

Alibaba Cloud Elastic Container Instance

API reference

Issue: 20200707









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Document conventions

Style	Description	Example
	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restart an instance.
	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings > Network > Set network type.
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK.
Courier font	Courier font is used for commands.	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
{ } or {a b}	This format is used for a required value, where only one item can be selected.	switch {active stand}

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1 API overview

The following tables list API operations available for use in Elastic Container Instance (ECI).

Table 1-1: Regions

Operation	Description
DescribeRegions	Queries the most recent regions available for container groups.

Table 1-2: Container groups

Operation	Description
CreateContainerGroup	Creates a container group.
UpdateContainerGroup	Updates a container group.
RestartContainerGroup	Restarts a container group.
DeleteContainerGroup	Deletes a container group.
DescribeContainerGroups	Queries information about multiple container groups at a time.
ExecContainerCommand	Runs commands in a container.
CreateContainerGroupFromTemplate	Creates a container group by using a template.
ExportContainerGroupTemplate	Exports the template used to create a container group.
UpdateContainerGroupByTemplate	Updates a container group by using a template.

Table 1-3: Image caches

Operation	Description
CreateImageCache	Creates an image cache.
DeleteImageCache	Deletes an image cache.
DescribeImageCaches	Queries information about image caches.

Table 1-4: Monitoring and logs

Operation	Description
DescribeContainerGroupMetrics	Queries the monitoring data of a container group.

Operation	Description
DescribeMultiContainerGroupMonitors	Queries the monitoring data of multiple container groups at a time.
DescribeContainerLog	Queries the logs of a container.

Table 1-5: Other operations

Operation	Description
#unique_20	Queries the price of a container group with the specified CPU and memory specifications.

2 Response parameters

This topic describes the response parameters in Elastic Container Instance (ECI) API responses.

Parameter	Description
ContainerGroup	The container group.
ImageRegistryCredential	The information for logging on to the image repository.
Volume	The volume.
Event	The event.
Tag	The tag of the container.
DNSConfig	The Domain Name System (DNS) settings.
Container	The container.
ContainerState	The status of the container.
VolumeMount	The mount point of the volume.
EnvironmentVar	The environment variable.
ContainerPort	The port of the container.
SecurityContext	The security context of the container group.
ReadinessProbe	The readiness probe of the container.
LivenessProbe	The liveness probe of the container.

ContainerGroup

Parameter	Type	Description
RegionId	String	The region ID of the container group.
ZoneId	String	The ID of the zone where the container group is deployed . If you do not set a zone ID for a container group, the system assigns a zone ID for the container group. The default value is the zone ID assigned by the system.

Parameter	Type	Description
SecurityGroupId	String	The ID of the security group to which the container group belongs. Container groups from the same security group can access each other .
VSwitchId	String	The ID of the VSwitch. Currently, container groups can only be deployed in Virtual Private Clouds (VPCs).
ContainerGroupName	String	The name of the container group.
ContainerGroupId	String	The ID of the container group.
ImageRegistryCredentials	ImageRegistryCredential[]	The information for logging on to image repositories . A maximum of 10 sets of image repository logon information can be returned.
Volumes	Volume[]	The volumes mounted to the container group. A maximum of 20 volumes can be returned.
RestartPolicy	String	The restart policy of the container group. Valid values: Always, OnFailure, and Never.
Cpu	Float	The amount of CPU resources allocated to the container group. Unit: vCPUs .
Memory	Float	The amount of memory resources allocated to the container group. Unit: GiB.
InitContainers	Container[]	The init containers. A maximum of five init containers can be returned.

Parameter	Type	Description
Containers	Container[]	The containers. A maximum of five containers can be returned.
Events	Event[]	The events of the container group. A maximum of 50 events can be returned.
DNSConfig	DNSConfig	The DNS settings.
InternetIp	String	The public IP address of the container group.
IntranetIP	String	The internal IP address of the container group.
Tags	Tag[]	The tags attached to the container group. Each tag is a key-value pair. A maximum of 20 tags can be returned.
Status	String	The creation status of the container group. Valid values: Pending, Running, Succeeded, Failed, Scheduling, and ScheduleFailed.
CreationTime	String	The time when the system created the container group after receiving the request. The time follows the RFC 3339 standard and is displayed in UTC, for example, 2018-08-02T15:00:00Z.
SucceededTime	String	The time when all containers in the container group completed running the specified tasks. The time follows the RFC 3339 standard and is displayed in UTC, for example, 2018-08-02T15:00:00Z.

Parameter	Type	Description
EniInstanceId	String	The ID of the Elastic Network Interface (ENI) instance.
ExpiredTime	String	The time when the container failed to run due to overdue payments. The time follows the RFC 3339 standard and is displayed in UTC, for example, 2018-08-02T15:00:00Z.
FailedTime	String	The time when the container failed to run tasks. The time follows the RFC 3339 standard and is displayed in UTC, for example, 2018-08-02T15:00:00Z.

ImageRegistryCredential

Parameter	Type	Required	Description
Server	String	Yes	The address of the image repository, without the http:// or https:// prefix.
UserName	String	Yes	The username used to log on to the image repository.
Password	String	Yes	The password used to log on to the image repository.

Volume

Parameter	Type	Required	Description
Type	String	Yes	The type of the volume. Valid values : EmptyDirVolume , NFSVolume, and ConfigFileVolume.
Name	String	Yes	The name of the volume.

Parameter	Type	Required	Description
NFSVolume.Server	String	No	The address of the Network File System (NFS) server.
NFSVolume.Path	String	No	The path to the nfs volume.
NFSVolume.ReadOnly	Boolean	No	Indicates whether the nfs volume is set to the read-only mode. Default value : false.
ConfigFileVolume.ConfigFilePath	ConfigFilePath[]	No	The paths to configuration files.
EmptyDirVolume.Medium	String	No	The storage medium of the emptyDir volume. If you do not specify a storage medium for the emptyDir volume, it stores data in the file system of a node by default. A value of Memory indicates that the emptyDir volume stores data in the memory.

ConfigFilePath

Parameter	Type	Required	Description
Path	String	Yes	The relative path to the configuration file.
Content	String	No	The content of the configuration file. The maximum size of the file can be 32 KB.

Event

Parameter	Type	Description
Count	Integer	The number of events.

Parameter	Type	Description
FirstTimestamp	String	The time when the event started.
LastTimestamp	String	The time when the event ended.
Message	String	The content of the event.
Name	String	The name of the object to which the event belongs.
Type	String	The type of the event. Valid values: Normal and Warning
Reason	String	The name of the event.

Tag

Parameter	Type	Required	Description
Key	String	Yes	The key of the tag.
Value	String	No	The value of the tag.

DNSConfig

<https://kubernetes.io/docs/concepts/services-networking/dns-pod-service/#pod-s-dns-config>

Parameter	Type	Description
Nameservers	String[]	The IP addresses of DNS servers.
Searches	String[]	The DNS search domains.
Options	Option[]	The objects. Each object is a name-value pair. The value is optional.

Option

Parameter	Type	Description
Name	String	The name of the object.
Value	String	The value of the object.

Container

Parameter	Type	Required	Description
Commands	String[]	No	The commands used to start the container . A maximum of 20 commands can be specified to start a container. Each command is a string and can be up to 256 characters in length.
Args	String[]	No	The startup parameters of the container. A maximum of 10 startup parameters can be specified to start a container.
EnvironmentVars	EnvironmentVar[]	No	The environment variables in the operating system in which you run the container. Each environment variable is a key-value pair . Both the key and value are strings . A maximum of 100 environment variables can be returned. Key indicates the name of a variable and Value indicates the value of the variable.
Image	String	Yes	The image of the container.
Name	String	Yes	The name of the container.

Parameter	Type	Required	Description
Cpu	Float	Yes	The amount of CPU resources allocated to the container. Unit : vCPUs.
Memory	Float	Yes	The amount of memory resources allocated to the container. Unit: GiB.
ImagePullPolicy	String	No	The policy for pulling an image.
VolumeMounts	VolumeMount[]	No	The volumes mounted to the container. A maximum of 16 volumes can be returned.
CurrentState	ContainerState	No	The current status of the container.
PreviousState	ContainerState	No	The previous status of the container.
RestartCount	Integer	No	The number of times that the container has restarted.
WorkingDir	String	No	The working directory of the container.
Ports	Port[]	No	The exposed ports and protocols of the container. A maximum of 100 port and protocol combinations can be returned.
LivenessProbe	LivenessProbe	No	The liveness probe of the container.
ReadinessProbe	ReadinessProbe	No	The readiness probe of the container.

Parameter	Type	Required	Description
SecurityContext	SecurityContext	No	The security context of the container group. For more information, see Configure a Security Context for a Pod or Container .

ContainerState

Parameter	Type	Description
StartTime	Timestamp	The time when the container started to run.
State	String	The status of the container . Valid values: Waiting, Running, and Terminated.
DetailStatus	String	The details of the container status.
FinishTime	Timestamp	The time when the container stopped running.
ExitCode	Integer	The exit code of the container.
Reason	String	The reason why the container is in this status.
Message	String	The information about the container status.
Signal	Integer	The code of the container status.

VolumeMount

Parameter	Type	Required	Description
Name	String	Yes	The name of the volume. The name is the same as the volume you selected when you purchased the container group.

Parameter	Type	Required	Description
MountPath	String	Yes	The directory to which the volume is mounted. Data under this directory is overwritten by the data on the volume.
ReadOnly	Boolean	Yes	Indicates whether the volume is set to the read-only mode. Default value: false.

EnvironmentVar

Parameter	Type	Required	Description
Key	String	Yes	The name of the variable. The name can be 1 to 128 characters in length and can contain letters, digits, and underscores (_). It cannot start with a digit.
Value	String	No	The value of the variable. The value can be 0 to 256 characters in length.
FieldRef.FieldPath	String	No	The source of the variable value. Currently, the only valid value is status.podIP.

Port

Parameter	Type	Description
Port	Integer	The port number of the container. Valid values: 1 to 65535.

Parameter	Type	Description
Protocol	String	The protocol of the container . Valid values: TCP and UDP.

SecurityContext

Parameter	Type	Description
Capability	Capability	The default capabilities of the container. Currently, only the CPU and memory are supported.
RunAsUser	Integer	N/A
ReadOnlyRootFilesystem	Boolean	Indicates whether the root file system is set to the read-only mode. Currently, the only valid value is true.

Capability

Parameter	Type	Description
Adds	String[]	The capability that you can add. Currently, the only valid value is NET_ADMIN.

ReadinessProbe

Parameter	Type	Description
ReadinessProbe.HttpGet.Path	String	The path to the HTTP GET method.
ReadinessProbe.HttpGet.Port	Integer	The port for the HTTP GET method.
ReadinessProbe.HttpGet.Scheme	String	The scheme used for connecting to the host. Valid values: HTTP and HTTPS.
ReadinessProbe.Exec.Commands	String[]	The commands used to check the container.
ReadinessProbe.TcpSocket.Port	Integer	The port for the TCP socket method.

Parameter	Type	Description
N/A	N/A	Note: The method used to check the container can be Exec, HttpGet, or TcpSocket.
ReadinessProbe.InitialDelaySeconds	Integer	The time when the check started. The initial time is when the container is started.
ReadinessProbe.PeriodSeconds	Integer	The interval for checking the container. Default value: 10. Minimum value: 1. Unit: seconds.
ReadinessProbe.SuccessThreshold	Integer	After the last check failed, the minimum number of consecutive times that a check must be successful before the check is declared successful. Default value: 1.
ReadinessProbe.FailureThreshold	Integer	After the last check succeeded, the minimum number of consecutive times that a check must fail before the check is declared failed. Default value: 3.
ReadinessProbe.TimeoutSeconds	Integer	The timeout period of the check. Default value: 1. Minimum value: 1. Unit: seconds.

LivenessProbe

Parameter	Type	Description
LivenessProbe.HttpGet.Path	String	The path to the HTTP GET method.
LivenessProbe.HttpGet.Port	Integer	The port for the HTTP GET method.
LivenessProbe.HttpGet.Scheme	String	The scheme used for connecting to the host. Valid values: HTTP and HTTPS.

Parameter	Type	Description
LivenessProbe.Exec. Commands	String[]	The commands used to check the container.
LivenessProbe.TcpSocket. Port	Integer	The port for the TCP socket method.
LivenessProbe.InitialDel aySeconds	Integer	The time when the check started. The initial time is when the container is started.
LivenessProbe.PeriodSeco nds	Integer	The interval for checking the container. Default value: 10. Minimum value: 1. Unit: seconds.
LivenessProbe.SuccessThr eshold	Integer	After the last check failed , the minimum number of consecutive times that a check must be successful before the check is declared successful. Default value: 1. Currently, this value must be 1.
LivenessProbe.FailureThr eshold	Integer	After the last check succeeded, the minimum number of consecutive times that a check must fail before the check is declared failed. Default value: 3.
LivenessProbe.TimeoutSec onds	Integer	The timeout period of the check. Default value: 1. Minimum value: 1. Unit: seconds.

3 Common request parameters

This topic describes the common request parameters in Elastic Container Instance (ECI) API requests.

Parameter	Type	Description
RegionId	String	The ID of the region where the container group is deployed, such as cn-hangzhou. For more information about regions and zones, see #unique_23 .
ZoneId	String	The ID of the zone where the container group is deployed. If you do not specify this parameter, the system assigns a zone ID for the container group. The default value is the zone ID assigned by the system.
SecurityGroupId	String	The ID of the security group to which the container group belongs, such as sg-xxx. Container groups from the same security group can access each other. For more information about security groups, see #unique_24 .
VSwitchId	String	The ID of the VSwitch to connect to, such as vsw-xxx. Currently, container groups can only be deployed in Virtual Private Clouds (VPCs). For more information, see #unique_25

For more information about other common request parameters such as those related to the signature method, see [#unique_26](#).

