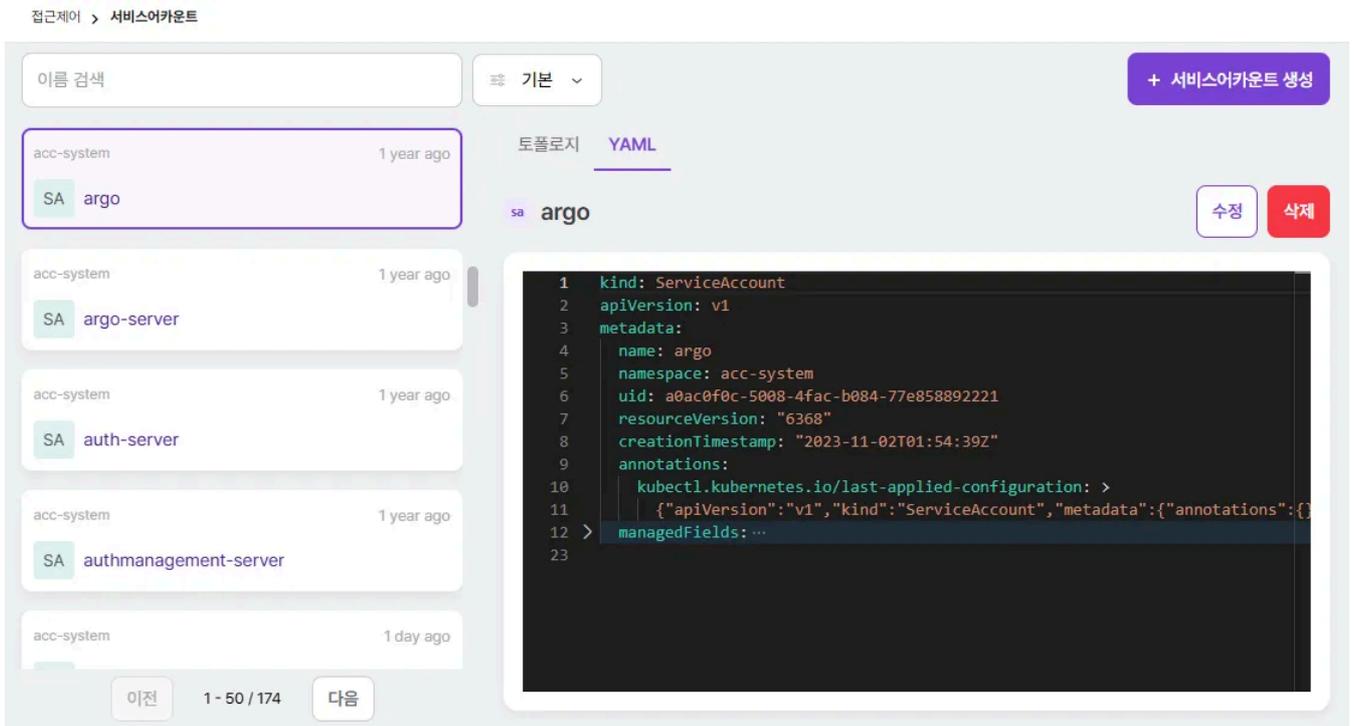
### 4.2.11.5.2. Creating a Service Account

+ 서비스어카운트 생성 You can create it by entering Kubernetes service account resource information on the screen that appears when you select .



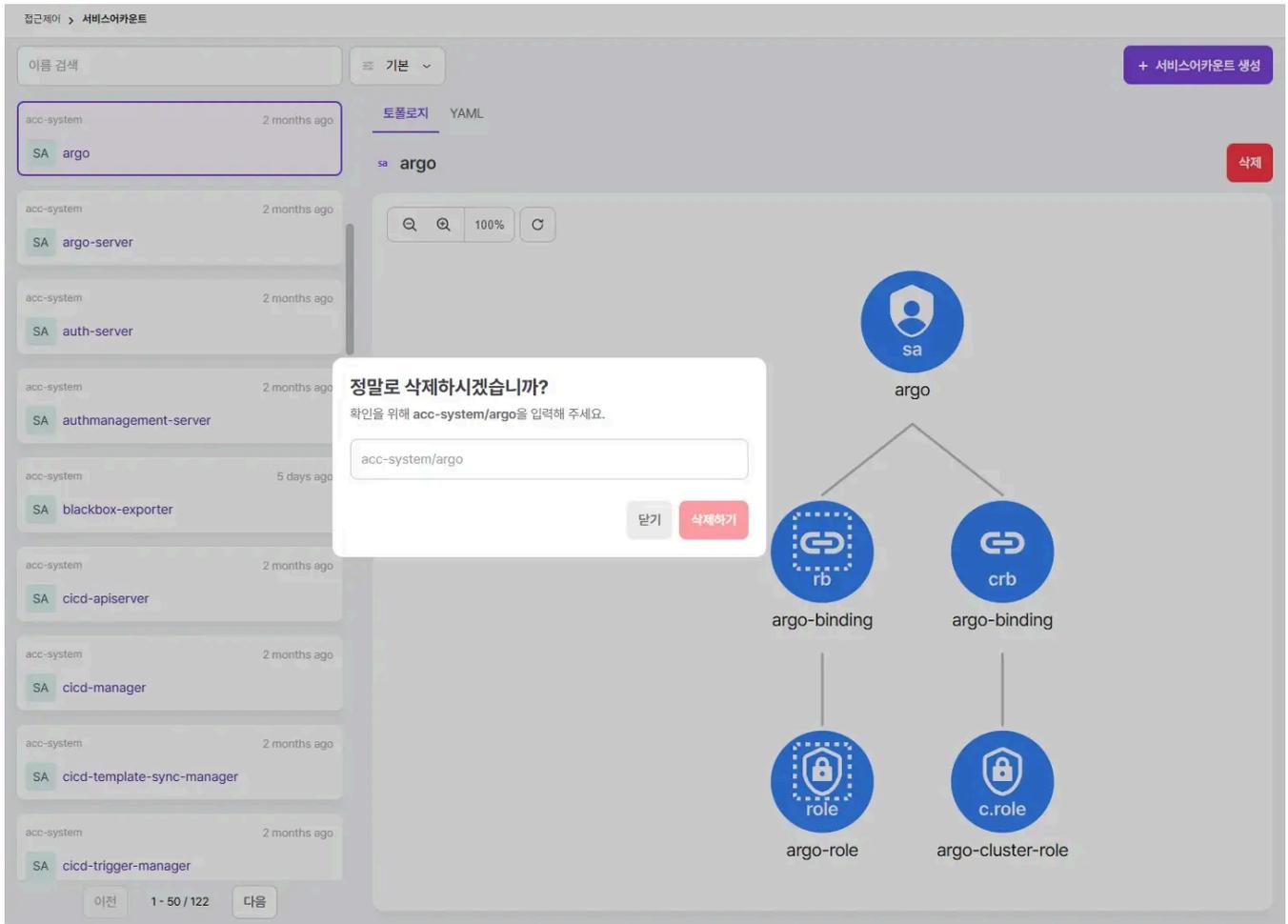
### 4.2.11.5.3. Modify service account

Select the service account you want to modify, change the information in the YAML editor on the right, and then 수정 select the button to apply the changes.



### 4.2.11.5.4. Deleting a Service Account

Select the service account you want to delete and 삭제 select the button on the right.



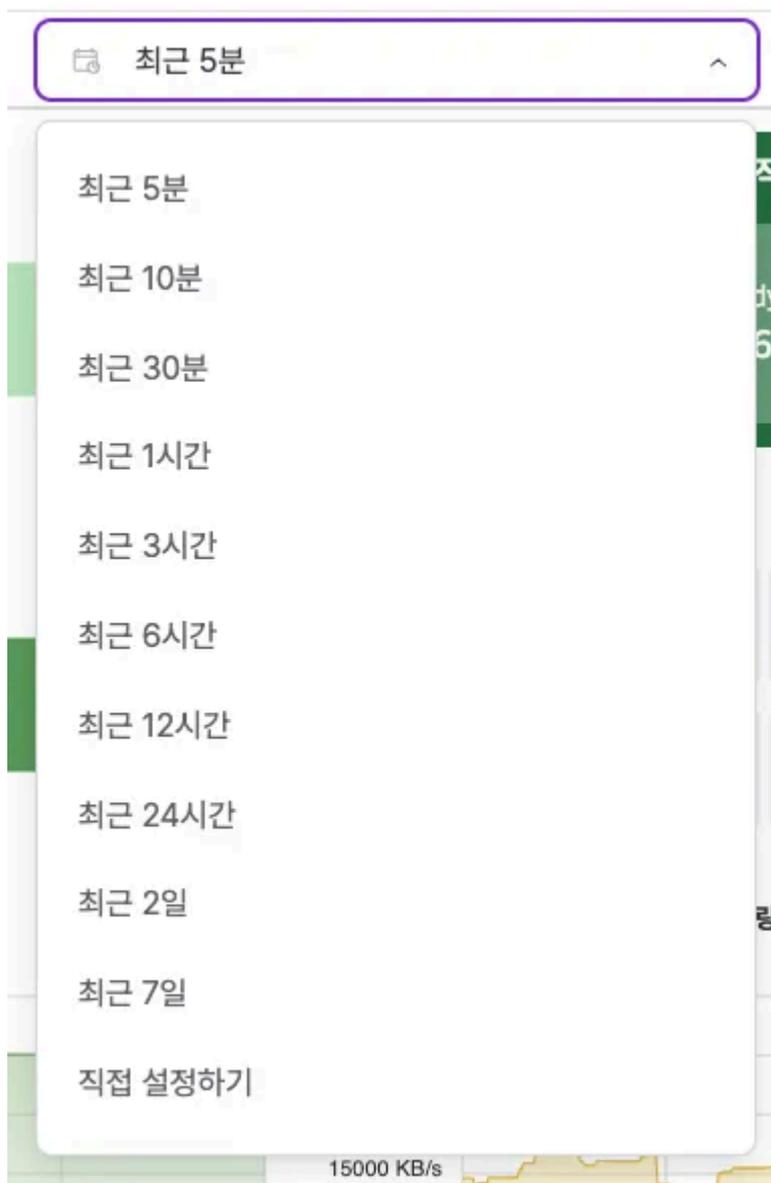
Delete by entering the namespace and service account name in the modal.

## 4.2.12. Monitoring

Monitoring provides cluster-specific monitoring. Monitoring provides a service mesh for system information, log information (e.g., event logs, audit logs, container logs), and service traffic information, enabling operators to monitor clusters and applications within Accordion from various perspectives, ensuring stable system operation.

Monitoring metrics can be searched by time, using the two methods below.

First, you can check monitoring data by setting a time interval starting from the most recent point in time. The period can be specified in minutes (5, 10, or 30), hours (1, 3, 6, 12, or 24), or days (2, 7).



Second, you can select "Set manually" to view information for your desired search date/time. Select a start date from the Start Time calendar and an end date from the End Time calendar, then click "Set" to apply your desired search period.

### 직접 설정하기

**시작 시간**

2025.01.07 09:52:35

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2025

1

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일	월	화	수	목	금	토
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

9

52

35

**종료 시간**

2025.01.07 09:52:35

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2025

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일	월	화	수	목	금	토
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

9

52

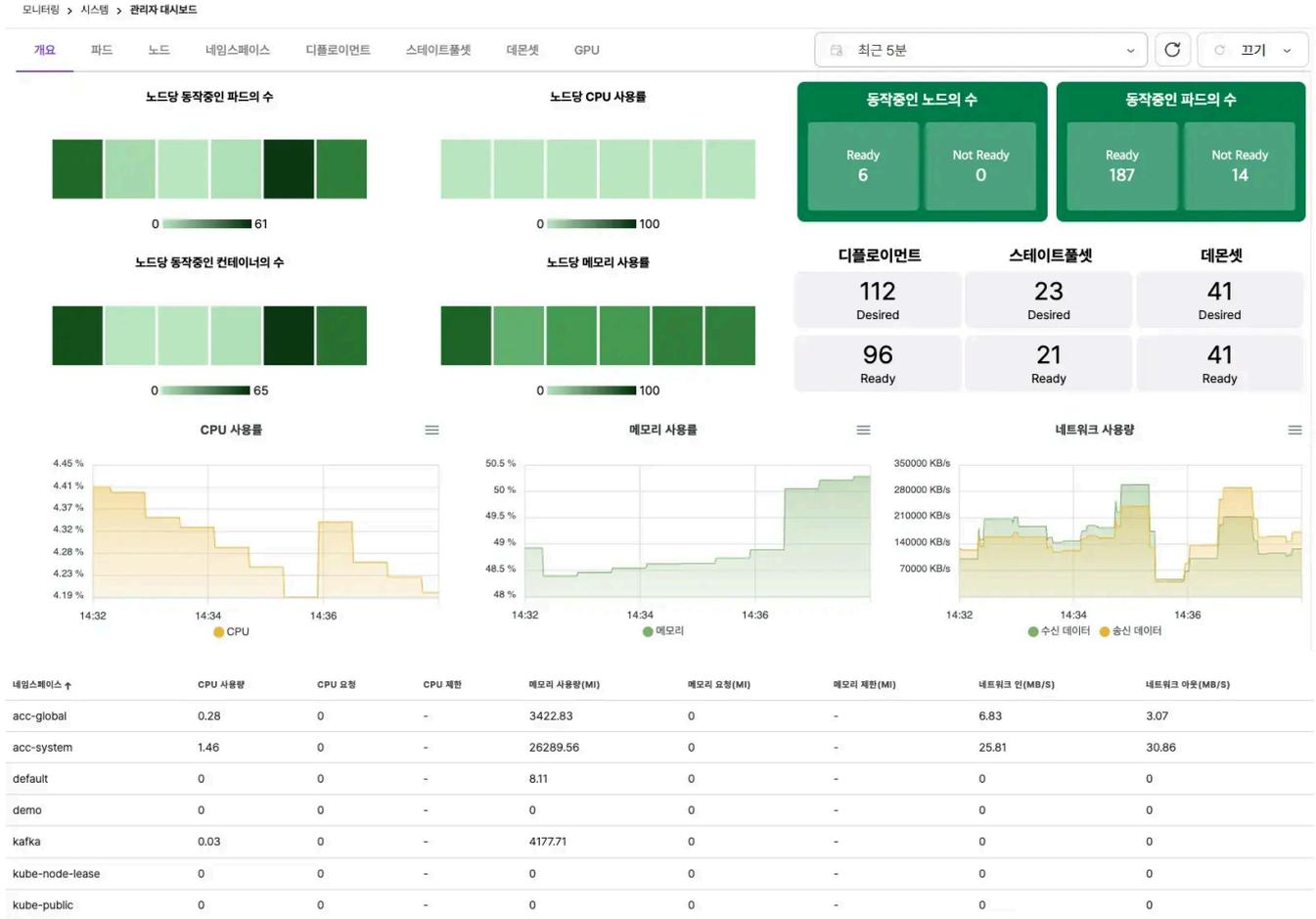
35

닫기

설정

### 4.2.12.1. System

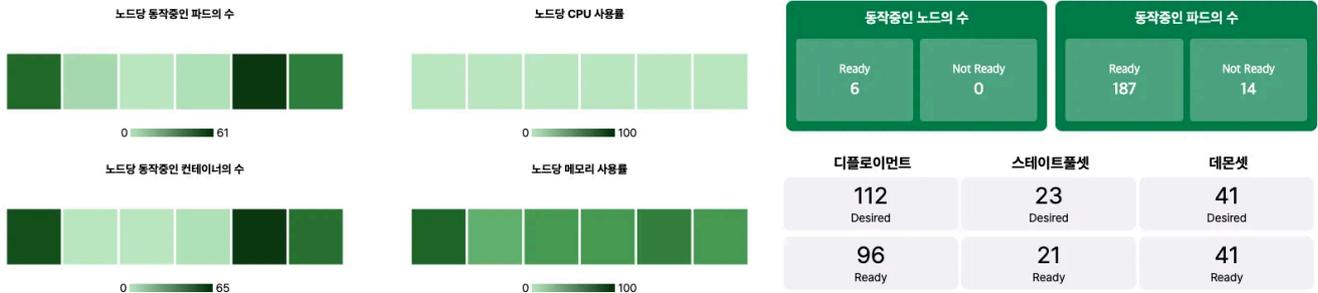
The cluster provides monitoring metrics for overviews, pods, nodes, namespaces, deployments, stateful sets, daemon sets, and GPUs, based on criteria. Overview provides resource utilization information for the entire cluster and all namespaces.



### 4.2.12.1.1. Host Map

Shows information about nodes within the cluster, as well as information about running nodes, pods, deployments, stateful sets, and daemon sets.

Here are the details:



item	explanation
Number of running pods per node	Shows the number of running pods on a node within the cluster. A larger number of pods is displayed in a darker color.
CPU utilization per node	Shows CPU utilization within a node within a cluster. Higher absolute utilization is displayed in darker colors.
Number of running containers per node	Shows the number of running containers on a node within a cluster. Containers with a relatively large number of containers are displayed in a darker color.
Memory usage per node	Shows memory usage within nodes within a cluster. Higher absolute usage is indicated by a darker color.
Number of nodes in operation	Shows the number of nodes in the cluster. <b>Ready</b> : Shows the number of nodes that are running. <b>Not Ready</b> : Shows the number of nodes that are not running.
Number of active pods	Shows the number of pods in the cluster. <b>Ready</b> : Shows the number of running pods. <b>Not Ready</b> : Shows the number of not running pods.
Deployment	Shows the number of deployments in the cluster. <b>Desired</b> : Shows the number of defined deployments. <b>Ready</b> : Shows the number of running deployments.
StatefulSet	Shows the number of StatefulSets in the cluster. <b>Desired</b> : Shows the number of defined StatefulSets. <b>Ready</b> : Shows the number of running StatefulSets.

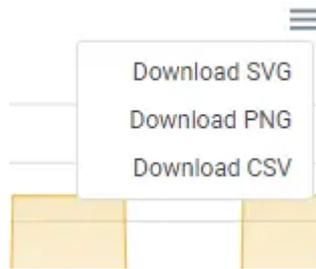
item	explanation
Demon Set	Shows the number of DaemonSets in the cluster.  <b>Desired</b> : Shows the number of defined DaemonSets. <b>Ready</b> : Shows the number of running DaemonSets.

### 4.2.12.1.2. Chart

Shows information about the cluster's CPU usage, memory usage, and network usage.



You can download the chart by selecting the hamburger button in the upper right corner of the screen.



### 4.2.12.1.3. Table

Shows information about namespaces within a cluster.

네임스페이스 ↑	CPU 사용량	CPU 요청	CPU 제한	메모리 사용량 (MI)	메모리 요청 (MI)	메모리 제한 (MI)	네트워크 인 (MB/S)	네트워크 아웃 (MB/S)
acc-global	0.13	0	-	3419.55	0	-	0.06	0.06
acc-system	1.29	0	-	26328.56	0	-	5.04	7.35
default	0	0	-	8.11	0	-	0	0
demo	0	0	-	0	0	-	0	0
kafka	0.03	0	-	4179.48	0	-	0	0
kube-node-lease	0	0	-	0	0	-	0	0
kube-public	0	0	-	0	0	-	0	0
kube-system	1.08	0	-	8100.74	0	-	7.34	12.29
manual	0	0	-	0	0	-	0	0

The namespace information is as follows:

item	explanation
namespace	Namespace name
CPU usage	CPU usage
CPU requests	CPU Quota Request Capacity
CPU limit	CPU Quota Limits Capacity
Memory Usage (MI)	Memory usage
Memory Request (MI)	Memory Quota Request Capacity

item	explanation
Memory Limit (MI)	Memory Quota Limits Capacity
Network In (MB/S)	Network Inbound Speed
Network Out (MB/S)	Network Outbound Speed

### 4.2.12.1.4. Pad

Provides status information about pods deployed in a cluster. You can filter pod information by node or namespace.

namespace	name	situation	Node	Pad IP	container	CPU requests/limits	CPU usage	Memory requests/limits	Memory usage
acc-system	acc-kube-state-metrics-6776cd956d-1j8kx	Running	acc-node1	172.32.139.166	3/5	-	-	-	111 KiB / 37.15 KiB
acc-system	acc-node-exporter-62q95	Running	acc-node1	10.20.200.207	2/2	112 m	270 m	200Mi	220Mi
acc-system	acc-node-exporter-91qfj	Running	acc-master	10.20.200.206	2/2	112 m	270 m	200Mi	220Mi
acc-system	acc-node-exporter-8vda	Running	acc-node2	10.20.200.208	2/2	112 m	270 m	200Mi	220Mi
acc-system	accordion-data-provisioner-758b4d882b-v7555	Running	acc-master	172.32.183.141	1/1	-	-	-	734 Bytes / 459 Bytes
acc-system	alert-server-d995588f-54c0d	Running	acc-node2	172.32.24.41	1/1	-	-	-	15 Bytes / 5 Bytes
acc-system	alertmanager-main-0	Running	acc-node2	172.32.24.33	2/2	-	250Mi	-	143 Bytes / 351 Bytes
acc-system	auth-server-55d3a615-6w9fs	Running	acc-node1	172.32.139.170	1/1	-	-	-	28.79 KiB / 14.15 KiB
acc-system	blackbox-exporter-84d58b-485b-99mm	Running	acc-node1	172.32.139.158	3/3	30 m	60 m	60Mi	120Mi
acc-system	cod-ops-server-754345c5-5cukx	Running	acc-node1	172.32.139.173	1/1	-	-	-	97 Bytes / 97 Bytes

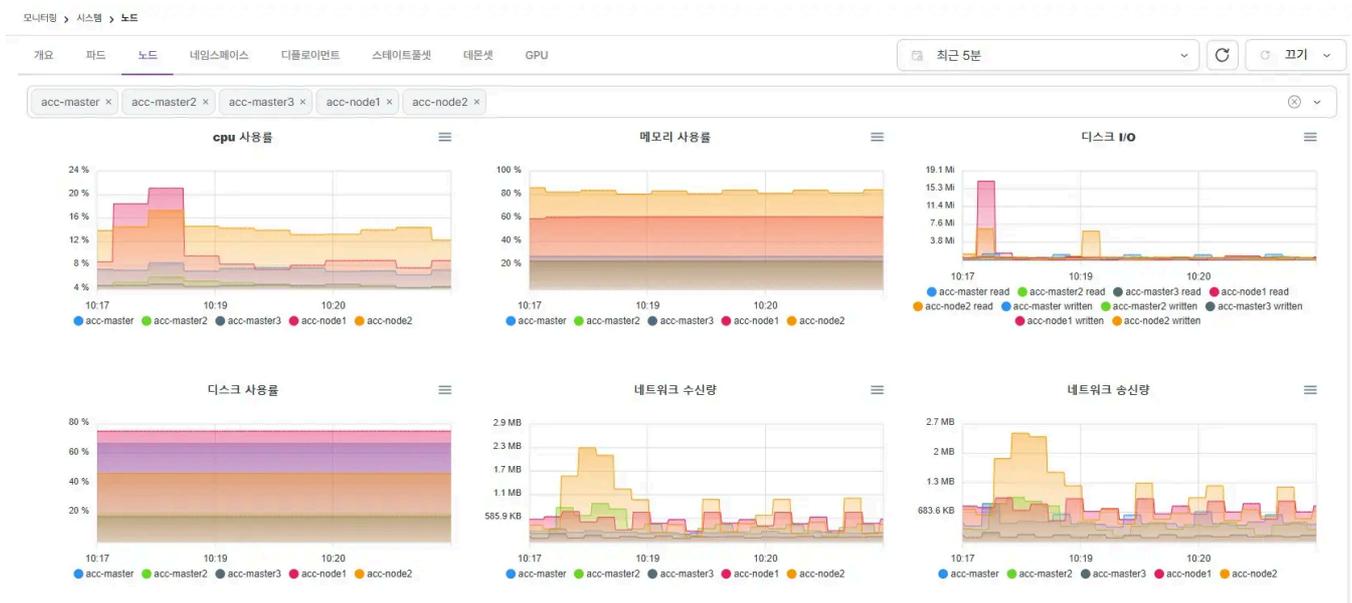
The information provided is as follows:

item	explanation
namespace	Namespace name
name	Pod name
situation	Pod status
Node	The name of the node where the pod was deployed
Pad IP	Pod unique IP
container	Running and total number of containers in the pod
CPU requests/limits	This is the CPU Requests/Limits quota for the pod. Displayed if all containers in the pod have specified CPU resource amounts. Otherwise, it is displayed as "-".
Memory requests/limits	The pod's Memory resource Requests/Limits quota. Displayed if the entire container of the pod has specified the amount of Memory resources. Otherwise, it is displayed as "-".
CPU usage	This is the CPU usage of the pod. If CPU resource allocation is limited, CPU utilization of the pod is displayed based on the limits. Otherwise, CPU utilization is displayed based on the CPU resources of the node on which the pod is deployed. If no CPU limit is set, infinity is displayed.
Memory usage	This is the memory usage of the pod. If the memory resource allocation is limited, the memory usage of the pod is displayed based on the limits. Otherwise, the memory usage is displayed based on the memory resources of the node on which the pod is deployed. If no memory limit is set, infinity is displayed.

<b>item</b>	<b>explanation</b>
NETWORK RX	Network Received rate of the pod
NETWORK TX	Network Transmitted rate of the pod
Rerun	Number of times the pod is restarted
AGE	The running time of the pod

### 4.2.12.1.5. Node

Provides information on system resource usage (CPU, memory, disk, and network) by node. Multiple selections are possible for nodes, allowing comparison of resource usage by node.



### 4.2.12.1.6. Namespace

Provides information on system resource (CPU, memory) usage by namespace. Like nodes, multiple selections are possible, allowing comparison of resource usage by namespace.

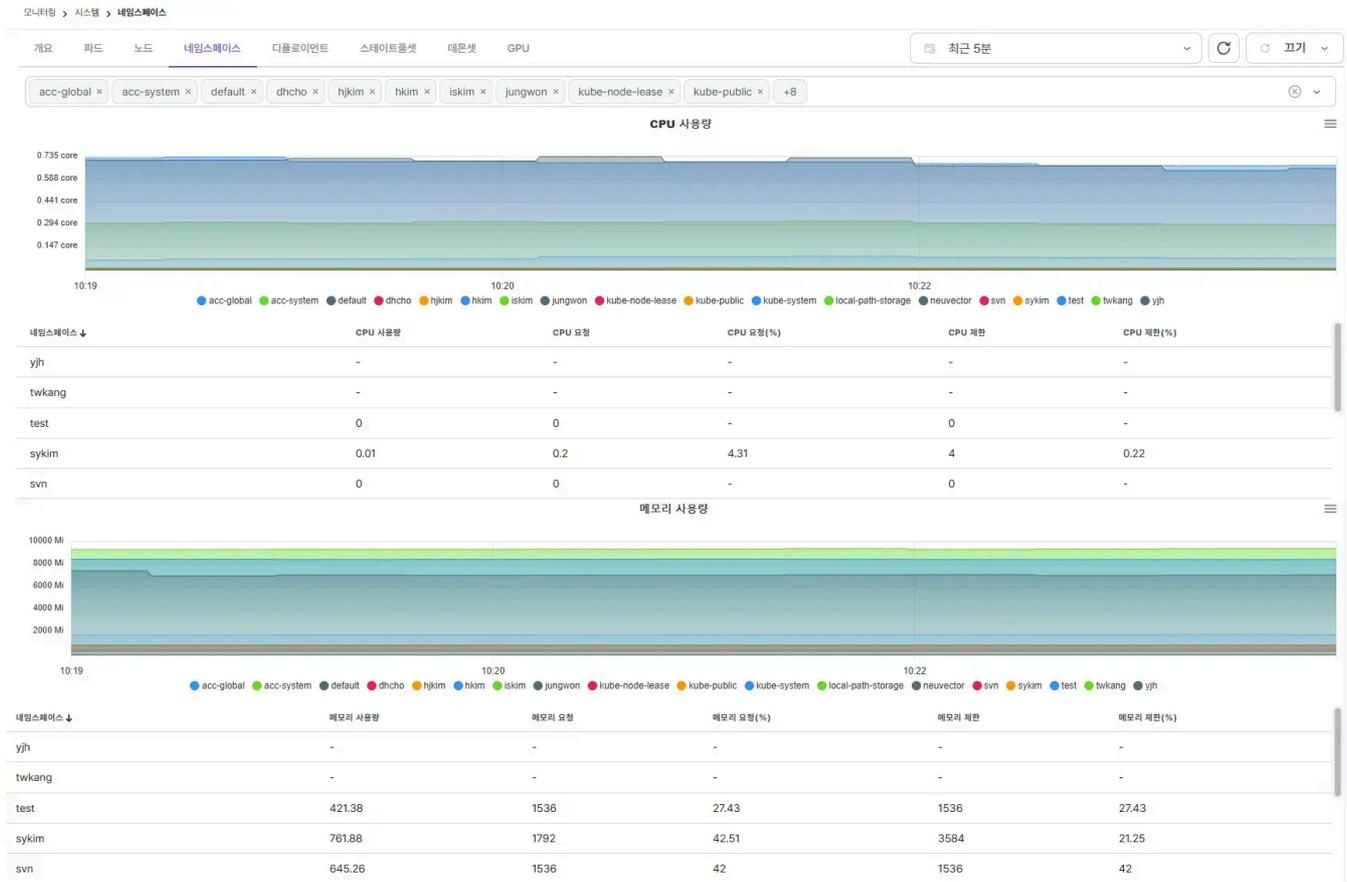


Table 8. CPU

item	explanation
namespace	Namespace name
CPU usage	Sum of CPU usage of pods deployed in the namespace
CPU requests	Total CPU Requests of pods deployed in the namespace
CPU Requests (%)	CPU usage / CPU requests
CPU limit	The sum of CPU Limits of pods deployed in the namespace.
CPU limit (%)	CPU usage / CPU limit

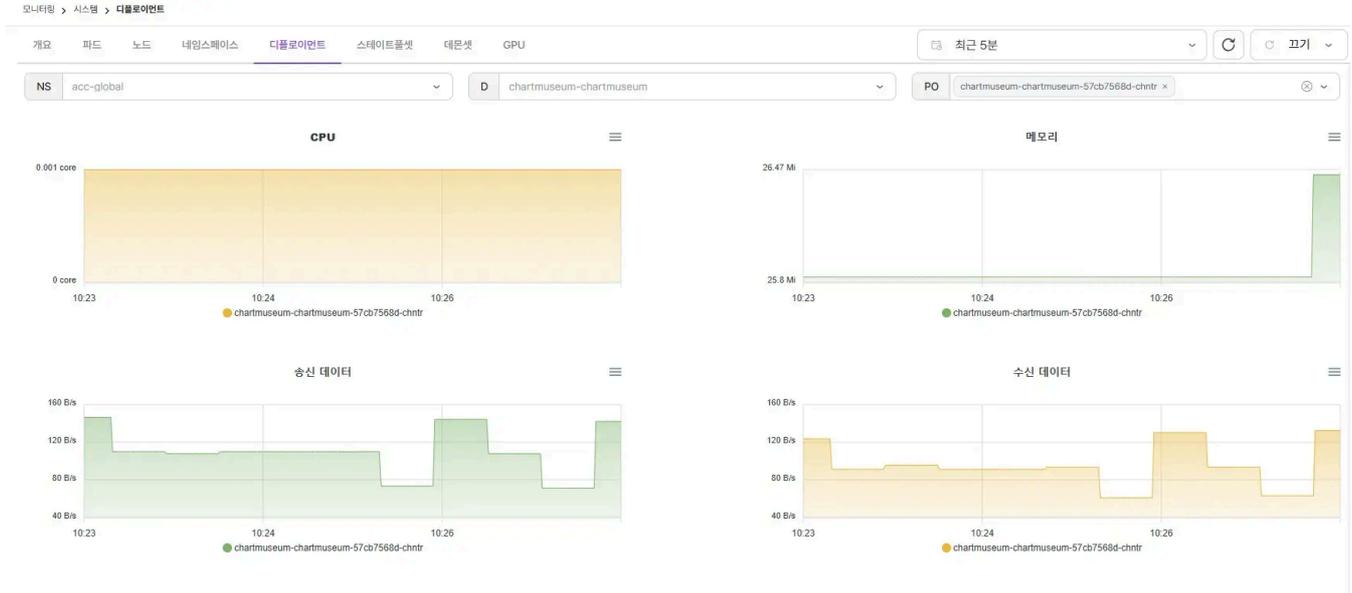
Table 9. Memory

item	explanation
namespace	Namespace name
Memory usage	Sum of memory usage of pods deployed in the namespace

<b>item</b>	<b>explanation</b>
Memory request	Total memory requests of pods deployed in the namespace
Memory Requests (%)	Memory usage / memory requests
Memory limit	Sum of memory limits of pods deployed in the namespace
Memory limit (%)	Memory usage / memory limit

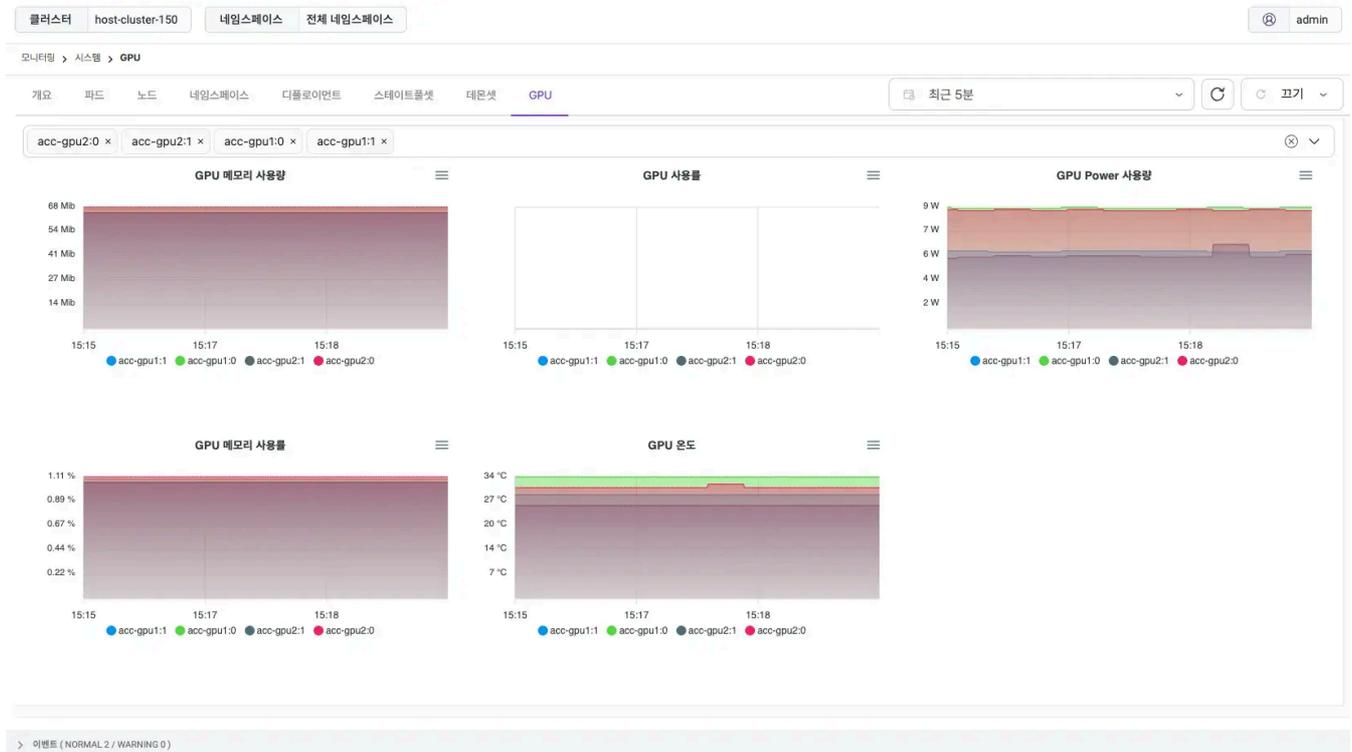
### 4.2.12.1.7. Deployment / StatefulSet / DaemonSet

Provides system resource usage information based on Deployments, StatefulSets, and DaemonSets. You can also view resource usage information for individual pods that comprise Deployments, StatefulSets, and DaemonSets.



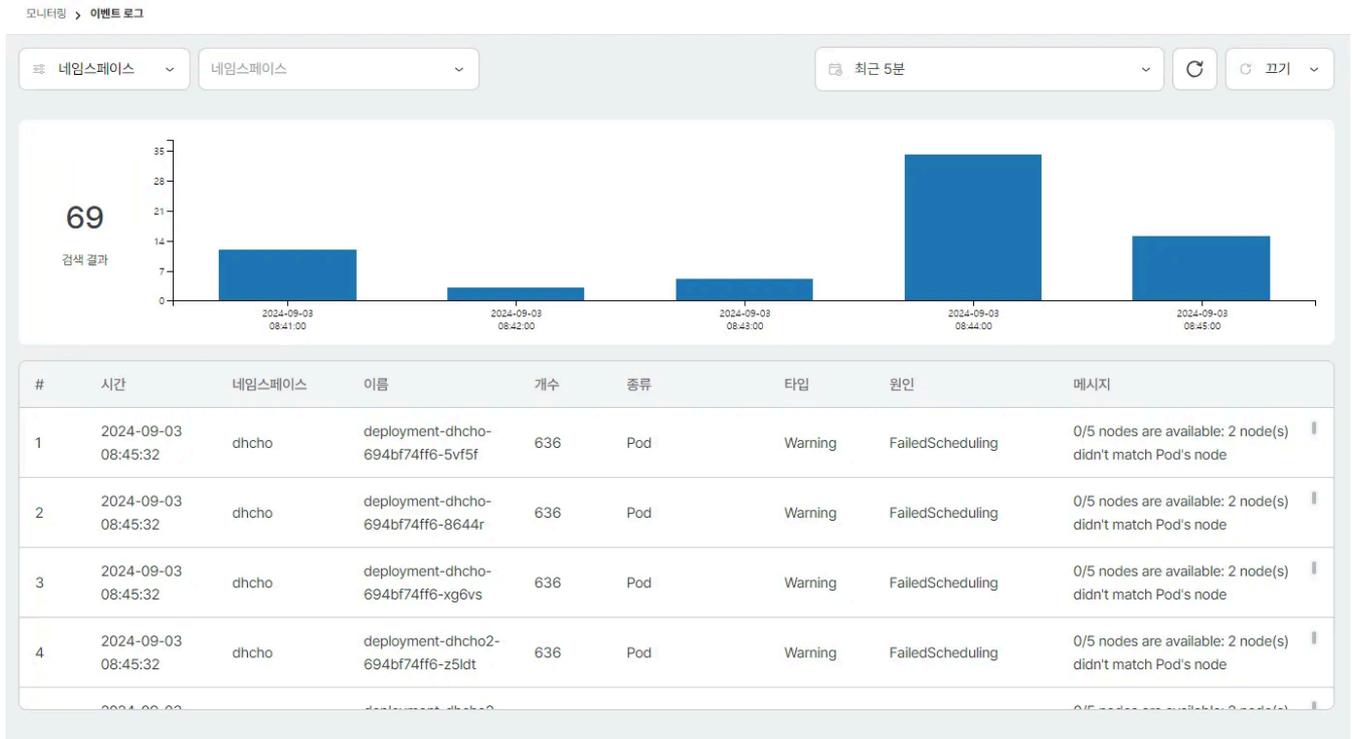
### 4.2.12.1.8. GPU

If GPU support is enabled in Kubernetes settings, resource usage information for each GPU is provided.



### 4.2.12.2. Event Log

Provides Kubernetes event logs generated in the cluster. It provides charts of log counts by time zone and provides information on individual logs.



The information provided is as follows:

item	explanation
hour	Date (yyyy-mm-dd HH:mm:ss)
namespace	Namespace name
name	Event occurrence resource name
Number	Number of event occurrences
type	Event occurrence resource type
Type	Event level
cause	Cause of event occurrence
message	Event Details

You can check detailed information by selecting a log.

The screenshot shows the '이벤트 로그' (Event Log) section. At the top, there are filters for '클러스터' (Cluster) set to 'host-cluster-200' and '네임스페이스' (Namespace) set to '전체 네임스페이스' (All namespaces). Below the filters is a bar chart showing the search results, with a total count of 69. The chart shows four bars for the time period 2024-09-03 08:41:00 to 08:43:00. Below the chart is a table with columns: #, 시간 (Time), 네임스페이스 (Namespace), 이름 (Name), 개수 (Count), and 종류 (Type).

#	시간	네임스페이스	이름	개수	종류
1	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-5vf5f	636	Pod
2	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-8644r	636	Pod
3	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-xg6vs	636	Pod
4	2024-09-03 08:45:32	dhcho	deployment-dhcho2-694bf74ff6-z5ldt	636	Pod

On the right side, a detailed view of 'Item {14}' is shown. It is an Event of kind 'Event' and apiVersion 'v1'. The metadata includes name 'deployment-dhcho-694bf74ff6-5vf5f.17f0e4c7aecb9679', namespace 'dhcho', uid '491bf25d-aed6-459f-967c-5a3ab70b49fa', and resourceVersion '220737004'. The involvedObject is a Pod with name 'deployment-dhcho-694bf74ff6-5vf5f'. The reason is 'FailedScheduling' with a message: '0/5 nodes are available: 2 node(s) didn't match Pod's node affinity/selector, 3 node(s) had untolerated taint {node-role.kubernetes.io/control-plane: }. preemption: 0/5 nodes are available: 5 Preemption is not helpful for scheduling.' The source is the 'default-scheduler'.

You can filter logs by setting conditions at the top. You can select the condition items and values and use the magnifying glass button to set the conditions. Multiple conditions can be set. When multiple conditions are set, each condition AND is combined with .

This screenshot shows the same '이벤트 로그' interface but with a search filter menu open. The menu is highlighted with a red box and contains options: 네임스페이스 (Namespace), 종류 (Type), 이름 (Name), 타입 (Type), 원인 (Cause), and 메시지 (Message). The background shows a bar chart and a table of event logs. The table has columns: #, 시간, 네임스페이스, 이름, 개수, 종류, 타입, 원인, and 메시지.

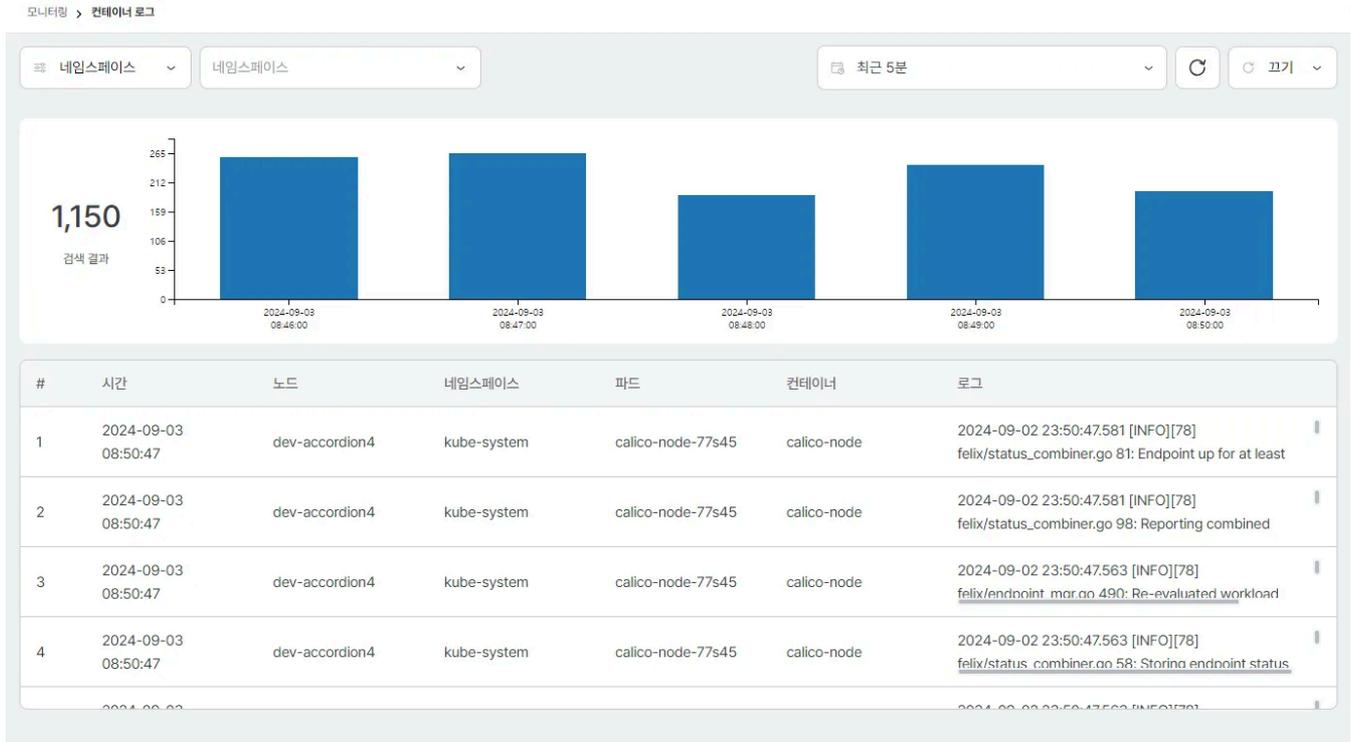
#	시간	네임스페이스	이름	개수	종류	타입	원인	메시지
1	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-5vf5f	636	Pod	Warning	FailedScheduling	0/5 nodes are available: 2 node(s) didn't match Pod's node
2	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-8644r	636	Pod	Warning	FailedScheduling	0/5 nodes are available: 2 node(s) didn't match Pod's node
3	2024-09-03 08:45:32	dhcho	deployment-dhcho-694bf74ff6-xg6vs	636	Pod	Warning	FailedScheduling	0/5 nodes are available: 2 node(s) didn't match Pod's node
4	2024-09-03 08:45:32	dhcho	deployment-dhcho2-694bf74ff6-z5ldt	636	Pod	Warning	FailedScheduling	0/5 nodes are available: 2 node(s) didn't match Pod's node

### 4.2.12.3. Container Logs

Provides logs generated from containers deployed in a cluster. It provides log count information by time zone in a chart and provides information about individual logs below.

**TIP**

Due to storage capacity issues, we only provide container logs deployed to the system namespace kube-system and acc-system namespaces, not container logs deployed to all namespaces.



item	explanation
hour	Date (yyyy-mm-dd HH:mm:ss)
Node	Node where the log occurred
namespace	The namespace where the log occurred
Pad	The pod where the log occurred
container	Container where the log occurred
log	Log messages

You can check detailed information by selecting a log.

클러스터 host-cluster-220 네임스페이스 전체 네임스페이스

모니터링 > 컨테이너 로그

네임스페이스 네임스페이스

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#	시간	노드	네임스페이스	파드	컨테이너
1	2024-09-06 08:46:09	acc-master2	kube-system	calico-node-8pdfh	calico-node
2	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-ma
3	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-ma
4	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-ma
5	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-ma
6	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-ma
7	2024-09-06 08:46:01	acc-node1	kube-system	calico-node-ztw4j	calico-node
8	2024-09-06 08:45:52	acc-node2	kube-system	calico-node-7qdv	calico-node
9	2024-09-06 08:45:52	acc-node1	kube-system	calico-node-ztw4j	calico-node

> 이벤트 (NORMAL 9 / WARNING 3)

네임스페이스: kube-system    파드: calico-node-8pdfh    컨테이너: calico-node

2024-09-06 08:44:29 to 2024-09-06 08:46:10

```
[0]2024-09-06 08:46:09: 2024-09-05 23:46:09.048 [INFO] [94] felix/int_dataplane.go 1689: Received "proto.HostMetadataV4V6Update" update from calculation graph #sg-hostname="acc-master" ipv4_addr:"10.20.200.221/16" labels:<key:"beta.kubernetes.io/arch" value:"amd64" > labels:<key:"beta.kubernetes.io/os" value:"linux" > labels:<key:"kubernetes.io/arch" value:"amd64" > labels:<key:"kubernetes.io/hostname" value:"acc-master" > labels:<key:"kubernetes.io/os" value:"linux" > labels:<key:"node-role.kubernetes.io/control-plane" value:"" > labels:<key:"node.kubernetes.io/exclude-from-external-load-balancers" value:"" >
[1]2024-09-06 08:45:52: 2024-09-05 23:45:52.627 [INFO] [94] felix/int_dataplane.go 1689: Received "proto.HostMetadataV4V6Update" update from calculation graph #sg-hostname="acc-node1" ipv4_addr:"10.20.200.224/16" labels:<key:"beta.kubernetes.io/arch" value:"amd64" > labels:<key:"beta.kubernetes.io/os" value:"linux" > labels:<key:"kubernetes.io/arch" value:"amd64" > labels:<key:"kubernetes.io/hostname" value:"acc-node1" > labels:<key:"kubernetes.io/os" value:"linux" > labels:<key:"node-role.kubernetes.io/infra" value:"" > labels:<key:"node-role.kubernetes.io/worker" value:"" >
[2]2024-09-06 08:45:41: 2024-09-05 23:45:41.782 [INFO] [92] monitor-addresses/autodetection_methods.go 117: Using autodetected IPv4 address 10.20.200.222/16 on matching interface ens192
[3]2024-09-06 08:45:41: 2024-09-05 23:45:41.536 [INFO] [94] felix/int_dataplane.go 1689: Received "proto.HostMetadataV4V6Update" update from calculation graph #sg-hostname="acc-node2" ipv4_addr:"10.20.200.225/16" labels:<key:"beta.kubernetes.io/arch" value:"amd64" > labels:<key:"beta.kubernetes.io/os" value:"linux" > labels:<key:"kubernetes.io/arch" value:"amd64" > labels:<key:"kubernetes.io/hostname" value:"acc-node2" > labels:<key:"kubernetes.io/os" value:"linux" > labels:<key:"node-role.kubernetes.io/infra" value:"" > labels:<key:"node-role.kubernetes.io/worker" value:"" >
[4]2024-09-06 08:45:41: 2024-09-05 23:45:41.536 [INFO] [94] felix/summary.go 100: Summarising 11 dataplane reconciliation loops over 1m2.6s: avg=4ms longest=12ms ()
[5]2024-09-06 08:44:41: 2024-09-05 23:44:41.781 [INFO] [92] monitor-addresses/autodetection_methods.go 117: Using autodetected IPv4 address 10.20.200.222/16 on matching interface ens192
[6]2024-09-06 08:44:38: 2024-09-05 23:44:38.894 [INFO] [94] felix/summary.go 100: Summarising 8 dataplane reconciliation loops over 1m1.3s: avg=7ms longest=36ms (resync-net-v4)
```

You can filter logs by setting conditions at the top. You can select the condition items and values and use the magnifying glass button to set the conditions. Multiple conditions can be set. When multiple conditions are set, each condition AND is combined with .

컨테이너 > 컨테이너 로그

네임스페이스

네임스페이스

최근 5분

🔄

🔍

네임스페이스

노드명

파드명

컨테이너명

로그

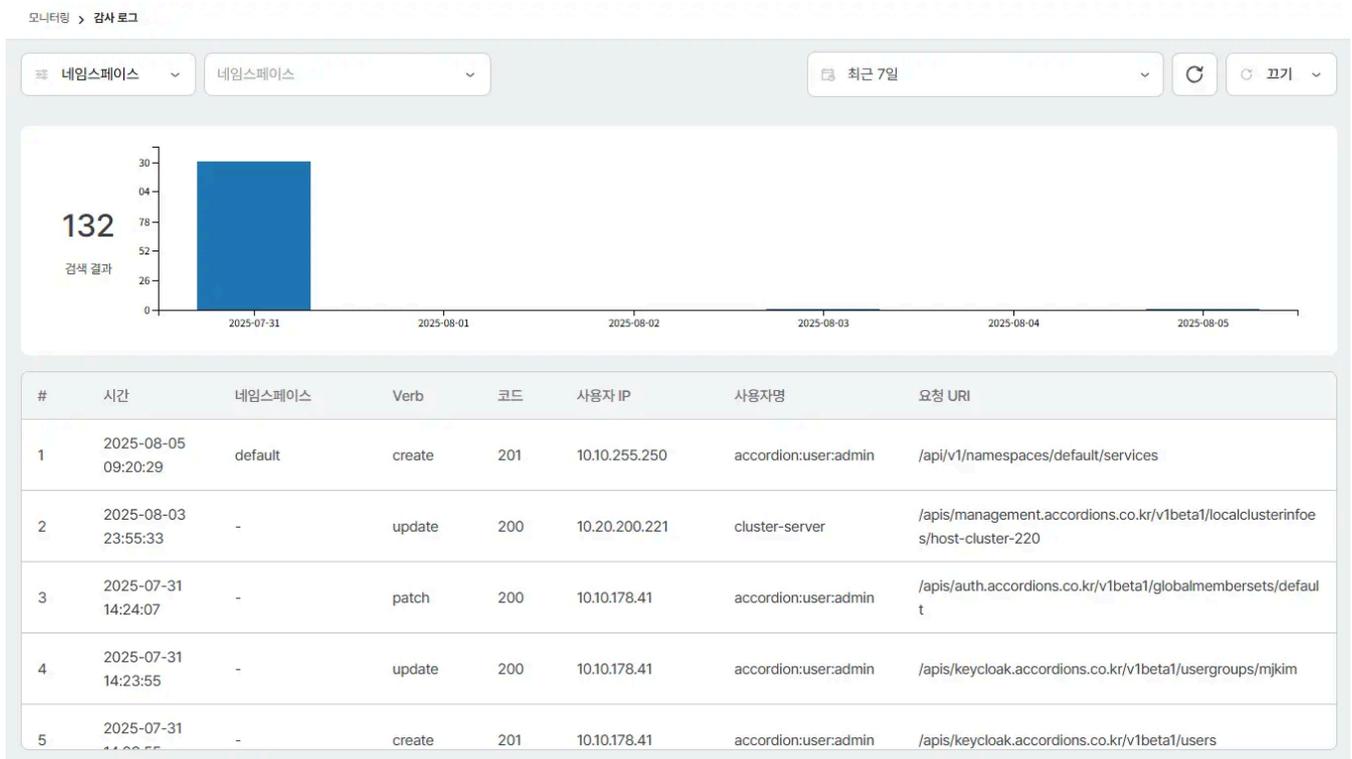
#	시간	노드	네임스페이스	파드	컨테이너	로그
1	2024-09-06 08:46:09	acc-master2	kube-system	calico-node-8pdfh	calico-node	2024-09-05 23:46:09.048 [INFO][94] felix/int_dataplane.go 1689: Received *proto.HostMetadataV4V6Update update from calculation
2	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-manager	I0906 08:46:05.061107 1 event.go:376] "Event occurred" object="haproxy/haproxy-test-7d747864-25db4859" fieldPath=""
3	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-manager	I0906 08:46:05.061362 1 event.go:376] "Event occurred" object="aaaa/www-web-0" fieldPath="" kind="PersistentVolumeClaim"
4	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-manager	I0906 08:46:05.061513 1 event.go:376] "Event occurred" object="sykim/egw-target-8ac8c2f2-81b07cff" fieldPath=""
5	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-manager	I0906 08:46:05.061740 1 event.go:376] "Event occurred" object="jenkins/test-jenkins-82ca3b73-0970cd68" fieldPath=""
6	2024-09-06 08:46:05	acc-master3	kube-system	kube-controller-manager-acc-master3	kube-controller-manager	I0906 08:46:05.061768 1 event.go:376] "Event occurred" object="thlee/data-jupyterhub-postgresql-0" fieldPath=""
7	2024-09-06 08:46:01	acc-node1	kube-system	calico-node-ztw4j	calico-node	2024-09-05 23:46:01.923 [INFO][63] felix/summary.go 100: Summarising 14 dataplane reconciliation loops over 1m8.7s: avg=13ms
8	2024-09-06 08:45:52	acc-node2	kube-system	calico-node-7qdv	calico-node	2024-09-05 23:45:52.628 [INFO][74] felix/int_dataplane.go 1689: Received *proto.HostMetadataV4V6Update update from calculation
9	2024-09-06 08:45:52	acc-node1	kube-system	calico-node-ztw4j	calico-node	2024-09-05 23:45:52.627 [INFO][63] felix/int_dataplane.go 1689: Received *proto.HostMetadataV4V6Update update from calculation

file:///C:/Users/User/Documents/업무/site/site/accordion/2.14/index.html

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### 4.2.12.4. Audit Log

Provides access audit logs for Kubernetes resources deployed in a cluster. It provides charts of hourly counts and provides information about individual logs.



item	explanation
hour	Date (yyyy-mm-dd HH:mm:ss)
namespace	The namespace where the resource accessed by the user is deployed
VERB	API verbs used when requesting resource access (get, list, create, update, patch, watch, delete)
cord	Response HTTP code for resource access request
User IP	IP address from which the request originated
Username	The user who requested resource access
Request URI	Resource Access Request Endpoint

You can check detailed information by selecting a log.

The screenshot shows the '감사 로그' (Audit Log) section. At the top, there are filters for '클러스터' (cluster) and '네임스페이스' (namespace). A bar chart shows a search result of 132 items for the date 2025-07-31. Below the chart is a table of log entries:

#	시간	네임스페이스	Verb	코드	사용자 IP	사
1	2025-08-05 09:20:29	default	create	201	10.10.255.250	ac
2	2025-08-03 23:55:33	-	update	200	10.20.200.221	cli
3	2025-07-31 14:24:07	-	patch	200	10.10.178.41	ac
4	2025-07-31 14:23:55	-	update	200	10.10.178.41	ac
5	2025-07-31 14:23:55	-	create	201	10.10.178.41	ac

On the right, the detailed audit information for the selected log entry is shown:

```

Item {17}
  kind : Audit
  apiVersion : log.accordions.co.kr/v1beta1
  metadata {2}
    uid : 4c7368a4-df5d-4628-ba58-2137ebfce3c5
    creationTimestamp : 2025-08-05T00:20:29Z
    level : Metadata
    auditID : 4c7368a4-df5d-4628-ba58-2137ebfce3c5
    stage : ResponseComplete
    requestURI : /api/v1/namespaces/default/services
    verb : create
  user {4}
    username : system:serviceaccount:acc-system:member-agent
    uid : 8e84a1a4-60c1-4110-a45b-cf9baea7fb8f
  groups {3}
    0 : system:serviceaccounts
    1 : system:serviceaccounts:acc-system
    2 : system:authenticated
  extra {5}
    authentication.kubernetes.io/credential-id [1]
      0 : JTI=16cf80c2-3fd2-4296-87c6-2f2a12653488
    authentication.kubernetes.io/node-name [1]
      0 : acc-node1
    authentication.kubernetes.io/node-uid [1]
      0 : f8e9b7ef-b236-4585-8387-6652a4459342
    authentication.kubernetes.io/pod-name [1]
      0 : member-agent-5474fd65c-bf8r8
    authentication.kubernetes.io/pod-uid [1]
      0 : df01343e-3eeb-4472-b0cf-4f8eeba7ff13
  impersonatedUser {2}
    username : accordion:user:admin
  groups {1}
    0 : system:authenticated
  sourceIPs {4}
    0 : 10.10.255.250
    1 : 172.32.234.106
    2 : 10.20.200.221
  
```

You can filter logs by setting conditions at the top. You can select the condition items and values and use the magnifying glass button to set the conditions. Multiple conditions can be set. When multiple conditions are set, each condition AND is combined with .

The screenshot shows the '감사 로그' (Audit Log) section with a search filter dropdown menu open. The dropdown menu lists the following filterable fields:

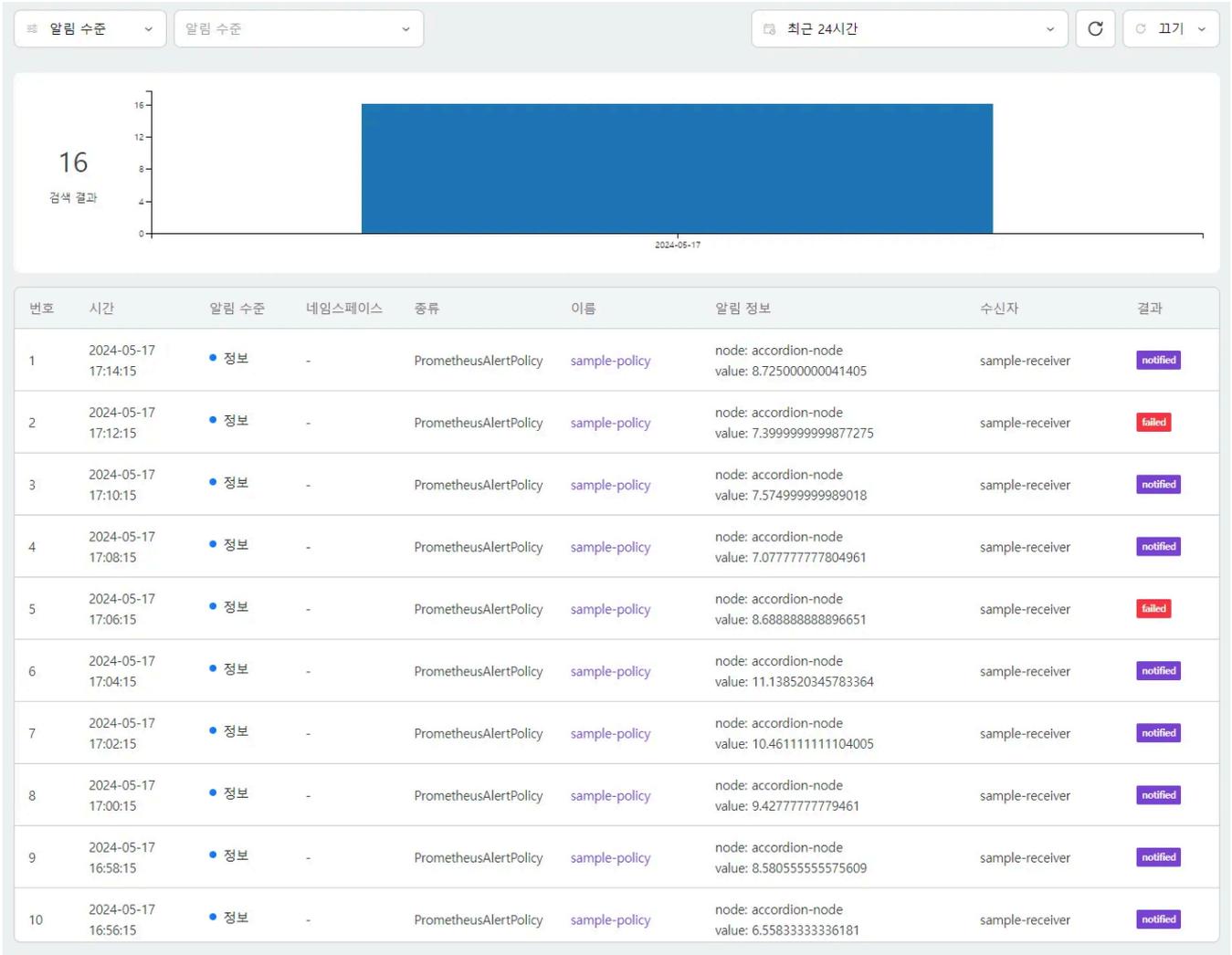
- 네임스페이스
- 사용자명
- Verb
- 코드

The main table below shows the filtered log entries:

#	시간	네임스페이스	Verb	코드	사용자 IP	사용자명	요청 URI
1	2025-08-05 09:20:29	default	create	201	10.10.255.250	accordion:user:admin	/api/v1/namespaces/default/services
2	2025-08-03 23:55:33	-	update	200	10.20.200.221	cluster-server	/apis/management.accordions.co.kr/v1beta1/localclusterinfos/host-cluster-220
3	2025-07-31 14:24:07	-	patch	200	10.10.178.41	accordion:user:admin	/apis/auth.accordions.co.kr/v1beta1/globalmembersets/default
4	2025-07-31 14:23:55	-	update	200	10.10.178.41	accordion:user:admin	/apis/keycloak.accordions.co.kr/v1beta1/usergroups/mjkim
5	2025-07-31 14:23:55	-	create	201	10.10.178.41	accordion:user:admin	/apis/keycloak.accordions.co.kr/v1beta1/users

### 4.2.12.5. Notification Log

Provides Kubernetes alert logs generated in the cluster. It provides log count information by time zone in a chart and information about individual logs in a table format.



The information provided is as follows:

item	explanation
hour	Date (yyyy-mm-dd HH:mm:ss)
Notification level	Notification Alert Level
namespace	Namespace name
type	Notification trigger resource type
name	Notification trigger resource name
Notification Information	Notification occurrence information
Recipient	List of recipients receiving notifications

item	explanation
result	Notification sending results

You can check detailed information by selecting a log.

클러스터 host-cluster-200 네임스페이스 전체 네임스페이스

모니터링 > 알림 로그

알림 수준 알림 수준

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번호	시간	알림 수준	네임스페이스	종류	이름
1	2024-05-17 17:14:15	정보	-	PrometheusAlertPolicy	sample-policy
2	2024-05-17 17:12:15	정보	-	PrometheusAlertPolicy	sample-policy
3	2024-05-17 17:10:15	정보	-	PrometheusAlertPolicy	sample-policy
4	2024-05-17 17:08:15	정보	-	PrometheusAlertPolicy	sample-policy
5	2024-05-17 17:06:15	정보	-	PrometheusAlertPolicy	sample-policy
6	2024-05-17 17:04:15	정보	-	PrometheusAlertPolicy	sample-policy
7	2024-05-17 17:02:15	정보	-	PrometheusAlertPolicy	sample-policy
8	2024-05-17 17:00:15	정보	-	PrometheusAlertPolicy	sample-policy
9	2024-05-17 16:58:15	정보	-	PrometheusAlertPolicy	sample-policy
10	2024-05-17 16:56:15	정보	-	PrometheusAlertPolicy	sample-policy

> 이벤트 ( NORMAL 32 / WARNING 30 )

```
Item {17}
kind: Audit
apiVersion: log.accordions.co.kr/v1beta1
metadata {2}
  uid: beb11faa-c2ec-4748-a9e3-e135445e22c8
  creationTimestamp: 2024-05-17T08:14:15Z
level: Request
auditID: beb11faa-c2ec-4748-a9e3-e135445e22c8
stage: ResponseComplete
requestU: /apis/alert.accordions.co.kr/v1beta1/Notifications/sample-policy-450220339
verb: update
user {4}
  username: system:serviceaccount:acc-system:alertmanagement-server
  uid: c779fff4-9982-4bea-8c00-96d8dead2e08
  groups {3}
    0: system:serviceaccounts
    1: system:serviceaccounts:acc-system
    2: system:authenticated
  extra {2}
    authentication.kubernetes.io/pod-name [1]
      0: alertmanagement-server-5b5bf689bb-m28v5
    authentication.kubernetes.io/pod-uid [1]
      0: 98fc7068-a74c-4b8d-baac-eea0cb35108c
  sourceIPs [1]
    0: 10.20.200.224
  userAgent: alertmanagement-server/v0.0.0 (linux/amd64)
  t: kubernetes/$Format
objectRef {6}
  resource: Notifications
  name: sample-policy-450220339
  uid: 2714f9c6-4c09-4609-9d6b-f79db384e091
  apiGroup: alert.accordions.co.kr
  apiVersion: v1beta1
  resourceVersion: 47157777
responseStatus {2}
  metadata {0}
  (empty object)
  code: 200
responseObject {5}
  apiVersion: alert.accordions.co.kr/v1beta1
  kind: Notification
  metadata {6}
    creationTimestamp: 2024-05-17T08:14:14Z
    generation: 1
    labels {1}
      created_by: alertmanagement-server
    name: sample-policy-450220339
    resourceVersion: 47157777
    uid: 2714f9c6-4c09-4609-9d6b-f79db384e091
  spec {5}
    alerts [1]
```

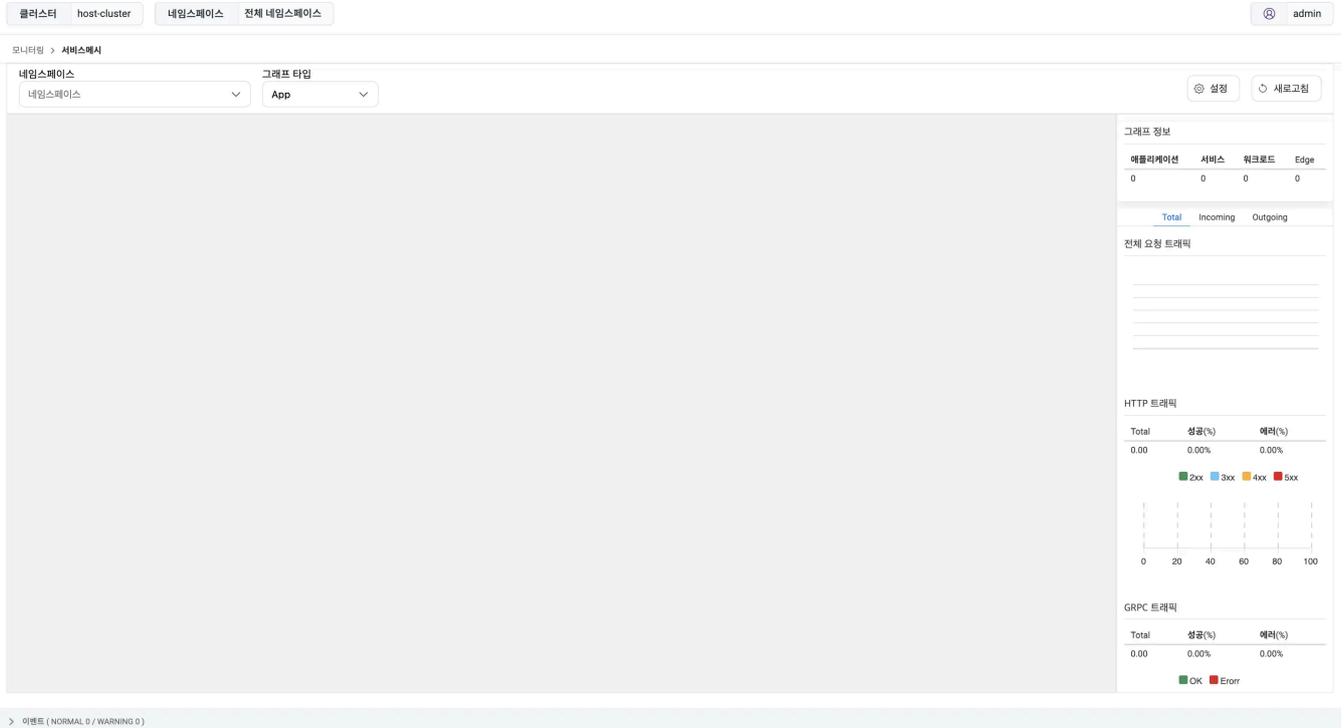
You can filter logs by setting conditions in the upper left corner. Condition items and values 검색 can be selected and added using buttons, and multiple conditions can be set. When multiple conditions are set, each condition AND is combined with .

검색 결과 결과

알림 수준: 위험 × 종류: ClusterPromethe... × 이름: sample × 알림 정보: node × 수신자: sample-receiver ×

### 4.2.12.6. Service Mesh

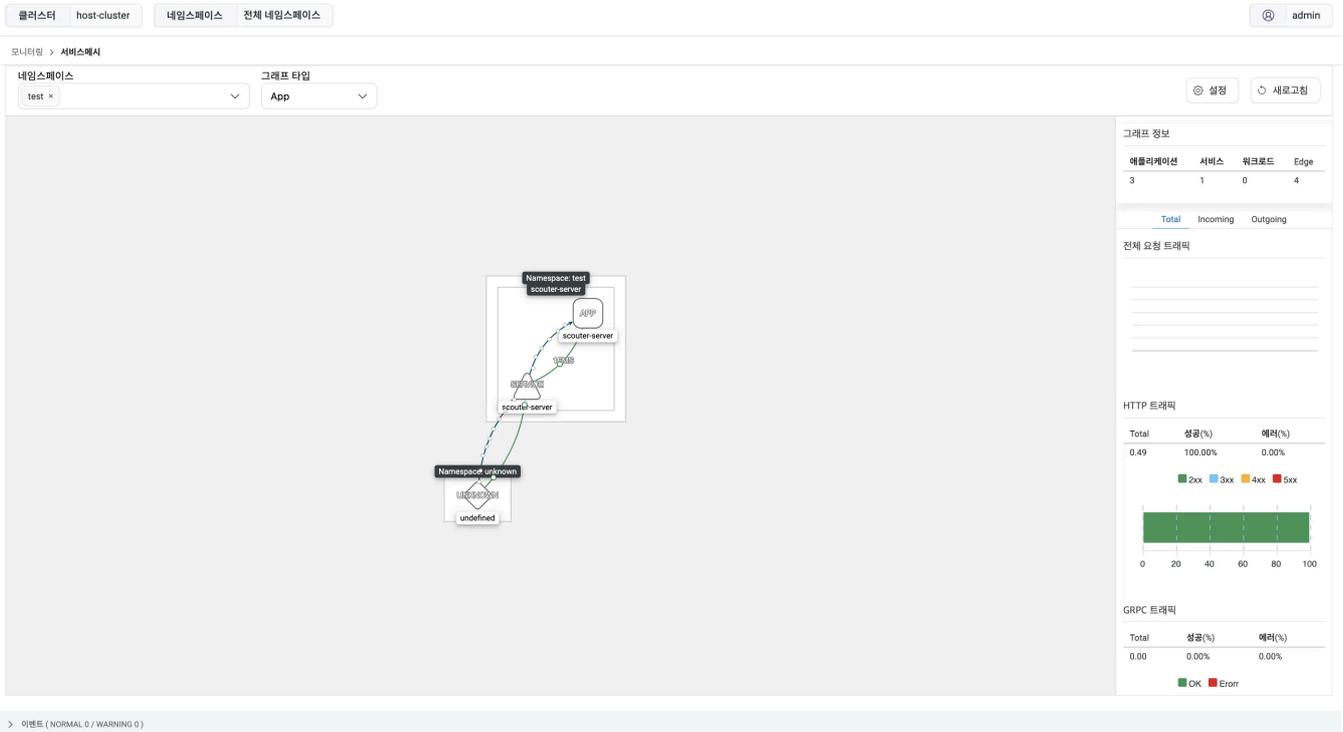
Service mesh refers to the ability to control, display, and manage communication between services. Currently, Accordion offers a feature in the Service Mesh menu that displays communication between services, among other service mesh features.



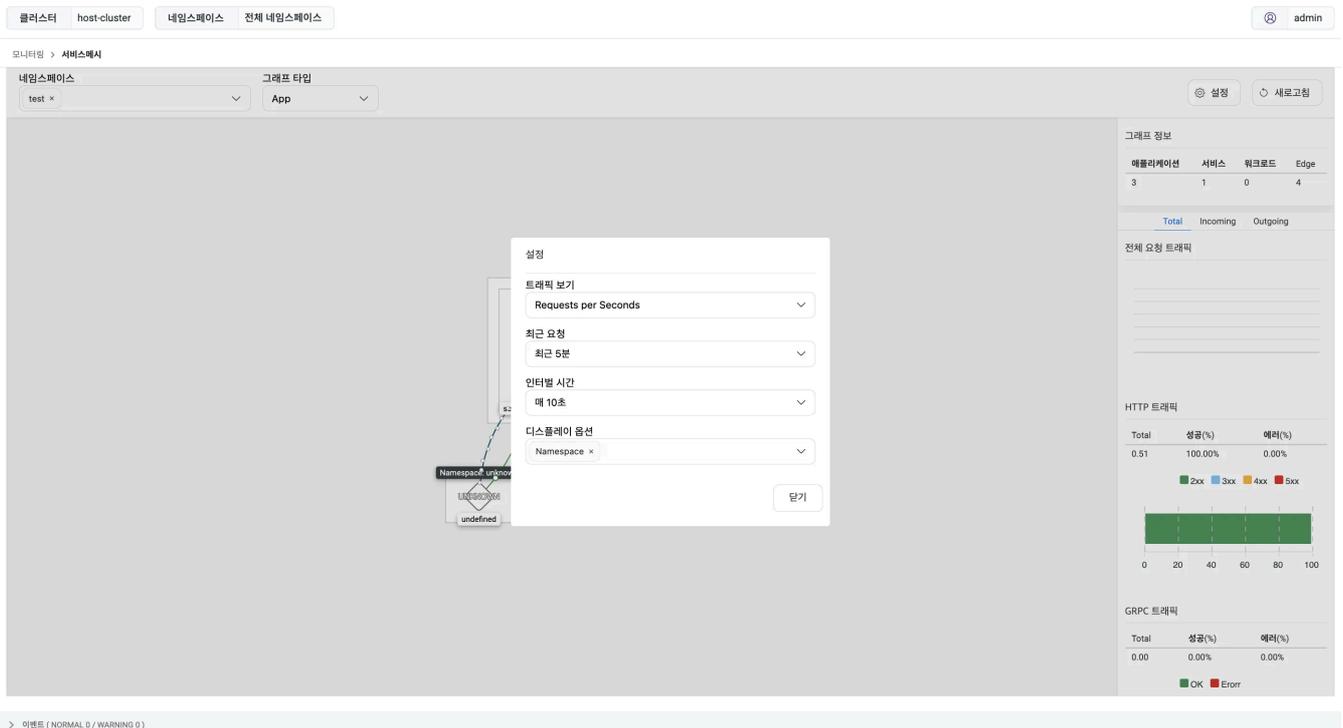
If you select the list of namespaces you want to monitor from the items above, 네임스페이스 you can check the communication status between services occurring within the namespace in a graph, and you can change the graph type to change the perspective criteria to applications, application versions, services, workloads, etc.

**TIP**

Namespaces can be multi-selected.



설정 You can set traffic information, refresh times, display options, etc. by selecting the button in the upper right corner .



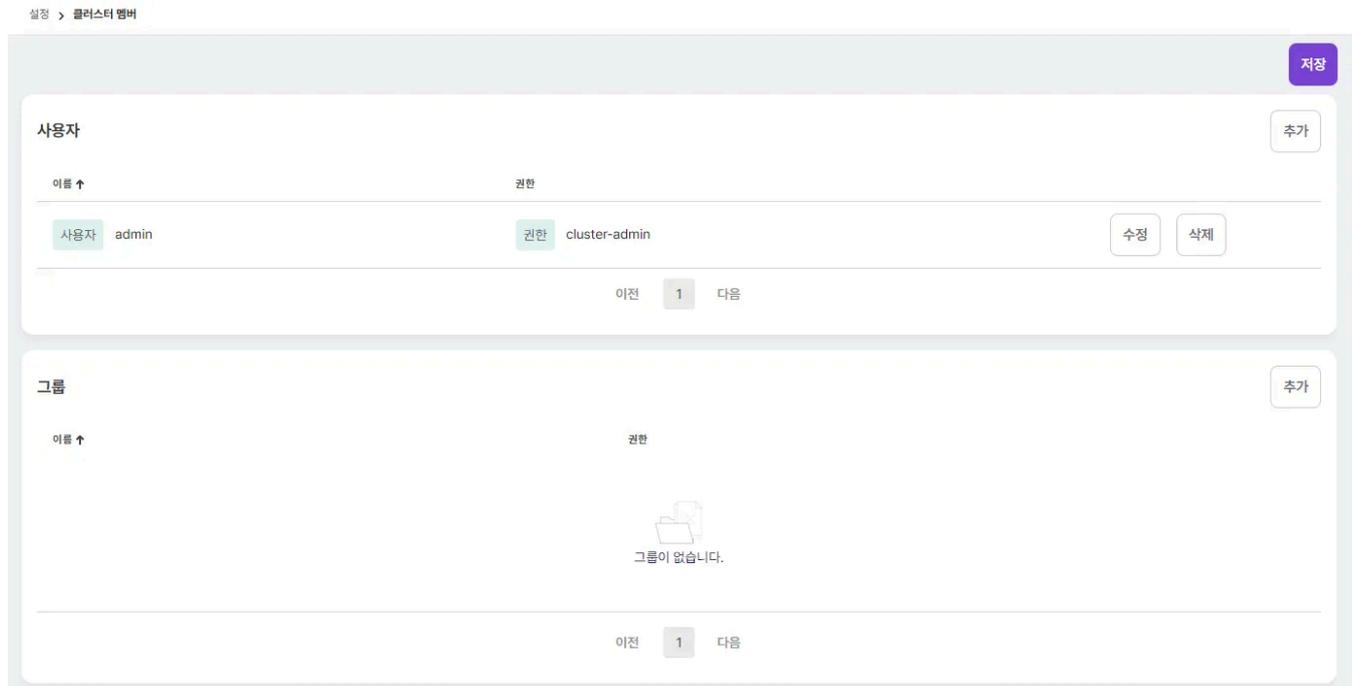


## 4.2.13. Settings

Settings manage information required for cluster operation and apply across the cluster. You can configure registry settings for image storage, notification settings, and cluster permissions.

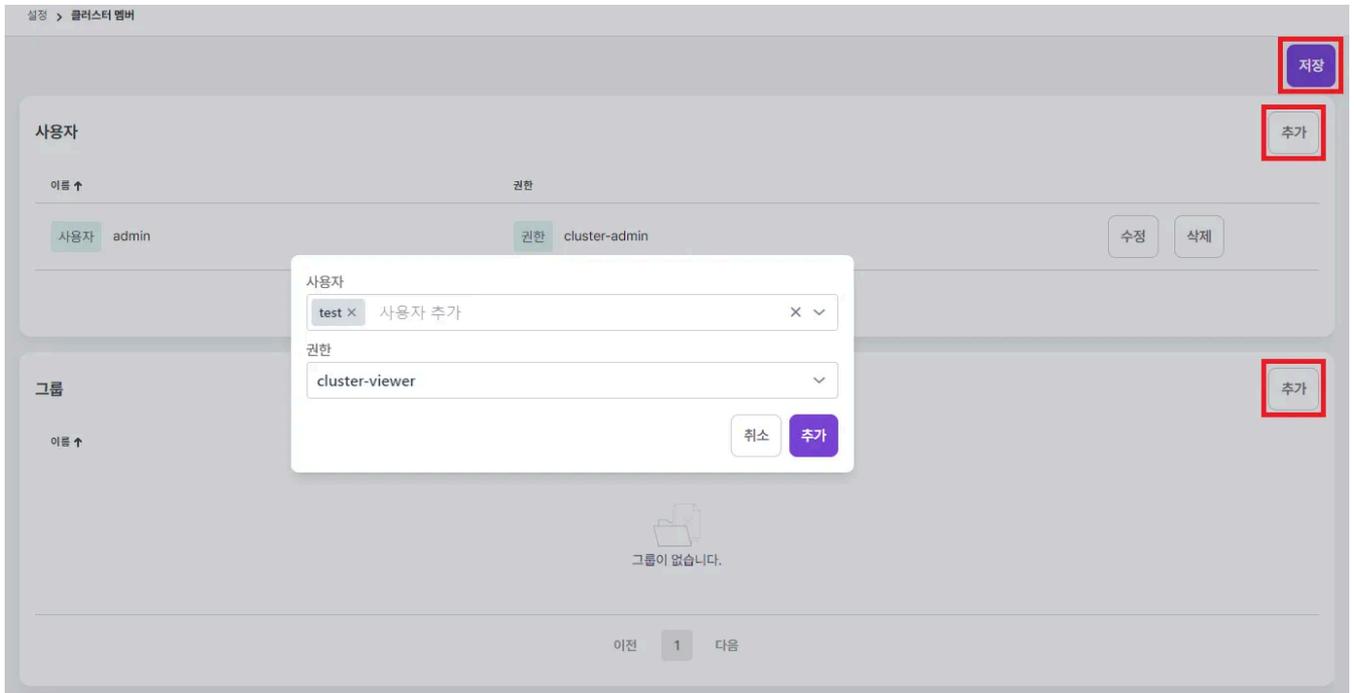
### 4.2.13.1. Cluster Members

Manage permissions for cluster users and groups.