4 Common error codes

HTTP status code	Error code	Error message	Description
403	Forbidden. AccessKeyDisabled	The Access Key is disabled.	The error message returned because the AccessKey is invalid.
403	Forbidden. NotSupportRAM	This action does not support access in RAM mode.	The error message returned because the operation cannot be performed by Resource Access Management (RAM) users.
403	Forbidden.RAM	You are not authorized to operate on the specified resource, or this API does not support RAM mode.	The error message returned because the current user is not authorized to manage the resource or the operation cannot be performed by RAM users.
403	Forbidden. RiskControl	This operation has been identified as an abnormal operation and cannot be processed.	The error message returned because the operation has been identified as an anomaly and cannot be processed.
403	Forbidden. SubUser	The specified action is not available for you.	The error message returned because the current user cannot perform the specified operation.
500	InternalServerError	An unknown error occurred while processing your request.	The error message returned because an unknown error occurred when the system processed the request.
403	InvalidAction	The specified action is invalid	The error message returned because the specified operation is invalid.
400	InvalidParameter	%s	The error message returned because the specified parameter is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.LengthExceeded	%s	The error message returned because the number of elements in the list specified by a parameter exceeds the upper limit.
404	InvalidParameter.NotFound	%s	The error message returned because the specified parameter cannot be found.
400	InvalidParameter.ValueExceeded	%s	The error message returned because the specified parameter value is invalid.
403	LastTokenProcessing	The previous token request is being processed.	The error message returned because the previous request is being processed.
400	MissingParameter	%s	The error message returned because a required parameter is not set.
409	OperationConflict	The request was denied. It conflicts with a previous request.	The error message returned because the request was denied for conflicting with a previous request.
403	RealNameAuthenticationError	Your account has not passed the real-name authentication yet.	The error message returned because the current account has not passed the real-name verification.
503	ServiceUnavailable	A server error occurred while processing your request.	The error message returned because a server error occurred when the server was processing the request.
503	ServiceUnavailable.RegionMaintaining	System maintenance is in progress on the selected region, please wait a few minutes before trying again.	The error message returned because the system is being maintained in the selected region. Try again later.
400	SignatureNonceUsed	The request signature nonce has been used.	The error message returned because the signature of the request has been used.

HTTP status code	Error code	Error message	Description
400	Throttling	You have made too many requests within a short time ; your request is denied due to request throttling.	The error message returned because too many requests are sent in a short time and the request is denied due to throttling.
403	Unsupporte dHTTPMethod	This http method is not supported.	The error message returned because the HTTP method is not supported.
403	Forbidden. RamRoleNotExist	The specified RAM role does not exist.	The error message returned because the specified RAM role does not exist.
403	Forbidden. Unauthorized	You are not authorized to operate on the specified resource.	The error message returned because the current user is not authorized to manage the resource.
403	Throttling.Vcpu. PerDay	The maximum number of request for the day has been exceeded.	The error message returned because the number of requests sent exceeds the daily limit.
403	InvalidVSwitchId. IpNotEnough	The specified VSwitch does not have enough IP addresses.	The error message returned because the VSwitch does not have sufficient IP addresses.
503	containerR epositoryA uthorizationFailed	An error occurred while authenticating the container image repository. Make sure that you have activated ACR, and try again later.	The error message returned because the authentication for accessing the image repository failed. Check whether Alibaba Cloud Container Registry (ACR) is activated and try again later .
400	Idempotent ParameterM ismatch	Request uses a client token in a previous request but is not identical to that request.	The error message returned because the parameters in this request are different from those in a previous request with the same client token.

HTTP status code	Error code	Error message	Description
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.
400	IncorrectOperation	You cannot perform this operation on the specified resource.	The error message returned because the current user is not authorized to perform the operation on the specified resource.
400	IncorrectUserTemplateFormat	%s	The error message returned because the format of the template is invalid.
403	RegionNotSupported	The specified Region is not supported.	The error message returned because the specified region is not supported.
400	UnknownError	An unknown error occurred while processing your request	The error message returned because an unknown error occurred when the system processed the request.

For a list of error codes, visit the [API Error Center](#).

For a list of error codes, visit the [API Error Center](#).

5 Regions

5.1 DescribeRegions

Queries the most recent regions available for container groups.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	DescribeRegions	The operation that you want to perform. Set the value to DescribeRegions.
RegionId	String	No	cn-hangzhou	The ID of the region.

Response parameters

Parameter	Type	Example	Description
Regions	Array	N/A	The information about regions.
RegionEndpoint	String	eci.aliyuncs.com	The endpoint of the region.
RegionId	String	cn-hangzhou	The ID of the region.
Zones	List	cn-hangzhou-g	The IDs of zones.
RequestId	String	0E234675-3465-4CC3-9D0F-9A864BC391DD	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeRegions
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>0E234675-3465-4CC3-9D0F-9A864BC391DD</RequestId>
<Regions>
  <RegionId>cn-hangzhou</RegionId>
  <RegionEndpoint>eci.aliyuncs.com</RegionEndpoint>
  <Zones>cn-hangzhou-g</Zones>
  <Zones>cn-hangzhou-b</Zones>
  <Zones>cn-hangzhou-e</Zones>
  <Zones>cn-hangzhou-f</Zones>
  <Zones>cn-hangzhou-h</Zones>
  <Zones>cn-hangzhou-i</Zones>
</Regions>
<Regions>
  <RegionId>cn-zhangjiakou</RegionId>
  <RegionEndpoint>eci.cn-zhangjiakou.aliyuncs.com</RegionEndpoint>
  <Zones>cn-zhangjiakou-a</Zones>
  <Zones>cn-zhangjiakou-b</Zones>
</Regions>
<Regions>
  <RegionId>ap-southeast-2</RegionId>
  <RegionEndpoint>eci.ap-southeast-2.aliyuncs.com</RegionEndpoint>
  <Zones>ap-southeast-2a</Zones>
  <Zones>ap-southeast-2b</Zones>
</Regions>
```

JSON format

```
{
  "RequestId": "0E234675-3465-4CC3-9D0F-9A864BC391DD",
  "Regions": [
    {
      "RegionId": "cn-hangzhou",
      "RegionEndpoint": "eci.aliyuncs.com",
      "Zones": [
        "cn-hangzhou-g",
        "cn-hangzhou-b",
        "cn-hangzhou-e",
        "cn-hangzhou-f",
        "cn-hangzhou-h",
        "cn-hangzhou-i"
      ]
    },
    {
      "RegionId": "cn-zhangjiakou",
      "RegionEndpoint": "eci.cn-zhangjiakou.aliyuncs.com",
      "Zones": [
        "cn-zhangjiakou-a",
        "cn-zhangjiakou-b"
      ]
    }
  ]
}
```

```
},
{
  "RegionId":"ap-southeast-2",
  "RegionEndpoint":"eci.ap-southeast-2.aliyuncs.com",
  "Zones":[
    "ap-southeast-2a",
    "ap-southeast-2b"
  ]
}
]
```

Error codes

6 Container groups

6.1 CreateContainerGroup

You can call this operation to create a container group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	CreateContainerGroup	The operation that you want to perform. Set the value to CreateContainerGroup .
Container.N.Image	String	Yes	registry-vpc.cn-hangzhou.aliyuncs.com/eci_open/nginx:latest	The image of the container.
Container.N.Name	String	Yes	nigix	The name of the container.
ContainerGroup.Name	String	Yes	nigix-test	The name of the container group.
RegionId	String	Yes	cn-hangzhou	The ID of the region where you want to deploy the container group.
SecurityGroup.Id	String	Yes	sg-uf66jeqopgqa9hdn2atd	The ID of the security group to which the container group belongs. Container groups within the same security group can access each other.

Parameter	Type	Required	Example	Description
VSwitchId	String	Yes	vsw-uf6h3rbwbm90urjwavskd	The ID of the VSwitch. Currently , container groups can only be deployed in VPC networks. The number of IP addresses in the VSwitch CIDR block determines the maximum number of container groups that can be created in the VSwitch . Before you can create an ECI instance, plan the CIDR block of the VSwitch.
ZoneId	String	No	cn-hangzhou-b	The ID of the zone where you want to deploy the container group. If no value is specified, the system assigns a zone to the container group. By default, no value is specified.
RestartPolicy	String	No	Always	The restart policy of the container group. Default is Always .
Tag.N.Key	String	No	version	The key of the tag.
Tag.N.Value	String	No	3	The value of the tag.
ImageRegistryCredential.N.Server	String	No	registry-vpc.cn-shanghai.aliyuncs.com	The address of the image repository.
ImageRegistryCredential.N.UserName	String	No	yourusername	The username that is used to log on to the image repository.
ImageRegistryCredential.N.Password	String	No	yourpassword	The password that is used to log on to the image repository.

Parameter	Type	Required	Example	Description
Container.N.Cpu	Float	No	0.25	The amount of CPU resources allocated to the container. Unit: cores.
Container.N.Memory	Float	No	0.5	The amount of memory resources allocated to the container. Unit: GiB.
Container.N.WorkingDir	String	No	/usr/local/	The working directory for the container.
Container.N.ImagePullPolicy	String	No	Always	The policy for pulling an image.
Container.N.Command.N	RepeatList	No	sleep	The commands run by the container. You can define a maximum of 20 commands. Minimum length per string: 256 characters
Container.N.Arg.N	RepeatList	No	100	The arguments passed to the commands. Maximum: 10.
Container.N.VolumeMount.N.MountPath	String	No	/pod/data	The directory of the mounted volume. Data under this directory will be overwritten by the data in the volume.
Container.N.VolumeMount.N.ReadOnly	Boolean	No	false	Specifies whether the volume is set to the read-only mode. Default is false.
Container.N.VolumeMount.N.Name	String	No	default-volume1	The name of the volume. The name is the same as the volume you selected when you purchased the container.

Parameter	Type	Required	Example	Description
Container.N. VolumeMount. N.SubPath	String	No	data2/	The subdirectory of the volume.
Container.N. Port.N.Protocol	String	No	TCP	Valid values: TCP and UDP.
Container.N. Port.N.Port	Integer	No	80	The port number. Valid values: 1 to 65535.
Container.N. Environmen tVar.N.Key	String	No	PATH	The name of the variable. The name can be 1 to 128 characters in length and can contain letters , digits, and underscores (_). It cannot start with a digit.
Container.N. Environmen tVar.N.Value	String	No	/usr/local/bin	The value of the variable. The value can be 0 to 256 characters in length.
Container.N. Environmen tVar.N.FieldRef. FieldPath	String	No	status.podIP	The source of the variable value . Currently, only status.podIP is supported.
Container.N .ReadinessP robe.HttpGet. Path	String	No	/healthz	The path to the HTTP GET method .
Container.N .ReadinessP robe.HttpGet. Port	Integer	No	8080	The port for the HTTP GET method .
Container.N .ReadinessP robe.HttpGet. Scheme	String	No	HTTP	Valid values: HTTP and HTTPS.

Parameter	Type	Required	Example	Description
Container.N .ReadinessProbe.InitialDelaySeconds	Integer	No	3	The time when the detection starts. The initial time is when the container is started.
Container.N .ReadinessProbe.PeriodSeconds	Integer	No	3	The detection interval in seconds . Default is 10, and minimum is 1.
Container.N .ReadinessProbe.SuccessThreshold	Integer	No	1	After the last detection failed , the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1.
Container.N .ReadinessProbe.FailureThreshold	Integer	No	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed. Default is 3.
Container.N .ReadinessProbe.TimeoutSeconds	Integer	No	1	The detection timeout period in seconds. Default is 1, and minimum is 1.
Container.N .ReadinessProbe.Exec.Command.N	RepeatList	No	cat /tmp/healthy	The command to run detection tasks in the container.
Container.N. LivenessProbe. HttpGet.Path	String	No	/healthyz	The path to the HTTP GET method .
Container.N. LivenessProbe. HttpGet.Port	Integer	No	8888	The port for the HTTP GET method .

Parameter	Type	Required	Example	Description
Container.N.LivenessProbe.HttpGet.Scheme	String	No	HTTP	Valid values: HTTP and HTTPS.
Container.N.LivenessProbe.InitialDelaySeconds	Integer	No	5	The time when the detection starts. The initial time is when the container is started.
Container.N.LivenessProbe.PeriodSeconds	Integer	No	5	The detection interval in seconds . Default is 10, and minimum is 1.
Container.N.LivenessProbe.SuccessThreshold	Integer	No	2	After the last detection failed , the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1. Currently , the value must be set to 1.
Container.N.LivenessProbe.FailureThreshold	Integer	No	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed. Default is 3.
Container.N.LivenessProbe.TimeoutSeconds	Integer	No	1	The detection timeout period in seconds. Default is 1, and minimum is 1.
Container.N.LivenessProbe.Exec.Command.N	RepeatList	No	cat /tmp/healthy	The command to run detection tasks in the container.

Parameter	Type	Required	Example	Description
Container.N.SecurityContext.Capability.Add.N	RepeatList	No	NET_ADMIN	Currently, the only valid value is NET_ADMIN.
Container.N.SecurityContext.ReadOnlyRootFilesystem	Boolean	No	true	Currently, the only valid value is true.
Container.N.SecurityContext.RunAsUser	Long	No	1000	The container runs with the user ID 1000.
Container.N.ReadinessProbe.TcpSocket.Port	Integer	No	8000	The port used to test TCP sockets.
Container.N.LivenessProbe.TcpSocket.Port	Integer	No	8000	The port used to test TCP sockets.
Container.N.Stdin	Boolean	No	true	Specifies whether the container allocates buffer resources to standard input streams while the container is running. If no value is specified, an end of file (EOF) error may occur. Default value: false.

Parameter	Type	Required	Example	Description
Container.N.StdinOnce	Boolean	No	false	If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.
Container.N.Tty	Boolean	No	false	Specifies whether interaction is enabled. Default is false. For example, if the command is <code>"/bin /bash"</code> , this parameter is set to true.
Container.N.Gpu	Integer	No	1	The number of GPUs.
Volume.N.Name	String	No	default-volume1	The name of the volume.
Volume.N.NFSVolume.Server	String	No	3f9cd4a596-naw76.cn-shanghai.nas.aliyuncs.com	The address of the NFS server.
Volume.N.NFSVolume.Path	String	No	/share	The path to the NFS volume.
Volume.N.NFSVolume.ReadOnly	Boolean	No	false	Default value: false.

Parameter	Type	Required	Example	Description
Volume.N. ConfigFile Volume. ConfigFile ToPath.N. Content	String	No	bGl1bWk=	The content of the configuration file. Maximum size: 32 KB.
Volume.N. ConfigFile Volume. ConfigFile ToPath.N.Path	String	No	liu/name	The relative file path.
Volume.N.Type	String	No	ConfigFile Volume	The type of the volume.
Volume.N. EmptyDirVo lume.Medium	String	No	memory	The storage medium of EmptyDirVolume. By default, no value is specified, which indicates that EmptyDirVolume uses the node file system as storage. You can also set the value to Memory to use the memory as storage.
Volume.N. DiskVolume. DiskId	String	No	d-xx	The ID of DiskVolume.
Volume.N. DiskVolume. FsType	String	No	xfS	The system type of DiskVolume.
Volume.N. DiskVolume. DiskSize	Integer	No	15	The size of DiskVolume. Unit: GiB.
Volume.N. FlexVolume. Driver	String	No	flexvolume	The name of the FlexVolume driver.

Parameter	Type	Required	Example	Description
Volume.N. FlexVolume. FsType	String	No	ext4	The type of the mounted file system. The default value is determined by the script of FlexVolume.
Volume.N. FlexVolume. Options	String	No	{}	The list of FlexVolume objects. Each object is a key-value pair contained in a JSON string.
EipInstanceId	String	No	eip-xxx	The ID of the elastic IP address.
InitContainer.N .Name	String	No	test-init	The name of the init container.
InitContainer.N .Image	String	No	nginx	The image of the container.
InitContainer.N .Cpu	Float	No	0.5	The amount of CPU resources allocated to the container.
InitContainer.N .Memory	Float	No	1.0	The amount of memory resources allocated to the container.
InitContainer.N .WorkingDir	String	No	/usr/local	The working directory of the container.
InitContainer. N.ImagePullP olicy	String	No	Always	The restart policy of the image.
InitContainer.N .Command.N	RepeatList	No	sleep	The commands run by the init container.
InitContainer.N .Arg.N	RepeatList	No	10	The arguments passed to the commands.

Parameter	Type	Required	Example	Description
InitContainer.N.VolumeMount.N.MountPath	String	No	/usr/share/	The directory of the mounted volume. Data under this directory will be overwritten by the data in the volume.
InitContainer.N.VolumeMount.N.ReadOnly	Boolean	No	false	Default value: false.
InitContainer.N.VolumeMount.N.Name	String	No	test-empty	The name of the mounted volume.
InitContainer.N.VolumeMount.N.SubPath	String	No	/usr/sub/	The subdirectory of the mounted volume. The container group can mount different directories of the same volume to different subdirectories of containers.
InitContainer.N.Port.N.Protocol	String	No	TCP	Valid values: TCP and UDP.
InitContainer.N.Port.N.Port	Integer	No	8888	The port number. Valid values: 1 to 65535.
InitContainer.N.EnvironmentVar.N.Key	String	No	Path	The name of the variable. The name can be 1 to 128 characters in length and can contain letters, digits, and underscores (_). It cannot start with a digit.
InitContainer.N.EnvironmentVar.N.Value	String	No	/usr/bin/	The value of the variable. The value can be 0 to 256 characters in length.
InitContainer.N.EnvironmentVar.N.FieldRef.FieldPath	String	No	status.podIP	The source of the variable value. Currently, only status.podIP is supported.

Parameter	Type	Required	Example	Description
InitContainer.N.SecurityContext.Capability.Add.N	RepeatList	No	NET_ADMIN	Currently, the only valid value is NET_ADMIN.
InitContainer.N.SecurityContext.ReadOnlyRootFilesystem	Boolean	No	false	Currently, the only valid value is true.
InitContainer.N.SecurityContext.RunAsUser	Long	No	587	The user ID with which the container runs.
InitContainer.N.Gpu	Integer	No	1	The number GPUs.
DnsConfig.NameServer.N	RepeatList	No	x.x.x.x	The list of DNS server IP addresses.
DnsConfig.Search.N	RepeatList	No	svc.local. kubenetes	The list of DNS lookup domains.
DnsConfig.Option.N.Name	String	No	name	The name of the object.
DnsConfig.Option.N.Value	String	No	value	The value of the object.
Cpu	Float	No	1.0	The amount of CPU resources allocated to the container group.
Memory	Float	No	2.0	The amount of memory resources allocated to the container group.
ResourceGroupID	String	No	rg-xxx	The ID of the resource group.
DnsPolicy	String	No	uuid	The DNS policy.

Parameter	Type	Required	Example	Description
ClientToken	String	No	123e4567-xxxx-12d3-xxxx-426655440000	The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see t10046.dita#reference_zdl_bmg_ydb.
HostAliase.N.Ip	String	No	1.1.1.1	Adds an IP address.
HostAliase.N.Hostname.N	RepeatList	No	hehe.com	Adds a host name.
InstanceType	String	No	ecs.c5.xlarge	The type of the ECS instance.
SecurityContext.Sysctl.N.Name	String	No	kernel.msgmax	The name of the security context system that the container group runs.
SecurityContext.Sysctl.N.Value	String	No	65536	The variable value of the security context that the container group runs.
SlsEnable	Boolean	No	false	Specifies whether to enable logging. Default value: False .
ImageSnaps hotId	String	No	imc-2zebxkiifu yzzlhl199h	The ID of the image cache.
RamRoleName	String	No	test-xxx	The RAM role that the container group assumes. ECI and ECS share the same RAM role. For more information, see t9666.dita#concept_jwk_pd5_xdb.

Parameter	Type	Required	Example	Description
NtpServer.N	RepeatList	No	ntp.cloud.aliyuncs.com	The NTP server.
TerminationGracePeriodSeconds	Long	No	60	The buffer time for the program to handle operations before it is stopped.
AutoMatchImageCache	Boolean	No	false	Specifies whether to automatically match the image cache.
Ipv6AddressesCount	Integer	No	128	The number of IPv6 addresses.
ActiveDeadlineSeconds	Long	No	1000	The validity period in seconds.

Response parameters

Parameter	Type	Example	Description
RequestId	String	28B583A8-313D-4383-8EA9-B5A9F7E07817	The unique ID of the request.
ContainerGroupId	String	eci-uf6fonnghi50u374a0i4	The ID of the container group.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=CreateContainerGroup
&Container.1.Image=registry-vpc.cn-hangzhou.aliyuncs.com/eci_open/nginx:latest
&Container.1.Name=nigix
&ContainerGroupName=nigix-test
&RegionId=cn-hangzhou
&SecurityGroupId=sg-uf66jeqopgqa9hdn2atd
&VSwitchId=vsw-uf6h3rbwbm90urjwavskd
&<Common request parameters>
```