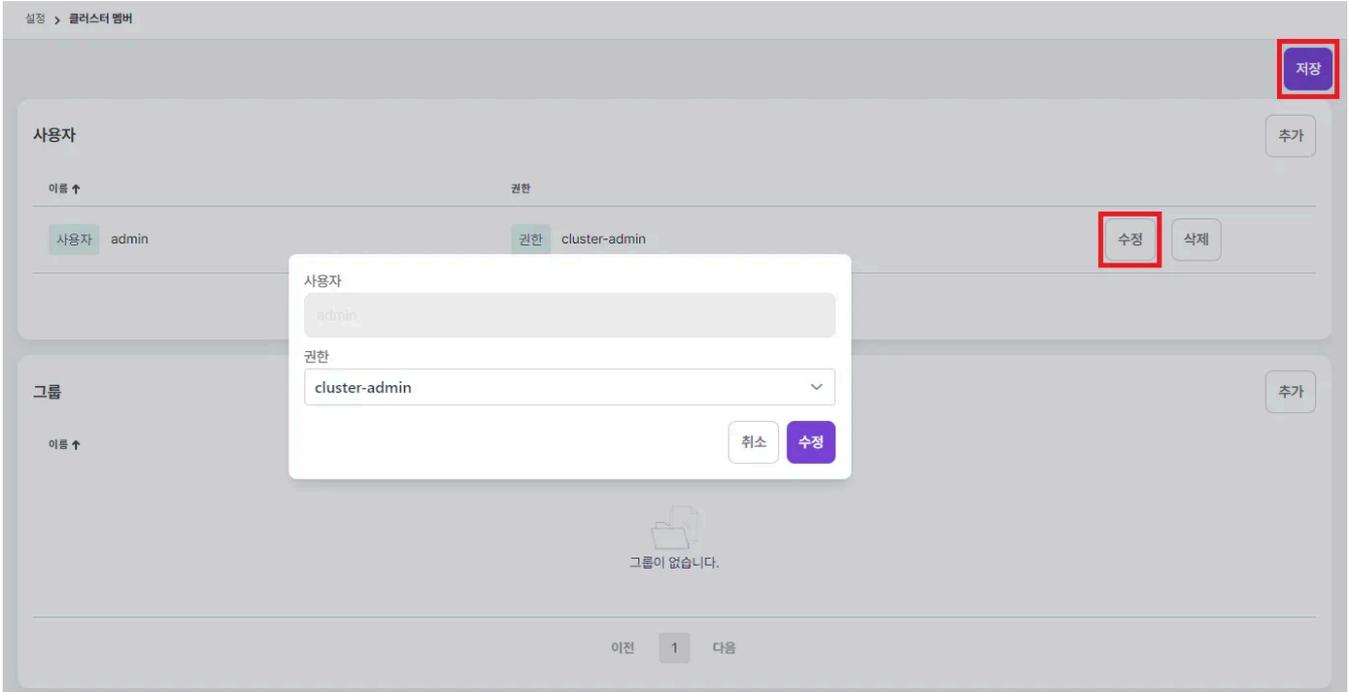
#### 4.2.13.1.1. Adding a Cluster Member

추가 Select the button to the right of the user (or group) list . You can select a user (or group) and set permissions in the modal. After setting the permissions 저장 , you must select the button for the changes to take effect. While multiple users (or groups) can be selected, only single permis - sions can be selected.



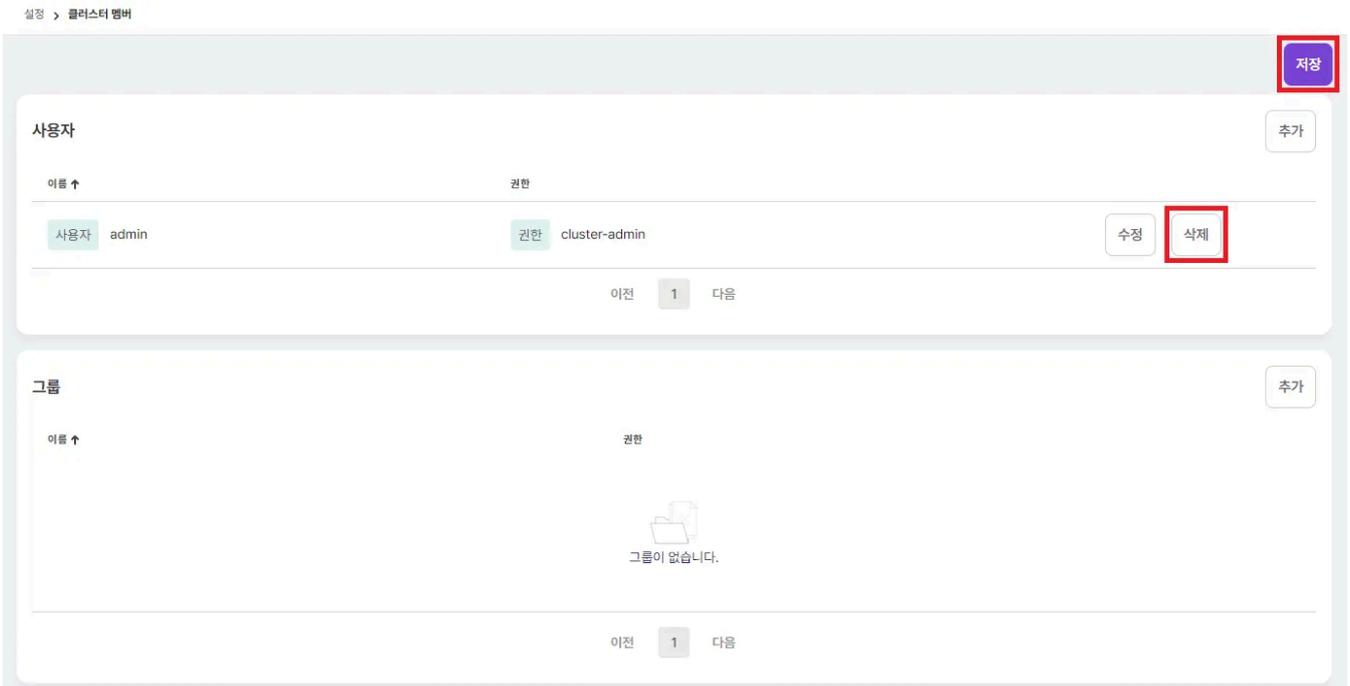
### 4.2.13.1.2. Modifying Cluster Members

수정 You can modify a user's (or group's) permissions by clicking the button to the right of the user (or group). 저장 Changes will only take effect after clicking the button at the top.



### 4.2.13.1.3. Deleting a Cluster Member

삭제 You can delete a member by right-clicking on the user (or group) . 저장 You must then click the button at the top to apply the change.



### 4.2.13.2. Cluster Receiver

The cluster receiver menu in the cluster scope is used in the same way as the global receiver menu in the global scope, so please refer to that guide .

### 4.2.13.3. Notification Policy

Notification policies set the criteria for system performance alerts. When a situation occurs that exceeds the user-defined alert criteria, a notification is sent, allowing the user to quickly respond. Cluster-scoped notification policies allow you to configure node and workload-related alerts, while namespace-scoped notification policies allow you to configure workload-related alerts.

#### TIP

The criteria for notification policies can be arbitrarily defined and set by the user.

Inactive

**sample-alertpolicy**

Sample Setting Alertpolicy

🕒 2024-05-23 11:18:27

수정
삭제

**sample-alertpolicy**

알림 활성화: ● Inactive

알림 이름: **sample-alertpolicy**

알림 설명: **Sample Setting Alertpolicy**

---

**알림 규칙**

알림 규칙 이름: **sample-policy1**

알림 규칙 설명: **rule1**

알림 대상: **대상 지정**

    메트릭 타입: **CPU 사용률**

    오브젝트

        종류: **노드**

        이름: **dev-accordion1**

    임계 조건

        연산자: **일치**

        임계치: **100%**

알림 수준: **정보**

알림 주기

    그룹 대기 시간: **5m**

    그룹 반복 시간: **5m**

    알림 반복 시간: **5m**

일시 정지

    스케줄: **0 0 1 \* \***

    지속시간: **5h**

---

알림 규칙 이름: **sample-policy2**

알림 규칙 설명: **rule2**

알림 대상: **대상 지정**

    메트릭 타입: **메모리 사용률**

    오브젝트

        종류: **디플로이먼트**

        네임스페이스: **sample**

        라벨 선택자: **app = sample**

    임계 조건

        연산자: **일치**

        임계치: **100%**

알림 수준: **경고**

---

알림 수준: **정보**

알림 주기

    그룹 대기 시간: **5s**

    그룹 반복 시간: **5m**

    알림 반복 시간: **5h**

일시 정지

    스케줄: **0 0 \* \* 0**

    지속시간: **5h**

수신자 목록:

- **sample-receiver**

### 4.2.13.3.1. Creating a Notification Policy

+ 알림 생성 Selecting the button will bring up a form where you can configure notifications. Enter the settings in the form and 알림 생성 select to create a notification policy. A notification policy can have multiple notification rules, each with its own notification target, notification level, notification cycle, pause, and other settings.

#### 4.2.13.3.1.1. Notification Policy

Describes the settings for the notification policy forms located at the top and bottom.

← 알림 목록 알림 생성

알림 활성화

이름  설명

item	explanation
activate	Whether to enable notification policy
Notification Policy Name	Notification Policy Name
Notification Policy Description	Description of Notification Policy

알림 수준  
 위험  경고  정보

알림 주기

그룹 대기 시간  그룹 반복 시간  알림 반복 시간

일시 정지

시작일자  스케줄

스케줄  지속시간

수신자 목록

item	explanation
Notification level	Notification Alert Level

item	explanation
Notification cycle	Set a time to send notifications <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <ul style="list-style-type: none"> <li>• Group Wait Time: How long the first notification will wait</li> <li>• Group repeat time: The time it takes for a notification to be resent after it has been sent.</li> <li>• Alarm repeat time: The time interval between notification resends.</li> </ul> </div>
interrupt	시작일자 Or limit notification sending 스케줄 based on 지속 시간
Recipient list	List of cluster recipients to receive notifications (created from the Cluster Recipients menu)

### 4.2.13.3.1.2. Notification Rules

알림 규칙 추가 You can create multiple notification rules with buttons in the notification policy , and 알림 규칙 삭제 you can remove notification rules with buttons.

item	explanation
Notification Rule Name	Notification Rule Name
Notification Rule Description	Description of Notification Rules
Notification target	대상 지정 Or Query (Prometheus Query)
Notification level	Notification Alert Level
Notification cycle	Set a time to send notifications <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <ul style="list-style-type: none"> <li>• Group Wait Time: How long the first notification will wait</li> <li>• Group repeat time: The time it takes for a notification to be resent after it has been sent.</li> <li>• Alarm repeat time: The time interval between notification resends.</li> </ul> </div>
interrupt	시작일자 Or limit notification sending 스케줄 based on 지속 시간

- 대상 지정 If the notification target is

**알림 규칙**

알림 규칙

알림 규칙 이름

알림 규칙 설명

알림 대상

대상 지정  Query

오브젝트

단일  라벨 선택기

종류

메트릭 타입

%

알림 수준

알림 주기

일시 정지

### 알림 규칙

알림 규칙

알림 규칙 이름

알림 규칙 설명

알림 대상

대상 지정  Query

오브젝트

단일  라벨 선택터

종류

네임스페이스

라벨 선택터

=

✕

메트릭 타입

임계 조건

알림 수준

알림 주기

일시 정지

item	explanation
Object	단일 Or 라벨 선택터 choose
type	Choose between nodes or workloads (deployments, stateful sets, daemon sets, jobs, cron jobs, pods).
namespace	Select a namespace
name	단일 Select resource name if object is
Label Selector	라벨 선택터 Set the label selector if the object is <div style="border: 2px solid black; padding: 10px; margin-top: 10px;"> <ul style="list-style-type: none"> <li>key: Label key value to match</li> <li>Value: The label value to match</li> </ul> </div>

item	explanation
Metric type	<ul style="list-style-type: none"> <li>• Node metric type</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ul style="list-style-type: none"> <li>• CPU usage</li> <li>• Memory usage</li> <li>• Disk usage</li> </ul> </div> <ul style="list-style-type: none"> <li>• Workload Metric Type</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ul style="list-style-type: none"> <li>• CPU usage</li> <li>• Memory usage</li> <li>• Active service</li> <li>• Response time</li> <li>• Gc time</li> </ul> </div>
Critical condition	<ul style="list-style-type: none"> <li>• agreement</li> <li>• inconsistency</li> <li>• bigger than</li> <li>• Greater than or equal to</li> <li>• smaller than</li> <li>• less than or equal to</li> </ul>
Critical condition setting value	<ul style="list-style-type: none"> <li>• % (Percent)</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ul style="list-style-type: none"> <li>• CPU usage</li> <li>• Memory usage</li> <li>• Disk usage</li> </ul> </div> <ul style="list-style-type: none"> <li>• Count</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ul style="list-style-type: none"> <li>• Active service</li> </ul> </div> <ul style="list-style-type: none"> <li>• Second</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ul style="list-style-type: none"> <li>• Response time</li> <li>• Gc time</li> </ul> </div>

- Query If the notification target is

### 알림 규칙

알림 규칙

알림 규칙 이름

알림 규칙 설명

알림 대상

대상 지정  Query

Query

임계 조건

임계 조건을 선택하세요.

설정값을 입력하세요.

알림 수준

알림 주기

일시 정지

알림 규칙 삭제  
알림 규칙 추가

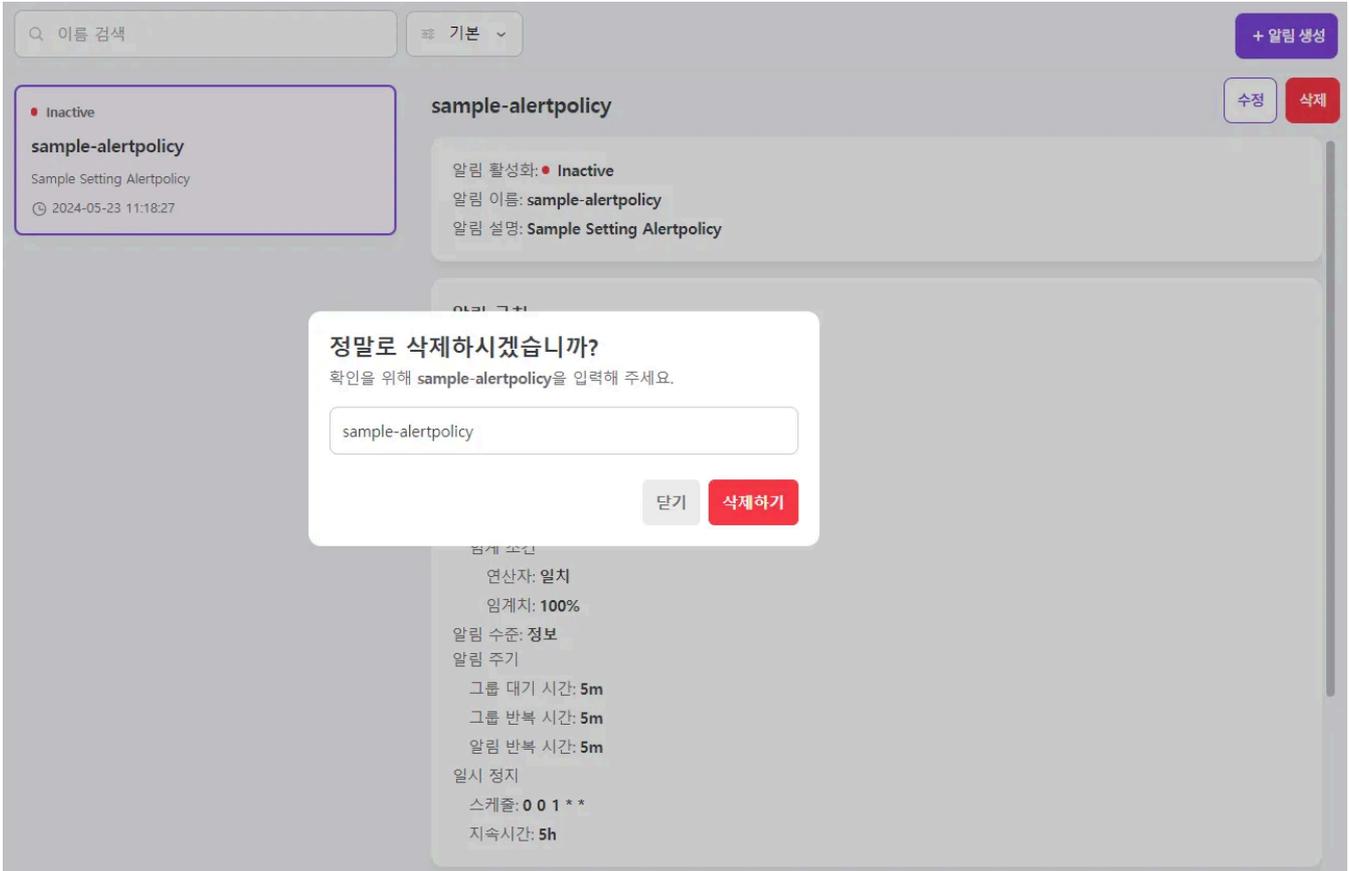
Query	Enter Prometheus Query
Critical condition	<ul style="list-style-type: none"> <li>agreement</li> <li>inconsistency</li> <li>bigger than</li> <li>Greater than or equal to</li> <li>smaller than</li> <li>less than or equal to</li> </ul>
Critical condition setting value	Enter a query or number corresponding to the value of the critical condition

### 4.2.13.3.2. Modifying the Notification Policy

Select the notification policy you want to modify and 수정 select the button. Enter or select the changes you want to make, then 알림 수정 click the button to apply them.

### 4.2.13.3.3. Deleting a Notification Policy

Select the notification policy you want to delete and 삭제 select the button.



Delete by entering the notification policy name in the modal.

### 4.2.13.4. Registry

A registry manages a repository of container images shared across a cluster. This repository is accessible from namespaces deployed across the cluster. Accordion provides an infrastructure registry and a user registry by default.

**TIP**

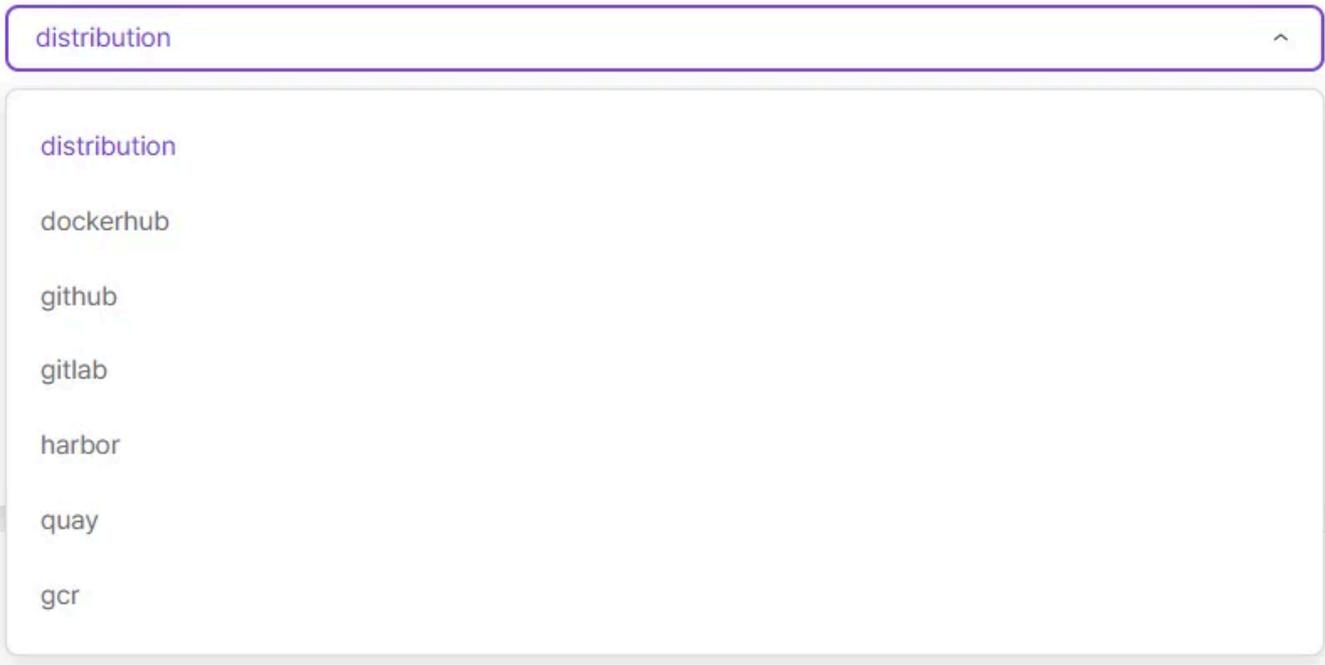
Accordion provides infrastructure registry and user registry by default.

The infrastructure registry stores the infrastructure container images required to run Accordion. Users only use the user registry.

If your container registry uses a private certificate, you must first configure the container runtime to trust the registry's SSL certificate. For instructions on how to do this, refer to the manual for your container runtime.

Additionally, users can define and use external and internal registries. The registry vendor types and available management features provided by Accordion are as follows:

벤더

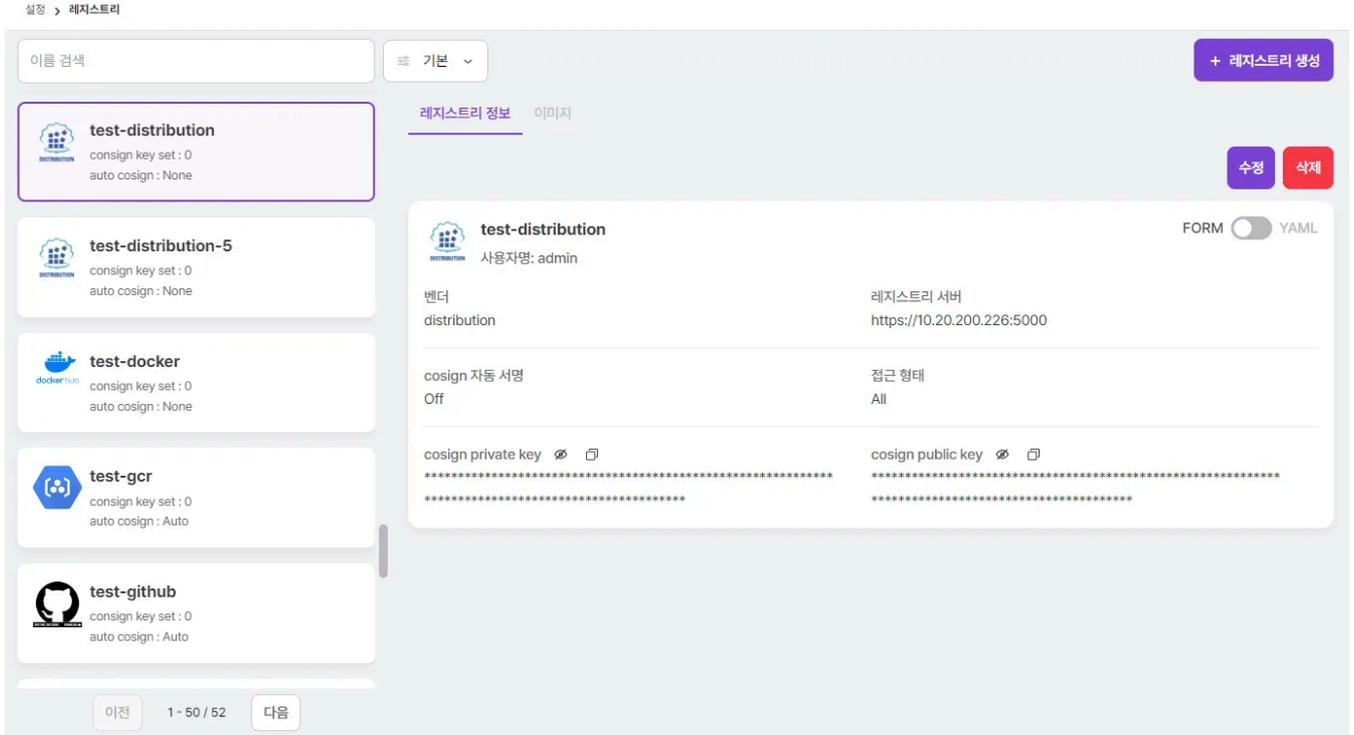


item	(Image, Tag) List View	Detailed inquiry	Cosign signature	delete
distribution	THE	THE	THE	THE
dockerhub	THE	THE	X	X
github	THE	THE	THE	X
gitlab	THE	THE	THE	THE

item	(Image, Tag) List View	Detailed inquiry	Cosign signature	delete
harbor	THE	THE	THE	THE
turn	THE	THE	THE	THE
gcr	THE	THE	THE	X

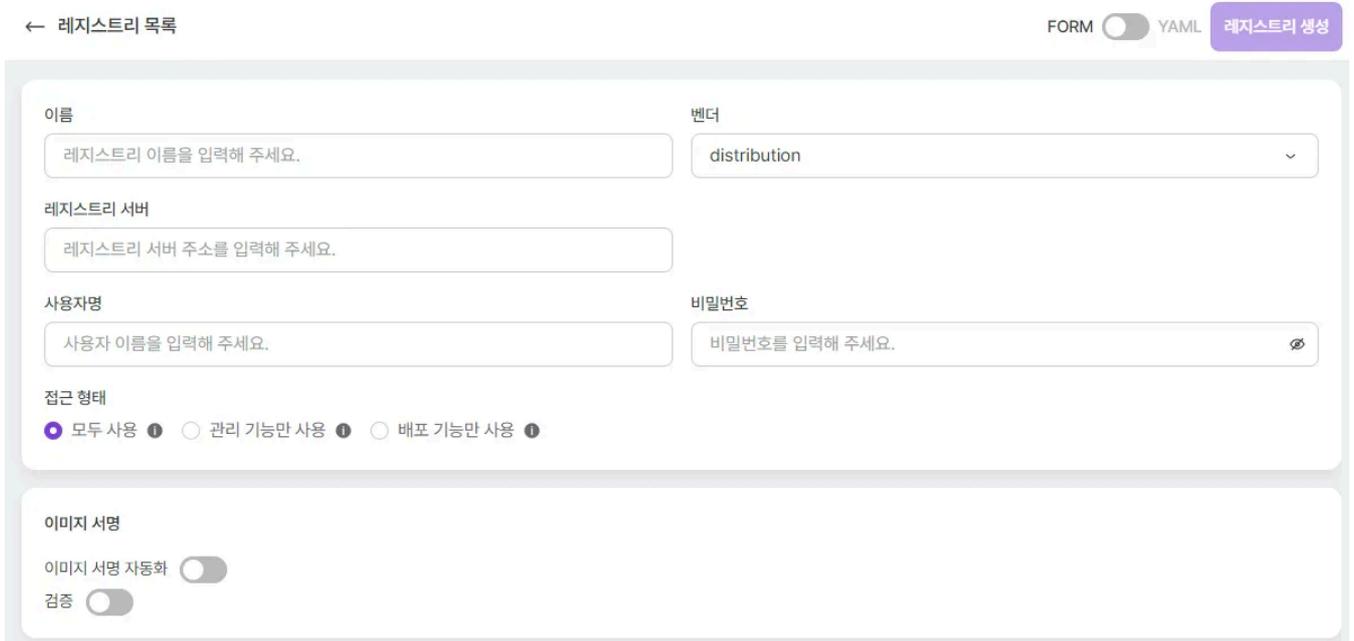
### 4.2.13.4.1. Registry List

The left side of the registry menu displays a list of created registries. You can check the registry name in card format, whether it's automatically signed by Cosine, and the number of additional verification keys registered.



### 4.2.13.4.2. Creating a registry

+ 레지스트리 생성 Selecting this option will take you to the registry creation page. Registration is supported in FORM format and via a YAML editor. The required FORM varies depending on the registry vendor. All registry-related information is entered and stored in base64-encoded form.



### 4.2.13.4.3. Creating a Vendor-Specific Registry (FORM)

#### 4.2.13.4.3.1. Distribution FORM

**이름**

**벤더**

**레지스트리 서버**

**사용자명**

**비밀번호**

**접근 형태**

모두 사용 ⓘ
  관리 기능만 사용 ⓘ
  배포 기능만 사용 ⓘ

item	explanation
name	Registry Name (required)
registry server	Distinguish between Http and Https with the registry server address. (Required)
Username	Registry Username (required)
password	Password (required)

#### TIP

An example of a registry server input is as follows:

Ex) http://registry.internal.co.kr

When using deployment mode, the username is automatically bound to the image repository and pushed when building the pipeline/catalog.

### 4.2.13.4.3.2. DockerHub FORM

**이름**

**벤더**

**사용자명**

**액세스 토큰**

**접근 형태**

모두 사용 ⓘ  
  관리 기능만 사용 ⓘ  
  배포 기능만 사용 ⓘ

**배포용 토큰** ⓘ

item	explanation
name	Registry Name (required)
Username	Registry Username (required)
Access token	Personal access token issued by DockerHub (required)

#### TIP

Accordion Registry only supports authentication permissions for individual users when using DockerHub.

To see how to issue an access token, [see](#) :

### 4.2.13.4.3.3. GitHub FORM

**이름**

**벤더**

**URL** ⓘ

**사용자명**

**액세스 토큰**

**조직 사용**

**접근 형태**

모두 사용 ⓘ
  관리 기능만 사용 ⓘ
  배포 기능만 사용 ⓘ

**배포용 토큰** ⓘ

item	explanation
name	Registry Name (required)
URL	Enter only the user name or group name up to the path to the image name in the repository as the URL of the registry server.
Username	Registry Token Username (Required)
Access token	Personal access token issued by GitHub (required)
Organizational Use	Check if the registry uses an organization.

**TIP**

An example of a URL input is as follows: Ex) acc , ghcr.io/acc

If you do not enter a URL, GitHub automatically binds it to your username. Ex) ghcr.io/사용자명

To see how to issue an access token, [see](#) :

### 4.2.13.4.3.4. Gitlab FORM

**이름**

**벤더**

**URL** ⓘ

**사용자명**

**액세스 토큰**

**접근 형태**

모두 사용 ⓘ  
  관리 기능만 사용 ⓘ  
  배포 기능만 사용 ⓘ

**배포용 토큰** ⓘ

item	explanation
name	Registry Name (required)
URL	Enter your username (or organization name) and project name in the repository as the URL of the registry server you want to manage and deploy to.
Username	Registry Token Username (Required)
Access token	Personal access token issued by Gitlab (required)

**TIP**

Enter the URL as (user name or organization name)/(project name).

Ex) acc/test , registry.gitlab.com/acc/test

Gitlab requires that you enter both your username (or organization name) and project name to properly view registry images.

To see how to issue an access token, [see](#) :

### 4.2.13.4.3.5. Harbor FORM

**이름**

**벤더**

**레지스트리 서버**

**사용자명**

**비밀번호**

**접근 형태**

모두 사용 ⓘ  
  관리 기능만 사용 ⓘ  
  배포 기능만 사용 ⓘ

**배포용 토큰** ⓘ

item	explanation
name	Registry Name (required)
registry server	Distinguish between Http and Https with the registry server address. (Required)
Username	Registry Username (required)
password	Password (required)

**TIP**

An example of a registry server input is as follows:

Ex) http://registry.internal.co.kr , http://registry.internal.co.kr/acc

When using deployment mode, you can optionally specify the project scope to deploy. If you do not enter the project scope, it will be automatically bound to the username when generating secret credentials.

Ex)

http://registry.internal.co.kr → http://registry.internal.co.kr/사용자명

http://registry.internal.co.kr/acc → http://registry.internal.co.kr/acc

### 4.2.13.4.3.6. Quay FORM

**이름**

**벤더**

**사용자명**

**비밀번호**

**조직 사용**

**접근 형태**

모두 사용 ⓘ  
  관리 기능만 사용 ⓘ  
  배포 기능만 사용 ⓘ

**배포용 토큰** ⓘ

item	explanation
name	Registry Name (required)
Username	Registry Username (required)
password	Docker login password set in Quay (required)
Organizational Use	If the registry uses an organization, check it and enter the organization name.

#### TIP

When building a pipeline/catalog, Quay automatically binds the username or organization name to the image repository by default. Ex) quay.io/(사용자명 or 조직명)

### 4.2.13.4.3.7. Gcr FORM

이름 밴더

레지스트리 이름을 입력해 주세요.

gcr

URL ?

URL을 입력해 주세요.

서비스 계정 키

서비스 계정 키를 입력해 주세요.

접근 형태

모두 사용 ?
 관리 기능만 사용 ?
 배포 기능만 사용 ?

배포용 토큰 ?

item	explanation
name	Registry Name (required)
URL	Enter the URL of the registry server, including the project name for a container registry and the storage repository for an artifact repository.
Service account key	Personal access token issued by GCP (required)

#### TIP

If you're using a container registry, you'll need to use the (region).gcr.io domain. Include the domain and your project ID in the URL. For example: gcr.io/accordion-0123

If you're using an artifact registry, use (region).gcr.io or the (region)-docker.pkg.dev domain. The URL should include the domain and the storage repository, including the project ID.

The artifact registry cannot be used if a storage repository is not configured.

To set up service account permissions, see:

- [Container Registry](#)
- [Artifact Registry](#)

Check the issuance method for service account keys below.

- [Container Registry](#)
- [Artifact Registry](#)

The following are commonly found FORMs.

item	explanation
Access form	<p>Select the mode to use depending on the purpose of using the registry.</p> <ul style="list-style-type: none"> <li>• Use All: Uses both management and deployment features.</li> <li>• Use only management functions: Use only image management functions, such as viewing or deleting images, within the container image repository.</li> <li>• Use only the deployment feature: Deploy the container image repository credentials secret to each namespace and use it in your pipeline/catalog.</li> </ul>
Tokens for distribution	<p>When using both access types, use this option if you want to separate authentication information for management and distribution. When this option is checked, a secret is created with distribution token information when distributing the secret.</p>

If your vendor supports Cosign image signing in your accordion, you have the following additional options:

item	explanation
Cosign automatic signing	<p>If you check this option, image signing will also be performed when building the pipeline/catalog.</p>

item	explanation
AUTO GENERATE KEY	This is only available when using Cosign automatic signing. If a separate Cosign signing key does not exist, check this to create a signing key for the registry.
Cosign public/private key	This is only available when using Cosign automatic signing. If a separate Cosign signing key exists, enter it directly.
Verifying externally signed container images	When using the verification function for Cosign image signature, you can verify the signature with the registered key.

### 4.2.13.4.4. Creating a Registry (YAML)



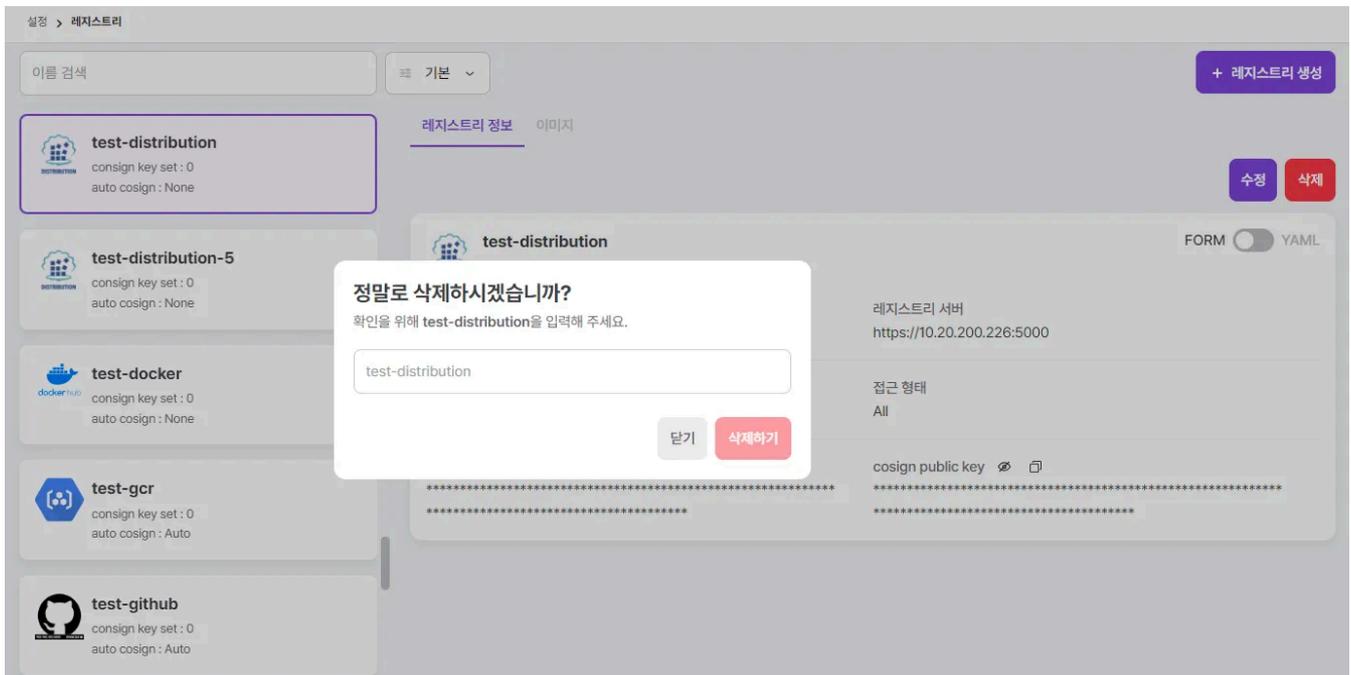
You can also create a registry using a YAML editor. When creating a registry using a YAML editor, all vendor specifications must be entered in base64 encoding.

### 4.2.13.4.5. Registry Edit

Select the registry you wish to modify and 수정 click the button on the right to apply the desired changes. Once a registry has been created, its name and vendor type cannot be changed.

### 4.2.13.4.6. Delete the registry

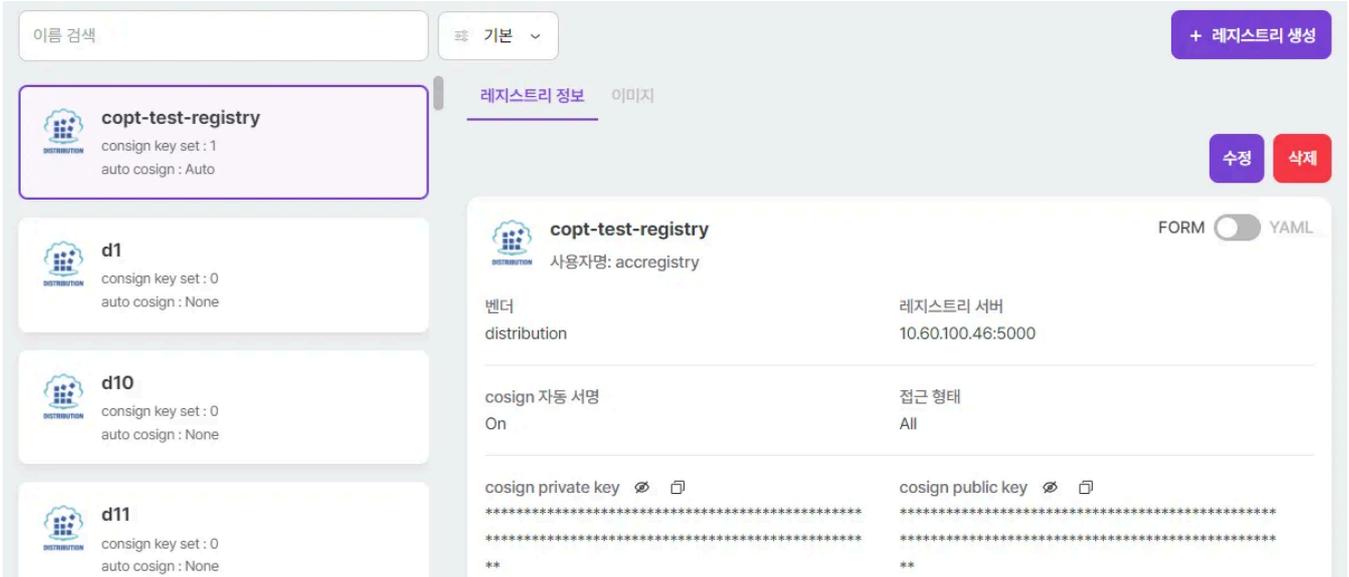
Select the registry you want to delete and 삭제 select the button on the right.



Delete by entering the registry name in the modal.

### 4.2.13.4.7. Registry Information

You can check the settings information for the registry.



item	explanation
name	The name of the registry is displayed.
Username	The username of the registry credentials is displayed.
vendor	The registry vendor type is displayed.
registry server	The registry server is displayed. For some vendors, the repository scope required for querying and deployment is also displayed.
cosign automatic signature	Cosign Whether or not automatic signing is enabled is displayed.
Access form	The registry usage mode is displayed.
cosign private key	The private key used for Cosign signing is displayed.
cosign public key	The public key used to verify the Cosign signature is displayed.