Sample success responses

XML format

```
<ContainerGroupId>eci-uf6fonnghi50u374a0i4</ContainerGroupId>
```

```
<RequestId>28B583A8-313D-4383-8EA9-B5A9F7E07817</RequestId>
```

JSON format

```
{
  "ContainerGroupId": "eci-uf6fonng50u374a0i4",
  "RequestId": "28B583A8-313D-4383-8EA9-B5A9F7E07817"
}
```

Examples of request parameters

ImageRegistryCredentials

```
ImageRegistryCredential.N.Server=registry-vpc.cn-shanghai.aliyuncs.com
ImageRegistryCredential.N.UserName=yourusername
ImageRegistryCredential.N.Password=yourpassword
```

Volumes

ConfigFileVolume

```
Volume.N.Name=default-volume1
Volume.N.Type=ConfigFileVolume
Volume.N.ConfigFileVolume.ConfigFilePath.1.Content=bGl1bWk=
Volume.N.ConfigFileVolume.ConfigFilePath.1.Path=liu/name
Volume.N.ConfigFileVolume.ConfigFilePath.2.Content=YWxpeXVu
Volume.N.ConfigFileVolume.ConfigFilePath.2.Path=liu/com
```

NFSVolume

```
Volume.N.Name=default-volume1
Volume.N.Type=NFSVolume
Volume.N.NFSVolume.Path=/share
Volume.N.NFSVolume.Server=3f9cd4a596-naw76.cn-shanghai.nas.aliyuncs.com
Volume.N.NFSVolume.ReadOnly=False
```

EmptyDirVolume

```
Volume.N.Name: default-volume
Volume.N.Type: EmptyDirVolume
```

DiskVolume (Static)

```
Volume.N.Name=my-static-diskvolume
Volume.N.Type=DiskVolume
Volume.N.DiskVolume.FsType=ext4
Volume.N.DiskVolume.DiskId=d-2ze4rk800li49moq****
```



Note:

DiskIdThe ID of the cloud disk that you have created. The disk must be deployed in the same zone where the container group is deployed. All cloud disk types are supported. For more information, see [t9558.dita#concept_n1s_rzb_wdb](#).

**Note:**

If the cloud disk is not formatted, the system automatically formats the disk to a type specified by `FsType`. Currently, only Ext3, Ext4, and XFS are supported.

DiskVolume (Dynamic)

```
Volume.N.Name=my-dynamic-diskvolume
Volume.N.Type=DiskVolume
Volume.N.DiskVolume.FsType=ext4
Volume.N.DiskVolume.DiskSize=20
```

**Note:**

`DiskSize` Specifies the size of cloud disks to be dynamically created. Valid disk sizes are from 20 to 500 GiB.

**Note:**

If `DiskId` does not have a value, `DiskSize` is required. If both the two fields have a value, `DiskSize` will be ignored.

Notes:

1. After all the target volumes have been mounted to the container directories, the existing data under the directories will be overwritten. `EmptyDirVolume` will directly deletes all existing data. Proceed with caution.
2. Each cloud disk can be mounted to one container group only. You can only mount one cloud disk to each container group, except `ImageCache` disks that are used to generate snapshots.
3. Cloud disks that are dynamically created are created and deleted along with the container group.

Tags

```
Tag.N1.Key=version
Tag.N1.Value=v3
Tag.N2.Key=app
```

```
Tag.N2.Value=nginx
```

DnsConfig

```
DnsConfig.NameServer.N=x.x.x.x  
DnsConfig.Search.N=svc.local.kubernetes  
DnsConfig.Option.N.Name=name  
DnsConfig.Option.N.Value=vale
```

HostAliases

```
HostAliase.N.Hostname.1=hehe.com  
HostAliase.N.Hostname.2=haha.com  
HostAliase.N.Ip=42.101.1.10
```

SecurityContext.Sysctl

```
SecurityContext.Sysctl.1.Name=kernel.shm_rmid_forced,  
SecurityContext.Sysctl.1.Value='0',  
SecurityContext.Sysctl.2.Name=kernel.msgmax,  
SecurityContext.Sysctl.2.Value='65536',
```

Containers

```
#base params  
Container.1.Image=registry.cn-hangzhou.aliyuncs.com/eci_open/nginx:latest  
Container.1.Name=nginx-liu  
Container.1.Cpu=1  
Container.1.Memory=2  
Container.1.ImagePullPolicy=Always  
Container.1.WorkingDir=/usr/local/share/nginx  
#commands and args  
Container.1.Command.1=bash  
Container.1.Arg.1=-c  
Container.1.Arg.2= date; sleep 100  
#EnvironmentVar  
Container.1.EnvironmentVar.1.Key=PATH  
Container.1.EnvironmentVar.1.Value=/usr/local/bin  
Container.1.EnvironmentVar.2.Key=ECI_IP  
Container.1.EnvironmentVar.2.FieldRef.FieldPath=status.podIP  
#stdin  
Container.1.Stdin=True  
Container.1.StdinOnce=False  
Container.1.Tty=True  
#port  
Container.1.Port.1.Protocol=TCP  
Container.1.Port.1.Port=80  
#VolumeMounts  
Container.1.VolumeMount.1.Name=default-volume1  
Container.1.VolumeMount.1.MountPath=/pod/data  
Container.1.VolumeMount.1.ReadOnly=False  
Container.1.VolumeMount.2.Name=default-volume2  
Container.1.VolumeMount.2.SubPath=data2/  
Container.1.VolumeMount.2.MountPath=/pod/data2/  
Container.1.VolumeMount.2.ReadOnly=False  
#ReadinessProbe
```



```

Container.1.ReadinessProbe.TcpSocket.Port=80
Container.1.ReadinessProbe.InitialDelaySeconds=10
Container.1.ReadinessProbe.PeriodSeconds=10
Container.1.ReadinessProbe.FailureThreshold=3
Container.1.ReadinessProbe.SuccessThreshold=3
Container.1.ReadinessProbe.TimeoutSeconds=5
#LivenessProbe
Container.1.LivenessProbe.Exec.Command.1=/bin/sh
Container.1.LivenessProbe.Exec.Command.2=cat
Container.1.LivenessProbe.Exec.Command.3=/etc/nginx/nginx.conf
Container.1.LivenessProbe.InitialDelaySeconds=10
Container.1.LivenessProbe.PeriodSeconds=10
Container.1.LivenessProbe.FailureThreshold=3
Container.1.LivenessProbe.SuccessThreshold=1
Container.1.LivenessProbe.TimeoutSeconds=5
#SecurityContext
Container.1.SecurityContext.Capability.Add.1=NET_ADMIN
Container.1.SecurityContext.ReadOnlyRootFilesystem=True
Container.1.SecurityContext.RunAsUse=1337
#ntpServer
NtpServer.1=ntp.cloud.aliyuncs.com
NtpServer.2=ntp7.cloud.aliyuncs.com

```

Error code

HTTP status code	Error code	Error message	Description
400	Account.Arrearage	Your account has an outstanding payment.	The error message returned because your account has an overdue payment.
400	DryRunOperation	Request validation has been passed with DryRun flag set .	The error message returned because the specified dry run passed.
400	InvalidParameter.CPU.Memory	The specified cpu and memory are not allowed	The error message returned because the CPU and memory specifications are invalid.
400	InvalidParameter.DuplicatedName	The container group include containers with duplicate names.	The error message returned because the container group contains duplicate container names.
403	OperationDenied.NoStock	Sales of this resource are temporarily suspended in the specified region; please try again later.	The error message returned because the specified resource is insufficient. Specify another resource, region, or zone.

HTTP status code	Error code	Error message	Description
403	OperationDenied.VswZoneMismatch	The specified VSwitchId is not in the specified Zone.	The error message returned because the specified VSwitch is not deployed in the zone.
403	QuotaExceeded	%s quota exceeded.	The error message returned because the number of container groups that you have created has reached the upper limit.
403	Zone.NotOnSale	The specified zone is not available for purchase.	The error message returned because the specified zone is unavailable. Specify another zone. Or the VSwitch of the specified VPC instance is unavailable in the zone.
403	Forbidden.RiskControl	This operation has been identified as an abnormal operation and cannot be processed.	The error message returned because the specified operation has been identified as an anomaly and cannot be processed.
403	Forbidden.SubUser	The specified action is not available for you.	The error message returned because you cannot perform the specified operation.
403	Forbidden.OnlyForInvitedTest	Eci create action is only open to invited users during public beta.	The error message returned because ECI is only available to invited users during the public preview period.
400	InvalidParameter.DuplicatedVolumeName	The container group includes volumes with duplicate names.	The error message returned because the container group contains duplicate volume names.

HTTP status code	Error code	Error message	Description
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC network.
403	InvalidVSwitchId.IpNotEnough	The specified VSwitch does not have enough IP addresses.	The error message returned because the VSwitch does not have sufficient IP addresses.
403	Forbidden.UserBusinessStatus	This operation is not allowed, because you have overdue bills. Pay the overdue bill and try again.	The error message returned because you have overdue payments. Settle the overdue payments and try again later.
403	Forbidden.UserNotRealNameAuthentication	This operation is not allowed, because you have not passed the real-name verification.	The error message returned because you have not completed real-name verification and the specified operation is not allowed
400	ServiceNotEnabled	%s	The error message returned because the resource required to call the request is not activated. Activate the resource and try again later.
404	ImageSnapshot.NotFound	The specified snapshot does not exist.	The error message returned because no image cache or snapshot exists.
400	ImageSnapshot.IncorrectStatus	%s	The error message returned because the status of the image cache snapshot is invalid.

HTTP status code	Error code	Error message	Description
400	ImageSnapshot. NotSupport	%s	The error message returned because the image cache feature based on disk snapshots is not available to all users. If you need to use this feature, contact Alibaba Cloud customer service.
404	InvalidDiskId. NotFound	The specified disk does not exist.	The error message returned because the specified cloud disk does not exist.
400	DiskVolume. NotSupport	The disk volume is not supported.	The error message returned because the cloud volume is not supported. If the problem persists, contact Alibaba Cloud customer service.
403	InvalidUser. PassRoleForbidden	The RAM user is not authorized to assume a RAM role.	The error message returned because RAM users do not have the permission to assume the RAM role.
400	RamRole. NotSupport	The RAM role is not supported.	The error message returned because the specified RAM role is not supported.
403	NoPermission	The RAM role does not belong to ECS.	The error message returned because the RAM role does not belong to ECS.
400	DiskNumber. LimitExceed	The maximum number of disks in an instance is exceeded.	The error message returned because the number of disks attached to the container group has reached the upper limit.

HTTP status code	Error code	Error message	Description
400	InvalidPaymentMethod. InsufficientBalance	No payment method is specified for your account . We recommend that you add a payment method or add funds to the prepayment balance.	The error message returned because your Alibaba Cloud account does not have a valid payment method. Specify a valid payment method or top up the balance.
400	DiskVolume. NotInSameZone	The instance to be created and the disk are not in the same zone.	The error message returned because the region of the container group that you want to create is not the same as that of the cloud disk.

6.2 UpdateContainerGroup

You can call this operation to update a container group.

Description

1. You can only update container groups that are in the Pending or Running state.
2. You cannot update container groups that were created before 15:00:00, March 7, 2019.
3. You cannot change the specification of a container group. You can only change the specifications of containers inside the container group.
4. When a container group is being updated, it is in the Updating state.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	UpdateContainerGroup	The operation that you want to perform. Set the value to UpdateContainerGroup.
ContainerGroupId	String	Yes	eci-bp17da5olmkuagfrzurh	The ID of the container group that you want to update.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the container group is deployed.
RestartPolicy	String	No	Always	The restart policy of the container group.
Tag.N.Key	String	No	name	The key of the tag.
Tag.N.Value	String	No	hxx	The value of the tag.
Volume.N.Name	String	No	test-empty	The name of the volume.
Volume.N.Type	String	No	EmptyDirVolume	The type of the volume. Valid values: EmptyDirVolume, NFSVolume, and ConfigFileVolume.
Volume.N.NFSVolume.Server	String	No	0eaf24bfc1-xxxxx.cn-hangzhou.nas.aliyuncs.com	The address of the NFS server.
Volume.N.NFSVolume.Path	String	No	/	The path to the NFS volume.
Volume.N.NFSVolume.ReadOnly	Boolean	No	false	Default value: false.

Parameter	Type	Required	Example	Description
Volume.N. ConfigFile Volume. ConfigFile ToPath.N. Content	String	No	bGl1bWk=	The content of the configuration file. Maximum size: 32 KB.
Volume.N. ConfigFile Volume. ConfigFile ToPath.N.Path	String	No	liu/name	The relative file path.
Volume.N. EmptyDirVo lume.Medium	String	No	Memory	The storage medium of EmptyDirVolume. By default, no value is specified, which indicates that EmptyDirVolume uses the node file system as storage. You can also set the value to Memory to use the memory as storage.
DnsConfig. NameServer.N	RepeatList	No	1.2.3.4	The list of DNS server IP addresses.
DnsConfig. Search.N	RepeatList	No	my.dns.search. suffix	The list of DNS lookup domains.
DnsConfig. Option.N.Name	String	No	ndots	The name of the variable.
DnsConfig. Option.N.Value	String	No	2	The value of the variable.
Container.N. Name	String	No	jenkins	The name of the container.
Container.N. Image	String	No	jenkins	The image of the container.
Container.N. Cpu	Float	No	1.0	The amount of CPU resources allocated to the container group.

Parameter	Type	Required	Example	Description
Container.N.Memory	Float	No	2.0	The amount of memory resources allocated to the container group.
Container.N.WorkingDir	String	No	/usr/share/	The working directory for the container.
Container.N.ImagePullPolicy	String	No	Never	The policy for pulling an image.
Container.N.Stdin	Boolean	No	false	Specifies whether the container allocates buffer resources to standard input streams while the container is running. If no value is specified, an end of file (EOF) error may occur. Default value: false.
Container.N.StdinOnce	Boolean	No	true	If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.
Container.N.Tty	Boolean	No	false	Specifies whether to enable interaction. Default is false. For example, if the command is "/bin/bash", set the value to true.

Parameter	Type	Required	Example	Description
Container.N. Command.N	RepeatList	No	echo	The commands run by the container. You can define a maximum of 20 commands. Minimum length per string: 256 characters
Container.N. Arg.N	RepeatList	No	hello	The arguments passed to the commands. Maximum: 10.
Container.N. EnvironmentVar.N.Key	String	No	PATH	The name of the environment variable of the container.
Container.N. EnvironmentVar.N.Value	String	No	/usr/bin/local/	The value of the environment variables of the container.
Container.N. Port.N.Protocol	String	No	TCP	TCP or UDP
Container.N. Port.N.Port	Integer	No	8080	The port number. Valid values: 1 to 65535.
Container.N. VolumeMount.N.Name	String	No	test-empty	The name of the volume. The name is the same as the volume you selected when you purchased the container.
Container.N. VolumeMount.N.MountPath	String	No	/usr/share/	The directory of the mounted volume. Data under this directory will be overwritten by the data in the volume.
Container.N. VolumeMount.N.SubPath	String	No	/usr/share/sub /	The subdirectory of the mounted volume. The container group can mount different directories of the same volume to different subdirectories of containers.

Parameter	Type	Required	Example	Description
Container.N.VolumeMount.N.ReadOnly	Boolean	No	false	Default value: false.
Container.N.ReadinessProbe.TcpSocket.Port	Integer	No	5000	The port used to test TCP sockets.
Container.N.ReadinessProbe.Exec.Command.N	RepeatList	No	[/bin/sh cat /tmp/healthy]	The command to run detection tasks in the container.
Container.N.ReadinessProbe.HttpGet.Path	String	No	/usr/	The path to the HTTP GET method.
Container.N.ReadinessProbe.HttpGet.Port	Integer	No	8080	The port for the HTTP GET method.
Container.N.ReadinessProbe.HttpGet.Scheme	String	No	HTTP	Valid values: HTTP and HTTPS.
Container.N.ReadinessProbe.InitialDelaySeconds	Integer	No	10	The time when the detection starts. The initial time is when the container is started.
Container.N.ReadinessProbe.PeriodSeconds	Integer	No	10	The detection interval in seconds. The default is 10, and minimum is 1.
Container.N.ReadinessProbe.SuccessThreshold	Integer	No	3	After the last detection failed, the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1.

Parameter	Type	Required	Example	Description
Container.N .ReadinessP robe.FailureThr eshold	Integer	No	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed. Default is 3.
Container.N .ReadinessP robe. TimeoutSec onds	Integer	No	5	The detection timeout period in seconds. Default is 1, and minimum is 1
Container.N. LivenessProbe. TcpSocket.Port	Integer	No	80	The port used to test TCP sockets.
Container.N. LivenessProbe. Exec.Command .N	RepeatList	No	[/bin/sh cat /tmp/healthy]	The command to run detection tasks in the container.
Container.N. LivenessProbe. HttpGet.Path	String	No	/usr/local/bin	The path to the HTTP GET method.
Container.N. LivenessProbe. HttpGet.Port	Integer	No	8080	The port for the HTTP GET method.
Container.N .LivenessPr obe.HttpGet. Scheme	String	No	HTTP	Valid values include HTTP and HTTPS.
Container.N .LivenessPr obe.InitialDel aySeconds	Integer	No	10	The time when the detection starts. The initial time is when the container is started.
Container.N. LivenessProbe. PeriodSeconds	Integer	No	10	The detection interval in seconds. Default is 10, and minimum is 1.

Parameter	Type	Required	Example	Description
Container.N.LivenessProbe.SuccessThreshold	Integer	No	1	After the last detection failed , the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1. Currently , the value must be 1.
Container.N.LivenessProbe.FailureThreshold	Integer	No	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed. Default is 3.
Container.N.LivenessProbe.TimeoutSeconds	Integer	No	1	The detection timeout period in seconds. Default is 1, and minimum is 1.
Container.N.SecurityContext.ReadOnlyRootFilesystem	Boolean	No	true	Currently, the only valid value is true.
Container.N.SecurityContext.RunAsUser	Long	No	1337	The UID of the endpoint where you can run container processes.
Container.N.SecurityContext.Capability.Add.N	RepeatList	No	NET_ADMIN	Currently, the only valid value is NET_ADMIN.
Container.N.Gpu	Integer	No	1	The amount of GPU resources allocated to the container.
InitContainer.N.Name	String	No	init-nginx	The name of the init container.
InitContainer.N.Image	String	No	nginx	The image of the container.

Parameter	Type	Required	Example	Description
InitContainer.N.Cpu	Float	No	2.0	The amount of CPU resources allocated to the container group.
InitContainer.N.Memory	Float	No	4.0	The amount of memory resources allocated to the container group.
InitContainer.N.WorkingDir	String	No	/bin/local/	The working directory for the container.
InitContainer.N.ImagePullPolicy	String	No	Onfailure	The policy for pulling an image.
InitContainer.N.Stdin	Boolean	No	false	Specifies whether the container allocates buffer resources to standard input streams while the container is running. If no value is specified, an end of file (EOF) error may occur. Default value: false.
InitContainer.N.StdinOnce	Boolean	No	true	If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.

Parameter	Type	Required	Example	Description
InitContainer.N.Tty	Boolean	No	true	Specifies whether interaction is enabled. Default is false. For example, if the command is <code>"/bin/bash"</code> , set the value to true.
InitContainer.N.Command.N	RepeatList	No	<code>/bin/sh sleep</code>	The commands run by the init container.
InitContainer.N.Arg.N	RepeatList	No	10	The arguments passed to the commands.
InitContainer.N.EnvironmentVar.N.Key	String	No	PATH	The name of the environment variable.
InitContainer.N.EnvironmentVar.N.Value	String	No	<code>/usr/local/bin</code>	The value of the environment variable.
InitContainer.N.Port.N.Port	Integer	No	9000	The port number. Valid values: 1 to 65535.
InitContainer.N.Port.N.Protocol	String	No	TCP	Valid values include TCP and UDP.
InitContainer.N.VolumeMount.N.Name	String	No	default-volume1	The name of the volume. The name is the same as the volume you selected when you purchased the container.
InitContainer.N.VolumeMount.N.MountPath	String	No	<code>/pod/data</code>	The directory of the mounted volume. Data under this directory will be overwritten by the data in the volume.

Parameter	Type	Required	Example	Description
InitContainer.N .VolumeMount. N.SubPath	String	No	data2/	The subdirectory of the mounted volume. The container group can mount different directories of the same volume to different subdirectories of containers.
InitContainer.N .VolumeMount. N.ReadOnly	Boolean	No	false	Default value: false.
InitContainer.N. SecurityContext. .ReadOnlyRootFilesystem	Boolean	No	true	Specifies whether the root file system is set to the read-only mode.
InitContainer.N. SecurityContext. .RunAsUser	Long	No	1000	The UID of the endpoint where you can run container processes.
InitContainer.N. SecurityContext. .Capability.Add. N	RepeatList	No	NET_ADMIN	Currently, the only valid value is NET_ADMIN.
InitContainer.N .Gpu	Integer	No	1	The amount of GPU resources allocated to the container.

Parameter	Type	Required	Example	Description
ImageRegistryCredential.N.Server	String	No	registry.cn-shanghai.aliyuncs.com/ecitest/nginx:alpine	The image repository without the http:// or https:// prefix. 1. Only supports full updates. 2. If only ImageRegistryCredentials (image registry credentials) are updated, and the number of ImageRegistryCredentials is no greater than the previous number, you do not need to restart the container group. Otherwise, you need to restart the container group.
ImageRegistryCredential.N.UserName	String	No	yourname	The username that is used to log on to the image repository.
ImageRegistryCredential.N.Password	String	No	yourpassword	The password that is used to log on to the image repository.
ClientToken	String	No	123e4567-e89b-12d3-a456-426655440000	The client token, which is used to ensure the idempotency of requests. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see How to ensure idempotence .
Cpu	Float	No	2.0	The amount of CPU resources allocated to the container group.

Parameter	Type	Required	Example	Description
Memory	Float	No	4.0	The amount of memory resources allocated to the container group.

Parameters and descriptions

Cpu (**CPU resources allocated to the container group**):

1. This parameter cannot be updated, but it takes effect.
2. By default, ECI calculates the specification of a container group based on the container specifications. If you want the specification of the container group to change with the specifications of the containers, you must specify the specification of the container group.

Memory (**Memory resources allocated to the container group**):

1. This parameter cannot be updated, but it takes effect.
2. Be default, ECI calculates the specification of a container group based on the container specifications. If you want the specification of the container group to change with the specifications of the containers, you must specify the specification of the container group.

Volumes

1. Only supports full updates.
2. You need to restart the container group.

ImageRegistryCredentials

1. Only supports full updates.
2. If only ImageRegistryCredentials (image registry credentials) are updated, and the number of ImageRegistryCredentials is no more than the previous number, you do not need to restart the container group. Otherwise, you must restart the container group.

InitContainers

1. Only supports full updates.
2. Init containers and other containers only support full updates. However, you can choose to update either init containers or other containers. If the container group does not contain any init containers, you can add init containers to the container group.
3. You need to restart the container group.