Additionally, you can check the YAML spec by clicking the YAML toggle button in the upper right corner.

이름 검색

☰ 기본 ▾

+ 레지스트리 생성

**copt-test-registry**

consign key set : 1

auto cosign : Auto

**d1**

consign key set : 0

auto cosign : None

**d10**

consign key set : 0

auto cosign : None

**d11**

consign key set : 0

auto cosign : None

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다음

**copt-test-registry**

사용자명: accregistry

FORM  YAML

```

1 kind: Registry
2 apiVersion: containermanagement.accordions.co.kr/v1beta1
3 metadata:
4   creationTimestamp: '2024-01-04T07:10:19Z'
5   generation: 7
6   managedFields: ...
51  name: copt-test-registry
52  resourceVersion: '55534907'
53  uid: f543ef8f-4961-4c7a-9dcd-ea12714dd5c9
54 spec:
55   activeMode: All
56   additional:
57     cosign:
58       signKey:
59         privateKey: >-
60         LS0tLS1CRUdJTiBFTkNSWBURU0gU01HU1RPUkUgUFJJVkJvFURSBLRVktLS0tLQpleUpyWkdZaU9uc2

```

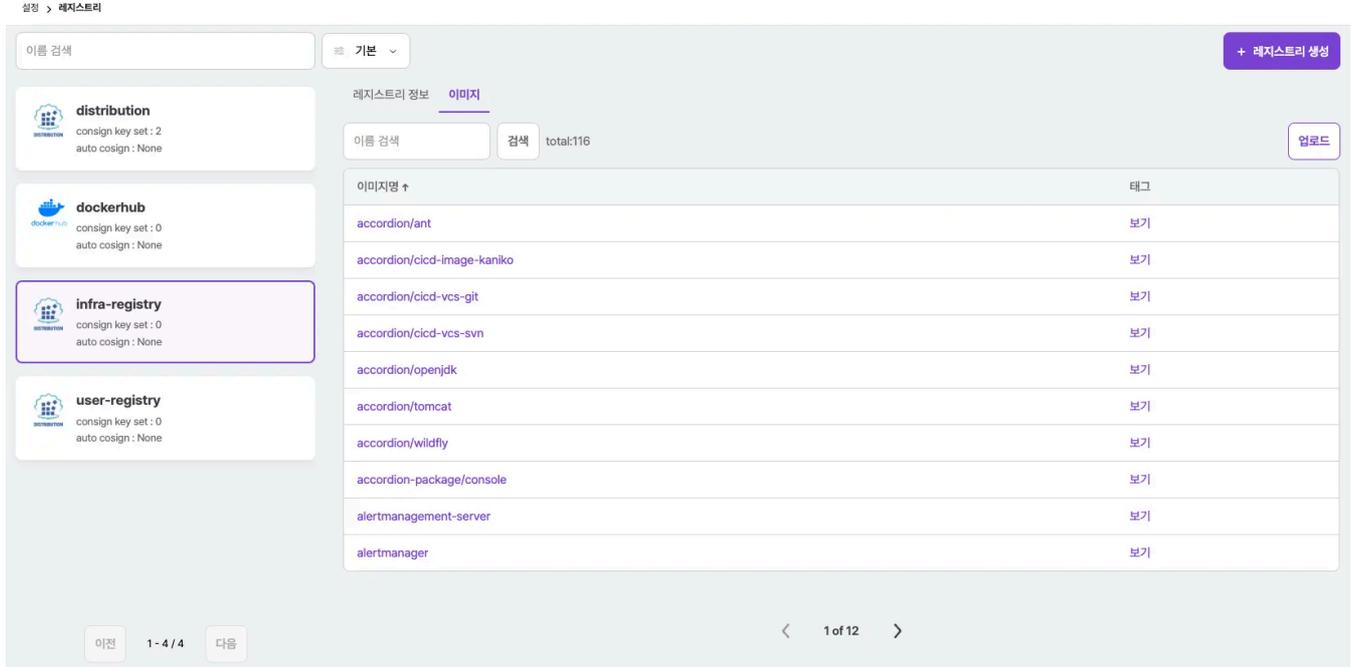
file:///C:/Users/User/Documents/업무/site/site/accordion/2.14/index.html

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### 4.2.13.4.8. Image (Repository) List

This displays a list of images in the registry.

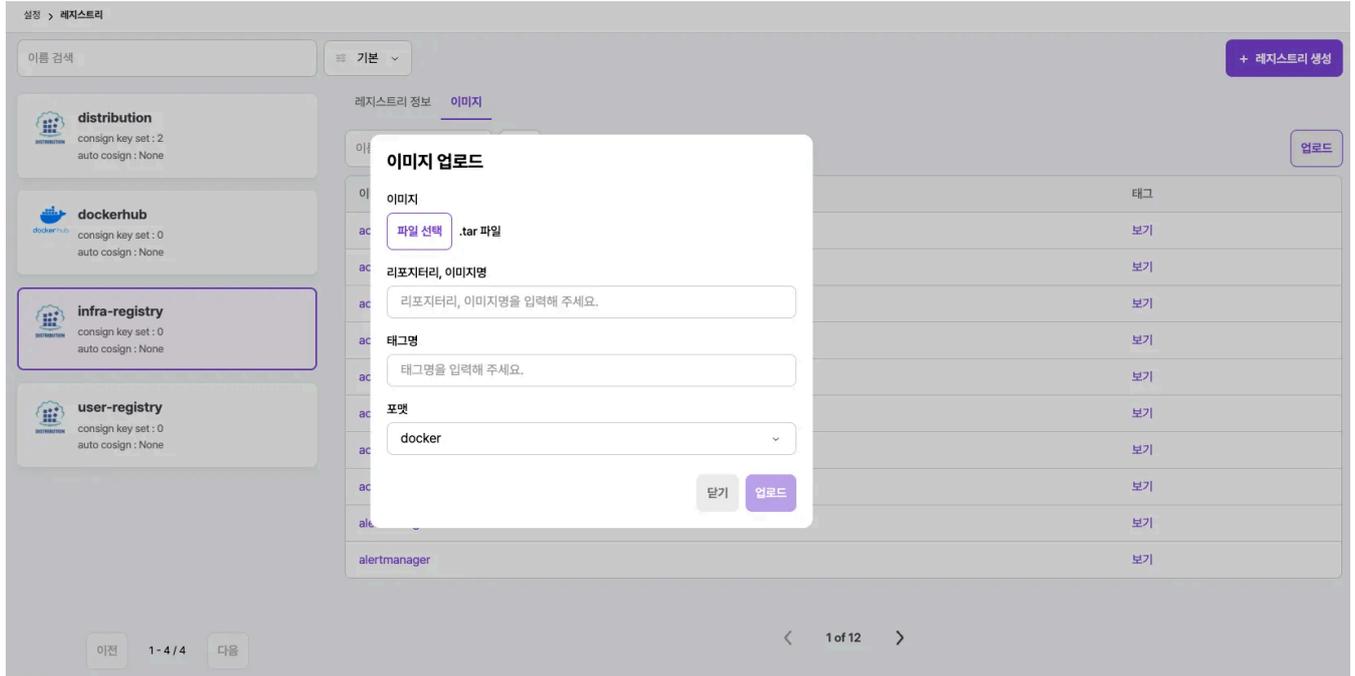
Only images matching the entered authentication authority can be viewed, and the search function requires at least three characters.



item	explanation
total	The total number of images in the searched registry is displayed.
Image name	The registry's image repository name is displayed.
Tags	보기 Selecting the button will display the total number of tags the registry image repository has.
Upload	A modal will appear allowing you to upload an image within the registry.

### 4.2.13.4.9. Image Upload

Supports uploading images within the registry.



item	explanation
image	Image to upload (extension is .tar )
Repository, image name	Repository to upload, image name
Tag name	Tag name to be attached to the image to be uploaded
Format	Format of the image to be uploaded ( docker and oci supported) If the uploaded file format is different from the format set, the upload will fail. Docker does not support multi-image upload.

### 4.2.13.4.10. Image Digest List

Lists the digests used in the repository.

sig 태그 감추기 An option allows you to list only pure image digests.  
( sig 태그 The tag is generated during Cosign.)

설정 > 레지스트리 > accordion/openjdk

검색어를 입력해주세요. Total: 3  sig 태그 감추기

다이제스트	태그	서명 여부	플랫폼 ↓	생성일	사이즈
3f5aa3686655eb583da6f7ff4...	jdk8	✖ Unsigned	linux/amd64	2024-05-16T05:13:11Z	160.76MB
910118b18975e86e4df30eb07...	jdk11	✖ Unsigned	linux/amd64	2024-05-16T05:14:11Z	301.65MB
a52ce06cdb534bc4995ab003...	jdk17	✖ Unsigned	linux/amd64	2024-05-16T05:22:49Z	247.01MB

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item	explanation
Digest	Digest name
Tags	List of tags the digest has
Whether to sign or not	Indicates the Cosign status of the digest. signed: signed; unsigned: unsigned
platform	manifest Platform information is displayed. In the case of , platform information for indexManifests all is displayed. manifest
Creation date	The creation date of the digest. indexManifests In this case, N/A it is displayed as .
size	The size of the digest. indexManifests In this case, N/A it is displayed as .
	<div data-bbox="475 810 1453 1525" style="border: 1px solid #ccc; padding: 10px;"> <p><b>sha256:a52ce06cdb534bc4995ab00302fd4c...</b></p> <p>포맷</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">docker</div> <p>플랫폼</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">linux/amd64</div> <p>태그명</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">태그명을 입력해 주세요.</div> <div style="text-align: right;"> <span style="border: 1px solid #ccc; padding: 5px 10px; margin-right: 5px;">닫기</span> <span style="background-color: #4a4a9a; color: white; padding: 5px 10px; border-radius: 5px;">다운로드</span> </div> </div> <p>Downloads are supported for digest images. The formats are supported, docker and oci you can select the platform for the digest. For all platforms, oci only format images are supported. If no tag name is entered, the download will be performed using the digest name. If a tag name is entered, the download will be performed using the corresponding tag name.</p>

item	explanation
	<div data-bbox="478 179 1452 548"> <h3>서명하시겠습니까?</h3> <p>다이제스트 [sha256:dede560d9526b5abb996cb3149de165e12e946676d55808ce23ecde2c527cecd]를 서명합니다.</p> <p style="text-align: right;"> <input type="button" value="닫기"/> <input type="button" value="서명하기"/> </p> </div> <p>Registries other than DockerHub support Cosign if automated image signing is enabled. Cosign signs image digests using the registry's privateKey. If the image is in indexManifests, all subordinate digests are recursively signed. Signed digests can be verified using the registry's publicKey or verifyKeys.</p>
	<div data-bbox="478 750 1452 1388"> <h3>태그 복사하기</h3> <p>다이제스트명</p> <p>sha256:dede560d9526b5abb996cb3149de165e12e946676d55808ce23</p> <p>레지스트리</p> <p>레지스트리를 선택해주세요. ▾</p> <p>이미지명 변경 <span style="float: right;">태그명 변경</span></p> <p>새 이미지명을 입력해 주세요. : 새 태그명을 입력해 주세요.</p> <p><input type="checkbox"/> 태그 덮어쓰기</p> <p style="text-align: right;"> <input type="button" value="닫기"/> <input type="button" value="복사하기"/> </p> </div> <p>Copy the digest. You can select the registry to copy to and change the image name and tag name. If you don't change the tag name, the latest tag will be copied by default. If you select "Overwrite Tag," any existing tags with the same name will be ignored and overwritten.</p>

item	explanation
	<div data-bbox="478 185 1452 689" style="border: 1px solid #ccc; padding: 10px;"> <p><b>정말로 삭제하시겠습니까?</b></p> <p>확인을 위해 sha256:dede560d9526b5abb996cb3149de165e12e946676d55808ce23ecde2c527cecd을 입력해 주세요.</p> <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin: 10px 0;">             sha256:dede560d9526b5abb996cb3149de165e12e94           </div> <div style="display: flex; justify-content: flex-end; gap: 10px;"> <span data-bbox="1129 566 1225 638">닫기</span> <span data-bbox="1246 566 1398 638" style="background-color: #f00; color: white; padding: 5px 10px;">삭제하기</span> </div> </div> <p>Deletion is supported for vendors other than DockerHub, GitHub, and Gcr. If you choose to delete, the digest will be deleted.</p>

### 4.2.13.4.11. For problematic digests

If there's a problem with the digest, a warning icon is displayed. This digest doesn't support additional features, such as detailed information retrieval and copying, except for deletion. If the provider doesn't support deletion or if deletion fails, the accordion can't process the deletion, so deletion must be performed through the provider.

설정 > 레지스트리 > console

검색어를 입력해주세요. Total: 178 sig 태그 감추기

다이제스트	태그	서명 여부	플랫폼 ↓	생성일	사이즈	
d3ae5e72cd9740fdc4d3c8ba...	ef038f99c61041fb31f289457795c2c106f503318f0f5990c6865b6b	Unsigned		2023-04-06T06:30:06Z	20.76MB	
66fed5a35daede3e4893fad2...	f3c264f99e6f092586b3d97d15ff99a77ba1842b8ba0af97bb89cd	Unsigned		2023-04-10T06:07:54Z	20.71MB	
ba1de5f5995fe55195943...	2.6.0	Unsigned				
663ee2052bf1b3fd30d94f4d3...	test-memory	Unsigned	linux/amd64	2024-05-14T01:22:29Z	103.96MB	
ba5315da0b7ab42a578130c2...	2.7.1	Unsigned	linux/amd64	2024-06-04T08:50:02Z	104.27MB	
f1cc077388e9e1da1d0b9b433...	apm-test2	Unsigned	linux/amd64	2024-07-26T05:13:11Z	95.49MB	
a409beef192198798a4a16983...	2.4.0	Unsigned	linux/amd64	2023-05-10T07:33:54Z	32.21MB	
e6f0505f4dd1b73eaa5737fc...	2.2.5	Unsigned	linux/amd64	2022-11-14T00:17:14Z	35.59MB	
b21a62010530c9e1ff4095f31a...	e77f81cc227c04f602011df28e0d154d06e98a9b4293a67544f99f	Unsigned		2023-03-08T23:53:04Z	691.62MB	
1d004a1d746099d30cddea67...	134bb256c9dfe2e363197969b8fcd7f5d134113df9a394eba9de49b7	Unsigned		2023-03-09T00:05:28Z	19.90MB	

이전 1 ... 4 5 6 7 8 ... 18 다음

### 4.2.13.4.12. Image digest information

manifest It shows based on digest information .

설정 > 레지스트리 > admin/cicd-image-kaniko > sha256:262e0dc6b33c62099bc0be76a96cc5397007a572b3bc3cdeeebbd24bae27b7e3

unsigned

**10.20.200.206:30001/admin/cicd-image-kaniko@sha256:262e0dc6b33c62099bc0be76a96cc5397007a572b3bc3cdeeebbd24bae27b7e3**

플랫폼: linux/amd64

생성일: 2022-01-10T12:15:06Z

사이즈: 43.51MB

**Config**

---

**Layers**

- 0 COPY /go/src/github.com/GoogleContainerTools/kaniko/out/\* /kaniko/ # buildkit
- 1 COPY /go/src/github.com/GoogleContainerTools/kaniko/out/warmer /kaniko/warmer # buildkit
- 2 COPY /usr/local/bin/docker-credential-gcr /kaniko/docker-credential-gcr # buildkit
- 3 COPY /go/src/github.com/awslabs/amazon-ecr-credential-helper/bin/local/docker-credential-ecr-login /kaniko...
- 4 COPY /go/src/github.com/chrismlard/docker-credential-acr-env/build/docker-credential-acr-env /kaniko/doc...
- 5 COPY /bin /busybox # buildkit
- 6 VOLUME [ /busybox ]
- 7 COPY /ca-certificates.crt /kaniko/ssl/certs/ # buildkit
- 8 COPY /kaniko/docker /kaniko/docker # buildkit
- 9 COPY files/nsswitch.conf /etc/nsswitch.conf # buildkit
- 10 ENV HOME=/root
- 11 ENV USER=root

**Command**

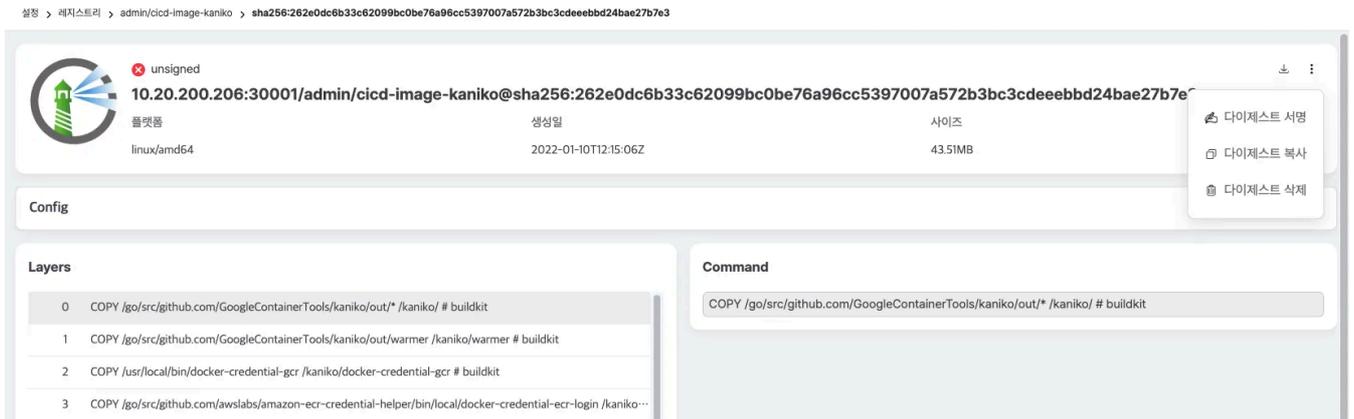
```
COPY /go/src/github.com/GoogleContainerTools/kaniko/out/* /kaniko/ # buildkit
```

### 4.2.13.4.13. Digest-related action buttons

Clicking on the top right  will bring up a format selection box for downloading the digest image, and clicking on the format information will download the image.



Clicking on the top right  will bring up a select box that allows you to sign, copy, or delete the digest, which works in the same way as the digest list.



item	explanation
Digest signature	Sign the digest.
Copy digest	Copy the digest. You can select the registry to copy to and change the image name and tag name. If you don't change the tag name, latest it will be copied as a tag by default. 태그 덮어쓰기 If you select , any existing tags with the same name will be ignored and overwritten.
Delete digest	Delete the digest.

### 4.2.13.4.13.1. Layers and Command

When you select a row in Layers, the entire contents of the command for the selected layer are printed in the Command on the right.

**Layers**

- 1 /bin/sh -c apt-get update && apt-get install -y --no-install-recom...
- 2 /bin/sh -c apt-get update && apt-get install -y --no-install-recom...
- 3 /bin/sh -c apt-get update && apt-get install -y --no-install-recom...
- 4 /bin/sh -c apt-get update && apt-get install -y --no-install-recom...
- 5 /bin/sh -c echo 'deb http://deb.debian.org/debian jessie-backport...
- 6 ENV LANG=C.UTF-8
- 7 /bin/sh -c { echo '#!/bin/sh'; echo 'set -e'; echo; echo 'dirname "\${(r...
- 8 ENV JAVA\_HOME=/usr/lib/jvm/java-8-openjdk-amd64
- 9 ENV JAVA\_VERSION=8u111
- 10 ENV JAVA\_DEBIAN\_VERSION=8u111-b14-2-bpo8+1
- 11 ENV CA\_CERTIFICATES\_JAVA\_VERSION=20140324
- 12 /bin/sh -c set -x && apt-get update && apt-get install -y openjdk-...
- 13 /bin/sh -c /var/lib/dpkg/info/ca-certificates-java.postinst configure

**Command**

```
/bin/sh -c { echo '#!/bin/sh'; echo 'set -e'; echo; echo 'dirname "${(r
eadlink -f "$(which javac || which java)")}"; } > /usr/local/bin/docker-java-ho
me && chmod +x /usr/local/bin/docker-java-home
```

### 4.2.13.4.14. Repository Tag Information

Repository tag information displays almost the same screen as digest information. Additionally, only the tags themselves digest are displayed separately.

설정 > 레지스트리 > admin/cicd-image-kaniko > 2.0.2

x unsigned

10.20.200.206:30001/admin/cicd-image-kaniko:2.0.2

DIGEST:sha256:262e0dc6b33c62099bc0be76a96cc5397007a572b3bc3cdeeebbd24bae27b7e3

플랫폼: linux/amd64

생성일: 2022-01-10T12:15:06Z

사이즈: 43.51MB

**Config**

---

**Layers**

- 0 COPY /go/src/github.com/GoogleContainerTools/kaniko/out/\* /kaniko/ # buildkit
- 1 COPY /go/src/github.com/GoogleContainerTools/kaniko/out/warmer /kaniko/warmer # buildkit
- 2 COPY /usr/local/bin/docker-credential-gcr /kaniko/docker-credential-gcr # buildkit
- 3 COPY /go/src/github.com/awslabs/amazon-ecr-credential-helper/bin/local/docker-credential-ecr-login /kaniko...
- 4 COPY /go/src/github.com/chris-mellard/docker-credential-acr-env/build/docker-credential-acr-env /kaniko/doc...
- 5 COPY /bin /busybox # buildkit
- 6 VOLUME [ /busybox ]
- 7 COPY /ca-certificates.crt /kaniko/ssl/certs/ # buildkit
- 8 COPY /kaniko/docker /kaniko/docker # buildkit
- 9 COPY files/nsswitch.conf /etc/nsswitch.conf # buildkit
- 10 ENV HOME=/root

**Command**

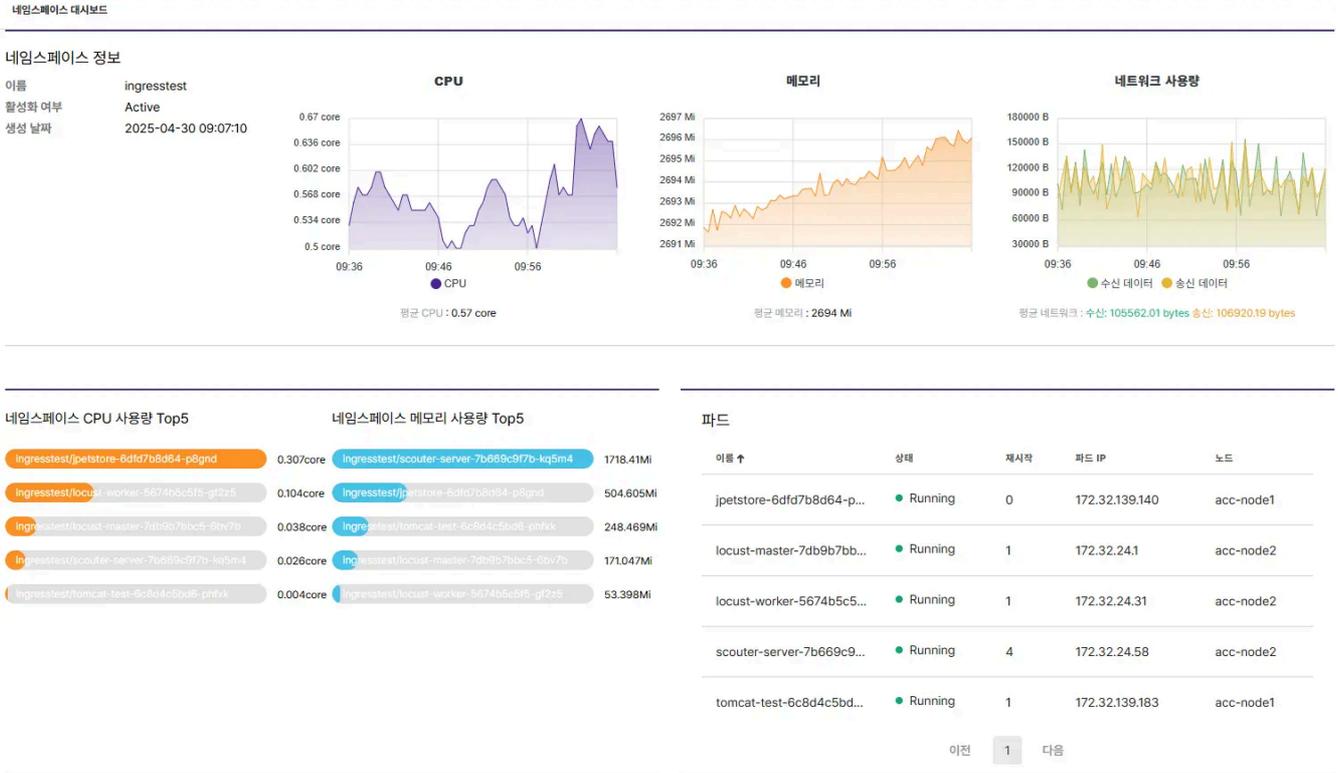
```
COPY /go/src/github.com/GoogleContainerTools/kaniko/out/* /kaniko/ # buildkit
```



## 4.3. Namespace Menu

### 4.3.1. Namespace Dashboard

The namespace dashboard provides namespace information, namespace-specific system resources (CPU/memory, etc.), and status information for pods deployed in the namespace.



The top of the namespace dashboard provides information about the namespace description and system resource usage.



Table 10. Namespace information

item	explanation
name	Namespace name
Whether activated or not	Namespace status (Active or Terminating) <ul style="list-style-type: none"> <li>Active: Normal deployment</li> <li>Terminating: Deleting</li> </ul>

item	explanation
Creation date	Time of creation
CPU	CPU usage over 5 minutes (Average CPU: average value of CPU)
memory	Memory usage over 5 minutes (average memory: average value of memory)
Network usage	Network usage over 5 minutes (Average Network: Average value of network usage)

The bottom of the namespace dashboard provides information about the pods deployed in the namespace. The chart on the left shows the five pods with the highest CPU usage and the five pods with the highest memory usage in the namespace.

네임스페이스 CPU 사용량 Top5



네임스페이스 메모리 사용량 Top5



The list on the right lists all pods deployed in the namespace.

패드

이름 ↑	상태	재시작	패드 IP	노드
jpetstore-6dfd7b8d64-p...	● Running	0	172.32.139.140	acc-node1
locust-master-7db9b7bb...	● Running	1	172.32.24.1	acc-node2
locust-worker-5674b5c5...	● Running	1	172.32.24.31	acc-node2
scouter-server-7b669c9...	● Running	4	172.32.24.58	acc-node2
tomcat-test-6c8d4c5bd...	● Running	1	172.32.139.183	acc-node1

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item	explanation
name	The name of the pad
situation	Pad's operating status
re-start	Number of retries for the pod
Pad IP	Pad's IP
Node	Node where the pod is deployed



## 4.3.2. Application

Applications in the namespace scope allow users to deploy applications using Helm charts or catalog templates. Deploying using Helm charts is identical to the Helm menu in cluster-scoped applications, except for the scope, so refer to that guide . This chapter explores how to deploy and manage applications using catalog templates in the catalog menu.

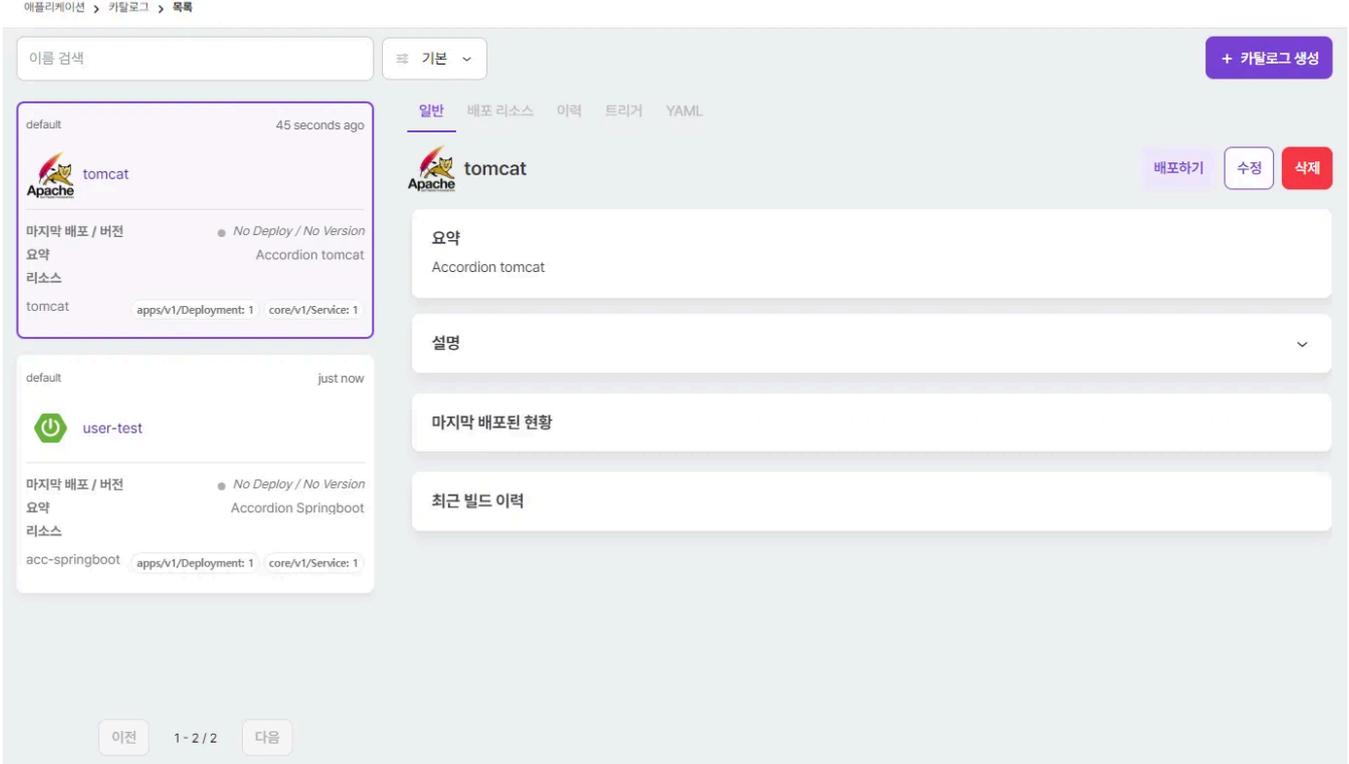
### 4.3.2.1. Catalog

Catalog is Accordion's unique management tool for deploying Kubernetes resources using catalog templates. The catalog features the following:

characteristic	explanation
Deploying various Kubernetes resources	You can deploy custom resources, including core resources such as Deployments and StatefulSets.
Continuous Delivery	You can manage the lifecycle, including deploying upgrades, for a set of resources distributed through a catalog.
Distribution History Management	Manages the specifications at the time of distribution and the history of the user who requested the distribution.
Rollback	Recreates only the resources with the deployment resource specifications described in the previously successfully deployed history.
Various distribution policies	Even for resources that make up a single catalog, each resource can have its own distribution policy.
Compare and preview distribution (rollback) by history version	You can compare changes to deployment resources or pipelines by version and preview the changes before deployment (rollback).
Multi-cluster deployment support	For clusters managed by Accordion, you can have the same deployment and life cycle across different namespaces and clusters.
Pipeline linkage	You can create container images from source, deploy them through various pipeline connections, and distribute them with approval.

#### TIP

The relationship between a catalog and a catalog template is similar to that between a Helm release and a Helm chart. A catalog template contains catalog specifications, such as Kubernetes resource information and variable information required for deployment. When a user creates a catalog using a catalog template, the system uses the catalog information to deploy the application.



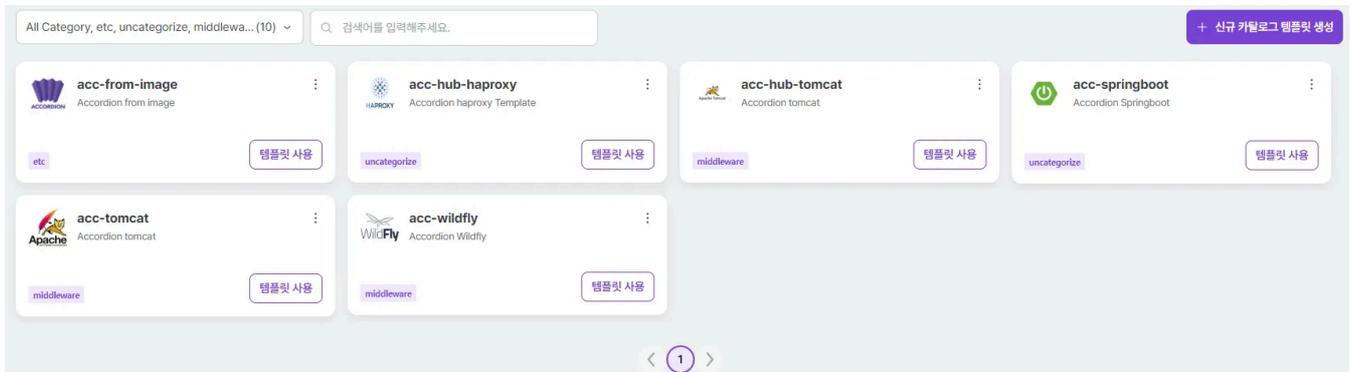
The Catalog menu provides a description of the catalog, resource configuration, and distribution history.

item	explanation
common	<p>Provides basic information about the catalog and its distribution status.</p> <ul style="list-style-type: none"> <li>• summation</li> <li>• explanation</li> <li>• Last distributed status</li> <li>• Recent build history</li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>최근 빌드 이력</b></p> <p>버전: 20</p> <ul style="list-style-type: none"> <li>✓ VCS-GET &gt;</li> <li>✓ DOCKERFILE-TOMCAT &gt;</li> <li>✓ IMAGE-BUILD &gt;</li> <li>✓ DEPLOY-LOCALCLUSTER-AAAA &gt;</li> </ul> </div>
Distribution Resources	Provides information on Kubernetes resources distributed through the catalog.
record	<p>Provision and distribution management of history information distributed through catalogs</p> <ul style="list-style-type: none"> <li>• Check the catalog distribution process</li> <li>• Stop distribution of a catalog that is being distributed</li> <li>• Rollback for successful deployment history</li> <li>• Comparison of changes in deployment history by version</li> </ul>
YAML	Managing Kubernetes Resources for Catalogs

item	explanation
trigger	Detect event publication and deploy catalogs or perform actions on triggers.

### 4.3.2.1.1. Creating a Catalog

+ 카탈로그 생성 Clicking the button in the Catalog menu allows you to select the catalog template needed to create a catalog.



**NOTE**

Accordion comes with built-in templates for Tomcat, Wildfly, etc., and catalog templates can be added or modified.

If you want to create a catalog without using a template, + 신규 카탈로그 템플릿 생성 you can create a catalog directly by clicking the button in the upper right corner.

템플릿 사용 Selecting a template for the catalog you want to create via the button takes you to the catalog settings screen. On the next screen, simply enter the basic settings required to create the catalog, such as the catalog name, pipeline, and deployment resources. Then 카탈로그 생성 , click the button in the upper right corner to easily create the catalog.

← 뒤로가기

전체 옵션 보기

카탈로그 생성

이름

파이프라인 설정



vcs-get

repo [?](#)

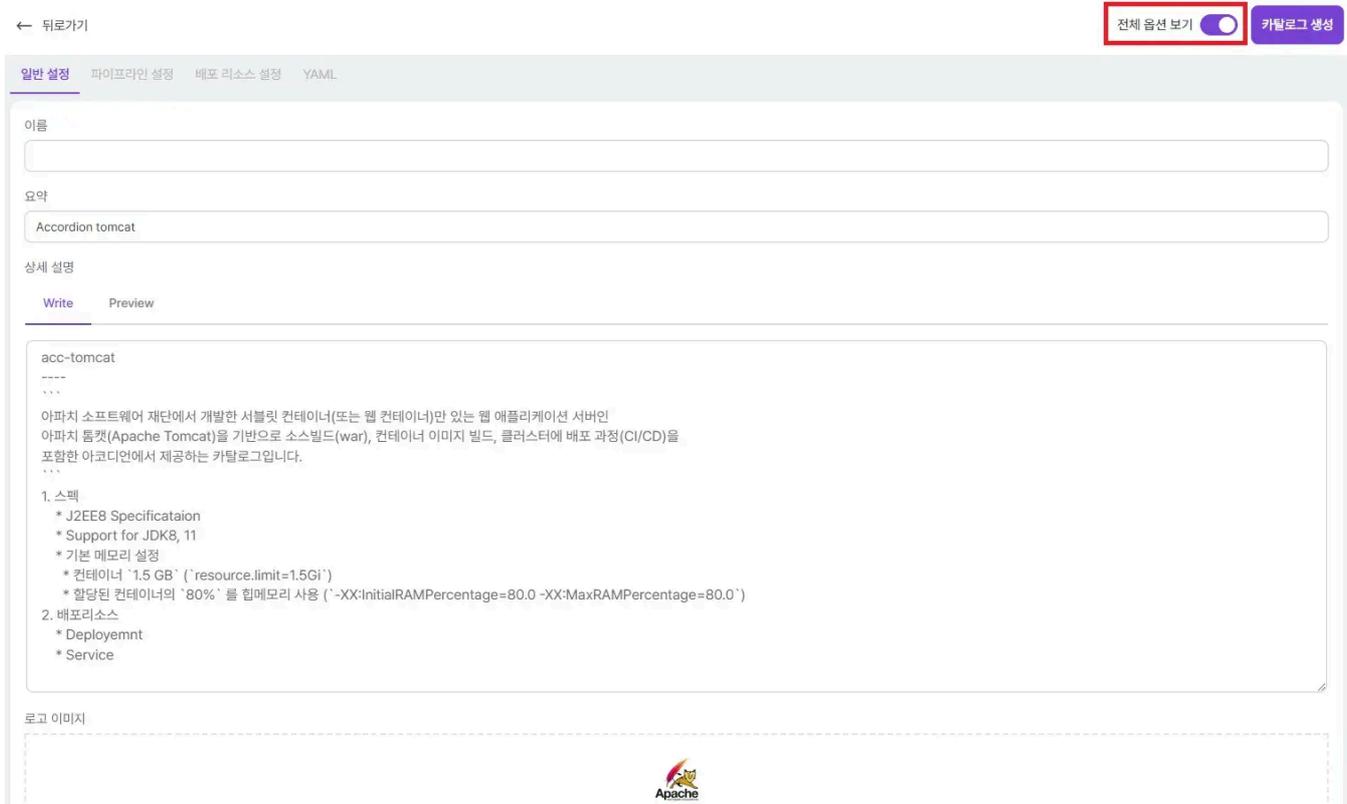
ref [?](#)

auth

src-build

cmd [?](#)

전체 옵션 보기 Clicking the toggle button in the upper right corner allows you to select more detailed settings. Activating the toggle reveals the General Settings section, where you can enter basic information about the catalog you're creating, such as the catalog name, description, and logo image.



item	explanation
name	Catalog name
summation	A brief description of the catalog (displayed in the list information after creation)
Detailed description	Detailed description of the catalog (displayed in Markdown format after creation)
Logo image	Logo image of the catalog (if not set, set to the logo of the template)



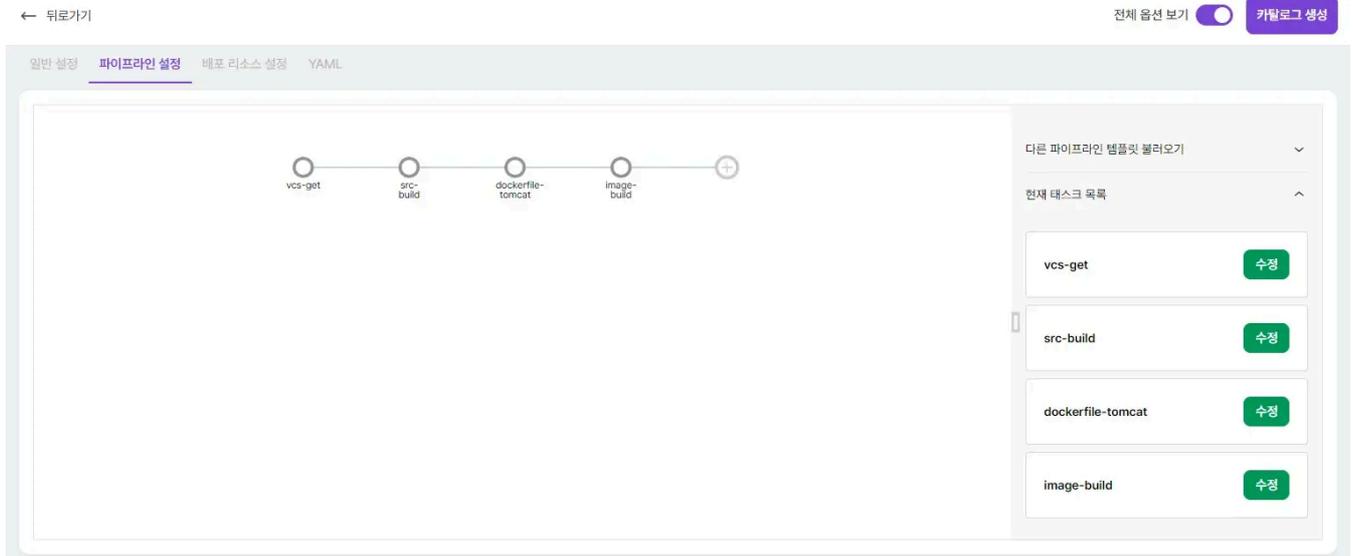
고급 설정 Selecting this option allows you to configure detailed settings, such as distribution policies, in addition to basic information. The items in the advanced settings may vary slightly from catalog to catalog, but the most frequently used items are as follows.