Containers

1. Only supports full updates.

Tags

1. Only supports full updates.
2. You do not need to restart the container group.

DnsConfig

1. Only supports full updates.
2. You need to restart the container group.

**Note:**

Full updates: If the parameter specifies a list of items, all the items are updated. If the parameter is a struct, all the members are updated.

Response parameters

Parameter	Type	Example	Description
RequestId	String	CB8D2B22-D636-4182-8C8C-1FC9DBDAD66F	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=UpdateContainerGroup
&ContainerGroupId=eci-bp17da5olmkuagfrzurh
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

JSON format

```
{
  "RequestId": "CB8D2B22-D636-4182-8C8C-1FC9DBDAD66F"
}
```

XML format

```
<RequestId>CB8D2B22-D636-4182-8C8C-1FC9DBDAD66F</RequestId>
```

Common scenarios

Container

All parameters of a container can be updated. The parameters are the same as those used to create the container.

A container group contains both init containers and other containers, but only the init containers need to be updated.

A container group contains both init containers and other containers, but only the other containers need to be updated.

A container group contains both init containers and other containers, and all these containers need to be updated.

A container group contains containers, and these containers need to be updated.

A container group contains containers, and you need to add init containers.

A container group only contains containers, and you need to add init containers and updated the existing containers.

Volume

ECI supports three types of volumes: ConfigFileVolume, NFSVolume, and EmptyDirVolume.

These types of volumes can be updated. Parameters of a volume after an update are the same as those used to create the volume.

Note: Volumes are mounted to specific containers by volume name. When you update volumes, you can only update basic attributes of the volumes. To make other changes, such as adding, removing, or renaming volumes, we recommend that you update the containers at the same time.

ImageRegistryCredentials can be updated separately or updated along with other parameters. If only ImageRegistryCredentials are updated,

and the number of vImageRegistryCredentials is no greater than the previous number,

you do not need to restart the container group. Otherwise, you need to restart the container group.

Tags

All tags are updated. You do not need to restart the container group.

DnsConfig

Only supports full updates.

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.CPU.Memory	The specified cpu and memory are not allowed	The error message returned because the CPU and memory specifications are invalid.
400	InvalidParameter.DuplicatedName	The container group include containers with duplicate names.	The error message returned because the container group contains duplicate container names.
400	InvalidParameter.DuplicatedVolumeName	The container group includes volumes with duplicate names.	The error message returned because the container group contains duplicate volume names.
400	InvalidParameter.LengthExceeded	%s	The error message returned because the length of the parameter that specifies a list exceeds the upper limit.
404	InvalidParameter.NotFound	%s	The error message returned because the specified parameter cannot be found.
400	InvalidParameter.ValueExceeded	%s	The error message returned because the specified parameter value is invalid.
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.
403	InvalidAction	The specified action is invalid	The error message returned because the specified action is invalid.
400	InvalidParam.CpuOrMemorySpec	The specified specification is invalid.	The error message returned because the specified specification is unavailable. You cannot query the prices.

HTTP status code	Error code	Error message	Description
400	InvalidParameter	%s	The error message returned because the specified parameter is invalid.
400	MissingParameter	%s	The error message returned because a required parameter is not set.
400	NoNeedUpdate	There are no changes to be updated for current resource.	The error message returned because this operation does not require any parameter to be updated.

6.3 RestartContainerGroup

Restarts a container group.

Description

When you call this operation, take note of the following:

- You can only restart container groups that are in the Pending or Running state. You cannot restart container groups that are in the Succeeded state.
- You cannot restart container groups that were created before 15:00:00 on March 7, 2019.
- When a container group is restarting, it is in the Restarting state.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
ContainerGroupId	String	Yes	eci-djfioduf35gitgyif	The ID of the container group.
RegionId	String	Yes	cn-hangzhou	The region ID of the container group.

Parameter	Type	Required	Example	Description
Action	String	No	RestartContainerGroup	The operation that you want to perform. Set the value to RestartContainerGroup .
ClientToken	String	No	123e4567-e89b-12d3-a456-426655440000	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see #unique_30 .

Response parameters

Parameter	Type	Example	Description
RequestId	String	45D5B0AD-3B00-4A9B-9911-6D5303B06712	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=RestartContainerGroup
&ContainerGroupId=eci-djfioudf35gitgyif
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<RestartContainerGroupResponse>
  <RequestId>45D5B0AD-3B00-4A9B-9911-6D5303B06712</RequestId>
```

```
<RestartContainerGroupResponse>
```

JSON format

```
{
  "RequestId": "45D5B0AD-3B00-4A9B-9911-6D5303B06712"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.
403	InvalidAction	The specified action is invalid	The error message returned because the specified operation is invalid.
400	InvalidParameter	%s	The error message returned because the specified parameter is invalid.

6.4 DeleteContainerGroup

Deletes a container group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
ContainerGroupid	String	Yes	eci-uf6fonng hi50valsr7yw	The ID of the container group.
RegionId	String	Yes	cn-hangzhou	The region ID of the container group.

Parameter	Type	Required	Example	Description
Action	String	No	DeleteContainerGroup	The operation that you want to perform. Set the value to DeleteContainerGroup .
ClientToken	String	No	123e4567-e89b-12d3-a456-426655440000	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see t10046.dita#reference_zdl_bmg_ydb

Response parameters

Parameter	Type	Example	Description
RequestId	String	45D5B0AD-3B00-4A9B-9911-6D5303B06712	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DeleteContainerGroup
&ContainerGroupId=eci-uf6fonngghi50vals7yw
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>45D5B0AD-3B00-4A9B-9911-6D5303B06712</RequestId>
```

JSON format

```
{
```



```
"RequestId":"45D5B0AD-3B00-4A9B-9911-6D5303B06712"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.

6.5 DescribeContainerGroups

You can call this operation to query information about multiple container groups at a time.

Description

Note:

1. After the status of a container group becomes Succeeded, the computing resources provided by the ECS instance are released. The information about the latest 100 container groups (all regions included) that are run successfully will be retained. Information of other container groups will be deleted.
2. After the status of a container group becomes Failed, the computing resources provided by the ECS instance are released. The information about the container group will be retained for 24 hours.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	DescribeContainerGroups	The operation that you want to perform. Set the value to DescribeContainerGroups.

Parameter	Type	Required	Example	Description
RegionId	String	Yes	cn-hangzhou	The IDs of the regions where the container groups are deployed.
ZoneId	String	No	cn-hangzhou-h	The IDs of the zones where the container groups are deployed . If this parameter is not set, the system automatically selects the zones. By default, no value is specified.
VSwitchId	String	No	vsw-bp1jrgfqy54kg5hcf8bc	The ID of the VSwitch. Currently , container groups can only be deployed in VPC networks.
NextToken	String	No	d78f2dd8-5979-42fe-939e-b16db43be5bc	The token required to get the next set of results. You do not need to specify the parameter value in the first call. If a NextToken is returned by a previous call, there are more results available.
Limit	Integer	No	20	The maximum number of resources returned in the response. Default value is 20. Maximum value: 20. The number of returned results is no greater than the specified number.
Tag.N.Key	String	No	name	The key of the tag.
Tag.N.Value	String	No	test-xh	The value of the tag.
ContainerGroupIds	String	No	["eci-bp14j2xod16swv8efxoz",]	The IDs of the container groups in JSON strings. Maximum: 20.
ContainerGroupName	String	No	test-xh	The name of the container group.

Parameter	Type	Required	Example	Description
Status	String	No	Running	The status list. For more information, see the description of ContainerGroup arrays.
ResourceGroupid	String	No	rg-xxx	The ID of the resource group to which the container group belongs. If you have not specified a resource group for the container group, it is added to the default resource group.

Response parameters

Parameter	Type	Example	Description
RequestId	String	1EB63BFD-273A-49D1-83DE-690465E29A15	The unique ID of the request.
NextToken	String	d78f2dd8-5979-42fe-939e-b16db43be5bc	The token required to get the next set of results.
TotalCount	Integer	19	The total number of container groups.
ContainerGroups	Array		The list of container groups.
ContainerGroupid	String	eci-xxx	The ID of the container group.
ContainerGroupName	String	test	The name of the container group.
RegionId	String	cn-hangzhou	The ID of the region where the container group is deployed.
ZoneId	String	cn-hangzhou-h	The ID of the zone where the container group is deployed.
Memory	Float	4.0	The amount of memory resources allocated to the container group.

Parameter	Type	Example	Description
Cpu	Float	2.0	The amount of CPU resources allocated to the container group.
VSwitchId	String	vsw-bp1vzjjfla b6wvjoxpogs	The ID of the VSwitch. Container groups are deployed in VPC networks.
SecurityGroupId	String	sg-bp12ujq5zp xuyjfo3o8r	The ID of the security group.
RestartPolicy	String	Never	The restart policy of the container group.
IntranetIp	String	10.21.1.1	The internal IP address of the container group.
Status	String	Running	The creation status of the container group. Valid values: Pending, Running, Succeeded, Failed, Scheduling, and ScheduleFailed.
InternetIp	String	21.3.43.4	The public IP address of the container group.
CreationTime	String	2018-08-02T15:00:00Z	The time when the system received the request for creating the container group. The timestamp follows the UTC and RFC3339 formats.
SucceededTime	String	2019-12-11T04:33:42Z	The time when all containers in the container group completed running the specified tasks. The timestamp follows the UTC and RFC 3339 formats. For example, 2018-08-02T15:00:00Z.
EniInstanceId	String	eni-xxx	The ID of the ENI instance.
InstanceType	String	ecs.g5.large	The type of the ECS instance.

Parameter	Type	Example	Description
ExpiredTime	String	2018-08-02T15:00:00Z	The time when the container group failed to run due to overdue payments . The timestamp follows the UTC and RFC3339 formats.
FailedTime	String	2018-08-02T15:00:00Z	The time when the container failed to run tasks. The timestamp follows the UTC and RFC3339 formats.
RamRoleName	String	ram:PassRole	The RAM role that the container group assumes. ECI and ECS share the same RAM role. For more information, see Use the instance RAM role by calling APIs .
Ipv6Address	String	CD:CD:0000:0000:0000:8475:1111:3900:2020=CD:CD::8475:1111:3900:2020	The IPv6 address.
Tags	Array		The tags attached to the container group. Each tag is a key-value pair . You can attach up to 20 tags to a container group.
Key	String	name	The key of the tag.
Value	String	test-xh	The value of the tag.
Events	Array		The events of the container group. Maximum: 50.
Count	Integer	20	The number of events.
Type	String	Normal	The type of the event. Valid values: Normal and Warning.

Parameter	Type	Example	Description
Name	String	test-xxx	The name of the object to which the event belongs.
Message	String	Started container	The content of the event.
FirstTimes stamp	String	2018-08-02T15:00 :00Z	The time when the event started.
LastTimest amp	String	2018-08-02T15:00 :00Z	The time when the event ended.
Reason	String	Created	The name of the event.
Containers	Array		The list of containers in the container group.
Name	String	nginx	The name of the container.
Image	String	mysql	The image of the container.
Memory	Float	2.0	The amount of memory resources allocated to the container.
Cpu	Float	2.0	The amount of CPU resources allocated to the container.
RestartCount	Integer	0	The number of times that the container has restarted.
WorkingDir	String	/usr/local/nginx	The working directory of the container.
ImagePullP olicy	String	Always	The policy for pulling an image.
Ready	Boolean	true	Indicates whether the container is ready.
Gpu	Integer	1	The amount of GPU resources allocated to the container.

Parameter	Type	Example	Description
Stdin	Boolean	true	Indicates whether the container allocates buffer resources for standard streams while the container is running. If no value is specified, an end-of-file (EOF) error may occur. Default value: false.
StdinOnce	Boolean	true	If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.
Tty	Boolean	false	Indicates whether interaction is enabled. Default is false. For example , if the command is <code>"/bin/bash"</code> , this parameter is set to true.
VolumeMounts	Array		The list of volumes mounted to the container.
Name	String	test-empty	The name of the volume. The name is the same as the volume you selected when you purchased the container.
MountPath	String	<code>/usr/share/</code>	The directory of the mounted volume . Data under this directory will be overwritten by the data in the volume.

Parameter	Type	Example	Description
ReadOnly	Boolean	false	Default value: false.
Ports	Array		The list of exposed ports and protocols. Maximum: 100.
Port	Integer	8080	The port number. Valid values: 1 to 65535.
Protocol	String	TCP	Valid values: TCP and UDP.
EnvironmentVars	Array		The environment variables.
Key	String	PATH	The name of the variable.
Value	String	/usr/bin/	The value of the variable.
ValueFrom	Struct		The source of the variable value. The variable works as expected only when the value is not specified.
FieldRef	Struct		The fields of the container.
FieldPath	String	status.podIP	The path where the fields come from in the specified version. Currently, only status.podIP is supported.
Commands	List	[/bin/sh echo]	The commands run by the container . You can define a maximum of 20 commands. Minimum length per string: 256 characters
Args	List	["hello"]	The arguments passed to the commands. Maximum: 10.
PreviousState	Struct		The previous status of the container.

Parameter	Type	Example	Description
State	String	Terminated	The status of the container. Valid values: Waiting, Running, and Terminated.
DetailStatus	String	working	The details of the container status.
ExitCode	Integer	0	The exit code of the container.
StartTime	String	2018-08-02T15:00:00Z	The time when the container started running.
FinishTime	String	2018-08-02T15:00:00Z	The time when the container stopped running.
Reason	String	Completed	The reason why the container is in this status.
Message	String	Back-off 5m0s restarting failed container=test pod=test_eci-xxx(xxx)	The information about the container status.
Signal	Integer	1	The code of the container status.
CurrentState	Struct		The current status of the container.
State	String	Terminated	The status of the container. Valid values: Waiting, Running, and Terminated.
DetailStatus	String	working	The details of the container status.
ExitCode	Integer	0	The exit code of the container.
StartTime	String	2019-12-19T12:05:02Z	The time when the container started running.

Parameter	Type	Example	Description
FinishTime	String	2018-08-02T15:00:00Z	The time when the container stopped running.
Reason	String	Started	The reason why the container is in this status.
Message	String	Back-off 5m0s restarting failed container=test pod=test_eci-xxx(xxx)	The information about the container status.
Signal	Integer	1	The code of the container status.
ReadinessProbe	Struct		Indicates whether the container is ready.
InitialDelaySeconds	Integer	5	The time when the detection started. The initial time is when the container is started.
PeriodSeconds	Integer	1	The detection interval in seconds. Default is 10, and minimum is 1.
TimeoutSeconds	Integer	5	The detection timeout period in seconds. Default is 1, and minimum is 1
SuccessThreshold	Integer	1	After the last detection failed, the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1. Currently, the value must be 1.