- Distribution Strategy / Distribution Policy Types

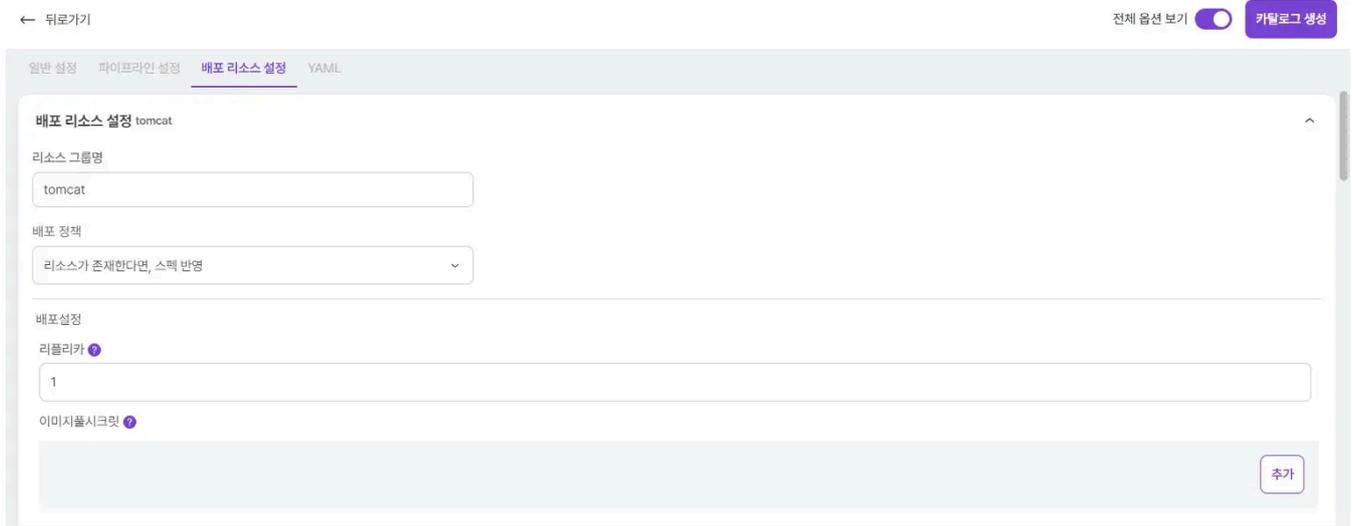
policy	Similar commands
If the resource exists, reflect the spec	kubectl apply ...
Replace spec if resource exists	kubectl replace ...
Skip deployment if resource exists	kubectl create ...
If the resource exists, update with replacement priority	

- Container Image Policy
  - When deploying an application with a catalog, if you run a pipeline that builds container images, you set the repository where the images will be stored and the maximum number of images to store.
- Distribution History Retention Policy
  - When deploying an application through a catalog, set the number and period of deployment history to be kept.
  - Please refer to the corresponding guide for detailed settings .

You can change to the settings screen for your pipeline by clicking the button in the top tab **파이프라인 설정** . Pipeline settings allow you to configure the pipeline that runs before deploying Kubernetes resources. Pipelines have a default pipeline template, and users can modify it to configure individual settings for each catalog they deploy to.



The top tab **배포 리소스 설정** button allows you to change the settings screen for resources to be deployed to Kubernetes. In the Deployment Resources settings, you enter information about Kubernetes resources to be deployed via the catalog, such as environment variables or system resource allocations.





고급 설정 If you select , you can configure the YAML editor for the Kubernetes resources you deploy to the catalog.

← 뒤로가기 전체 옵션 보기  카탈로그 생성

일반 설정   파이프라인 설정   **배포 리소스 설정**   YAML

▼ 고급 설정

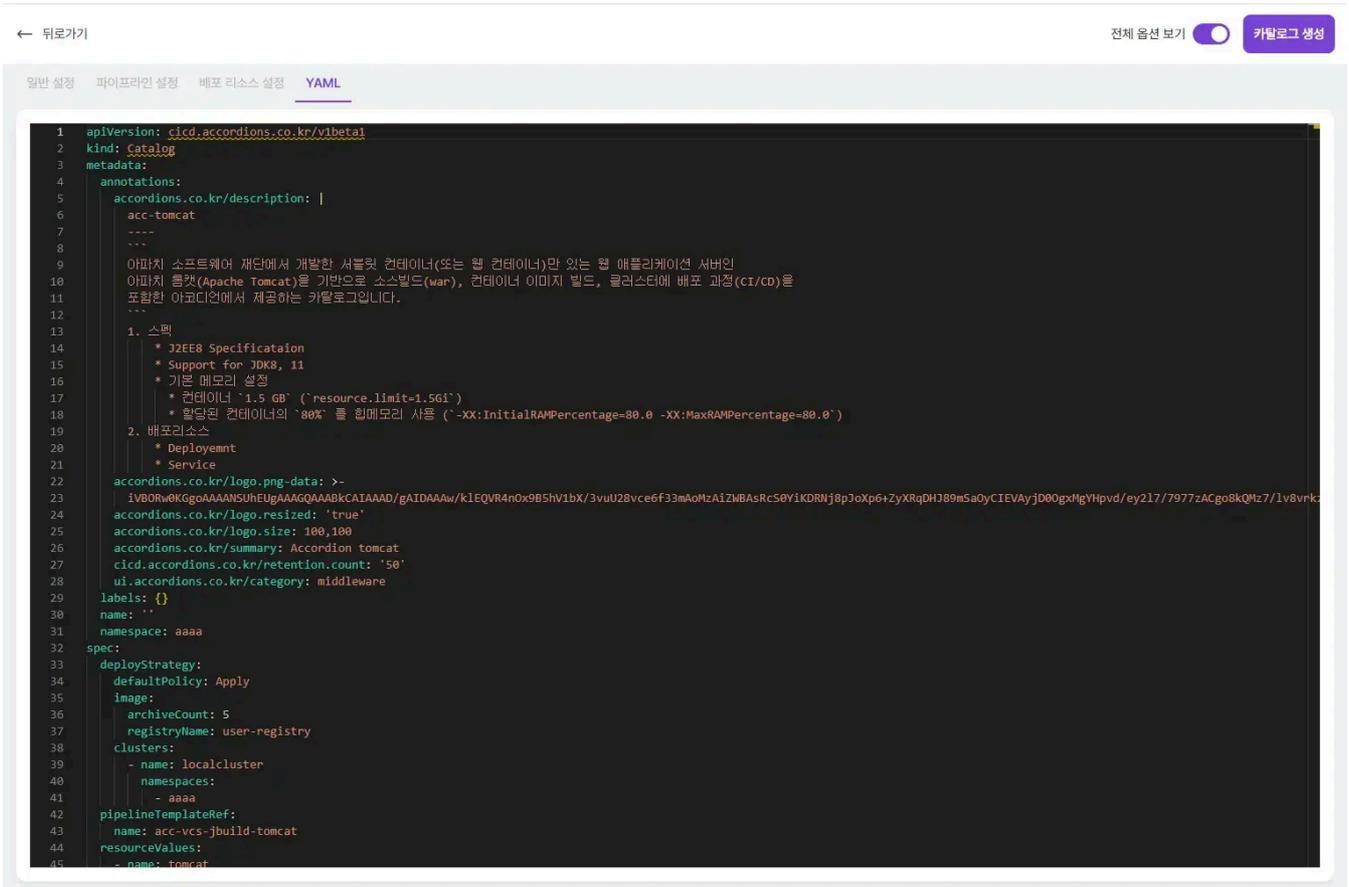
RESOURCE YAML

```

1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:
4    name: {{{.CATALOG.NAME}}}
5  spec:
6    selector:
7      matchLabels:
8        app: {{{.CATALOG.NAME}}}
9    replicas: {{{.values.deploy.replicas}}}
10   strategy:
11     type: {{{.values.deploy.updateStrategy}}}
12   template:
13     metadata:
14       annotations:
15         monitoring.accordions.co.kr/type: tomcat8
16       labels:
17         app: {{{.CATALOG.NAME}}}
18         app.kubernetes.io/version: '{{{.BUILD.VERSION}}}'
19     spec:
20       {{- if .values.deploy.tolerations }}
21       tolerations:
22         {{- range $i, $t := .values.deploy.tolerations }}
23         - key: {{{$.key}}}

```

You can use the top tab YAML button to check the information that makes up the catalog in the YAML editor or modify information that cannot be set in the UI.



You can view the reserved environment variables by viewing the catalog through a YAML editor. The reserved environment variables in the catalog are as follows:

name	Environment variable expressions	Additional explanation
Catalog name	{{{.CATALOG.NAME}}}	Name of the catalog
Catalog namespace	{{{.CATALOG.NAMESPACE}}}	The namespace name where the catalog is deployed
Image Registry	{{{.IMAGE.REGISTRYNAME}}}	<ul style="list-style-type: none"> <li>catalog.spec.deployStrategy.image.registryName</li> <li>Defaults to blank if no catalog is used</li> </ul>
Image name	{{{.IMAGE.NAME}}}	<ul style="list-style-type: none"> <li>{{{.IMAGE.REGISTRYNAME}}} Set if exists</li> <li>See below for name creation rules</li> <li>Defaults to blank if no catalog is used</li> </ul>
Image tags	{{{.IMAGE.TAG}}}	<ul style="list-style-type: none"> <li>If you explicitly enter it, {{{.IMAGE.NAME}}} the tag will be fixed in</li> </ul>
Image name pattern	{{{.IMAGE.NAMEPATTERN}}}	<ul style="list-style-type: none"> <li>gen-full (default) <ul style="list-style-type: none"> <li>{{{.IMAGE.NAME}}} Full automatic settings</li> <li>The tag {{{.BUILD.VERSION}}} is set to , and when rebuilding (recreate), the tag is changed to the current version.</li> <li>catalog.spec.deployStrategy.image.archiveCount In this case only, deletion is performed according to the number of storage ( ).</li> </ul> </li> <li>gen-name <ul style="list-style-type: none"> <li>{{{.IMAGE.TAG}}} {{{.IMAGE.NAME}}} Automatically set name excluding tags when exists</li> </ul> </li> <li>custom <ul style="list-style-type: none"> <li>Explicitly {{{.IMAGE.NAME}}} describe</li> </ul> </li> </ul>
registry server	{{{.REGISTRY.SERVER}}}	{{{.IMAGE.REGISTRYNAME}}} secret's server
Registry username	{{{.REGISTRY.USERNAME}}}	{{{.IMAGE.REGISTRYNAME}}} secret's username

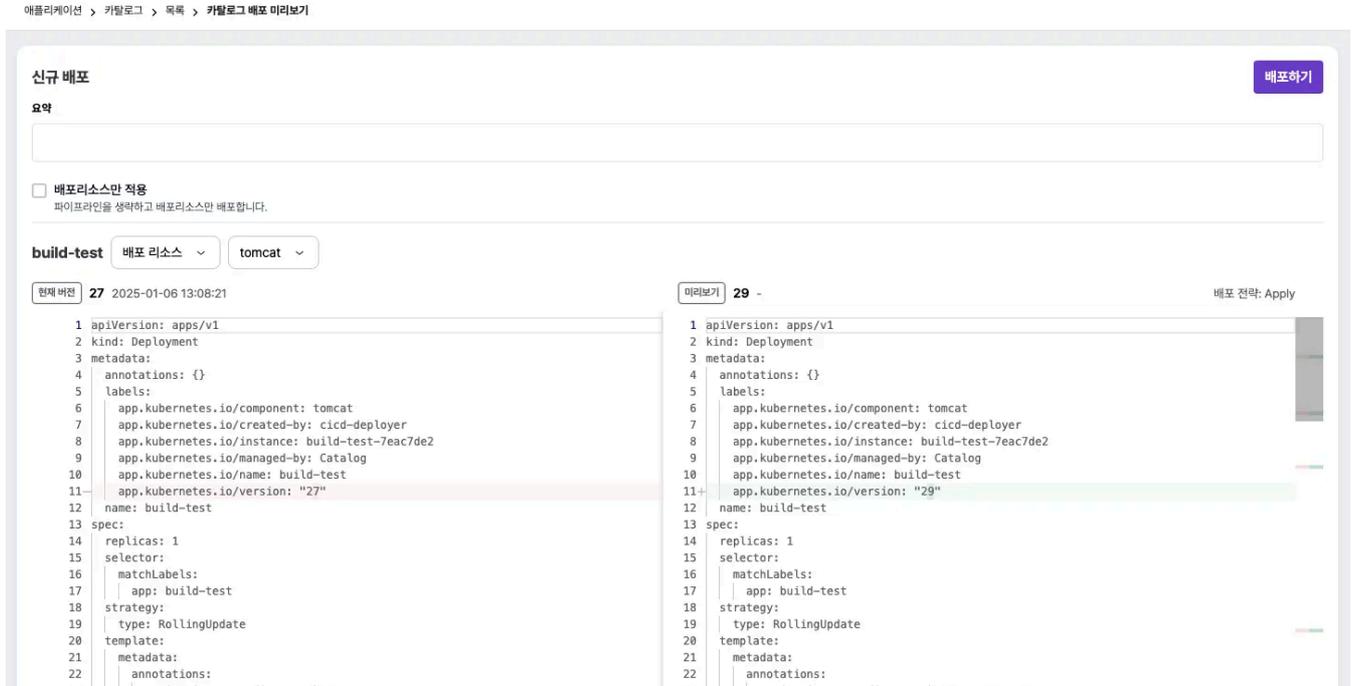
The image name environment variable is applied based on the registry and user environment variables.

The rules for generating image names and setting related environment variables are as follows.

INPUT	OUTPUT
<p>General format</p> <ul style="list-style-type: none"> <li>(registry) server : 127.0.0.1:5000</li> <li>(registry) username : acc</li> <li>{{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li> <li>{{{.BUILD.VERSION}}} : 2</li> </ul>	<ul style="list-style-type: none"> <li>{{{.REGISTRY.SERVER}}} : 127.0.0.1:5000</li> <li>{{{.REGISTRY.USERNAME}}} : acc</li> <li>{{{.IMAGE.NAMEPATTERN}}} : gen-full</li> <li>{{{.IMAGE.NAME}}} : 127.0.0.1:5000/acc/tmapp-c834f245:2</li> </ul>
<p>Dockerhub</p> <ul style="list-style-type: none"> <li>(registry) server : https://index.docker.io/v1/</li> <li>(registry) username : acc</li> <li>{{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li> <li>{{{.BUILD.VERSION}}} : 2</li> </ul>	<ul style="list-style-type: none"> <li>{{{.REGISTRY.SERVER}}} : docker.io</li> <li>{{{.REGISTRY.USERNAME}}} : acc</li> <li>{{{.IMAGE.NAMEPATTERN}}} : gen-full</li> <li>{{{.IMAGE.NAME}}} : docker.io/acc/tmapp-c834f245:2</li> </ul>
<p>If it includes scope</p> <ul style="list-style-type: none"> <li>(registry) server : registry.gitlab.com/scope/test</li> <li>(registry) username : acc</li> <li>{{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li> <li>{{{.BUILD.VERSION}}} : 2</li> </ul>	<ul style="list-style-type: none"> <li>{{{.REGISTRY.SERVER}}} : registry.gitlab.com/scope/test</li> <li>{{{.REGISTRY.USERNAME}}} : acc</li> <li>{{{.IMAGE.NAMEPATTERN}}} : gen-full</li> <li>{{{.IMAGE.NAME}}} : registry.gitlab.com/scope/test/tmapp-c834f245:2</li> </ul>
<p>When using image tags</p> <ul style="list-style-type: none"> <li>(registry) server : 127.0.0.1:5000</li> <li>(registry) username : acc</li> <li>{{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li> <li>{{{.BUILD.VERSION}}} : 2</li> <li>{{{.IMAGE.TAG}}} : dev</li> </ul>	<p>Change the tag of the image name: Build version ⇒ Tag</p> <ul style="list-style-type: none"> <li>{{{.REGISTRY.SERVER}}} : 127.0.0.1:5000</li> <li>{{{.REGISTRY.USERNAME}}} : acc</li> <li>{{{.IMAGE.TAG}}} : dev</li> <li>{{{.IMAGE.NAMEPATTERN}}} : gen-name</li> <li>{{{.IMAGE.NAME}}} : 127.0.0.1:5000/acc/tmapp-c834f245:dev</li> </ul>
<p>When using image names</p> <ul style="list-style-type: none"> <li>(registry) server : 127.0.0.1:5000</li> <li>(registry) username : acc</li> <li>{{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li> <li>{{{.IMAGE.NAME}}} : 127.0.0.1:5000/change/custom-app:latest</li> </ul>	<p>Fixed image name</p> <ul style="list-style-type: none"> <li>{{{.REGISTRY.SERVER}}} : 127.0.0.1:5000</li> <li>{{{.REGISTRY.USERNAME}}} : acc</li> <li>{{{.IMAGE.NAMEPATTERN}}} : custom</li> <li>{{{.IMAGE.NAME}}} : 127.0.0.1:5000/change/custom-app:latest</li> </ul>

INPUT	OUTPUT
<p>When using image names and image tags together</p> <ul style="list-style-type: none"><li>• (registry) server : 127.0.0.1:5000</li><li>• (registry) username : acc</li><li>• {{{.PIPELINE.INSTANCE}}} : tmapp-c834f245</li><li>• {{{.IMAGE.TAG}}} : dev</li><li>• {{{.IMAGE.NAME}}} : 127.0.0.1:5000/change/custom-app:latest</li></ul>	<p>Ignore image tags</p> <ul style="list-style-type: none"><li>• {{{.REGISTRY.SERVER}}} : 127.0.0.1:5000</li><li>• {{{.REGISTRY.USERNAME}}} : acc</li><li>• {{{.IMAGE.NAMEPATTERN}}} : custom</li><li>• {{{.IMAGE.NAME}}} : 127.0.0.1:5000/change/custom-app:latest</li></ul>

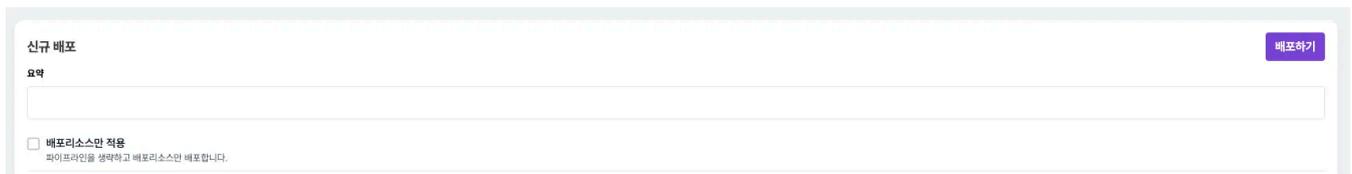
Once all settings are complete, 카탈로그 생성 select the button to complete catalog creation. Creating a catalog doesn't mean the application is actually deployed. Selecting the catalog you just created from the catalog list and 배포하기 selecting the button will take you to a screen where you can compare the current version with the preview version before deploying the new version Diff UI .



When the actual deployment is performed, a preview function is provided to compare the changes that will be applied with the current version. 배포 리소스 , 파이프라인 you can check each change, and if it is a deployment resource, 리소스 그룹 you can select on the right to check the changes by resource group.

You must select the button in the upper right corner of the page 배포하기 to deploy the applica - tion through the pipeline.

배포리소스만 적용 When selecting to deploy, only the resource deployment will proceed with the specifications defined in the current catalog using the image of the most recently deployed build. The most recently deployed build image applies only to images deployed after the 2.9.0 upgrade. Deployment is not possible with images from builds prior to 2.9.0 배포리소스만 적용 , and to use this feature, at least one de - ployment must be performed after the upgrade.

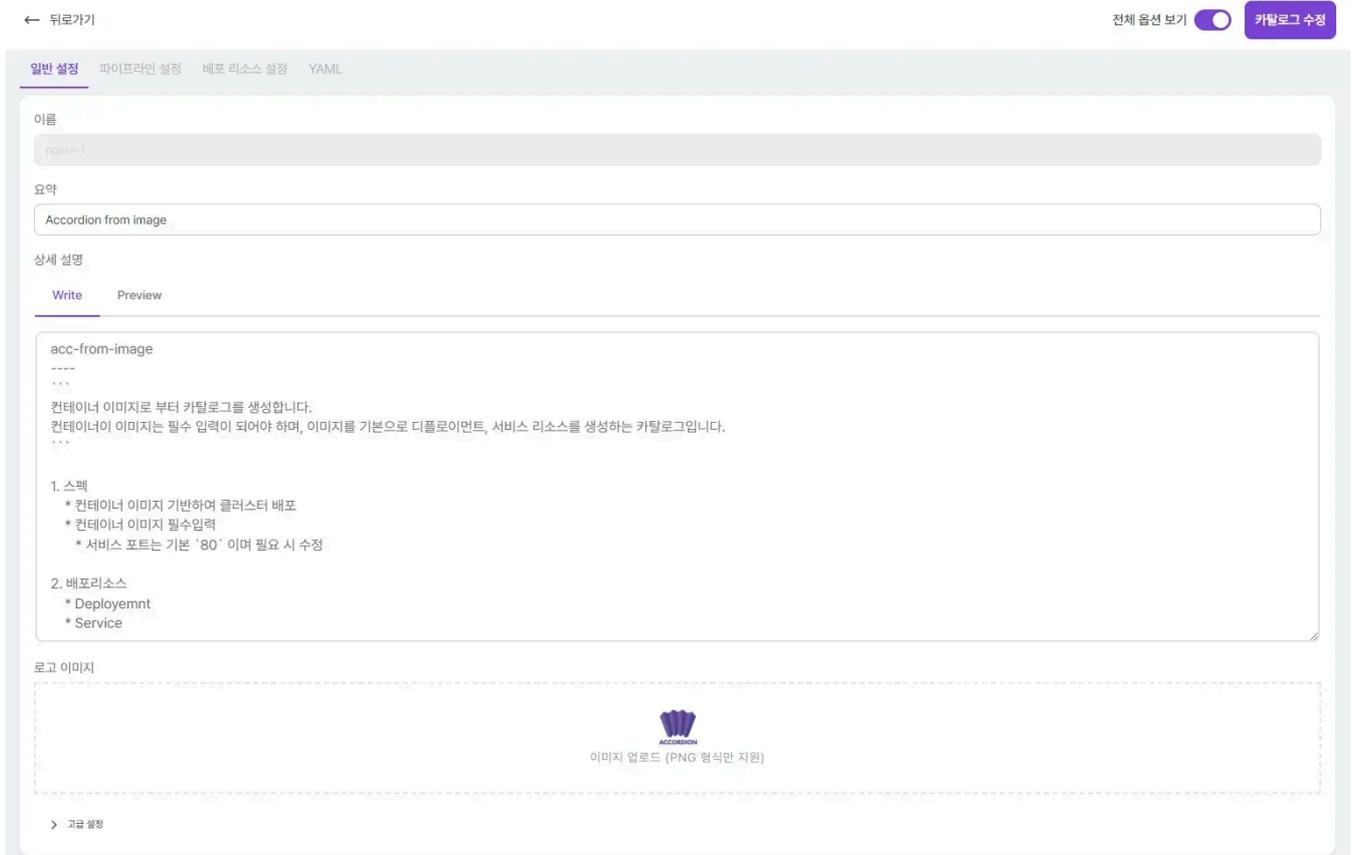


**TIP**

요약 The field is not required for deployment , but it is recommended to set it for application management.

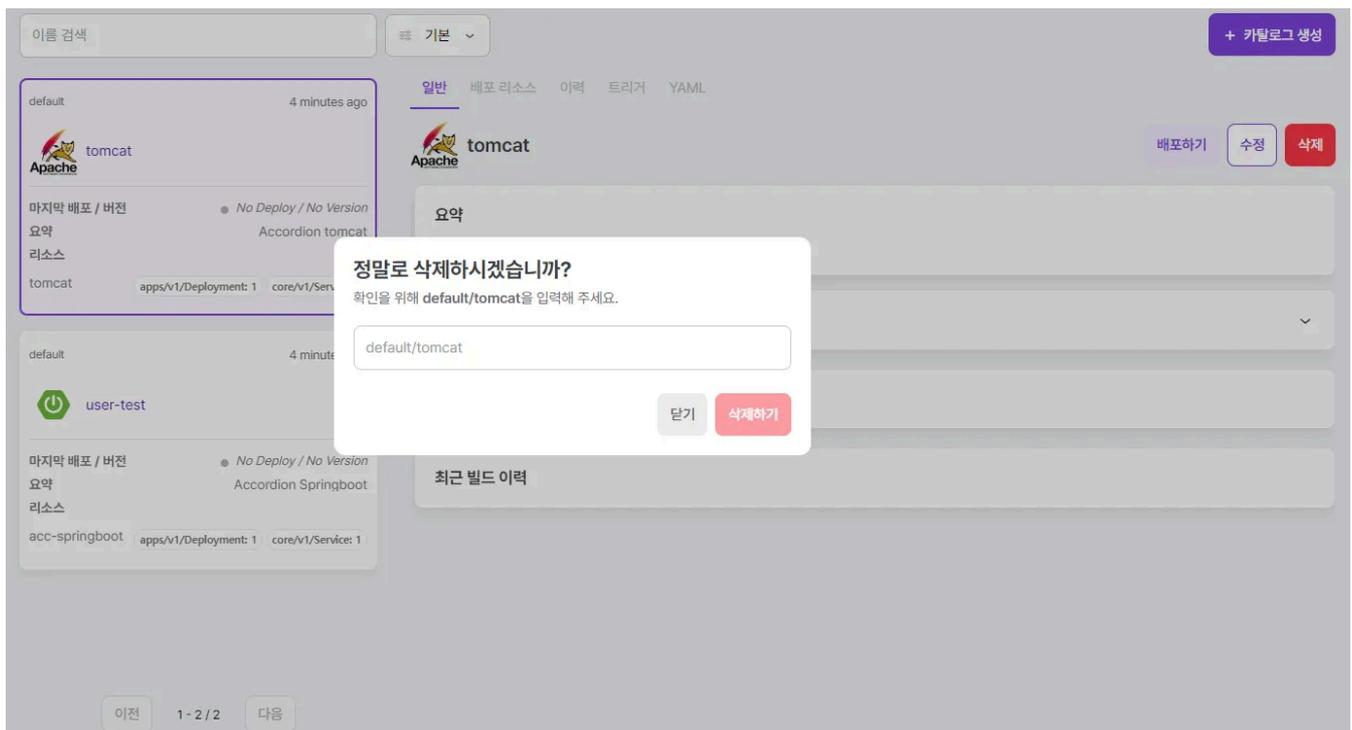
### 4.3.2.1.2. Modifying the Catalog

To change a catalog, find it in the list and 수정 select the button. When editing a catalog, the settings are similar to those entered when creating the catalog.



### 4.3.2.1.3. Deleting a Catalog

Select the catalog you want to delete and 삭제 select the button on the right.



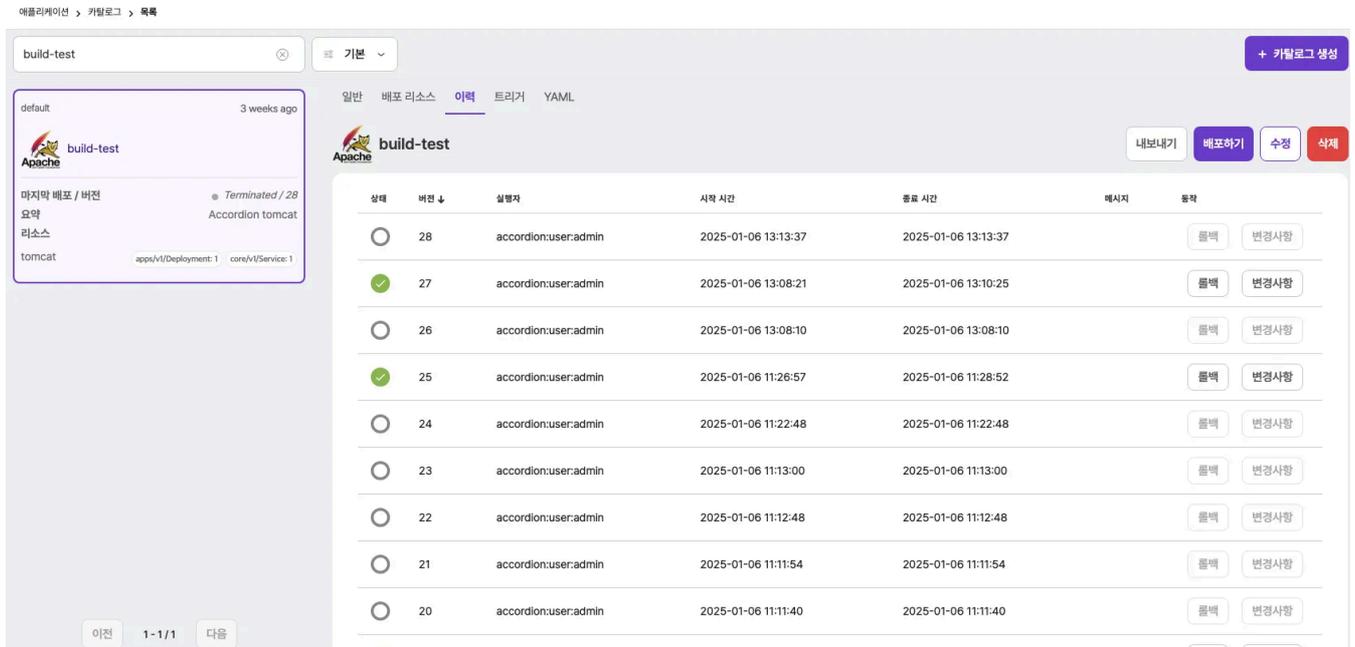
Delete by entering the namespace and catalog name in the modal.

### 4.3.2.1.4. History

You can review the history of deployed catalogs.

It provides features for rolling back specific history, checking changes by history, and exporting the history to a CSV file.

For rollbacks, the feature only applies to deployed resources.

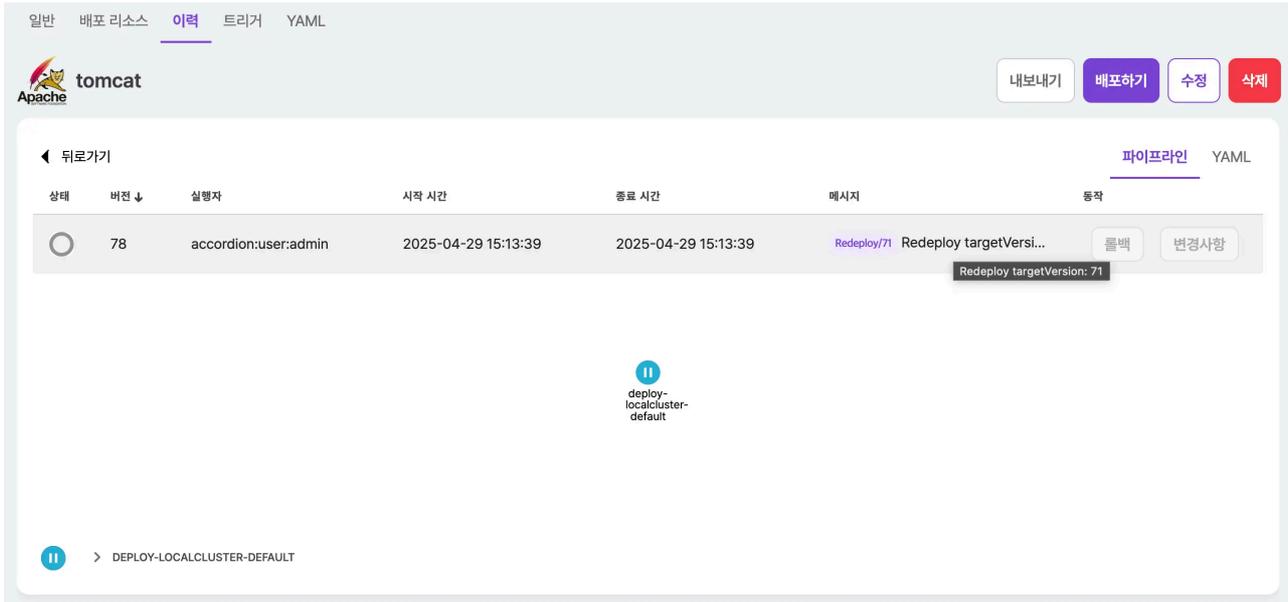


NOTE

NOTE

If you roll back and re-run to a previous version, or deploy by applying only the deployment resource without going through the pipeline, the message will appear as follows:

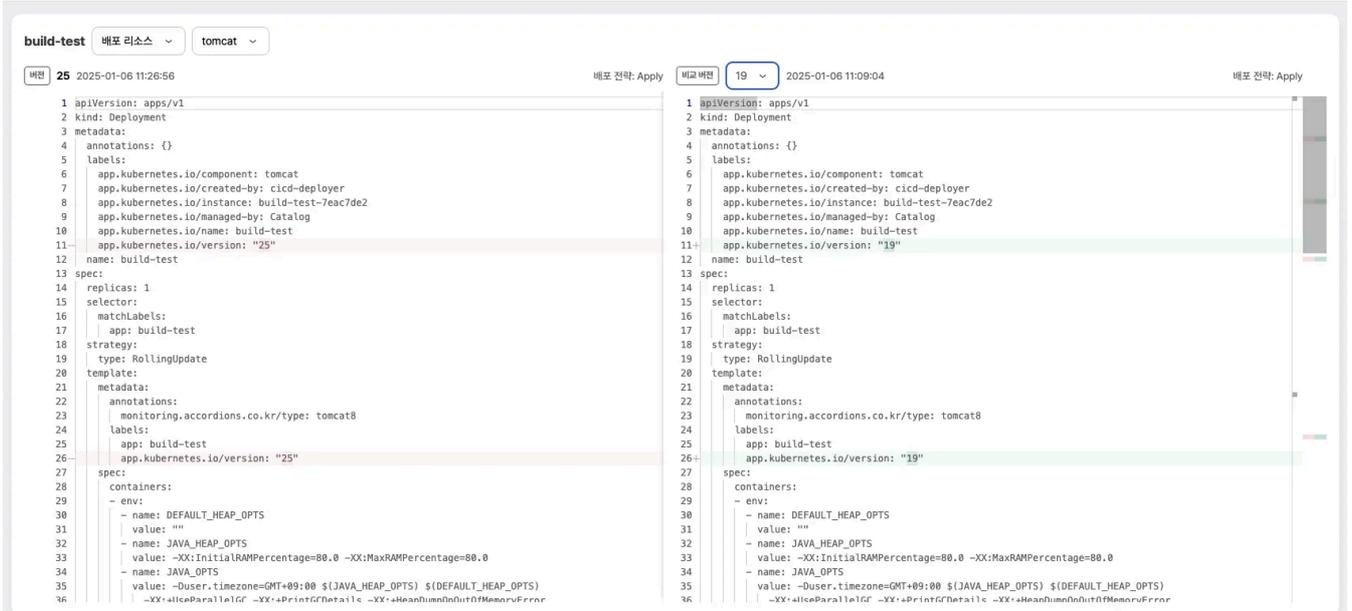
- <policy>/<version> It is displayed as history according to the catalog/pipeline build policy .
  - Catalog
    - Apply only to deployment resources: Deploy/<version>
    - Rollback: Redeploy/<version>
  - pipeline
    - Rerun: Recreate/<version>



### 4.3.2.1.4.1. Check changes by history

You can compare changes made to other successful versions based on a specific version selected from the history.

Only versions with successful builds can be selected, 변경사항 and clicking the button takes you to the comparison page.

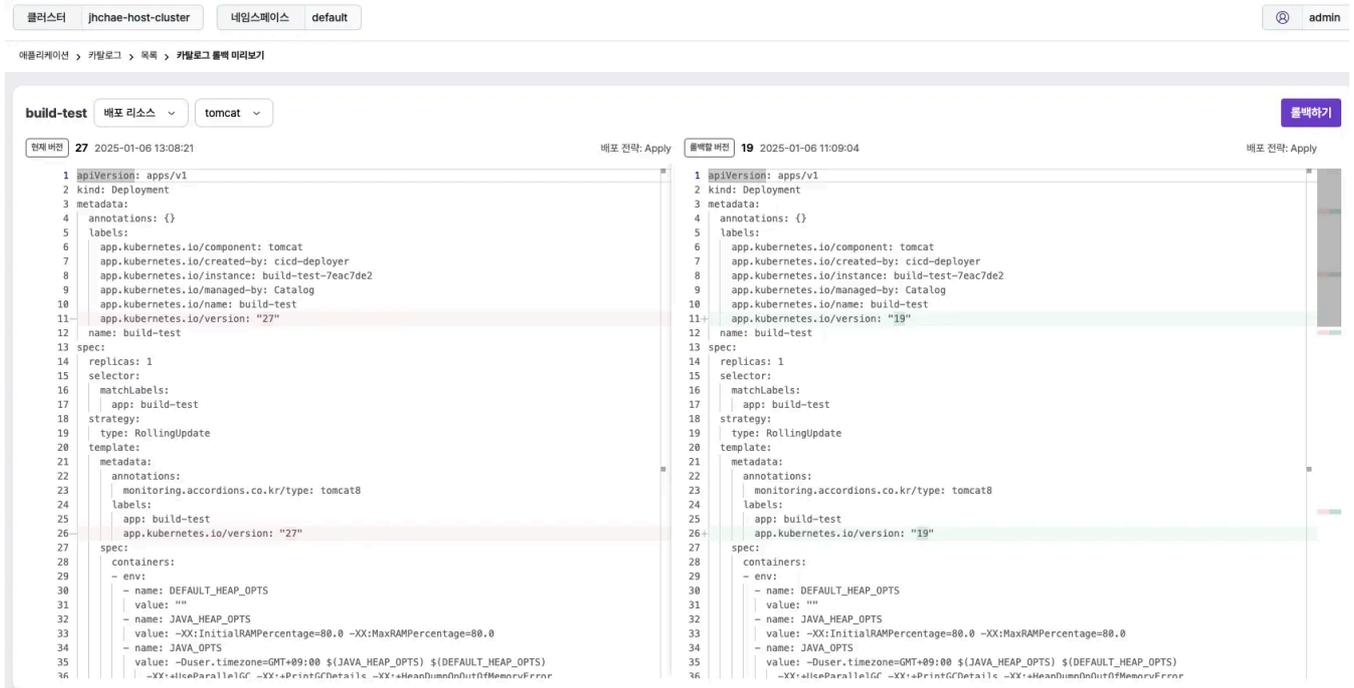


Comparison is available for two types of resources: deployment resources and pipelines. For deployment resources, changes can be compared across sub-resource groups. The default is deployment resource comparison, and pipeline comparison is only available if the version being compared has a policy other than Redeploy or Deploy. Furthermore, only versions with a successful build can be compared, and for pipelines, only versions with a policy other than Redeploy or Deploy can be compared.

### 4.3.2.1.4.2. Rollback Preview

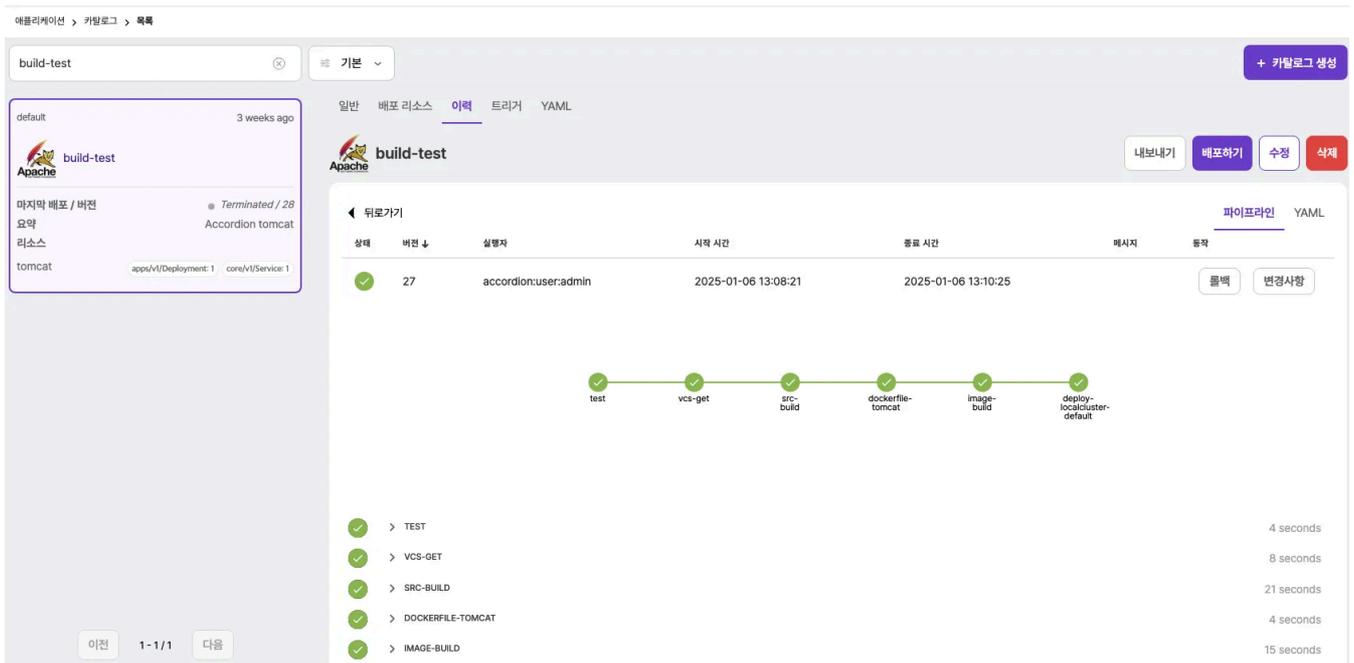
You can preview the changes before rolling back to a specific version.

Clicking the Rollback button will take you to a preview page where you can review the changes before rolling back.

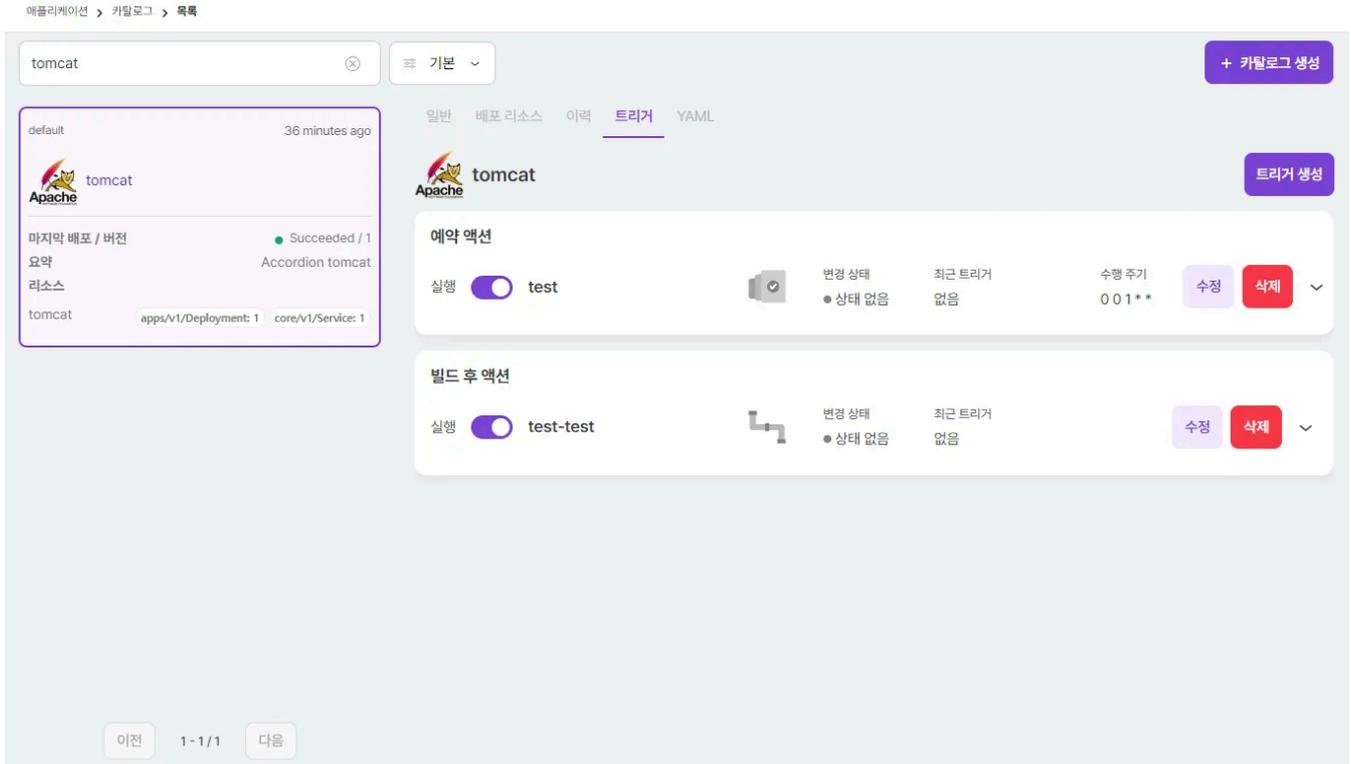


The most recently successfully built version **현재 버전** is set as the reference for comparison. A specific version selected from the history **롤백할 버전** is designated as the reference for comparison.

When you select a catalog distribution history, you can check the step-by-step detailed status and log for that catalog history.



### 4.3.2.1.5. Trigger



Triggers target catalogs/pipelines and are divided into two types based on the occurrence of events.

type	explanation
Reservation Action Trigger	Detects periodically registered events and executes the target catalog/pipeline.
Trigger post-build action	Perform actions after a catalog/pipeline has been deployed or built

### 4.3.2.1.5.1. Registering a Trigger

트리거 After selecting the tab, 트리거 생성 click the button and select 예약 액션 트리거 or . 빌드 후 액션 트리거

예약 액션  빌드 후 액션

이름

스케줄



버전관리 시스템 저장소 변경 감지



컨테이너 이미지 변경 감지



http 요청에 대한 응답 감지



정기적으로 트리거 실행

트리거 수행 서비스 어카운트

+ 옵션 추가하기

예약 액션  빌드 후 액션

이름



카탈로그/파이프라인 빌드 트리거



웹훅 전달 트리거

트리거 수행 서비스 어카운트

대상(카탈로그/파이프라인) 종류

빌드(배포)를 수행할 대상 지정

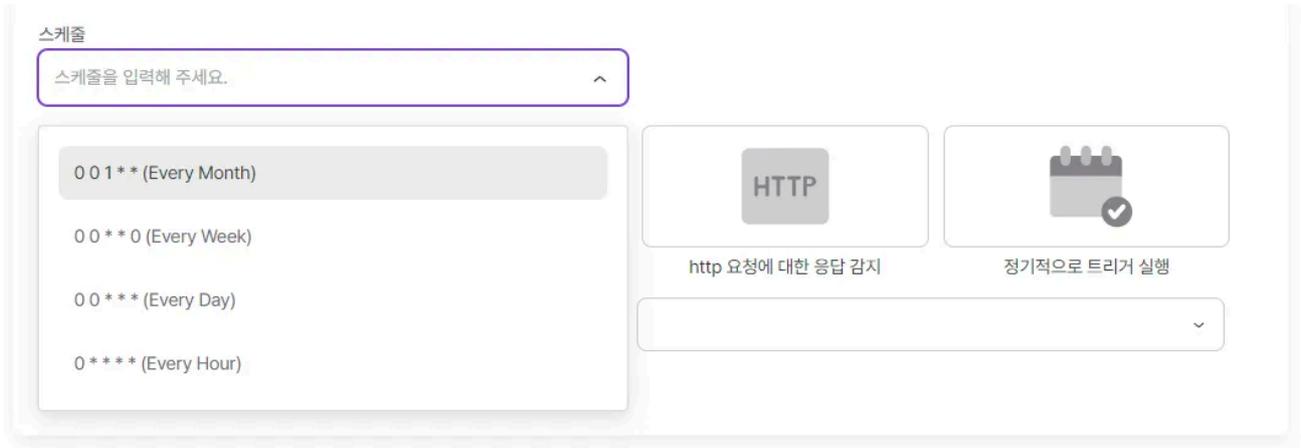
+ 옵션 추가하기

When you click , a screen will appear where you can enter 이름 , 타입 , . 옵션

- Name can be set to a name for the trigger
- Type allows you to select the type of trigger.
- Options are entered by entering the key and value of the option required in the selected trigger.

### Reservation Action Trigger

The scheduled action trigger runs periodically according to a registered schedule and performs a build (deployment) when **an event is detected** .



When registering a reservation action trigger, 스케줄 you can set the default schedule by clicking the select box.

Register using the Cron method, and setting it to **at least 3-5 minutes apart** is recommended.

When writing a direct schedule setting, you can also write it in the cron schedule format as shown below.

hour	Acceptable values	Allowable special characters
minute	0-59	* / , -
city	0-23	* / , -
date	1-13	* / , - ?
moon	1-12 or JAN-DEC	* / , -
day of the week	0-6 or SUN-SAT	* / , - ?

An example of a schedule setting is shown below.

```
1 9 1 11 *
= Every year at 9:01 AM on November 1st
```

Below are the types of available reservation action triggers.

Trigger name	explanation
Detecting changes in the repository of a version control system	Detect changes in remote repositories based on build metadata

<b>Trigger name</b>	<b>explanation</b>
Container image change detection	Detect container image changes based on build metadata or spec.env.EXTERNALIMAGE detect image changes based on build information.
Detecting responses to http requests	Detect response data through http requests
Run trigger regularly	Perform build (deployment) at each registered schedule cycle

## Detecting changes in the repository of a version control system

Compares the metadata of the vcs task with the remote repository to detect changes.

git Or svn supports .

This trigger works based on build metadata and requires the following mandatory values depending on the vcs:

git is as follows.

Metadata	explanation	example
vcs	git	git
repo	remote storage	https://github.com/mantech-accordion/sample-war.git
ref	Repository Reference	master
commit	Commit information	320a4819fe5b5dcb1892e263620d79849b83012e

svn is as follows.

Metadata	explanation	example
vcs	svn	svn
repo	remote storage	svn://acc@xx.xx.xx.xx/hello
revision	Revision	5

버전관리 시스템의 저장소 변경 감지 The keys used in are as follows:

예약 액션  빌드 후 액션

이름

트리거 이름을 입력해 주세요.

스케줄

스케줄을 입력해 주세요.



버전관리 시스템 저장소 변경 감지



컨테이너 이미지 변경 감지



http 요청에 대한 응답 감지



정기적으로 트리거 실행

트리거 수행 서비스 어카운트

버전관리 시스템의 저장소 인증 시크릿

vcs 카테고리 태스크 이름

+ 옵션 추가하기

key	explanation
Trigger execution service account	필수 벨류 The authentication service account that will perform the build (deployment)  If you do not have permission, the build (deployment) will fail.
Repository authentication secret for version control systems	Authentication secret for the vcs repository  Task values.auth.cred Automatically assigns if there is a value in the corresponding task specification (spec)  Supported secret types: kubernetes.io/basic-auth , kubernetes.io/ssh-auth
vcs category task name	Automatically assigned to "vcs category tasks" described in the catalog/pipeline spec (recommended)

### Container image change detection

Detect changes to container images.

You can set the image target to be detected by setting the image inside/outside the container.

### Internal image detection

내부 이미지 설정 The supported registry repository must support DockerHub or . Registry API 2.0

내부 이미지 설정 The required metadata values are as follows:

Metadata	example	explanation
image	docker.io/accordions/tmapp-03404282:2	Container images
digest	sha256:13be6694216a8bdc62fcb6c112b2165ff43341eddbddb88a39a17329d5bb8aaa	Required if mode is <b>digest with image digest</b>

내부 이미지 설정 The keys used are as follows:

예약 액션  빌드 후 액션

이름

스케줄



버전관리 시스템 저장소 변경 감지



컨테이너 이미지 변경 감지

HTTP

http 요청에 대한 응답 감지



정기적으로 트리거 실행

트리거 수행 서비스 어카운트	<input type="text"/>
이미지 카테고리 태스크 이름	<input type="text" value="x"/>
이미지 메타정보 대상 종류	<input type="text" value="x"/>
이미지 메타정보 (카탈로그/파이프라인)대상 지정	<input type="text" value="이미지 메타정보 대상 종류 설정이 필요합니다."/> <input type="text" value="x"/>
트리거 동작 모드	<input type="text" value="x"/>
컨테이너 이미지 내부/외부 설정	<input type="text" value="내부 컨테이너 이미지"/> <input type="text" value="x"/>
레지스트리 저장소에 대한 인증 시크릿	<input type="text" value="x"/>

+ 옵션 추가하기

key	explanation
Trigger execution service account	필수 밸류 The authentication service account that will perform the build (deployment) If you do not have permission, the build (deployment) will fail.
Image Category Task Name	Image Category Task Name Automatically assigned to the "Image Category Task" described in the catalog/pipeline spec (recommended)
Image metadata target type	You can specify a catalog or pipeline.
Image metadata (catalog/pipeline) targeting	Catalog/pipeline target to retrieve image metadata from

key	explanation
Trigger action mode	<p>digest : Compare the digest of metadata with the registry to check for changes.</p> <p>sequence : Checks if the last version tag in the registry is greater than the version tag in the metadata by comparing the tag versions.</p> <p>기본값 : If the image tag in the metadata is versioned, sequence it digest is automatically assigned as</p> <p>The default is the target for registering the trigger</p> <p>You can select a namespace and select a catalog/pipeline target for that namespace.</p>
Container image internal/external settings	Sets the type of image target to be detected.
Authentication secret for registry repository	<p>Authentication secret for registry repository</p> <p>values.auth.cred First, find the value in the task specification corresponding to "task" , and if not found IMAGE.REGISTRYNAME , automatically assign the environment variable.</p> <p>Supported secret types: kubernetes.io/basic-auth , kubernetes.io/dockerconfigjson</p>

**External image detection**

catalog It only works on .

Detects image changes through configured external images and external registry information.

외부 이미지 설정 The keys used are as follows:

예약 액션     빌드 후 액션

이름

트리거 이름을 입력해 주세요.

스케줄

스케줄을 입력해 주세요.



버전관리 시스템 저장소 변경 감지



컨테이너 이미지 변경 감지



http 요청에 대한 응답 감지



정기적으로 트리거 실행

트리거 수행 서비스 어카운트 ▼

컨테이너 이미지 내부/외부 설정 외부 컨테이너 이미지 ▼

외부 이미지

외부 이미지 레지스트리

+ 옵션 추가하기

key	explanation
Trigger execution service account	필수 밸류 The authentication service account that will perform the build (deployment) If you do not have permission, the build (deployment) will fail.
Container image internal/external settings	Sets the type of image target to be detected.
External image	Sets the name of the image to be retrieved from an external registry.
External image registry	Sets the name of the registry where external images are stored.

### Detecting responses to http requests

After an external http request, the response data is compared and if the data is the same, a build (deployment) is performed.

Response content only supports json format: Content-Type: application/json

Response status codes are 200 only supported.

http 요청에 대한 응답 감지 The keys used in are as follows:

예약 액션  빌드 후 액션

이름

스케줄



버전관리 시스템 저장소 변경 감지



컨테이너 이미지 변경 감지



http 요청에 대한 응답 감지



정기적으로 트리거 실행

<input type="text" value="트리거 수행 서비스 어카운트"/>	<input type="text" value=""/>
<input type="text" value="요청대상이 되는 url"/>	<input type="text" value="http://httpbin.org/json"/>
<input type="text" value="응답 데이터와 비교할 데이터"/>	<input type="text" value="Sample Slide Show"/>
<input type="text" value="응답 데이터 필터링"/>	<input type="text" value=".slideshow.title"/> <span style="float: right;">✕</span>
<input type="text" value="요청에 포함되는 json직렬화 형식의 데이터"/>	<input type="text" value='{"test": "data"}'/> <span style="float: right;">✕</span>
<input type="text" value="요청에 포함되는 메소드"/>	<input type="text" value="GET"/> <span style="float: right;">✕</span>
<input type="text" value="요청에 포함되는 header 목록"/>	<input type="text" value="useragent"/> <input type="text" value="window"/> <span style="float: right;">✕</span>
	<input type="text" value="cookie"/> <input type="text" value="cookie-value"/>

[+ 옵션 추가하기](#)

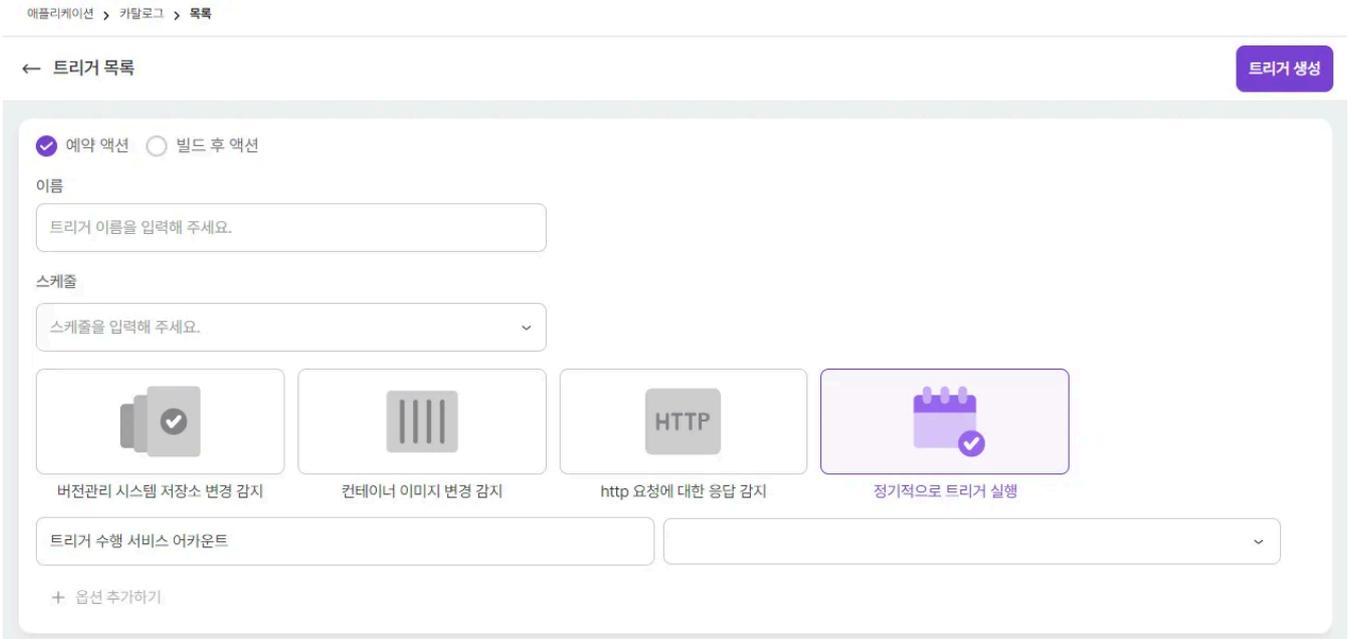
key	explanation
Trigger execution service account	<p>필수 밸류</p> <p>The authentication service account that will perform the build (deployment)</p> <p>If you do not have permission, the build (deployment) will fail.</p>
URL being requested	<p>필수 밸류</p>
Data to compare with response data	<p>필수 밸류</p> <p>Data to compare with the response data in simple string or json serialized format.</p>
Filtering response data	<p>Filter response data 응답 데이터와 비교할 데이터 to compare values with jsonpath format</p>
Data in JSON serialized format included in the request	<p>JSON data included in the request body</p>
Methods included in the request	<p>Default http method : GET</p>

key	explanation
List of headers included in the request	You can register multiple headers used in http requests.

Run trigger regularly

Builds (deployments) are performed periodically according to a set schedule.

정기적으로 트리거 실행 The keys used in are as follows:



key	explanation
Trigger execution service account	필수 밸류 The authentication service account that will perform the build (deployment) If you do not have permission, the build (deployment) will fail.

Trigger post-build action

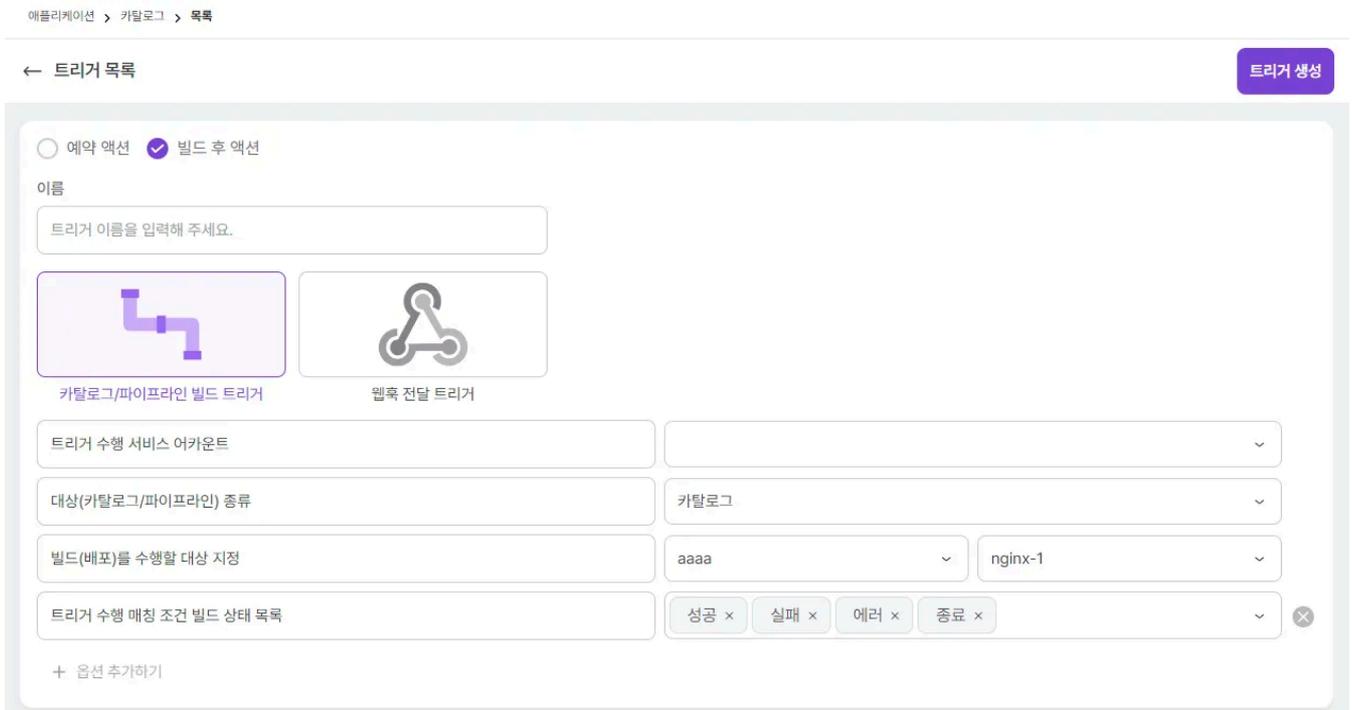
The types of triggers available.

Trigger name	explanation
Catalog/Pipeline Build (Deployment) Trigger	Build (deploy) another catalog/pipeline on the same cluster
Webhook delivery trigger	Passes catalog/pipeline information and build information via HTTP POST request to the set URL.

## Catalog/Pipeline Build (Deployment) Trigger

Compare the status of the build to build (deploy) other catalogs/pipelines on the same cluster.

카탈로그/파이프라인 빌드(배포) 트리거 The keys used in are as follows:



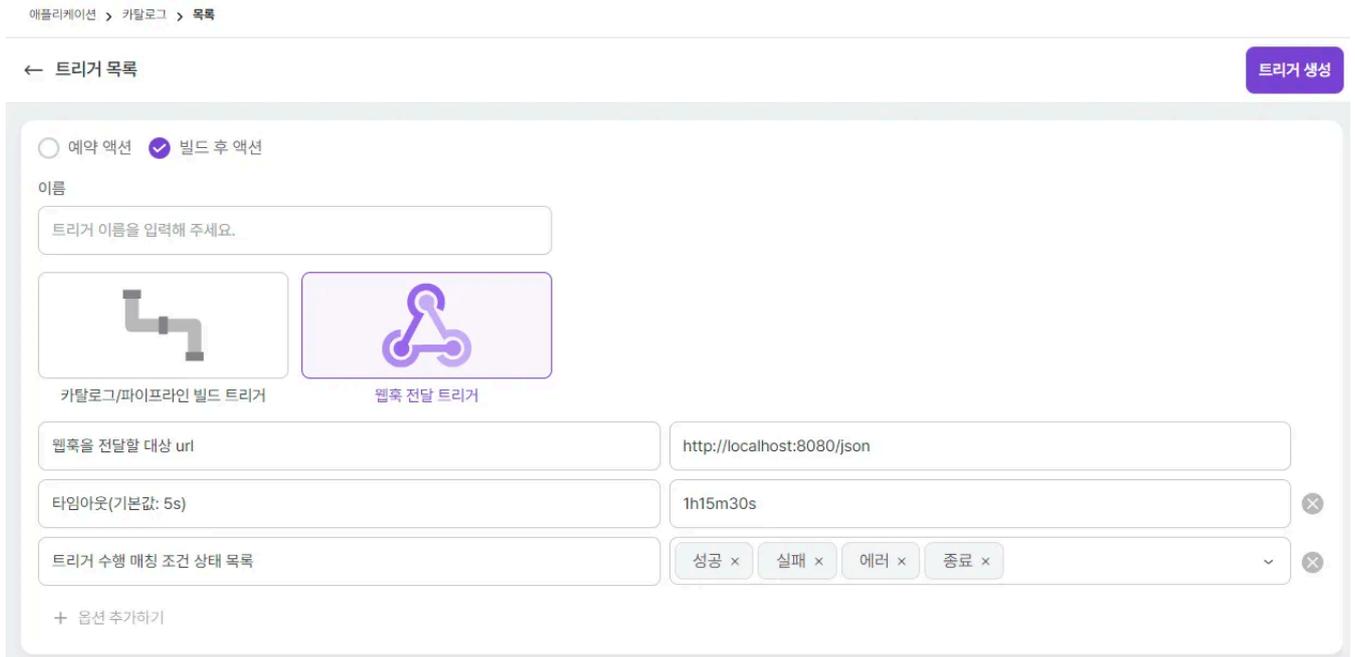
key	explanation
Trigger execution service account	필수 밸류 The authentication service account that will perform the build (deployment) If you do not have permission, the build (deployment) will fail.
Target (catalog/pipeline) type	필수 밸류 Type of build (deployment) target You can specify a catalog or pipeline.
Specify the target on which to perform the build (deployment)	필수 밸류 Build (Deployment) Target You can select a namespace and select a catalog/pipeline target for that namespace.
Trigger execution matching condition build status list	Available phases: 'success, failure, error, exit' Trigger only when build phase result matches Default: Succeeded

### Webhook delivery trigger

The format of the data being sent is as follows.

```
{
  "object": {카탈로그 or 파이프라인},
  "build": {마지막 빌드}
}
```

웹훅 전달 트리거 The keys used in are as follows:



key	explanation
Target URL to deliver the webhook to	필수 밸류 Webhook Host
Timeout (default: 5s)	It is used as a timeout when delivering webhooks. Duration Type
Trigger execution matching condition build status list	Available phases: 'success, failure, error, exit' Trigger only when build phase result matches Default: Succeeded

## Create a trigger execution service account

### CAUTION

클러스터 롤 If you are a user without permission, only the current namespace can be applied to the namespace to be built (deployed).

## Create a service account

서비스 어카운트 Please refer to the corresponding guide for how to create it .

- 서비스 어카운트 Creation example

```
apiVersion: v1
kind: ServiceAccount
metadata:
  name: tgr-build-executor
  namespace: test
```

## Create rolls and roll bindings

Sets the permissions used when building (deploying) the current namespace.

롤 Please refer to 롤 바인딩 the corresponding guide for how to create it .

- 롤 Creation example
  - This is the permission used for building (deploying) by default.  
If additional permission for build (deployment) resources is required, use the permission used by default in addition to the required permission.

```
kind: Role
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: tgr-build-executor-role
  namespace: test
rules:
  - verbs:
    - get, list, watch
    apiGroups:
    - cicd.accordions.co.kr
    resources:
    - pipelines, catalogs
  - verbs:
    - create
    apiGroups:
    - cicd.accordions.co.kr
    resources:
    - buildrequests
  - verbs:
    - create
    - patch
```

```
apiGroups:
  - apps
resources:
  - deployments
- verbs:
  - create
  - patch
apiGroups:
  - ""
resources:
  - services
```

- 룰 바인딩 Creation example

```
kind: RoleBinding
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: tgr-build-executor-rolebinding
  namespace: test
subjects:
  - kind: ServiceAccount
    name: tgr-build-executor
    namespace: test
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: Role
  name: tgr-build-executor-role
```

## Creating cluster roles and cluster role bindings

클러스터 롤 Available if you have permission, sets the permissions used when building (deploying) other namespaces.

클러스터 롤 , Please refer to 클러스터 롤 바인딩 the corresponding guide for how to create it .

- 클러스터 롤 Creation example
  - This is the permission used for building (deploying) by default. If additional permission for build (deployment) resources is required, use the permission used by default in addition to the necessary permission.

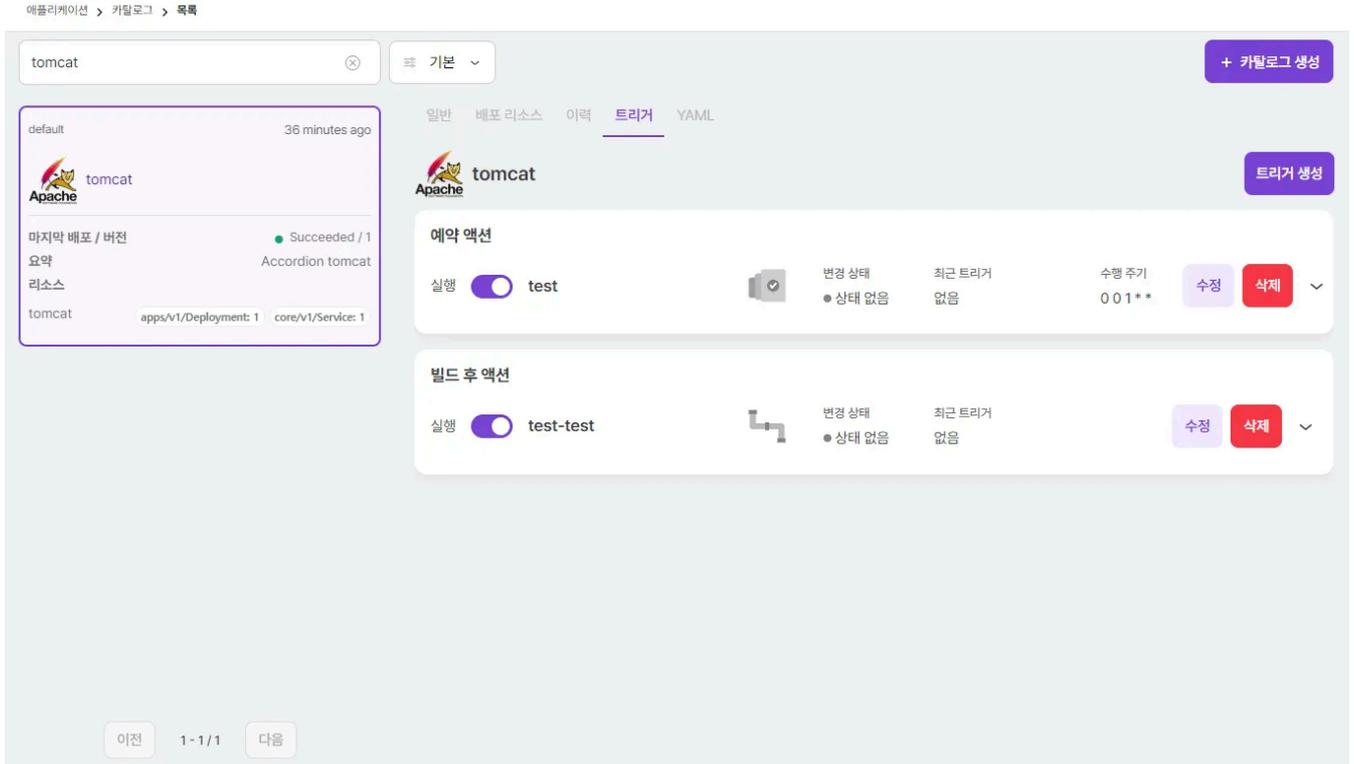
```
kind: ClusterRole
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: tgr-build-executor-clusterrole
rules:
- verbs:
  - get, list, watch
  apiGroups:
  - cicd.accordions.co.kr
  resources:
  - pipelines, catalogs
- verbs:
  - create
  apiGroups:
  - cicd.accordions.co.kr
  resources:
  - buildrequests
- verbs:
  - create
  - patch
  apiGroups:
  - apps
  resources:
  - deployments
- verbs:
  - create
  - patch
  apiGroups:
  - ""
  resources:
  - services
```

- 클러스터 롤 바인딩 Creation example

```
kind: ClusterRoleBinding
apiVersion: rbac.authorization.k8s.io/v1
metadata:
```

```
name: tgr-build-executor-clusterrolebinding
subjects:
- kind: ServiceAccount
  name: tgr-build-executor
  namespace: test
roleRef:
apiGroup: rbac.authorization.k8s.io
kind: ClusterRole
name: tgr-build-executor-clusterrole
```

### 4.3.2.1.5.2. Trigger List



You can check the list of triggers registered in the catalog or pipeline.

실행 The toggle button is a button that sets whether or not the trigger is executed. If it is set to purple, it is active, and if it is changed to gray, it is inactive.

변경 상태 is the state information of the trigger, and 예약 액션 트리거 in the case of 성공 and 실패, and 빌드 후 액션 트리거 in the case of 성공, 실패, 스킵.

type	explanation
success	If the trigger is detected and an action is taken
failure	If the trigger fails during the operation
Skip	If it is detected but the conditions are not met, or if it is already being built

최근 트리거 is the most recent operation time of the trigger and only shows the time 예약 액션 트리거 in the case of 성공 or . is visible only and shows the schedule of the trigger. 실패 수행 주기 예약 액션 트리거

### 4.3.2.1.5.3. Trigger Details

실행  test-manual HTTP 변경 상태 ● 실패 최근 트리거 2023.09.18 09:42:01 수행 주기 0 0 1 \* \* \* 수정 삭제

메시지

```
[.deploy.volumes[0].from.name is required, .deploy.volumes[0].from.type invalid enum (allowed: [configMap]), .deploy.volumes[0].from.volumeMounts invalid "array" type]
[.deploy.volumes[0].from.type invalid enum (allowed: [secret]), .deploy.volumes[0].from.volumeMounts invalid "array" type, .deploy.volumes[0].from.name is required]
[.deploy.volumes[0].from.name is required, .deploy.volumes[0].from.type invalid enum (allowed: [persistentVolumeClaim]), .deploy.volumes[0].from.volumeMounts invalid "array" type]
.deploy.volumes[0].from.volumeMounts invalid "array" type], .deploy.image is required]
```

조건 감지	최근 체크 시간	키	밸류
● 실패	2023.09.18 09:42:01	요청에 포함되는 json직렬화 형식의 데이터	data
		응답 데이터 필터링	url
		요청에 포함되는 header 목록	useragent : tst
		요청에 포함되는 메소드	method
		트리거 수행 서비스 어카운트	tgr-builder
		요청대상이 되는 url	http://httpbin.org/get
		응답 데이터와 비교할 데이터	http://httpbin.org/get

Click on the desired trigger to view detailed information.

예약 액션 트리거 In this case, you can check 실행 여부 , , , in the bottom table . 상태 메시지

조건 감지 최근 체크시간 키 밸류

The types of triggers 조건 감지 are as follows.

조건 감지 is the same as 예약 액션 트리거 of , and and are added. 트리거의 상태 정보 미감지 스킵

type	explanation
Undetected	예약 액션 트리거 Used only when no trigger is detected.

최근 체크 시간 is the time at which detection is attempted periodically according to the schedule of the trigger.

빌드 후 액션

실행  after-build HTTP 변경 상태 ● 실패 최근 트리거 2023.09.19 11:23:22 수행 주기 수정 삭제

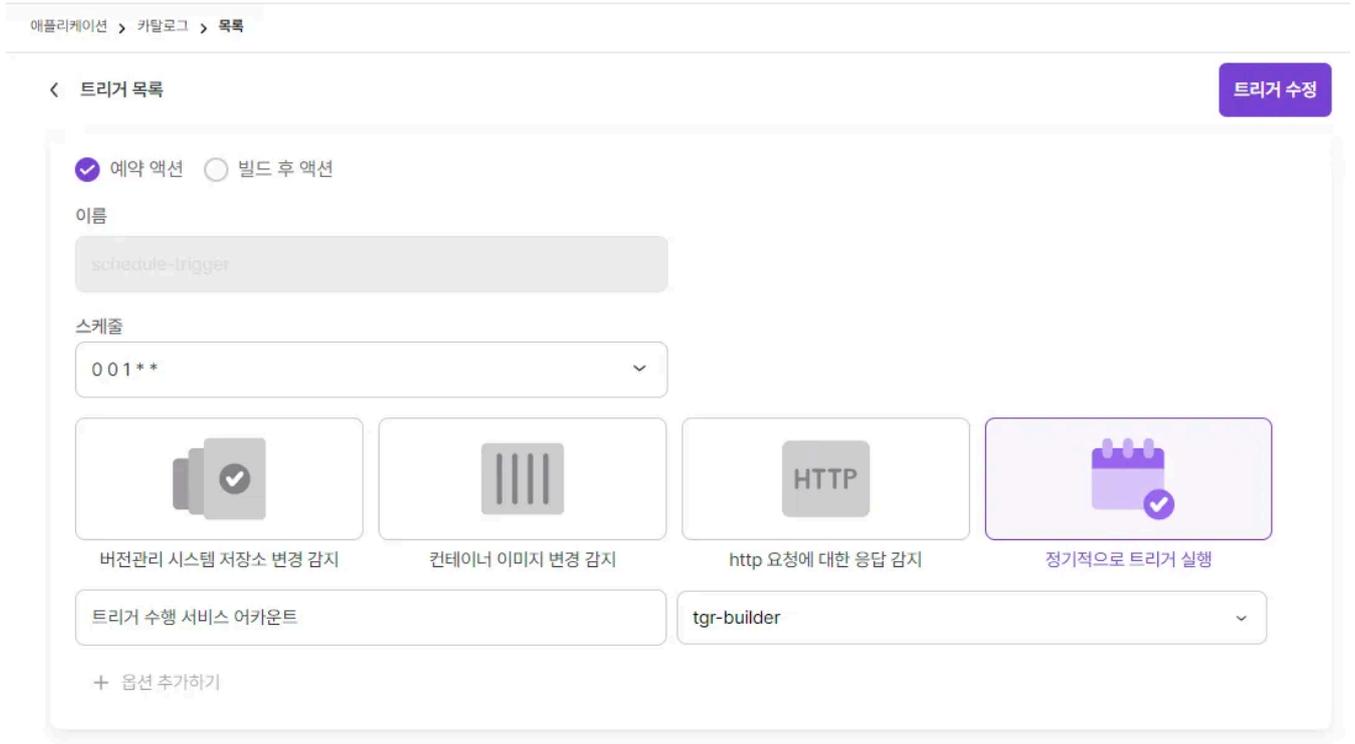
메시지

Failed trigger for build : Pipeline.cicd.accordions.co.kr "test" not found

키	밸류
대상(키팔로그/파이프라인) 종류	Pipeline
트리거 수행 서비스 어카운트	tgr-builder
빌드(배포)를 수행할 대상 지정	manual/test

빌드 후 액션 트리거 In the case of , you can check 실행 여부 , at the top and , in the table below . 상태  
메세지  
키 밸류

### 4.3.2.1.5.4. Modifying triggers

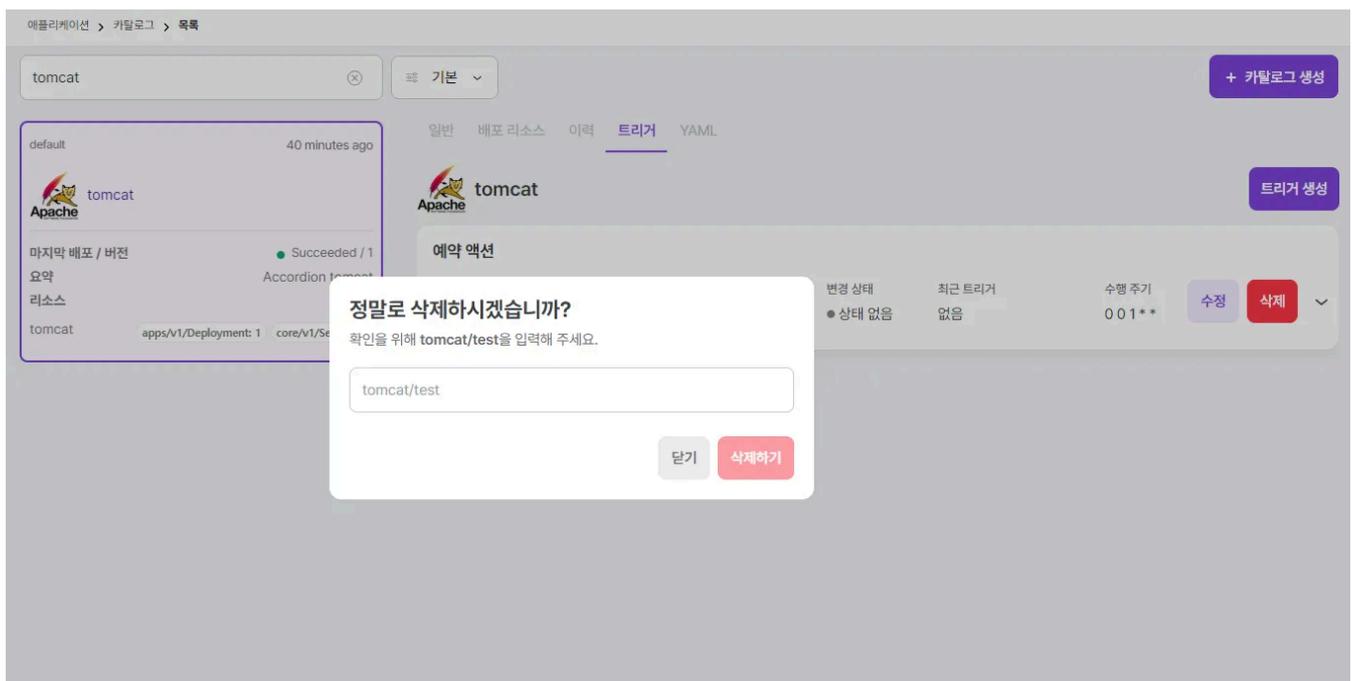


트리거 Clicking the button on the right 수정 will allow you to edit.

옵션 추가하기 You can enter new options by clicking the button.

Once you've completed your edits, 트리거 수정 you can click the button in the upper right corner to save them, or 트리거 목록 click the button to cancel them.

### 4.3.2.1.5.5. Delete Trigger



Right-click on the trigger you want to delete, and 삭제 a modal will appear. In the modal, enter the name of the catalog or pipeline and the trigger name, then delete.