Parameter	Type	Example	Description
FailureThreshold	Integer	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed . Default is 3.
Execs	List	["/bin/sh", "-c", "echo Hello world > /usr/share/message"]	The command to run detection tasks in the container.
HttpGet	Struct		The HTTP GET method.
Path	String	/usr/local	The path to the HTTP GET method.
Port	Integer	8080	The port for the HTTP GET method.
Scheme	String	HTTP	Valid values: HTTP and HTTPS.
TcpSocket	Struct		TCP sockets.
Host	String	1.2.3.4	The host.
Port	Integer	8888	The port number.
LivenessProbe	Struct		The liveness detection probe.
InitialDelaySeconds	Integer	10	The time when the detection started. The initial time is when the container is started.
PeriodSeconds	Integer	5	The detection interval in seconds. Default is 10, and minimum is 1.
TimeoutSeconds	Integer	10	The detection timeout period in seconds. Default is 1, and minimum is 1.

Parameter	Type	Example	Description
SuccessThreshold	Integer	1	After the last detection failed, the minimum number of times that a detection must be successful consecutively before the detection is declared successful. Default is 1. Currently, the value must be set to 1.
FailureThreshold	Integer	3	After the last detection succeeded, the minimum number of times that a detection must fail consecutively before the detection is declared failed . Default is 3.
Execs	List	["/bin/sh", "-c", "echo Hello world > /usr/share/message"]	The command to execute tasks.
HttpGet	Struct		The HTTP GET method.
Path	String	/usr/nginx/	The path to the HTTP GET method.
Port	Integer	80	The port for the HTTP GET method.
Scheme	String	HTTP	Valid values: HTTP and HTTPS.
TcpSocket	Struct		TCP sockets.
Host	String	1.2.3.4	The name of the host.
Port	Integer	80	The port number.
SecurityContext	Struct		The security context of the container group.
ReadOnlyRootFilesystem	Boolean	true	Indicates whether the root file system is set to the read-only mode. Currently , true is the only valid value.

Parameter	Type	Example	Description
RunAsUser	Long	1000	The UID of the endpoint where you can run container processes.
Capability	Struct		The default function library of the container. Currently, only CPU and memory are supported.
Adds	List	[NET_ADMIN]	Currently, the only valid value is NET_ADMIN.
Volumes	Array		The information about the mounted volume. You can mount up to 20 volumes.
Type	String	EmptyDirVolume	The type of the volume. Currently , the following types of volumes are supported: EmptyDirVolume, NFSVolume, ConfigFileVolume, and FlexVolume.
Name	String	test-empty	The name of the volume.
NFSVolumePath	String	/eci	The path to the NFS volume.
NFSVolumeServer	String	0eafxxxx-xxxx. cn-hangzhou.nas. aliyuncs.com	The address of the NFS server.
NFSVolumeReadOnly	Boolean	false	Default value: false.
DiskVolumeDiskId	String	d-xxxx	The ID of DiskVolume.
DiskVolumeFsType	String	xfs	The type of DiskVolume.
FlexVolumeDriver	String	flexvolume	The name of the FlexVolume driver.

Parameter	Type	Example	Description
FlexVolume FsType	String	ntfs	The type of the mounted file system. The default value is determined by the script of FlexVolume.
FlexVolume Options	String	[nolock,tcp, noresvport]	The list of FlexVolume objects.
ConfigFile VolumeConf igFileToPaths	Array		The list of configuration file paths.
Content	String	hello world	The content of the configuration file. Maximum size: 32 KB.
Path	String	/usr/bin/	The relative file path.
InitContainers	Array		The list of init containers.
Name	String	Init-xxx	The name of the init container.
Image	String	nginx	The image of the container.
Cpu	Float	1.0	The amount of CPU resources allocated to the container.
Memory	Float	2.0	The amount of memory resources allocated to the container.
RestartCount	Integer	5	The number of times that the container has restarted.
WorkingDir	String	/usr/test	The working directory of the container .
ImagePullP olicy	String	Always	The policy for pulling an image.
Ready	Boolean	true	Indicates whether the container is ready.

Parameter	Type	Example	Description
Gpu	Integer	1	The amount of GPU resources allocated to the container.
VolumeMounts	Array		The mounted volumes.
Name	String	test-empty	The name of the volume. The name is the same as the volume you selected when you purchased the container.
MountPath	String	/usr/share/	The directory of the mounted volume. Data under this directory will be overwritten by the data in the volume.
ReadOnly	Boolean	false	Default value: false.
Ports	Array		The exposed ports and protocols. Maximum: 100.
Port	Integer	8888	The port number. Valid values: 1 to 65535.
Protocol	String	TCP	Valid values: TCP and UDP.
EnvironmentVars	Array		The environment variables.
Key	String	PATH	The name of the variable.
Value	String	/usr/local/bin	The value of the variable.
ValueFrom	Struct		The source of the variable value. The variable works as expected only when the value is not specified.
FieldRef	Struct		The fields of the container.

Parameter	Type	Example	Description
FieldPath	String	status.podIP	The path where the fields come from in the specified version. Currently, the only valid value is <code>status.podIP</code> .
Command	List	<code>[/bin/sh echo]</code>	The commands run by the container.
Args	List	<code>['hello world']</code>	The arguments passed to the commands.
PreviousState	Struct		The previous status of the container.
State	String	Terminated	The status of the container. Valid values: Waiting, Running, and Terminated.
DetailStatus	String	working	The details of the container status.
ExitCode	Integer	0	The exit code of the container.
StartTime	String	2019-12-24T05:35:44Z	The time when the container started running.
FinishTime	String	2019-12-24T05:35:44Z	The time when the container stopped running.
Reason	String	completed	The reason why the container is in this status.
Message	String	Started container	The information about the container status.
Signal	Integer	1	The code of the container status.
CurrentState	Struct		The current status.

Parameter	Type	Example	Description
State	String	Running	The status of the container. Valid values: Waiting, Running, and Terminated.
DetailStatus	String	working	The details of the container status.
ExitCode	Integer	0	The exit code of the container.
StartTime	String	2018-08-02T15:00:00Z	The time when the container started running.
FinishTime	String	2018-08-02T15:00:00Z	The time when the container stopped running.
Reason	String	Started	The reason why the container is in this status.
Message	String	Created container	The content of the event.
Signal	Integer	1	The code of the container status.
SecurityContext	Struct		The security context of the container.
ReadOnlyRootFilesystem	Boolean	true	Indicates whether the root file system is set to the read-only mode. Currently, true is the only valid value.
RunAsUser	Long	1557	The UID of the endpoint where you can run container processes.
Capability	Struct		The default function library of the container. Currently, only CPU and memory are supported.
Adds	List	NET_ADMIN	Currently, the only valid value is NET_ADMIN.

Parameter	Type	Example	Description
HostAliases	Array		The mapping between host names and IP addresses for a container in the container group.
Ip	String	42.101.1.10	The IP address of the container.
Hostnames	List	['hehe.com', 'haha.com']	The name of the host.
DnsConfig	Struct		The DNS settings.
Options	Array		The list of objects. Each object is a name-value pair. The value is optional.
Name	String	name	The name of the object variable.
Value	String	value	The value of the object variable.
NameServers	List	[1.2.3.4]	The list of DNS server IP addresses.
Searches	List	[svc.local, kubernetes]	The list of DNS lookup domains.
EciSecurityContext	Struct		The security context of the container group.
Sysctls	Array		The system information.
Name	String	kernel.msgmax	The name of the variable.
Value	String	65536	The value of the variable.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeContainerGroups
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

JSON format

```
{
  "NextToken": "",
  "TotalCount": 1,
  "ContainerGroups": [
    {
      "EciSecurityContext": {},
      "Containers": [
        {
          "VolumeMounts": [],
          "Gpu": 0,
          "PreviousState": {
            "State": "",
            "FinishTime": "",
            "StartTime": ""
          },
          "RestartCount": 0,
          "SecurityContext": {
            "Capability": {}
          },
          "WorkingDir": "",
          "CurrentState": {
            "State": "Running",
            "FinishTime": "",
            "StartTime": "2019-12-24T05:35:44Z"
          },
          "Ready": true,
          "Name": "test-imagepull",
          "ImagePullPolicy": "IfNotPresent",
          "Memory": 4,
          "Cpu": 2,
          "ReadinessProbe": {
            "TcpSocket": {},
            "HttpGet": {}
          },
          "Image": "registry-vpc.cn-hangzhou.aliyuncs.com/eci_open/nginx:1.14.2",
          "EnvironmentVars": [
            {
              "Value": "/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin",
              "Key": "PATH",
              "ValueFrom": {
                "FieldRef": {}
              }
            },
            {
              "Value": "1.14.2-1~stretch",
              "Key": "NGINX_VERSION",
              "ValueFrom": {
                "FieldRef": {}
              }
            },
            {
              "Value": "1.14.2.0.2.6-1~stretch",
              "Key": "NJS_VERSION",
              "ValueFrom": {
                "FieldRef": {}
              }
            }
          ],
          "LivenessProbe": {
            "TcpSocket": {},
            "HttpGet": {}
          }
        }
      ]
    }
  ]
}
```

```

    },
    "Ports": []
  }
],
"SecurityGroupId": "sg-bp19ryeo103eqznmcat0",
"RestartPolicy": "Always",
"FailedTime": "",
"DnsConfig": {},
"Events": [
  {
    "Name": "test-imagepull.15e337e2347880ac",
    "LastTimestamp": "2019-12-24T05:35:39Z",
    "Count": 1,
    "Message": "pulling image \"registry-vpc.cn-hangzhou.aliyuncs.com/
eci_open/nginx:1.14.2\"",
    "Type": "Normal",
    "FirstTimestamp": "2019-12-24T05:35:39Z",
    "Reason": "Pulling"
  },
  {
    "Name": "test-imagepull.15e337e37173d182",
    "LastTimestamp": "2019-12-24T05:35:44Z",
    "Count": 1,
    "Message": "Successfully pulled image \"registry-vpc.cn-hangzhou.aliyuncs.
com/eci_open/nginx:1.14.2\"",
    "Type": "Normal",
    "FirstTimestamp": "2019-12-24T05:35:44Z",
    "Reason": "Pulled"
  },
  {
    "Name": "test-imagepull.15e337e37306423e",
    "LastTimestamp": "2019-12-24T05:35:44Z",
    "Count": 1,
    "Message": "Created container",
    "Type": "Normal",
    "FirstTimestamp": "2019-12-24T05:35:44Z",
    "Reason": "Created"
  },
  {
    "Name": "test-imagepull.15e337e377a39ab6",
    "LastTimestamp": "2019-12-24T05:35:44Z",
    "Count": 1,
    "Message": "Started container",
    "Type": "Normal",
    "FirstTimestamp": "2019-12-24T05:35:44Z",
    "Reason": "Started"
  }
],
"InternetIp": "",
"ZoneId": "cn-hangzhou-i",
"ContainerGroupName": "test-imagepull",
"EniInstanceId": "eni-bp1gj8moqnu15zrvt0in",
"VSwitchId": "vsw-bp1vzjjflab6wvjoxpogs",
"CreationTime": "2019-12-24T05:35:27Z",
"Tags": [],
"ContainerGroupId": "eci-bp12wdqc3g6qtr44vrpt",
>Status": "Running",
"SucceededTime": "",
"Memory": 4,
"Cpu": 2,
"InitContainers": [],
"RegionId": "cn-hangzhou",
"IntranetIp": "192.168.168.91",
"ExpiredTime": "",

```

```

    "Volumes": []
  }
},
"RequestId": "8715677F-0F66-4013-A1FE-FA8136A3A4D1"
}

```

XML format

```

<NextToken/>
<TotalCount>1</TotalCount>
<ContainerGroups>
  <EciSecurityContext/>
  <Containers>
    <Gpu>0</Gpu>
    <PreviousState>
      <State/>
      <FinishTime/>
      <StartTime/>
    </PreviousState>
    <RestartCount>0</RestartCount>
    <SecurityContext>
      <Capability/>
    </SecurityContext>
    <WorkingDir/>
    <CurrentState>
      <State>Running</State>
      <FinishTime/>
      <StartTime>2019-12-24T05:35:44Z</StartTime>
    </CurrentState>
    <Ready>true</Ready>
    <Name>test-imagepull</Name>
    <ImagePullPolicy>IfNotPresent</ImagePullPolicy>
    <Memory>4</Memory>
    <Cpu>2</Cpu>
    <ReadinessProbe>
      <TcpSocket/>
      <HttpGet/>
    </ReadinessProbe>
    <Image>registry-vpc.cn-hangzhou.aliyuncs.com/eci_open/nginx:1.14.2</Image>
    <EnvironmentVars>
      <Value>/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin</Value>
      <Key>PATH</Key>
      <ValueFrom>
        <FieldRef/>
      </ValueFrom>
    </EnvironmentVars>
    <EnvironmentVars>
      <Value>1.14.2-1~stretch</Value>
      <Key>NGINX_VERSION</Key>
      <ValueFrom>
        <FieldRef/>
      </ValueFrom>
    </EnvironmentVars>
    <EnvironmentVars>
      <Value>1.14.2.0.2.6-1~stretch</Value>
      <Key>NJS_VERSION</Key>
      <ValueFrom>
        <FieldRef/>
      </ValueFrom>
    </EnvironmentVars>
    <LivenessProbe>
      <TcpSocket/>
      <HttpGet/>
    </LivenessProbe>
  </Containers>
</ContainerGroups>