#### 4.3.2.1.5.6. Trigger Event

When a trigger is actually executed, information about success/failure is registered via a Kubernetes event.

Below is an example event.

```
49m Normal SucceededTrigger pipeline/hello Succeeded trigger for "build" :
pipeline/default/image
48m Normal SucceededTrigger pipeline/hello Succeeded trigger for "request" : GET
'http://httpbin.org/ip'
50m Warning FailedTrigger pipeline/hello Failed trigger for "build" : xxxx
```

#### 4.3.2.1.6. Build Retention Policy

This policy controls the number of builds that increase during a build. It retains only builds that meet certain conditions and deletes the rest.

It operates with the following annotations in the catalog/pipeline.

Annotation	explanation
cidc.accordions.co.kr/retention.count	Determines the number of builds to keep in a queue.
cidc.accordions.co.kr/retention.period	Set the period for which the build will be kept.

#### 4.3.2.1.7. Registration

```
metadata:
  annotations:
    cidc.accordions.co.kr/retention.count: '1'
    cidc.accordions.co.kr/retention.period: 1m
```

The build storage policy applies count first when multiple registrations are made, and a **mini - num of one build** is stored.

Type	Inputtable values	explanation
count	Number	1 = 1 piece, 2 = 2 pieces, 10 = 10 pieces
period	Duration	1d = 1 day, 1h = 1 hour, 1m = 1 minute, 1s = 1 second, 2d2h = 2 days 2 hours

##### 4.3.2.1.7.1. count

count If it is **1**, **only** the latest build is kept.

##### 4.3.2.1.7.2. period

period If it is **1m** , **only builds whose last build time is 1m + later than the current time** are kept.

#### 4.3.2.1.8. Process

The build retention policy operates based on the occurrence of background and buildRequest deletion events. Deletion is performed if

count annotations period exist.

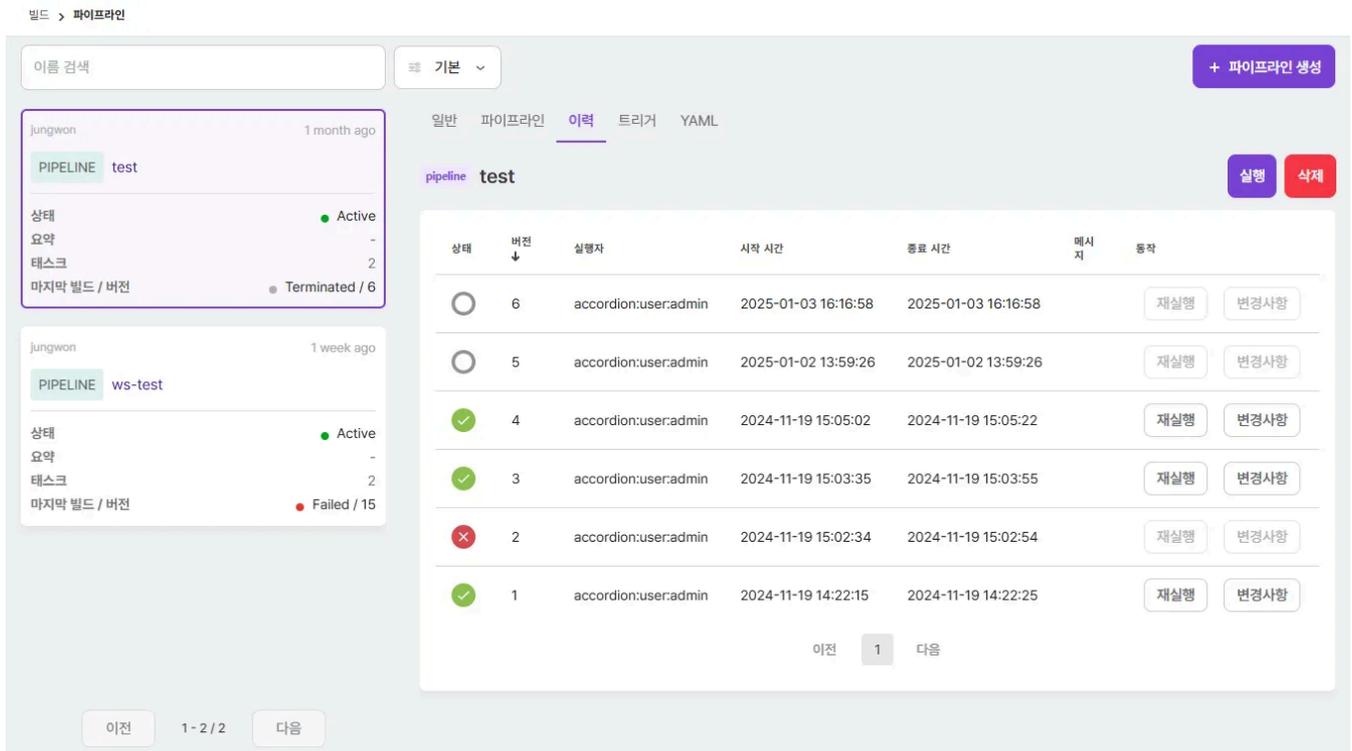
If deletion is successful, the catalog is registered in `buildStatus.lastDeletedVersion` , and the pipeline is registered in `status.lastDeletedVersion` .

### 4.3.3. Build

In Build, you can use the menus such as Pipeline, Approval, and Task Template to create pipelines or catalogs and task templates to use in pipelines, and handle the approval process required by the pipeline.

#### 4.3.3.1. Pipeline

A pipeline consists of one or more tasks for image building and deployment, managing their dependencies. Pipelines can be executed continuously and maintain a history of their execution.

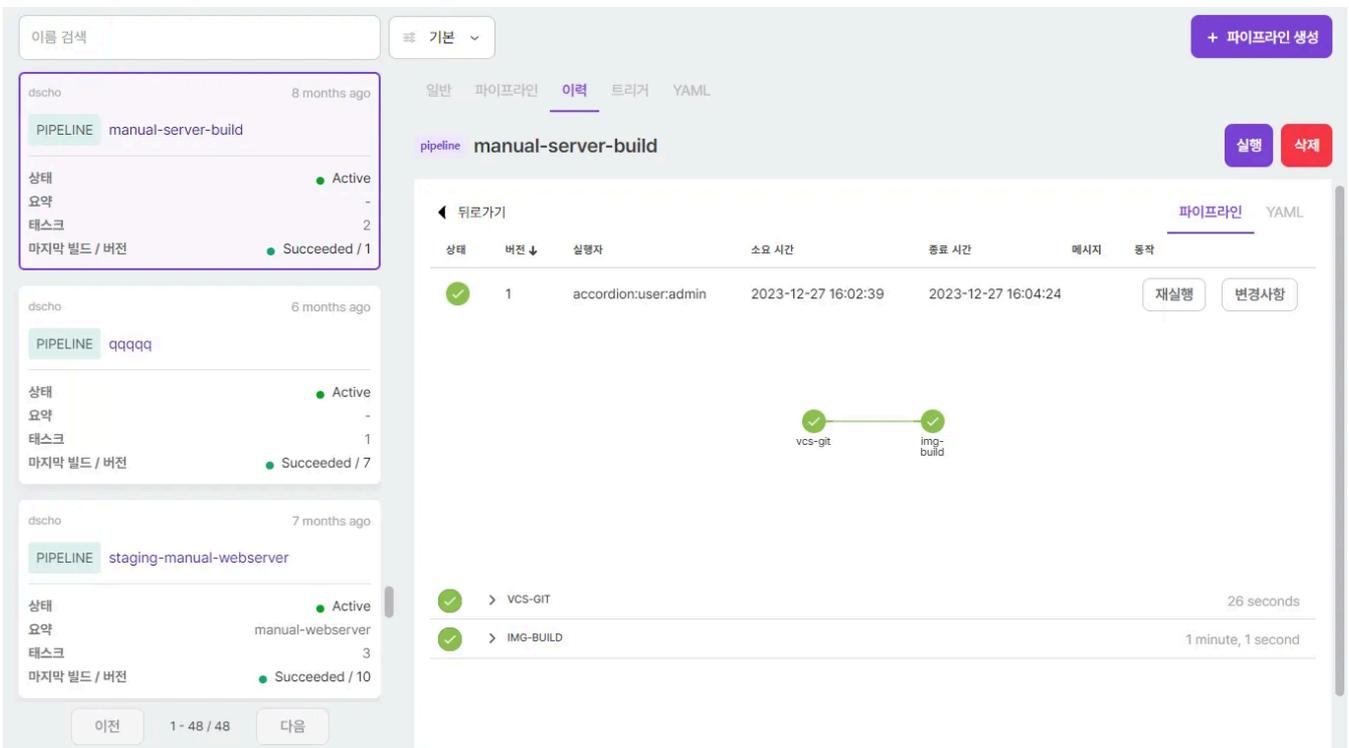


The Pipeline menu allows you to view the build history of the pipeline execution. Status information for each build is displayed as icons, each with its own meaning:

image	Task status
	Terminated: The build has been stopped by the user.
	Succeeded: The task has been completed with an exit code of 0.
	Running: The task is being performed.
	Failed: The task was performed but completed with a non-zero exit code.

<b>image</b>	<b>Task status</b>
	<p>Error: The task is not executed or terminated abnormally.</p> <p>Example of occurrence</p> <ul style="list-style-type: none"> <li>• If a task is not performed due to Kubernetes infrastructure factors</li> <li>• When the task being performed is abnormally terminated due to external factors</li> </ul>
	Pending: The task is waiting before being executed.
	Warning: Occurs when incorrect data is entered while editing a task.

Selecting a build history will display detailed information about each individual build.



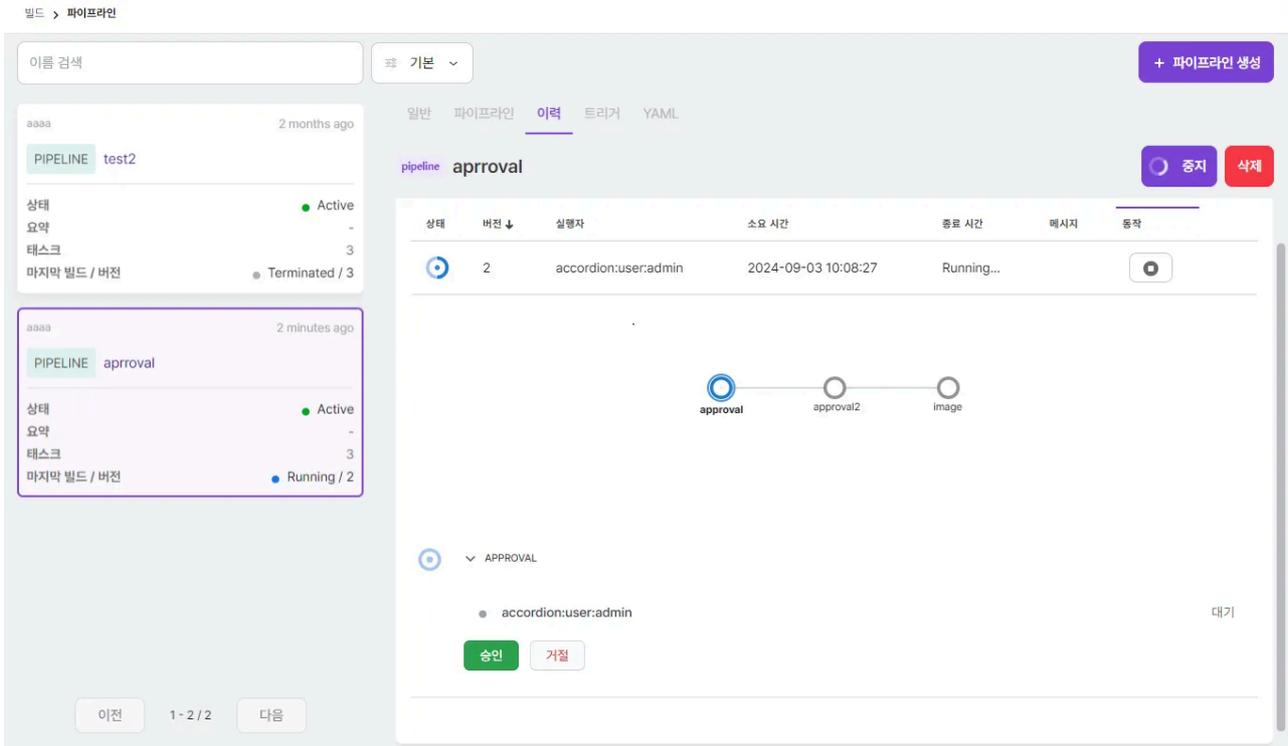
The screenshot displays the Accordion CI/CD interface. On the left, there is a sidebar with a search bar and a list of pipelines. The selected pipeline is 'manual-server-build', which is active and succeeded. The main area shows the pipeline details for 'manual-server-build', including a table of build history and a task graph. The build history table shows a single build (ID 1) by 'accordion:user:admin' that completed successfully on 2023-12-27. The task graph shows two tasks: 'vcs-git' (26 seconds) and 'img-build' (1 minute, 1 second), both of which completed successfully.

An individual build consists of one or more tasks, and selecting a task allows you to view the logs generated by that task.



NOTE

Tasks also include approval tasks. For approval tasks, selecting a task doesn't provide log information. Instead, a list of approvals appears. If the user is included in the list of approvers, they can approve or reject the task.

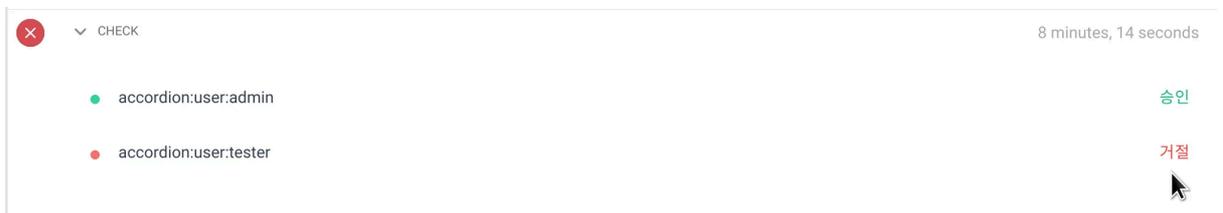


In case of approval, all approvers must approve to proceed to the next task, and if even one approver rejects, the pipeline stops.

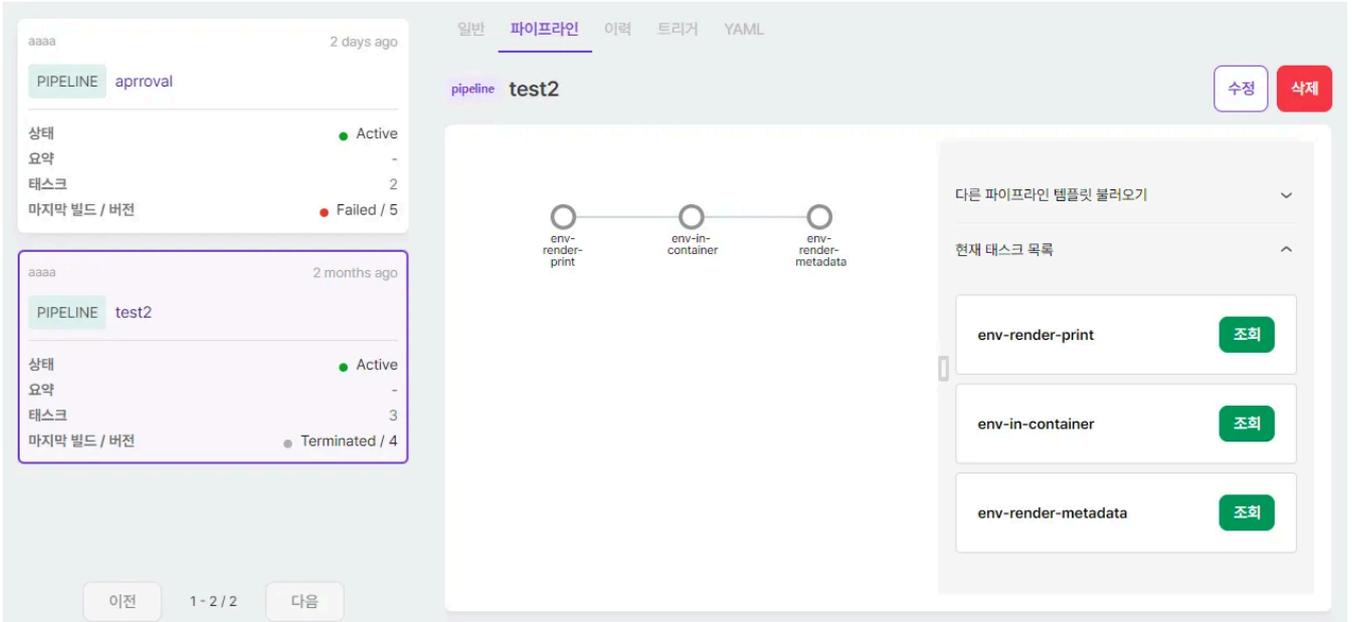
• Approval successful



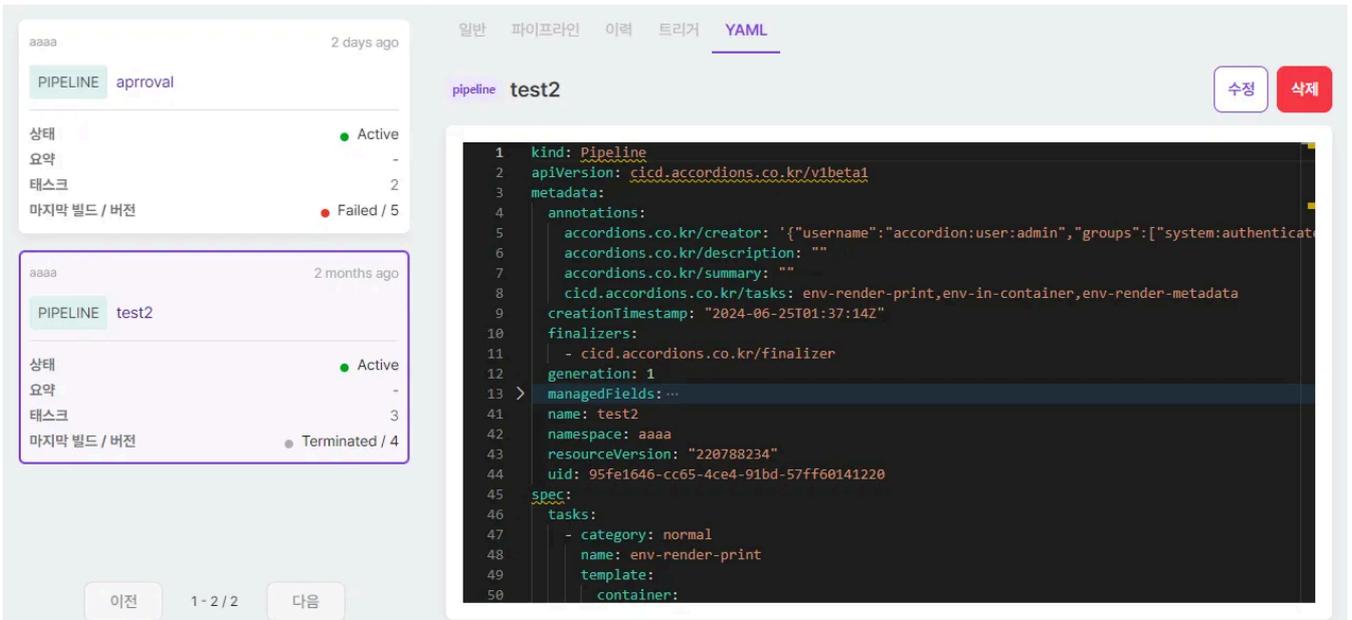
• Approval failed



Selecting the tabs at the top 파이프라인 displays a graph of task information composing the pipeline. Nodes in the graph represent tasks, and selecting a node displays information about that task.



If you select the tab at the top **YAML** , you can see the information that configures the pipeline in the **YAML editor**, and you can directly edit information that cannot be set in the **UI**.



You can view reserved environment variables in a **YAML editor**. The reserved environment variables in the pipeline are as follows:

meaning	Environment variable expressions
Pipeline name	{{{.PIPELINE.NAME}}}
Pipeline Namespace	{{{.PIPELINE.NAMESPACE}}}
Pipeline UID	{{{.PIPELINE.UID}}}
Pipeline instance name	{{{.PIPELINE.INSTANCE}}}
Build name	{{{.BUILD.NAME}}}

<b>meaning</b>	<b>Environment variable expressions</b>
Build version	{{{.BUILD.VERSION}}}
Build generator name	{{{.BUILD.CREATOR.USERNAME}}}
Build Creator Group	{{{.BUILD.CREATOR.GROUPS}}}

### 4.3.3.1.1. Creating a Pipeline

+ 파이프라인 생성 You can create a pipeline by entering information on the screen that appears when you select the button. You can enter information in FORM or YAML when creating a pipeline.

The information you enter is as follows:

item	explanation
Pipeline name	Name of the pipeline to be created
Select a pipeline template	Select a template for information about the tasks that make up the pipeline.
Pipeline Preview	View task information that composes the pipeline in a graph
Pipeline Summary	A one-line summary of the pipeline (displayed in the pipeline list)
Pipeline Description	Write a description of your pipeline in Markdown

When creating a pipeline, you can retrieve and set configuration information for tasks from a pipeline template.

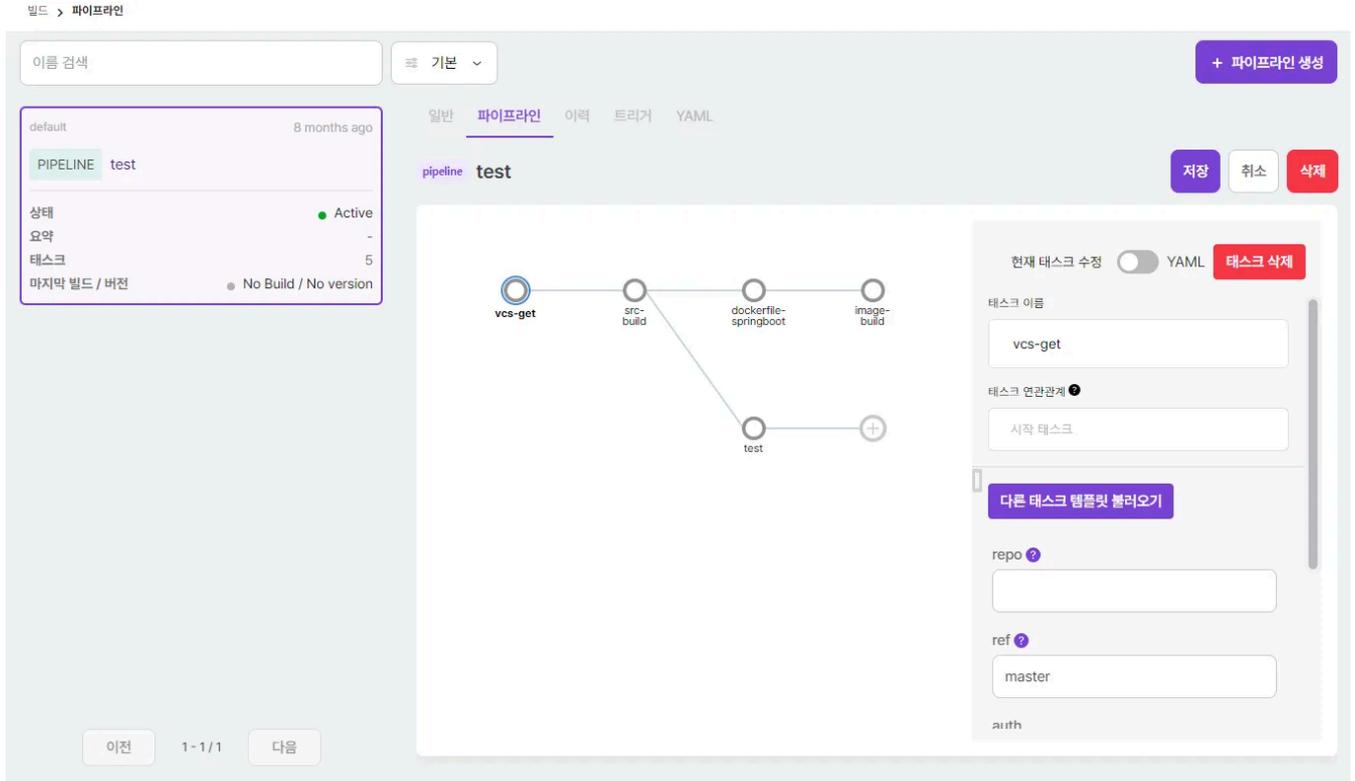
To modify a template and use it, apply the changes in the edit screen after creating the pipeline.

**TIP**

When creating a pipeline, 빈 템플릿 you can select to create a pipeline without tasks. This allows you to create the entire pipeline from scratch.

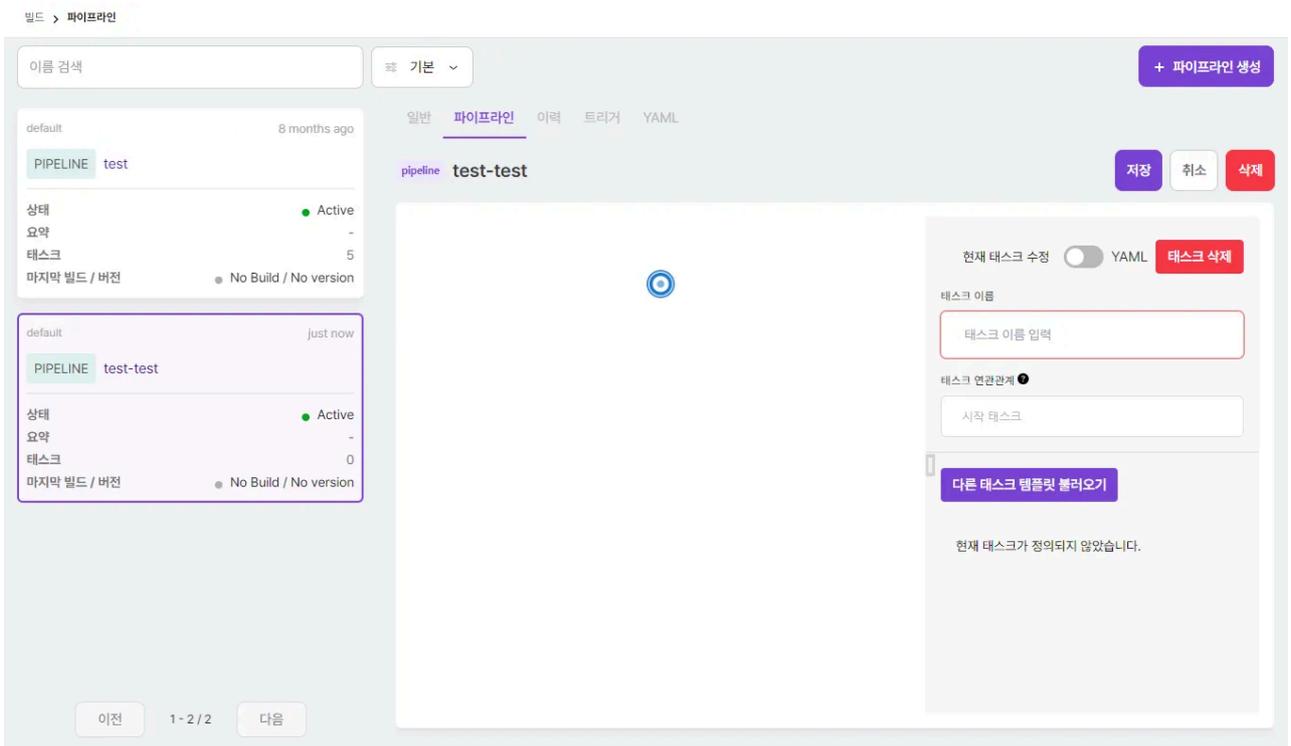
### 4.3.3.1.2. Modifying the Pipeline

When creating a pipeline, task information is retrieved from the pipeline template. To change task information in a pipeline, locate the pipeline you want to change and select the button **파이프라인** on the tab. 수정



#### NOTE

For pipelines without tasks, + you can configure tasks by editing them and selecting the button for an empty task.



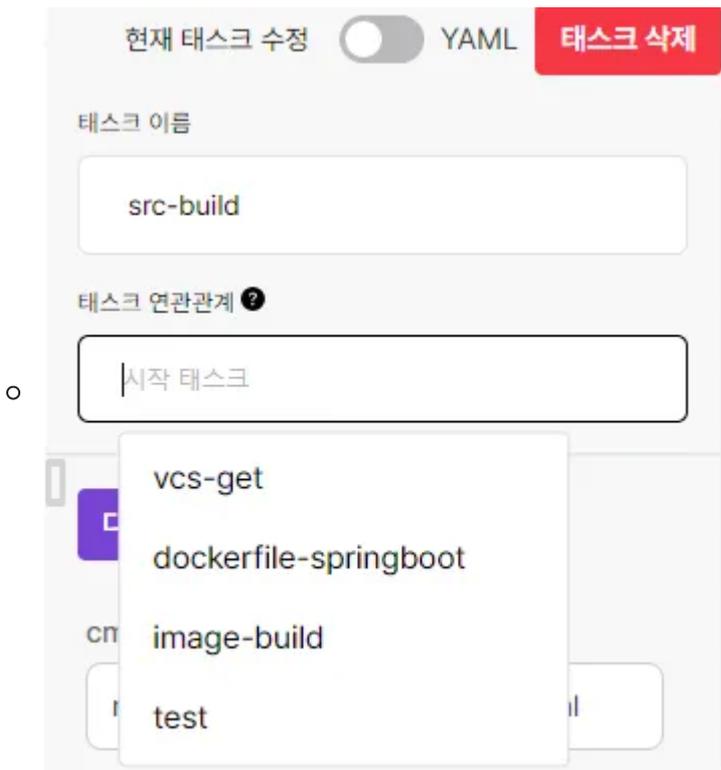
When writing specifications for a task, set the name and relationship with other tasks, and write detailed information based on the task template.

The task name should conform to the Kubernetes naming policy, and the task relationship should contain information about the conditions under which the task should be performed. This 이름.상태 can be entered in the format . The following values can be entered for the status.

situation	explanation
Succeeded	success
Failed	failure
Skipped	omission
Error	error

Here's how to write a relationship:

- Task Connection
  - Select the input window for the task relationship and then set the task



- Add task status and conditions
  - Select the status and conditions of the task sequentially

현재 태스크 수정  YAML **태스크 삭제**

태스크 이름

src-build

○ 태스크 연관관계 ?

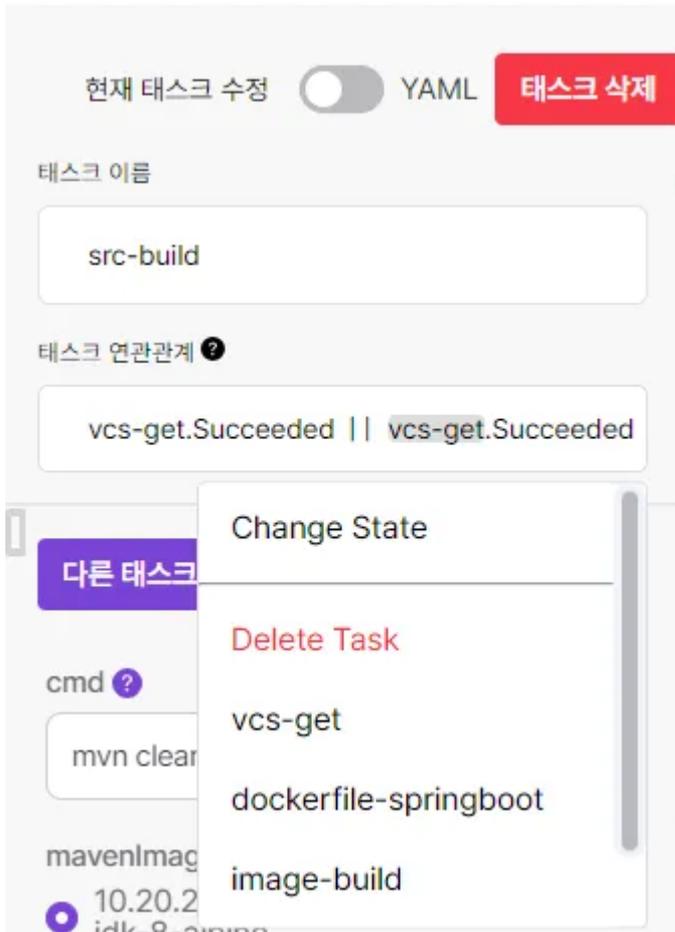
vcs-get.Succeeded|

**다른 태스크**

&&  
||

• Delete or edit tasks

- Click on the task that needs to be modified, or click on the status to change the content.



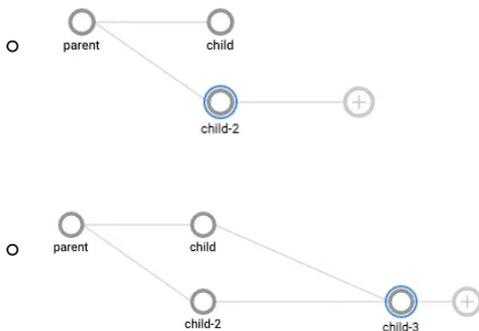
**TIP**

An example of creating a relationship is as follows:

• condition

- parent After the task child , child-2 perform the task.
- child Performs a task if the task succeeds and performs a task child-2 if the task fails . child-3

• setting

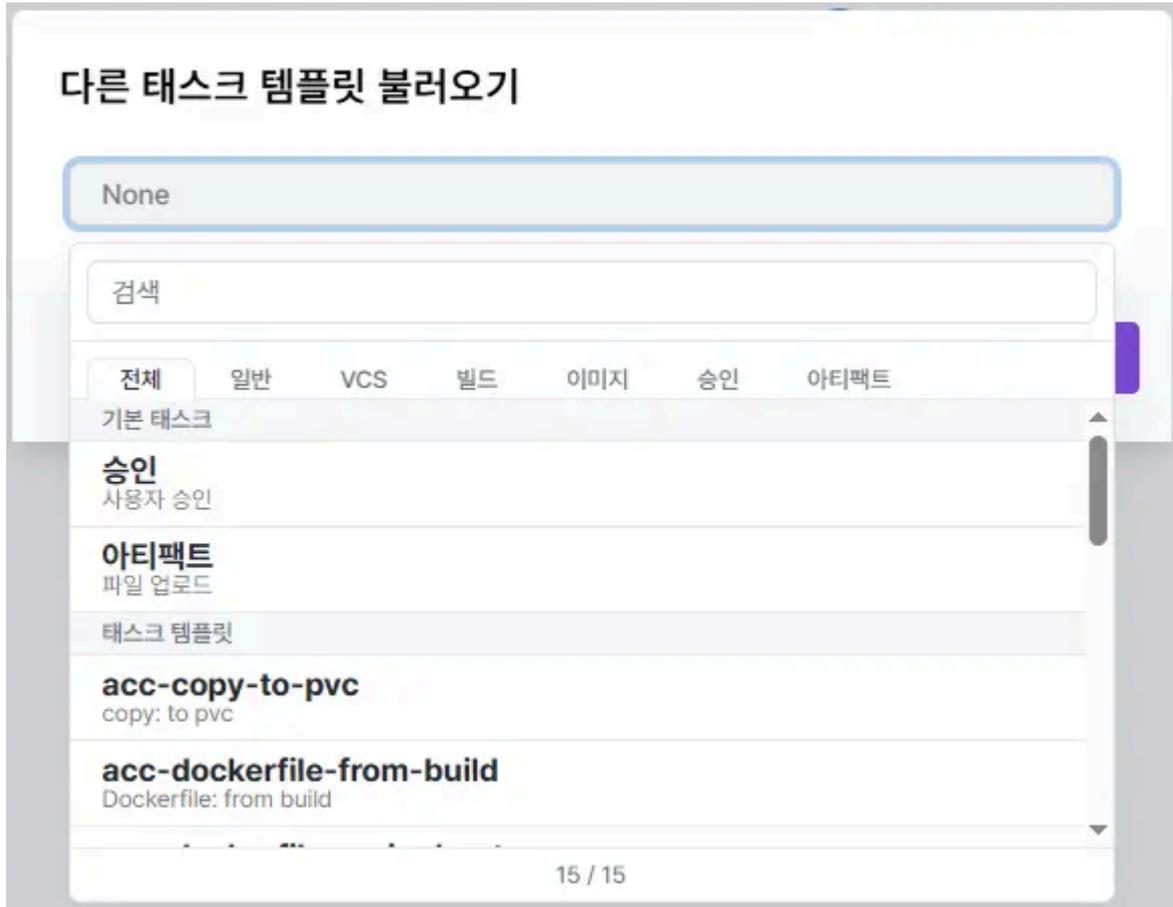


**CAUTION**

**CAUTION**

When configuring provisioning settings for a pipeline's workspace, if you configure the access mode as ReadWriteOnce, as in the example in the tip above, child if child-2 you try to configure a pipeline where the tasks start at the same time, the write may fail, so it must be created as ReadWriteMany.

To create a task, you must load the required task from the task template and set the parameters.



The types of task templates are as follows:

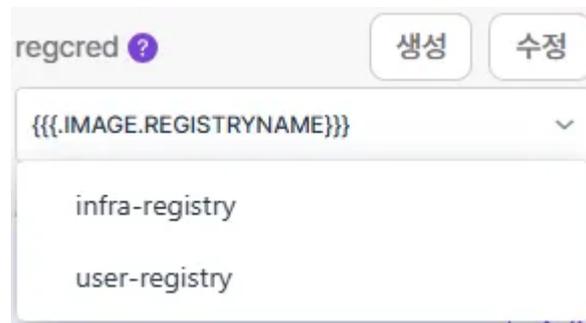
type	explanation
common	General type
VCS	Version Control System type (e.g. git, svn). If you use AWS CodeCommit SSH authentication with git type, you must specify the value used for ssh in <code>kubernetes.io/ssh-auth</code> the type <code>secret . data.ssh-login-name login_name</code>
Build	Source build type (e.g. maven, ant, gradle)
image	Types of container images to create (e.g. kaniko)
approval	It must describe the approval task <code>spec.tasks[].approvers</code> , but does not describe the container.
Artifact	It is necessary to describe how to retrieve data uploaded to the S3 storage set for each pipeline <code>spec.tasks[].buckets</code> , but does not describe the container.

Once the parameters are set, 저장 select the button to complete the writing.

**NOTE**

Here's how to reference Kubernetes resources when modifying a pipeline:

- Select a list of Kubernetes resources based on the current user permissions.
- Enter environment variables



- There are three cases in which Kubernetes resources can be created when modifying a pipeline Secret : , ConfigMap , and . The creation screen is identical to the creation screen for each menu. PersistentVolumeClaim

### 4.3.3.1.3. Previewing Pipeline Execution

이력 Clicking the button on the tab 실행 will take you to the pipeline preview page.

클러스터 | jhchae-host-cluster | 네임스페이스 | junhyeong | admin

빌드 > 파이프라인

test-p

기본

+ 파이프라인 생성

일반 | 파이프라인 | 이력 | 트리거 | YAML

pipeline test-p

실행 | 삭제

상태	버전 ↓	실행자	시작 시간	종료 시간	메시지	동작
✓	21	accordion:user:admin	2024-12-02 13:53:16	2024-12-02 13:53:27		재실행   변경사항
✓	20	accordion:user:admin	2024-12-02 13:52:46	2024-12-02 13:52:56		재실행   변경사항
✓	19	accordion:user:admin	2024-12-02 11:29:02	2024-12-02 11:29:12		재실행   변경사항
✓	18	accordion:user:admin	2024-12-02 11:19:31	2024-12-02 11:19:41		재실행   변경사항
✓	17	accordion:user:admin	2024-12-02 11:18:22	2024-12-02 11:18:32		재실행   변경사항
✓	16	accordion:user:admin	2024-12-02 11:11:38	2024-12-02 11:11:48		재실행   변경사항
✓	15	accordion:user:admin	2024-12-02 11:11:06	2024-12-02 11:11:16		재실행   변경사항
✓	14	accordion:user:admin	2024-12-02 10:57:35	2024-12-02 10:57:45		재실행   변경사항

클러스터 | jhchae-host-cluster | 네임스페이스 | junhyeong | admin

클러스터 | jhchae-host-cluster | 네임스페이스 | junhyeong | admin

빌드 > 파이프라인 > 파이프라인 실행 미리보기

신규 빌드

실행

요약

test-p

현재 버전 21 2024-12-02 13:53:16 | 미리보기 22 -

```

7 | template:
8 |   container:
9 |     args:
10 |       - |
11 |         | {{.values.cmd}}
12 |     command:
13 |       - sh
14 |       - '-c'
15 |     image: 10.60.160.51:5000/busybox
16 |     name: ''
17 |     resources: {}
18 |     valueschema:
19 |       properties:
20 |         cmd:
21 |           description: bash shell command
22 |           format: shell
23 |           type: string
24 |           type: object
25 |     templateRef:
26 |       clusterScope: false
27 |       name: acc-shell
28 |     values:
29 |       cmd: ''
30 | status:
31 |   phase: Succeeded
32 |   version: 21
33 |
7 | template:
8 |   container:
9 |     args:
10 |       - |
11 |         | {{.values.cmd}}
12 |     command:
13 |       - sh
14 |       - '-c'
15 |     image: 10.60.160.51:5000/busybox
16 |     name: ''
17 |     resources: {}
18 |     valueschema:
19 |       properties:
20 |         cmd:
21 |           description: bash shell command
22 |           format: shell
23 |           type: string
24 |           type: object
25 |     templateRef:
26 |       clusterScope: false
27 |       name: acc-shell
28 |     values:
29 |       cmd: ''
30 | status:
31 |   lastBuildPhase: Succeeded
32 |   lastVersion: 21
33 |

```

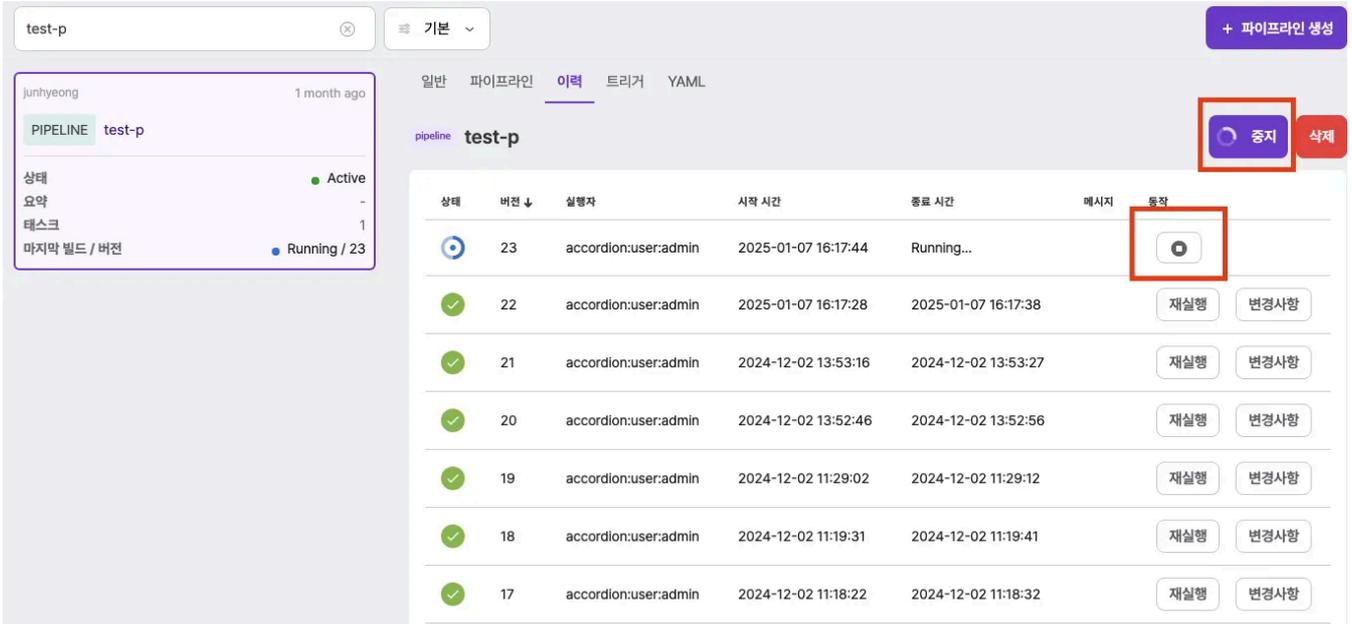
> 이벤트 ( NORMAL 2 / WARNING 0 )

The most recent successful build 현재 버전 serves as a comparison baseline, and any pipeline changes reflected in the build 미리보기 버전 can be compared.

Run the pipeline using the Run button in the upper right corner.

### 4.3.3.1.4. Running and Stopping Pipelines

이력 When you select a button in the tab 실행 , you can see the build of the pipeline running.

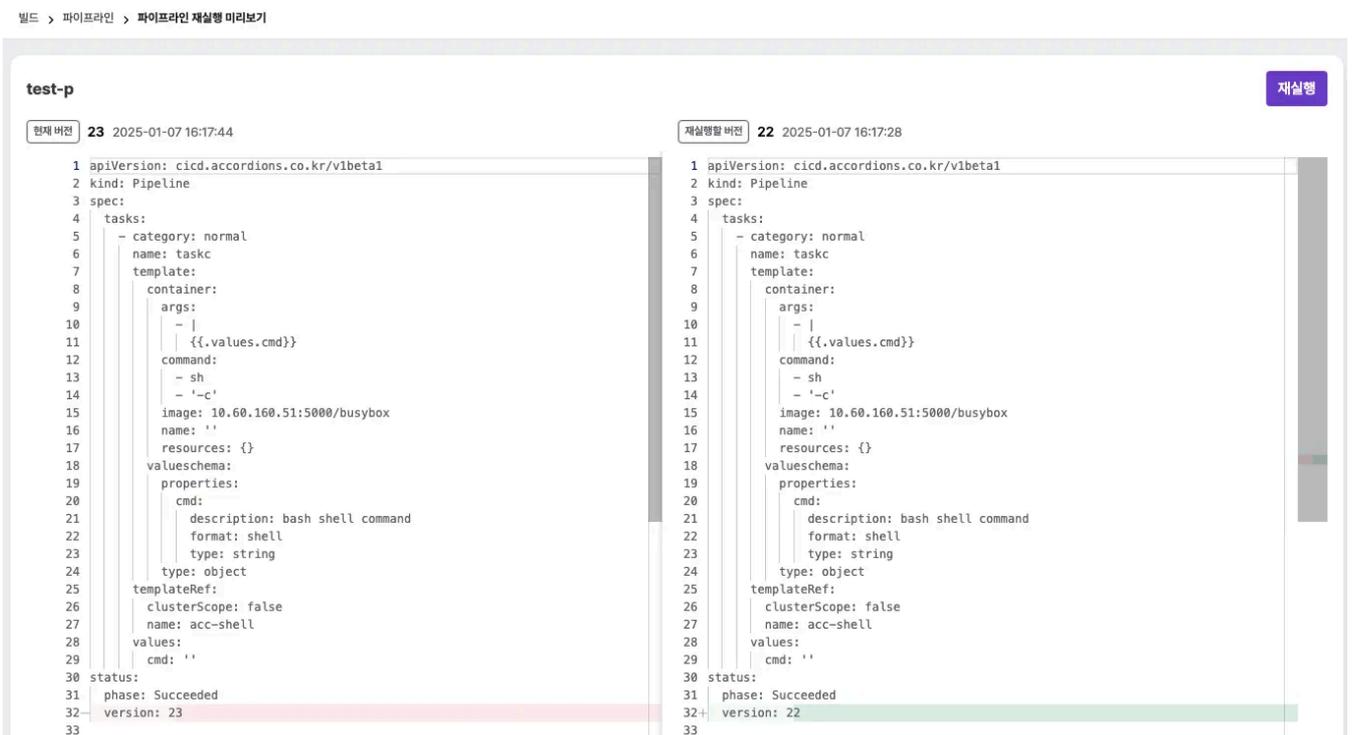


중지 You can stop the build of an ongoing pipeline by selecting the button at the top or the stop icon button on the right.

### 4.3.3.1.5. Rerunning and Previewing the Pipeline

If you want to redeploy a specific build from the build history, you can do so by clicking the button on the right side of the build history. This is only possible if the build you want to rerun successfully completed.

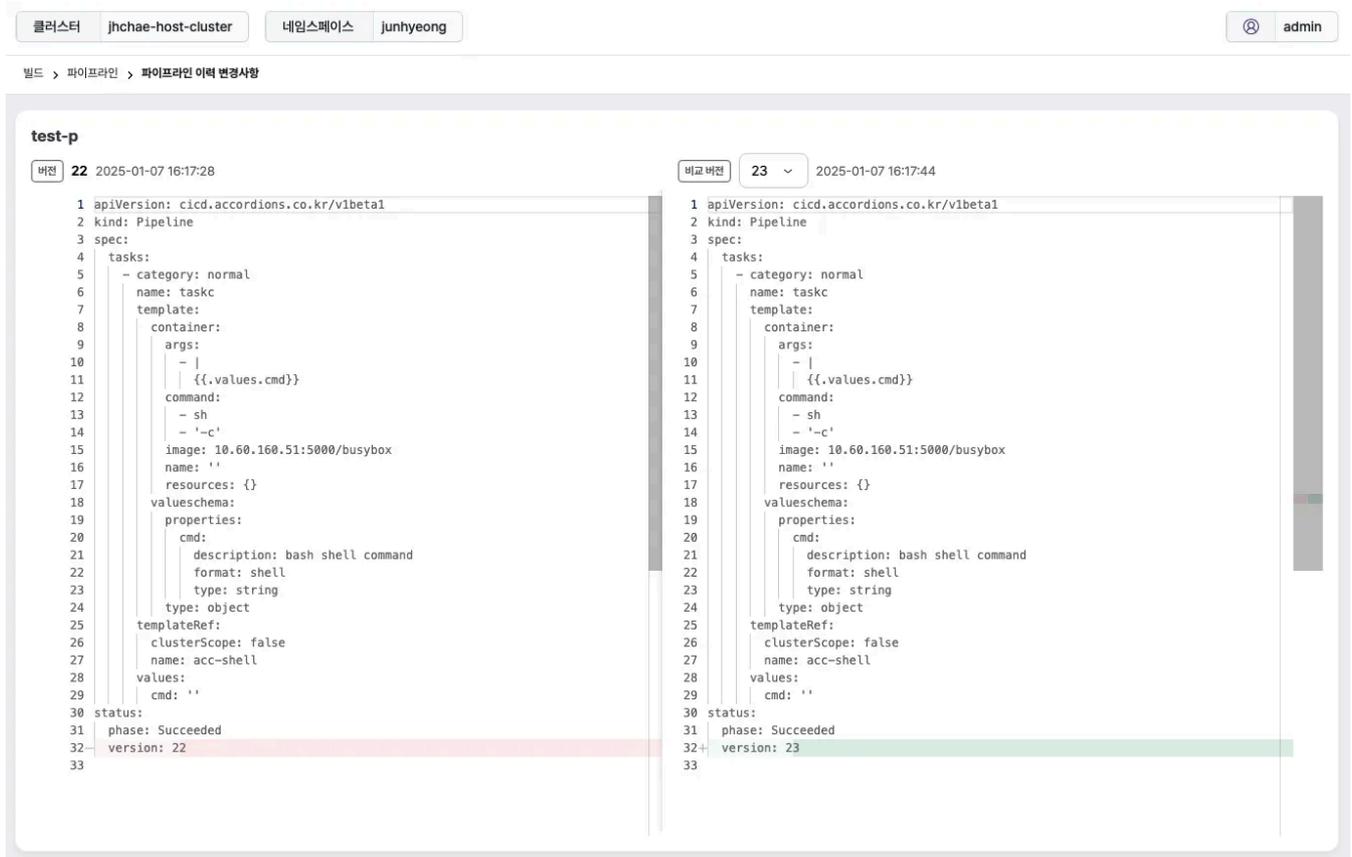
재실행 Clicking the button takes you to the pipeline preview page for rerun.



The most recent successful build 현재 버전 serves as a comparison baseline, and any pipeline changes that will be reflected through re-runs 재실행할 버전 can be compared. Re-run the pipeline using the Re-run button in the upper right corner.

### 4.3.3.1.6. Comparing Pipeline Versions

Only specific successful build versions can be compared for changes to each other.



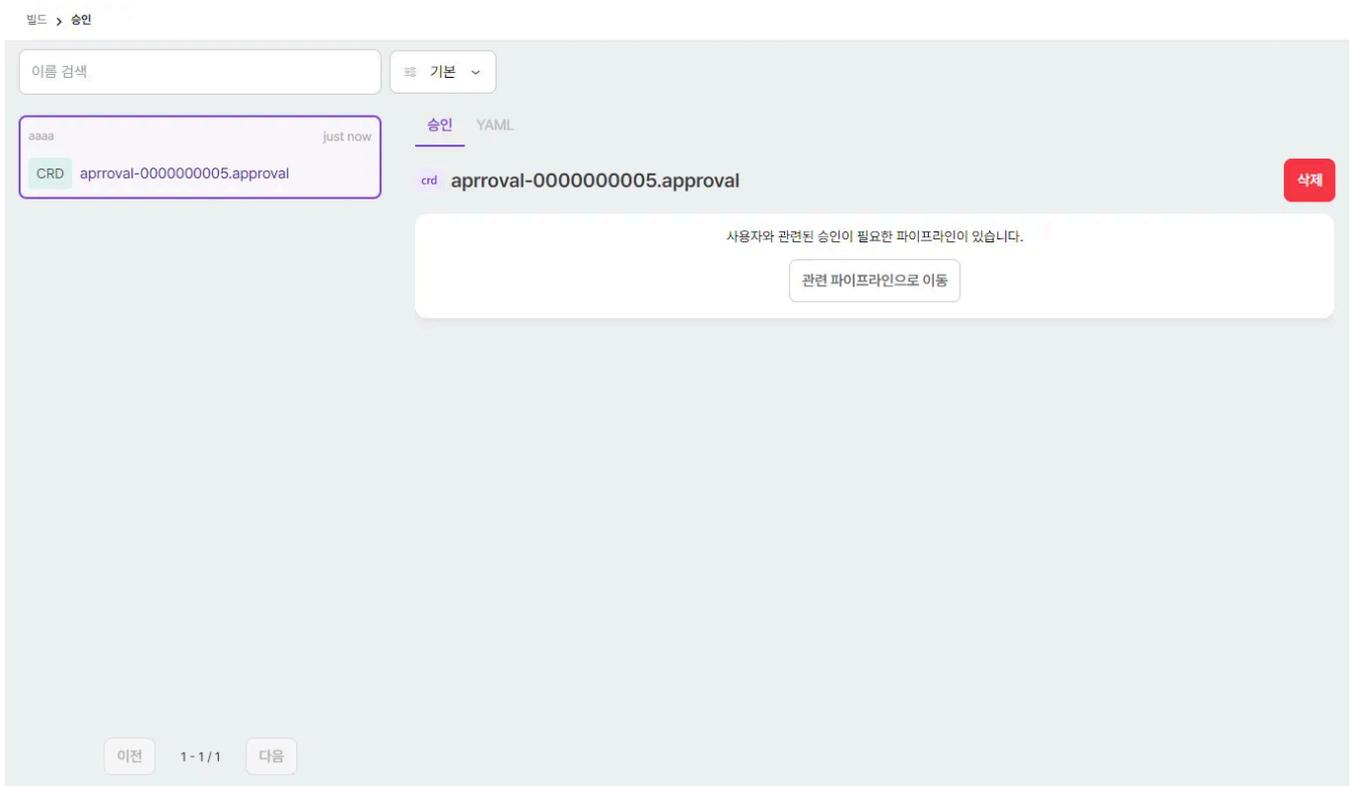
You can compare a specific version selected from the list with other successful versions.

### 4.3.3.1.7. Trigger

Please refer to that guide as the trigger and usage method in the catalog are the same .

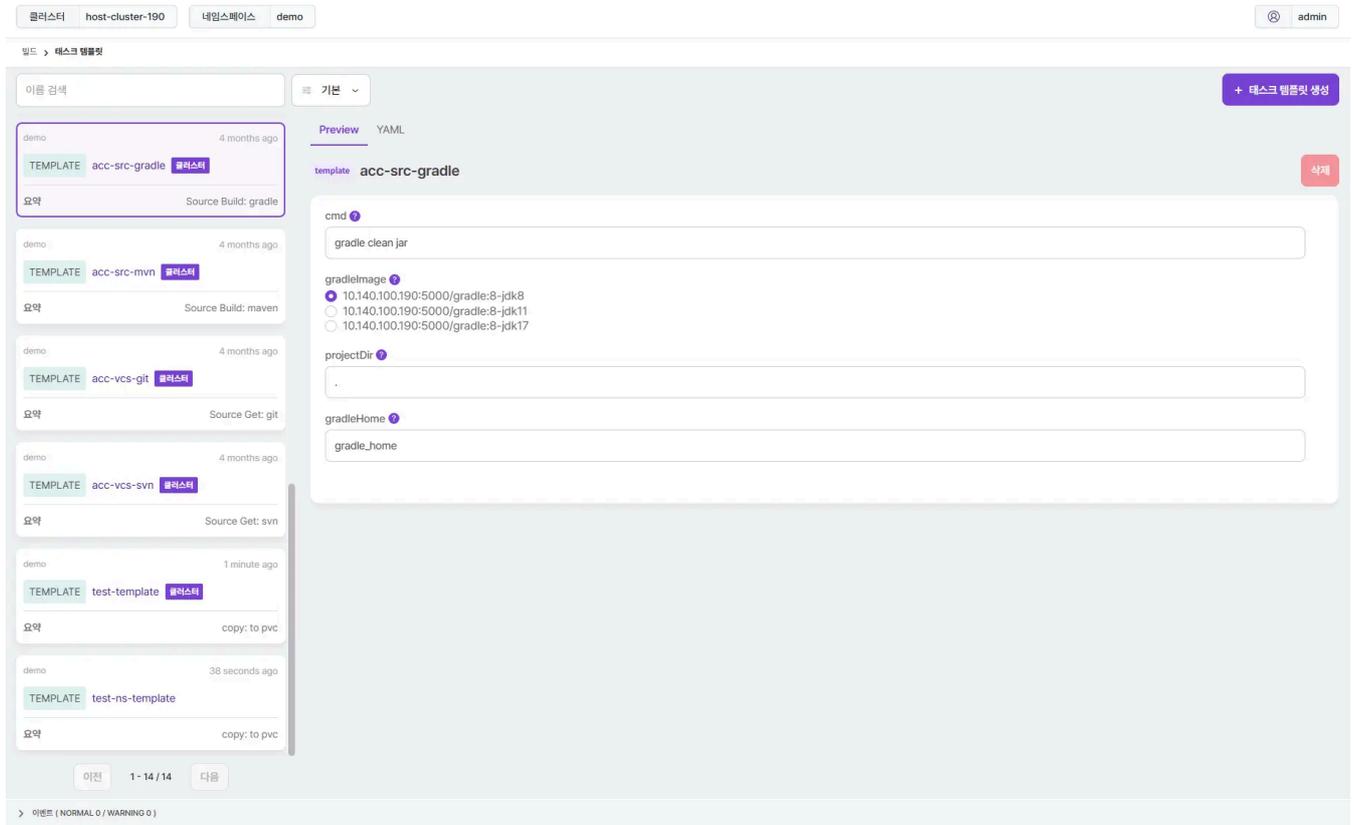
### 4.3.3.2. Approval

If a task requires approval during a pipeline build, it will wait until the approver approves. The default wait time is 30 minutes, and if approval is not received within this time, it will be marked as unapproved. Approvals are managed by the pipeline, not created or deleted by the user.



### 4.3.3.3. Task Template

Manage task templates required for creating tasks when creating or modifying pipelines. Preview The tab allows users to preview the forms provided.



#### NOTE

Task templates created from cluster task templates in the cluster scope are labeled with a cluster label when displayed in the list, and cannot be edited or deleted. When hovering over the cluster label, a tooltip appears, as shown above.

## 4.3.4. Workload

The Workload menu in the namespace scope is used in the same way as the Workload menu in the cluster scope, so please refer to that guide .

## 4.3.5. Composition

The configuration menu for the namespace scope is identical to the configuration menu for the cluster scope, so please refer to that guide .

## 4.3.6. Network

The Network menu in the namespace scope is used in the same way as the Network menu in the cluster scope, so please refer to that guide .

## 4.3.7. Storage

The Storage menu in the namespace scope is used in the same way as the PersistentVolumeClaim in the Storage menu in the cluster scope, so please refer to that guide .

## 4.3.8. Access Control

The access control menu of the namespace scope is used in the same way as the roles, role bindings, and service accounts of the access control menu of the cluster scope, so refer to that guide .

## 4.3.9. Monitoring

Monitoring provides information about system resources, application performance, and logs (event logs, audit logs, and notification logs) to enable operators to ensure stable system operation.

**NOTE**

For the System, Event Log, Audit Log, and Notification Log menus, the same menus are available in the Monitoring menu for cluster scopes. Since the two are identical except for the cluster and namespace scope criteria, please refer to the corresponding guide.

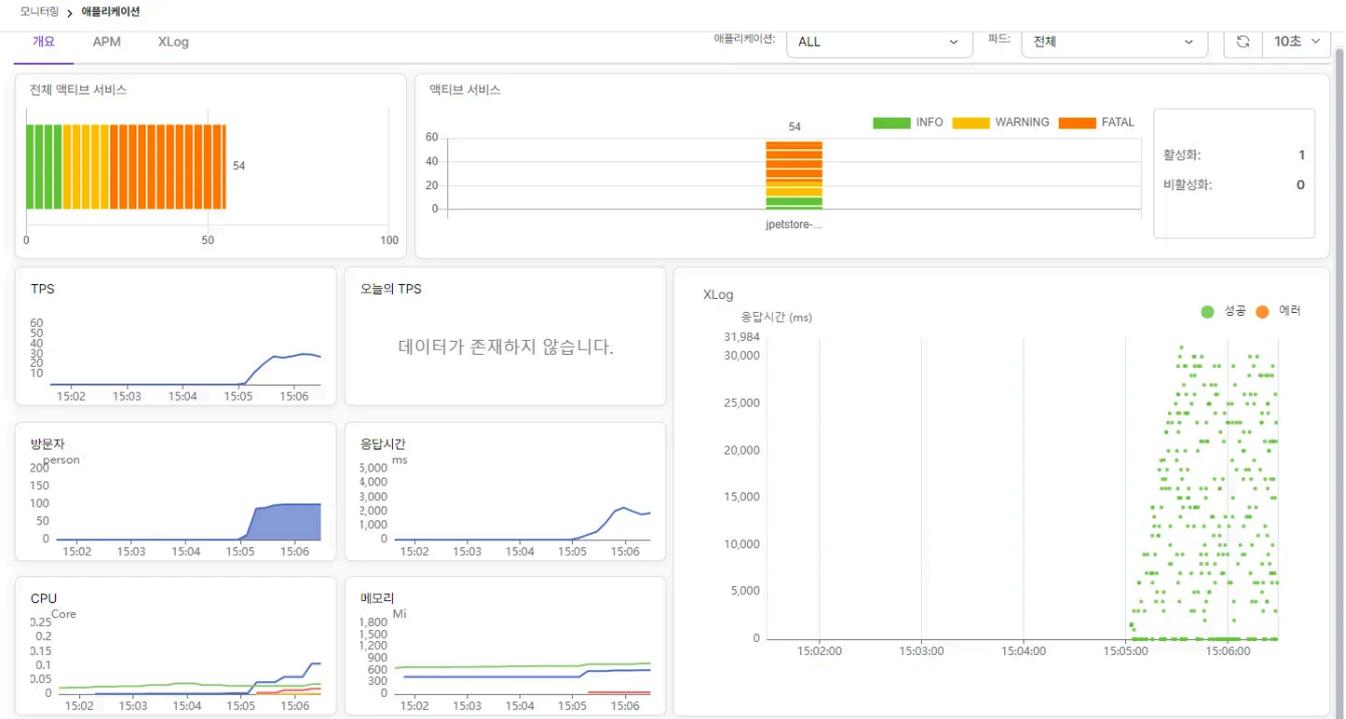
- System: Cluster/System
- Event Log: Cluster/Event Log
- Audit Log: Cluster/Audit Log
- Notification Log: Cluster/Notification Log

### 4.3.9.1. Application

#### 4.3.9.1.1. Overview

The application overview provides application performance monitoring information, centered on collected metrics. Key monitoring items include:

item	Metric
service	Total Active Services, Active Services, TPS, Today's TPS, Visitors, Response Time, XLog
System	CPU, memory



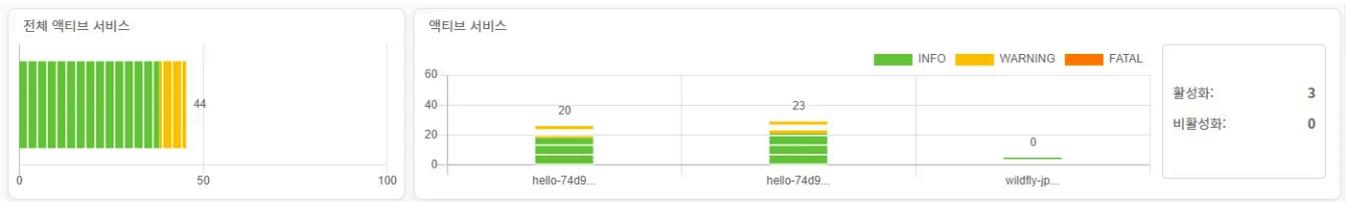
A description of each monitoring item follows.

### Active service

This bar chart provides information about the requests currently being processed for each instance. Requests being processed are categorized into three stages: satisfied (Info), accepted (Warning), and unsatisfied (Fatal), and are displayed in green, yellow (3 seconds), and orange (8 seconds), respectively.

- The full active service provides status information for all currently processing instances.
- Active services provide information about the status of individual instances currently being processed.

When the requests in progress are displayed, selecting the chart will bring up the Active Service Information modal, providing information about the ongoing requests.



#### NOTE

#### Active Service Information

액티브 서비스 Selecting a chart in the modal provides information. You can view thread metadata and ongoing stack information. If a thread is stalled, there's a high probability that there's an issue with the stack, which requires analysis.

액티브 서비스 정보

#	파드명	응답시간(ms)	서비스	IP	TXID	상태	쓰레드 CPU 시간	노트
1	jpetstore-7c89f8bf9d-szq49	0	/actions/Sleep.action	10.20.200.225		end	0	-
2	jpetstore-7c89f8bf9d-szq49	28,844	/actions/Sleep.action	10.20.200.225	x449f745g2mkfp	TIMED_WAITING	722	-
3	jpetstore-7c89f8bf9d-szq49	26,882	/actions/Sleep.action	10.20.200.225	x7gqgb92fk0n44	TIMED_WAITING	1,365	-
4	jpetstore-7c89f8bf9d-szq49	25,687	/actions/Sleep.action	10.20.200.225	x65ujgca77a3j	TIMED_WAITING	584	-

액티브 서비스 상세정보

파드명	jpetstore-7c89f8bf9d-szq49	쓰레드 CPU 시간	42,697 ms
차단된 개수	49	쓰레드 ID	461
잠금명	-	쓰레드명	http-nio-8080-exec-433
응답시간	5,852 ms	쓰레드 사용자 시간	24,600 ms
상태	TIMED_WAITING	대기 횟수	54,909
프로필		대기 시간	-1 ms

```

java.lang.Thread.sleep(Native Method)
org.apache.jsp.sleep_jsp._jspService(sleep_jsp.java:118)
org.apache.jasper.runtime.HttpJspBase.service(HttpJspBase.java:70)

```

### TPS, TPS of Today

TPS stands for Transactions Per Second, and Today's TPS is the average of TPS by time zone on the day.



### Visitors, response time

Visitors refers to the number of unique visitors per 5 minutes, and response time refers to the application response time.



### CPU, memory

Provides CPU and memory usage.



### XLog

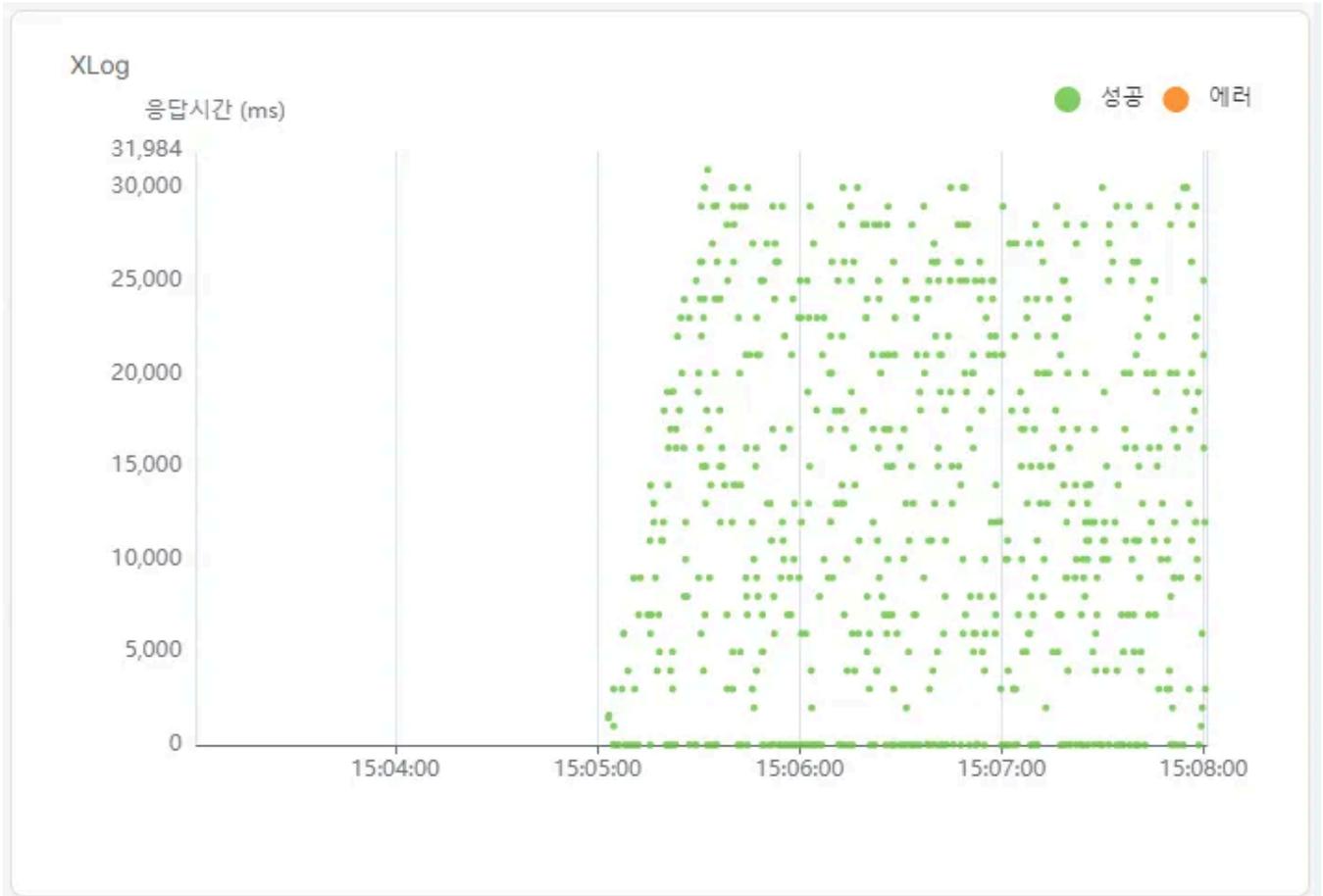
This chart displays hourly response time information in a scatter plot. The X-axis represents the time the request occurred, and the Y-axis represents the response time. The chart is colored green or orange based on the HTTP response code for the request, with orange indicating an error (HTTP 5xx code).

By blocking an area of the chart with the mouse, you can analyze detailed profiles of the requests processed in that area in XLog Info.

**NOTE**

NOTE

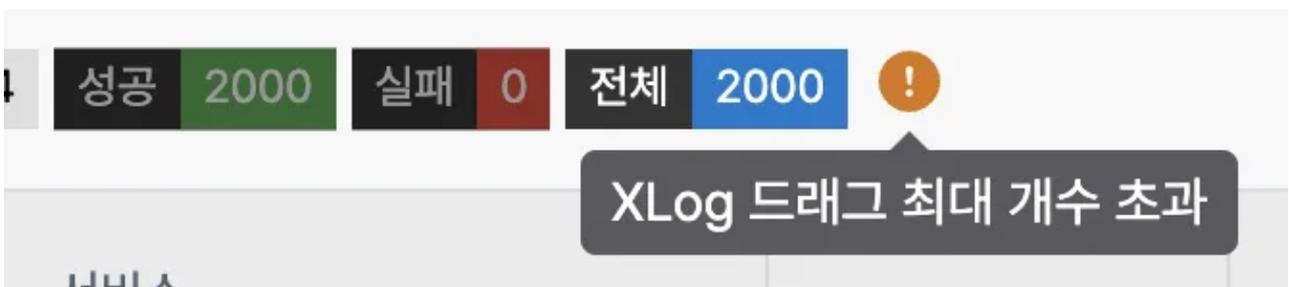
The default maximum response size for XLogs displayed on the console is 20MB.



XLog Info lists information about requests executed based on the selected area in the XLog scatter plot chart. Selecting a specific request displays information such as the start time, execution time, and CPU time consumed.

NOTE

The default maximum number of XLog drags is set to 2000. If this is exceeded, you will need to reduce the drag range or change the settings.



상세 XLog  SQL 파라미터 바인드

<b>애플리케이션명</b>	jpetstore	<b>응답시간</b>	18003 ms
<b>패드명</b>	jpetstore-7c89f8bf9d-szq49	<b>시작 시간</b>	2024-09-03 15:08:59
<b>TXID</b>	x6ov8b09v02550	<b>종료 시간</b>	2024-09-03 15:09:17
<b>서비스</b>	/actions/Sleep.action	<b>API 개수</b>	0
<b>IP 주소</b>	10.20.200.225	<b>API 시간</b>	0 ms
<b>CPU</b>	0 ms	<b>SQL 개수</b>	0
<b>메모리</b>	0 kbytes	<b>SQL 시간</b>	0 ms
<b>유저 에이전트</b>	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_13_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/76.0.3809.100 Safari/537.36		
<b>에러</b>			

The contents of each item are as follows:

item	explanation
Application name	Application name
Pad name	Pad name
Txid	Transaction ID
service	Service URL
IP address	IP address from which the request originated
Cpu	Service CpuTime
memory	Memory used by the service
Response time	Service time
Start time	Service start time
End time	Service end time
Number of APIs	Number of API executions in the service
API time	The sum of API time used by the service
Number of SQL	Number of SQL executions in the service
SQL time	Sum of SQL time used in the service

The profile displays the time taken to execute a given method. The execution relationships between methods are represented in a tree format, and the time difference from the previous step is expressed as T-GAP.

p#	#	TIME	T-GAP	CPU	CONTENTS
	[*****]	00:48:01.257	0	0	start transaction
-	[000000]	00:48:01.257	0	0	[driving thread] http-nio-8080-exec-10
-	[000001]	00:48:01.258	1	0	param: ko_KR
-	[000002]	00:48:01.258	0	0	param: {}
-	[000003]	00:48:01.258	0	0	param: org.apache.catalina.connector.ResponseFacade@7eafe61b
-	[000004]	00:48:01.258	0	0	param: execute
-	[000005]	00:48:01.258	0	0	param: H2DS
-	[000007]	00:48:01.260	1	0	PRE> SELECT l_returnflag, l_linestatus, SUM(l_quantity) AS sum_qty, SUM(l_extendedprice) AS sum_base_price, SUM(l_extendedprice * (@{1} - l_discount)) AS sum_disc_price, SUM(l_extendedprice * (@{2} - l_discount) * (@{3} + l_tax)) AS sum_charge, AVG(l_quantity) AS avg_qty, AVG(l_extendedprice) AS avg_price, AVG(l_discount) AS avg_disc, COUNT(*) AS count_order FROM lineitem WHERE l_shipdate <= DATE '@{4}' - INTERVAL '@{5}' DAY GROUP BY l_returnflag, l_linestatus [1,1,1,'1998-12-01','108'] 1 ms

In XLog, logs are left with a certain probability depending on the response time.

Response time	probability
Between 0 and 1 second	3%
Between 1 and 2 seconds	5%
Between 2 and 3 seconds	20%
3 seconds or more	100%

Bind SQL Parameter Enabling in XLog allows you to display the actual values bound to SQL statements in the profile.

```

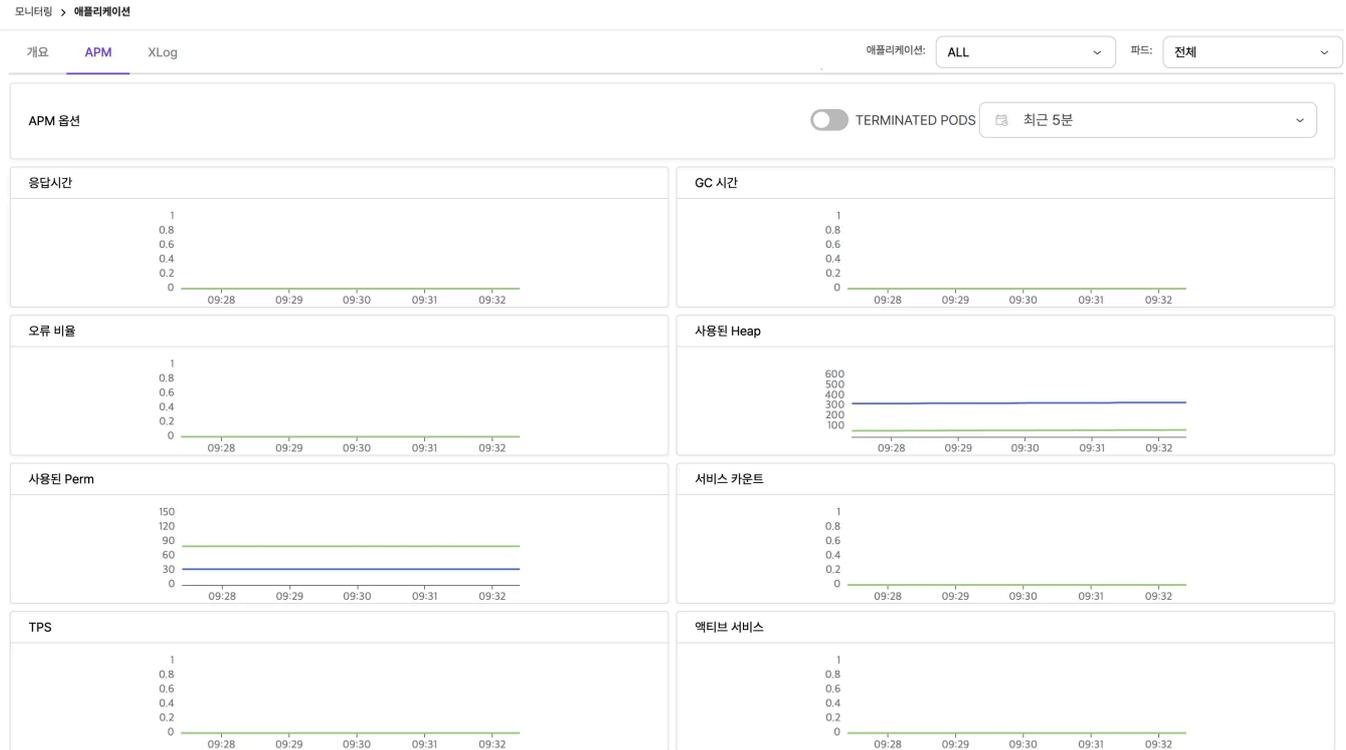
-----
p#      #      TIME      T-GAP      CPU      CONTENTS
-----
-      [*****] 00:48:01.257      0      0      start transaction
-      [000000] 00:48:01.257      0      0      [driving thread] http-nio-8080-exec-10
-      [000001] 00:48:01.258      1      0      param: ko_KR
-      [000002] 00:48:01.258      0      0      param: {}
-      [000003] 00:48:01.258      0      0      param: org.apache.catalina.connector.ResponseFacade@7eafe61b
-      [000004] 00:48:01.258      0      0      param: excute
-      [000005] 00:48:01.258      0      0      param: H2DS
-      [000007] 00:48:01.260      1      0      PRE> SELECT l_returnflag, l_linestatus,
SUM(l_quantity) AS sum_qty,
SUM(l_extendedprice) AS sum_base_price,
SUM(l_extendedprice * (1 - l_discount)) AS sum_disc_price,
SUM(l_extendedprice * (1 - l_discount) * (1 + l_tax)) AS sum_charge,
AVG(l_quantity) AS avg_qty,
AVG(l_extendedprice) AS avg_price,
AVG(l_discount) AS avg_disc,
COUNT(*) AS count_order
FROM lineitem
WHERE l_shipdate <= DATE '1998-12-01' - INTERVAL '108' DAY GROUP BY l_returnflag, l_linestatus
1 ms

```

### 4.3.9.1.2. APM

The APM tab provides a more detailed overview of collected metrics by period. Key monitoring items include:

item	Metric
service	Response time, GC time, error rate, used heap, used perm, service count, TPS, ac - tive services



Descriptions of the added items, excluding those described in the overview, are as follows:

#### **GC time**

GC time refers to the garbage collection time, and if the GC time is long, the service response time may slow down.

#### **Error rate**

Error rate refers to the rate of errors that occurred in the service.

#### **Heap used, Perm used**

Used Heap refers to Heap Memory usage, and Used Perm refers to Perm Memory usage.

#### **Service count**

Service count refers to the number of service calls.

### 4.3.9.1.3. XLog

The XLog tab provides a more detailed overview of the collected XLogs by period. Except for the ability to view by period, the functionality is the same as previously described.

## 4.3.10. Settings

The Settings menu in the namespace scope allows you to assign users permissions for the namespace and configure notification policies and recipients. This chapter explains how to configure notification policies for workloads deployed to the namespace using the Notification Policies menu.

### NOTE

- For the namespace member menu, refer to the corresponding guide as the configuration method is the same as that of the cluster member menu in the cluster scope .

### 4.3.10.1. Namespace Recipient

The namespace recipient menu of the namespace scope is used in the same way as the global recipient menu of the global scope, so please refer to that guide .

### 4.3.10.2. Notification Policy

The differences between notification policies in cluster scope and notification policies in namespace scope are as follows:

- 대상 지정 Node selection is excluded from .
- Query When writing a Prometheus Query, only the Vectors in that namespace are retrieved.

All vector selectors for the given namespace must exist in the vector.

The label key must contain the name "namespace".

For the example

sample namespace, the following query input is possible according to the above rules.

- `APM_TPS{exported_namespace="sample"}`
- `kube_pod_info{namespace="sample"}`
- `apm_TPS{exported_namespace="sample"} * on(pod) group_left(created_by_kind) kube_pod_info{namespace="sample"}`

Please refer to that guide as the notification policy and usage method of the cluster scope are the same .