```

```

    </LivenessProbe>
  </Containers>
  <SecurityGroupId>sg-bp19ryeo103eqznmcat0</SecurityGroupId>
  <RestartPolicy>Always</RestartPolicy>
  <FailedTime/>
  <DnsConfig/>
  <Events>
    <Name>test-imagepull.15e337e2347880ac</Name>
    <LastTimestamp>2019-12-24T05:35:39Z</LastTimestamp>
    <Count>1</Count>
    <Message>pulling image "registry-vpc.cn-hangzhou.aliyuncs.com/eci_open/nginx:
1.14.2"</Message>
    <Type>Normal</Type>
    <FirstTimestamp>2019-12-24T05:35:39Z</FirstTimestamp>
    <Reason>Pulling</Reason>
  </Events>
  <Events>
    <Name>test-imagepull.15e337e37173d182</Name>
    <LastTimestamp>2019-12-24T05:35:44Z</LastTimestamp>
    <Count>1</Count>
    <Message>Successfully pulled image "registry-vpc.cn-hangzhou.aliyuncs.com/
eci_open/nginx:1.14.2"</Message>
    <Type>Normal</Type>
    <FirstTimestamp>2019-12-24T05:35:44Z</FirstTimestamp>
    <Reason>Pulled</Reason>
  </Events>
  <Events>
    <Name>test-imagepull.15e337e37306423e</Name>
    <LastTimestamp>2019-12-24T05:35:44Z</LastTimestamp>
    <Count>1</Count>
    <Message>Created container</Message>
    <Type>Normal</Type>
    <FirstTimestamp>2019-12-24T05:35:44Z</FirstTimestamp>
    <Reason>Created</Reason>
  </Events>
  <Events>
    <Name>test-imagepull.15e337e377a39ab6</Name>
    <LastTimestamp>2019-12-24T05:35:44Z</LastTimestamp>
    <Count>1</Count>
    <Message>Started container</Message>
    <Type>Normal</Type>
    <FirstTimestamp>2019-12-24T05:35:44Z</FirstTimestamp>
    <Reason>Started</Reason>
  </Events>
  <InternetIp/>
  <ZoneId>cn-hangzhou-i</ZoneId>
  <ContainerGroupName>test-imagepull</ContainerGroupName>
  <EniInstanceId>eni-bp1gj8moqnu15zrvt0in</EniInstanceId>
  <VSwitchId>vsw-bp1vzjflab6wvjoxpogs</VSwitchId>
  <CreationTime>2019-12-24T05:35:27Z</CreationTime>
  <ContainerGroupId>eci-bp12wdqc3g6qtr44vrpt</ContainerGroupId>
  <Status>Running</Status>
  <SucceededTime/>
  <Memory>4</Memory>
  <Cpu>2</Cpu>
  <RegionId>cn-hangzhou</RegionId>
  <IntranetIp>192.168.168.91</IntranetIp>
  <ExpiredTime/>
</ContainerGroups>

```

```
<RequestId>8715677F-0F66-4013-A1FE-FA8136A3A4D1</RequestId>
```

Error codes

6.6 ExecContainerCommand

Runs commands in a container.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
RegionId	String	Yes	cm-hangzhou	The region ID of the container group.
ContainerGroupId	String	Yes	eci-xxx	The ID of the container group.
ContainerName	String	Yes	nginx	The name of the container.
Command	String	Yes	["/bin/bash"]	The commands to be run in the container. You can specify up to 20 commands. Each command is a string and can be up to 256 characters in length. You must specify the commands in JSON format, for example, <code>["/bin/bash"]</code> and <code>["ps","-ef"]</code> .
Action	String	No	ExecContainerCommand	The operation that you want to perform. Set the value to ExecContainerCommand .

Parameter	Type	Required	Example	Description
TTY	Boolean	No	false	Specifies whether to enable interaction. Default value: false. For example, if the command is <code>["/bin/bash"]</code> , set this parameter to true.

Response parameters

Parameter	Type	Example	Description
RequestId	String	28B583A8-313D-4383-8EA9-B5A9F7E07817	The unique ID of the request.
WebSocketUri	String	wss://eci-cn-shanghai.aliyun.com/exec/?s=xxx	The URL used to establish the WebSocket connection.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=ExecContainerCommand
&RegionId=cn-hangzhou
&ContainerGroupId=eci-xxx
&ContainerName=nginx
&Command=["/bin/bash"]
&<Common request parameters>
```

Sample success responses

XML format

```
<ExecContainerCommandResponse>
  <RequestId>45D5B0AD-3B00-4A9B-9911-6D5303B06712</RequestId>
  <WebSocketUri>wss://eci-cn-shanghai.aliyun.com/exec/?s=xxx</WebSocketUri>
</ExecContainerCommandResponse>
```

JSON format

```
{
  "RequestId": "45D5B0AD-3B00-4A9B-9911-6D5303B06712",
  "WebSocketUri": "wss://eci-cn-shanghai.aliyun.com/exec/?s=xxx"
```


}

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ValueExceeded	%s	The error message returned because the specified parameter value is invalid.
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.

6.7 CreateContainerGroupFromTemplate

Creates a container group by using a template.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	CreateContainerGroupFromTemplate	The operation that you want to perform. Set the value to CreateContainerGroupFromTemplate .
RegionId	String	Yes	cn-hangzhou	The region ID of the container group.
Template	String	Yes	{}	The parameters of the template.

Parameter	Type	Required	Example	Description
ClientToken	String	No	123e4567-xxxx-12d3-xxxx-426655440000	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see How to ensure idempotence .

Sample template

```
{
  "regionId": "cn-hangzhou",
  "zoneId": "cn-hangzhou-h",
  "securityGroupId": "sg-bp118ky5j07tymorgzfhwy",
  "vSwitchId": "vsw-bp1jfjsdy54ky7gerhcf8bc",
  "resourceGroupId": "rg-hfh4hjf6hdfeur8h9",
  "containerGroupName": "template-test",
  "instanceType": "ecs.t5-lc1m2.large",
  "slsEnable": true,
  "resources": {
    "cpu": 4.0,
    "memory": 8.0
  },
  "tags": [
    {
      "key": "createdFrom",
      "value": "template"
    },
    {
      "key": "version",
      "value": "1.0.4"
    }
  ],
  "spec": {
    "initContainers": [
      {
        "image": "registry-vpc.cn-hangzhou.aliyuncs.com/liumi/busybox:1.0",
        "name": "busybox",
        "resources": {
          "cpu": 1.345,
          "memory": 3.674
        },
        "imagePullPolicy": "Always"
      }
    ],
    "containers": [
```

```
{
  "image": "registry-vpc.cn-hangzhou.aliyuncs.com/liumi/nginx:alpine",
  "name": "nginx",
  "imagePullPolicy": "Always",
  "resources": {
    "cpu": 1.345,
    "memory": 3.674
  },
  "command": [
    "/bin/sh"
  ],
  "args": [
    "-c",
    "cp -r /pod/data/ /usr/share/"
  ],
  "volumeMounts": [
    {
      "readOnly": false,
      "mountPath": "/pod/data",
      "name": "nfs-volume"
    }
  ],
  "securityContext": {
    "readOnlyRootFilesystem": "true",
    "capabilities": {
      "add": [
        "NET_ADMIN"
      ]
    }
  },
  "runAsUser": "1337"
},
"env": [
  {
    "name": "KUBERNETES_SERVICE_HOST",
    "value": "47.xx.32.xx"
  },
  {
    "name": "KUBERNETES_SERVICE_PORT",
    "value": "6443"
  },
  {
    "name": "ECI_IP",
    "valueFrom": {
      "fieldRef": {
        "fieldPath": "status.podIP"
      }
    }
  }
]
},
"readinessProbe": {
  "tcpSocket": {
    "port": "80"
  },
  "timeoutSeconds": "5",
  "initialDelaySeconds": "5",
  "periodSeconds": "5",
  "successThreshold": "3",
  "failureThreshold": "3"
},
"livenessProbe": {
  "exec": {
    "command": ["cat", "/tmp/healthy"]
  },
  "timeoutSeconds": "5",

```

```

        "initialDelaySeconds": "5",
        "periodSeconds": "5",
        "successThreshold": "1",
        "failureThreshold": "3"
    },
    "ports": [
        {
            "protocol": "TCP",
            "containerPort": "8080"
        },
        {
            "protocol": "TCP",
            "containerPort": "80"
        }
    ]
},
"dnsConfig": {
    "searches": [
        "c7a1790b3f206498382cbba682c257b0e.svc.cluster.local",
        "svc.cluster.local",
        "cluster.local"
    ]
},
"restartPolicy": "Always",
"volumes": [
    {
        "nfs": {
            "path": "/",
            "readOnly": false,
            "server": "0ajddh74a604-jaq68.cn-hangzhou.nas.aliyuncs.com"
        },
        "name": "nfs-volume"
    },
    {
        "emptyDir": {
            "medium": "Memory"
        },
        "name": "nfs-volume"
    },
    {
        "configFile": {
            "defaultMode": xxx,
            "items": [
                {
                    "mode": xxx,
                    "path": "data/test1",
                    "content": "%8R8T="
                },
                {
                    "mode": xxx,
                    "path": "data/test2",
                    "content": "%8R8T="
                }
            ]
        },
        "name": "nfs-volume"
    }
],
"securityContext": {
    "sysctls": [
        {
            "Name": "kernel.shm_rmid_forced",
            "Value": "0"
        }
    ]
}

```

```

    },
    {
      "Name": "kernel.msgmax",
      "Value": "65536"
    }
  ]
},
"imagePullSecrets": [
  {
    "userName": "yourusername",
    "password": "password123456",
    "server": "registry-vpc.cn-shanghai.aliyuncs.com"
  }
]
}
}
}

```

For more information about the supported parameters in a template, see [ECI template parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	28B583A8-313D-4383-8EA9-B5A9F7E07817	The unique ID of the request.
ContainerGroupId	String	eci-uf6fonngghi50u374a0i4	The ID of the container group.

Examples

Sample requests

```

http(s)://eci.aliyuncs.com/? Action=CreateContainerGroupFromTemplate
&RegionId=cn-hangzhou
&Template={}
&<Common request parameters>

```

Sample success responses

JSON format

```

{
  "ContainerGroupId": "eci-uf6fonngghi50u374a0i4",
  "RequestId": "28B583A8-313D-4383-8EA9-B5A9F7E07817"
}

```

XML format

```

<CreateContainerGroupFromTemplateResponse>
  <ContainerGroupId>eci-uf6fonngghi50u374a0i4</ContainerGroupId>
  <RequestId>28B583A8-313D-4383-8EA9-B5A9F7E07817</RequestId>

```

```
</CreateContainerGroupFromTemplateReponse>
```

**Note:**

When you query a container group, the return result is the same regardless of whether the container group is created by the `CreateContainerGroup` or `CreateContainerGroupFromTemplate` operation.

Error codes

HTTP status code	Error code	Error message	Description
403	Throttling.Vcpu.PerDay	The maximum number of request for the day has been exceeded.	The error message returned because the number of requests sent exceeds the daily limit.
403	Zone.NotOnSale	The specified zone is not available for purchase.	The error message returned because the specified zone is unavailable or the VSwitch of the specified Virtual Private Cloud (VPC) is unavailable in the specified zone. Specify another zone.
400	MissingParameter	%s	The error message returned because a required parameter is not set.
409	OperationConflict	The request was denied. It conflicts with a previous request.	The error message returned because the request was denied for conflicting with a previous request.
403	OperationDenied.NoStock	Sales of this resource are temporarily suspended in the specified region; please try again later.	The error message returned because the specified resource is insufficient. Specify another resource, region, or zone.
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC.

HTTP status code	Error code	Error message	Description
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC.
403	OperationDenied.VswZoneMismatch	The specified VSwitchId is not in the specified Zone.	The error message returned because the specified VSwitch is not deployed in the specified zone.
403	QuotaExceeded	%s quota exceeded.	The error message returned because the number of container groups that you have created has reached the upper limit.
400	InvalidParameter	%s	The error message returned because the specified parameter is invalid.
400	InvalidParameter.CPU.Memory	The specified cpu and memory are not allowed	The error message returned because the CPU and memory specifications are invalid.
400	InvalidParameter.DuplicatedName	The container group include containers with duplicate names.	The error message returned because the container group contains containers with duplicate names.
400	InvalidParameter.DuplicatedName	The container group includes volumes with duplicate names.	The error message returned because the container group contains volumes with duplicate names.
400	InvalidParameter.DuplicatedVolumeName	The container group includes volumes with duplicate names.	The error message returned because the container group contains volumes with duplicate names.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.LengthExceeded	%s	The error message returned because the number of elements in the list specified by a parameter exceeds the upper limit.
404	InvalidParameter.NotFound	%s	The error message returned because the specified parameter cannot be found.
400	InvalidParameter.ValueExceeded	%s	The error message returned because the specified parameter value is invalid.
403	InvalidVSwitchId.IpNotEnough	The specified VSwitch does not have enough IP addresses.	The error message returned because the VSwitch does not have sufficient IP addresses.
400	InvalidParam.CpuOrMemorySpec	The specified specification is invalid.	The error message returned because the specified specification is unavailable. You cannot query the prices.

6.8 UpdateContainerGroupByTemplate

Updates a container group by using a template.

Description



Note:

Parameters in the template are the same as those in UpdateContainerGroup, but the structure of the template is the same as that in CreateContainerGroupFromTemplate.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
RegionId	String	Yes	cn-hangzhou	The region ID of the container group.
Template	String	Yes	{}	The content of the container group template, in JSON format . You can refer to the following sample template.
Action	String	No	UpdateContainerGroupByTemplate	The operation that you want to perform. Set the value to UpdateContainerGroupByTemplate .
ClientToken	String	No	123e4567-e89b-12d3-a456-426655440000	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see #unique_30 .

Sample template

```
{
  "regionId": "cn-hangzhou",
  "containerGroupId": "eci-njh75grewr6fewew",
  "spec": {
    "initContainers": [
      {
        "image": "registry-vpc.cn-hangzhou.aliyuncs.com/liumi/busybox:1.0",
        "name": "busybox",
        "resources": {
          "cpu": 1.345,
          "memory": 3.674
        }
      }
    ]
  }
}
```

```
    "imagePullPolicy": "Always"
  }
],
"containers": [
  {
    "image": "registry-vpc.cn-hangzhou.aliyuncs.com/liumi/nginx:alpine",
    "name": "nginx",
    "imagePullPolicy": "Always",
    "resources": {
      "cpu": 1.345,
      "memory": 3.674
    },
    "command": [
      "/bin/sh"
    ],
    "args": [
      "-c",
      "cp -r /pod/data/ /usr/share/"
    ],
    "volumeMounts": [
      {
        "readOnly": false,
        "mountPath": "/pod/data",
        "name": "nfs-volume"
      }
    ],
    "securityContext": {
      "readOnlyRootFilesystem": "true",
      "capabilities": {
        "add": [
          "NET_ADMIN"
        ]
      }
    },
    "runAsUser": "1337"
  },
  {
    "env": [
      {
        "name": "KUBERNETES_SERVICE_HOST",
        "value": "47.xx.32.xx"
      },
      {
        "name": "KUBERNETES_SERVICE_PORT",
        "value": "6443"
      }
    ],
    "readinessProbe": {
      "tcpSocket": {
        "port": "80"
      },
      "timeoutSeconds": "5",
      "initialDelaySeconds": "5",
      "periodSeconds": "5",
      "successThreshold": "3",
      "failureThreshold": "3"
    },
    "livenessProbe": {
      "tcpSocket": {
        "port": "80"
      },
      "timeoutSeconds": "5",
      "initialDelaySeconds": "5",
      "periodSeconds": "5",
      "successThreshold": "1",
      "failureThreshold": "3"
    }
  }
]
```

```

    },
    "ports": [
      {
        "protocol": "TCP",
        "containerPort": "8080"
      },
      {
        "protocol": "TCP",
        "containerPort": "80"
      }
    ]
  },
  "dnsConfig": {
    "searches": [
      "c7a1790b3f206498382cbba682c257b0e.svc.cluster.local",
      "svc.cluster.local",
      "cluster.local"
    ]
  },
  "restartPolicy": "Always",
  "volumes": [
    {
      "nfs": {
        "path": "/",
        "readOnly": false,
        "server": "0ahhf4a604-jaq68.cn-hangzhou.nas.aliyuncs.com"
      },
      "name": "nfs-volume"
    }
  ],
  "imagePullSecrets": [
    {
      "userName": "yourusername",
      "password": "password123456",
      "server": "registry-vpc.cn-shanghai.aliyuncs.com"
    }
  ]
}
}

```

Response parameters

Parameter	Type	Example	Description
RequestId	String	45D5B0AD-3B00-4A9B-9911-6D5303B06712	The unique ID of the request.

Examples

Sample requests

```

http(s)://eci.aliyuncs.com/? Action=UpdateContainerGroupByTemplate
&RegionId=cn-hangzhou
&Template=Template

```

&<Common request parameters>

Sample success responses

XML format

```
<UpdateContainerGroupByTemplateResponse>
  <RequestId>45D5B0AD-3B00-4A9B-9911-6D5303B06712</RequestId>
</UpdateContainerGroupByTemplateResponse>
```

JSON format

```
{
  "RequestId": "45D5B0AD-3B00-4A9B-9911-6D5303B06712"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Throttling.Vcpu.PerDay	The maximum number of request for the day has been exceeded.	The error message returned because the number of requests sent exceeds the daily limit.
403	Zone.NotOnSale	The specified zone is not available for purchase.	The error message returned because the specified zone is unavailable or the VSwitch of the specified Virtual Private Cloud (VPC) is unavailable in the specified zone. Specify another zone.
400	MissingParameter	%s	The error message returned because a required parameter is not set.
409	OperationConflict	The request was denied. It conflicts with a previous request.	The error message returned because the request was denied for conflicting with a previous request.
403	OperationDenied.NoStock	Sales of this resource are temporarily suspended in the specified region; please try again later.	The error message returned because the specified resource is insufficient. Specify another resource, region, or zone.

HTTP status code	Error code	Error message	Description
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC.
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC.
403	OperationDenied.VswZoneMismatch	The specified VSwitchId is not in the specified Zone.	The error message returned because the specified VSwitch is not deployed in the specified zone.
403	QuotaExceeded	%s quota exceeded.	The error message returned because the number of container groups that you have created has reached the upper limit.
400	InvalidParameter	%s	The error message returned because the specified parameter is invalid.
400	InvalidParameter.CPU.Memory	The specified cpu and memory are not allowed	The error message returned because the CPU and memory specifications are invalid.
400	InvalidParameter.DuplicatedName	The container group include containers with duplicate names.	The error message returned because the container group contains containers with duplicate names.
400	InvalidParameter.DuplicatedName	The container group includes volumes with duplicate names.	The error message returned because the container group contains volumes with duplicate names.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.DuplicatedVolumeName	The container group includes volumes with duplicate names.	The error message returned because the container group contains volumes with duplicate names.
400	InvalidParameter.LengthExceeded	%s	The error message returned because the number of elements in the list specified by a parameter exceeds the upper limit.
404	InvalidParameter.NotFound	%s	The error message returned because the specified parameter cannot be found.
400	InvalidParameter.ValueExceeded	%s	The error message returned because the specified parameter value is invalid.
403	InvalidVSwitchId.IpNotEnough	The specified VSwitch does not have enough IP addresses.	The error message returned because the VSwitch does not have sufficient IP addresses.
400	InvalidParam.CpuOrMemorySpec	The specified specification is invalid.	The error message returned because the specified specification is unavailable. You cannot query the prices.

6.9 ExportContainerGroupTemplate

Exports container group information as a template.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	ExportContainerGroupTemplate	The operation that you want to perform. Set the value to ExportContainerGroupTemplate.
ContainerGroupID	String	Yes	eci-xxx	The ID of the container group.
RegionID	String	Yes	cn-hangzhou	The region ID of the container group.

Response parameters

Parameter	Type	Example	Description
RequestId	String	CADE4B4A-15EA-4DB1-BCE2-23CE4F59823F	The unique ID of the request.
Template	Struct	N/A	The content of the container group template.
RegionID	String	cn-hangzhou	The region ID of the container group.
ZoneID	String	cn-hangzhou-h	The ID of the zone where the container group is deployed.
SecurityGroupID	String	sg-bp118knl07ymorgzfyw	The ID of the security group.
VSwitchID	String	vsw-bp1jrgfqy54kg5hcf8bc	The ID of the VSwitch.
ResourceGroupID	String	rg-acfm3us3oddylkq	The ID of the resource group.
EipInstanceID	String	eip-xxx	The instance ID of the Elastic IP Address (EIP).
ContainerGroupName	String	test	The name of the container group.

Parameter	Type	Example	Description
InstanceType	String	ecs.sn1ne.large	The instance type of the container group.
Tags	Array	N/A	The tags attached to the container group.
Key	String	env	The key of the tag.
Value	String	test	The value of the tag.
Resources	Struct	N/A	The resources allocated to the container group.
Cpu	Float	1.0	The amount of CPU resources allocated to the container group.
Memory	Float	2.0	The amount of memory resources allocated to the container group.
Spec	Struct	N/A	The information about the instance type.
RestartPolicy	String	Always	The restart policy of the container group.
DnsPolicy	String	ClusterFirst	The Domain Name System (DNS) policy set for the container group.
Volumes	Array	N/A	The volumes mounted to the container group.
Name	String	test-xxx	The name of the volume.
ConfigFile	Struct	N/A	The information about the ConfigFile volume, which stores the configuration files.

Parameter	Type	Example	Description
DefaultMode	Integer	0	The default mode bits used in the created configuration files. Valid values: 0 to 0777. Default value: 0644.
Items	Array	N/A	The configuration files.
Mode	Integer	0	The mode bits used in the configuration file. Valid values: 0 to 0777. If the parameter value is not specified, the parameter is set to the value of DefaultMode.
Path	String	/usr/share/	The relative path to the configuration file.
Content	String	test content	The content of the configuration file. The maximum size of the file can be 32 KB.
EmptyDir	Struct	N/A	The information about the emptyDir volume, which stores the shared files.
SizeLimit	String	20	The size limit of the volume.
Nfs	Struct	N/A	The information about the nfs volume.
Server	String	3f9cd4a596-xxxxx.cn-shanghai.nas.aliyuncs.com	The address of the Network File System (NFS) server.
Path	String	/	The path to the nfs volume.
ReadOnly	Boolean	false	Indicates whether the nfs volume is set to the read-only mode. Default value: false.
InitContainers	Array	N/A	The init containers.

Parameter	Type	Example	Description
Name	String	init-test	The name of the init container.
Image	String	nginx	The image of the container.
ImagePullPolicy	String	Always	The policy for pulling the image.
Stdin	Boolean	false	Indicates whether the container allocates buffer resources to standard input streams while the container is running. If no value is specified, an end-of-file (EOF) error may occur. Default value: false.
StdinOnce	Boolean	true	Indicates whether standard input streams are disconnected after a client is disconnected. If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.
Tty	Boolean	true	Indicates whether interaction is enabled. Default value: false. For example, if the command is <code>"/bin/bash"</code> , this parameter is set to true.
WorkingDir	String	<code>/test/</code>	The working directory of the container.

Parameter	Type	Example	Description
Env	Array	N/A	The environment variables of the container.
Name	String	env	The name of the variable.
Value	String	test	The value of the variable.
ValueFrom	Struct	N/A	The source of the variable value.
FieldRef	Struct	N/A	The fields of the container.
FieldPath	String	status.podIP	The path where the fields come from in the specified version. Currently, the only valid value is <code>status.podIP</code> .
Ports	Array	N/A	The exposed ports and protocols of the container. A maximum of 100 port and protocol combinations can be returned.
Name	String	port-nginx	The name of the port.
Protocol	String	TCP	The protocol of the container. Valid values: TCP and UDP. Default value: TCP.
ContainerPort	Integer	80	The port number of the container.
VolumeMounts	Array	N/A	The information about the mounted volumes.
Name	String	test-empty	The name of the volume. The name is the same as the volume you selected when you purchased the container group.

Parameter	Type	Example	Description
SubPath	String	/usr/local/bin	The subdirectory of the volume. The container group can mount different directories of the same volume to different subdirectories of containers.
MountPath	String	/usr/share/	The directory to which the volume is mounted. Data under this directory is overwritten by the data on the volume .
ReadOnly	Boolean	false	Indicates whether the volume is set to the read-only mode. Default value: false.
Command	List	[/bin/sh]	The commands used to start the container.
Args	List	[sleep 100]	The startup parameters of the container. A maximum of 10 startup parameters can be specified to start a container.
SecurityContext	Struct	N/A	The security context of the container group.
Sysctls	Array	N/A	The system information.
Name	String	kernel.msgmax	The name of the variable.
Value	String	0	The value of the variable.
Resources	Struct	N/A	The information about the resources.
Cpu	Float	1.0	The amount of CPU resources allocated to the container group.

Parameter	Type	Example	Description
Memory	Float	2.0	The amount of memory resources allocated to the container group.
Containers	Array	N/A	The containers in the container group.
Name	String	nginx-test	The name of the container.
Image	String	nginx	The image of the container.
ImagePullPolicy	String	Always	The policy for pulling the image.
Stdin	Boolean	false	Indicates whether the container allocates buffer resources to standard input streams while the container is running. If no value is specified, an EOF error may occur. Default value: false.
StdinOnce	Boolean	true	Indicates whether standard input streams are disconnected after a client is disconnected. If Stdin is set to true, standard input streams remain connected among multiple sessions. If StdinOnce is set to true, standard input streams are connected after the container is started, and remain idle until a client is connected to receive data. After the client is disconnected, streams are also disconnected, and remain disconnected until the container is started again.

Parameter	Type	Example	Description
Tty	Boolean	false	Indicates whether interaction is enabled. Default value: false. For example, if the command is <code>"/bin/bash"</code> , this parameter is set to true.
WorkingDir	String	<code>/usr/share/</code>	The working directory of the container.
Env	Array	N/A	The environment variables of the container.
Name	String	Path	The name of the variable.
Value	String	<code>/usr/bin/</code>	The value of the variable.
ValueFrom	Struct	N/A	The source of the variable value.
FieldRef	Struct	N/A	The fields of the container.
FieldPath	String	<code>status.podIP</code>	The path where the fields come from in the specified version. Currently, the only valid value is <code>status.podIP</code> .
Ports	Array	N/A	The exposed ports and protocols of the container. A maximum of 100 port and protocol combinations can be returned.
Name	String	redis	The name of the port.
Protocol	String	TCP	The protocol of the container. Valid values: TCP and UDP.
ContainerPort	Integer	6379	The port number of the container.
VolumeMounts	Array	N/A	The information about the mounted volumes.

Parameter	Type	Example	Description
Name	String	test-empty	The name of the volume. The name is the same as the volume you selected when you purchased the container group.
SubPath	String	/usr/local/	The subdirectory of the volume. The container group can mount different directories of the same volume to different subdirectories of containers.
MountPath	String	/usr.share/	The directory to which the volume is mounted. Data under this directory is overwritten by the data on the volume .
ReadOnly	Boolean	false	Indicates whether the volume is set to the read-only mode. Default value: false.
Command	List	[/bin/sh]	The commands used to start the container. A maximum of 20 commands can be specified to start a container. Each command is a string and can be up to 256 characters in length.
Args	List	[-c date; sleep 100]	The startup parameters of the container. A maximum of 10 startup parameters can be specified to start a container.
SecurityContext	Struct	N/A	The security context of the container group.
Sysctls	Array	N/A	The system information.

Parameter	Type	Example	Description
Name	String	kernel.msgmax	The name of the variable.
Value	String	0	The value of the variable.
Resources	Struct	N/A	The resources allocated to the container.
Cpu	Float	1.0	The amount of CPU resources allocated to the container.
Memory	Float	2.0	The amount of memory resources allocated to the container.
ReadinessProbe	Struct	N/A	The readiness probe.
InitialDelaySeconds	Integer	5	The time when the check started. The initial time is when the container is started.
PeriodSeconds	Integer	1	The interval for checking the container . Default value: 10. Minimum value: 1. Unit: seconds.
SuccessThreshold	Integer	1	After the last check failed, the minimum number of consecutive times that a check must be successful before the check is declared successful. Default value: 1.
FailureThreshold	Integer	5	After the last check succeeded, the minimum number of consecutive times that a check must fail before the check is declared failed. Default value : 3.

Parameter	Type	Example	Description
TimeoutSeconds	Integer	1	The timeout period of the check. Default value: 1. Minimum value: 1. Unit: seconds.
Exec	Struct	N/A	The commands used to check the container.
Command	List	<pre>[/bin/sh -c "touch /tmp/healthy; sleep 30; rm -rf /tmp/healthy; sleep 600"]</pre>	The commands used to check the container.
TcpSocket	Struct	N/A	The TCP socket method used to check the container.
Port	Integer	8080	The port for the TCP socket method.
HttpGet	Struct	N/A	The HTTP GET method used to check the container.
Scheme	String	HTTP	The scheme used for connecting to the host. Valid values: HTTP and HTTPS.
Path	String	/usr/local/	The path to the HTTP GET method.
Port	Integer	80	The port for the HTTP GET method.
LivenessProbe	Struct	N/A	The liveness probe of the container.
InitialDelaySeconds	Integer	5	The time when the check started. The initial time is when the container is started.
PeriodSeconds	Integer	3	The interval for checking the container . Default value: 10. Minimum value: 1. Unit: seconds.

Parameter	Type	Example	Description
SuccessThreshold	Integer	3	After the last check failed, the minimum number of consecutive times that a check must be successful before the check is declared successful. Default value: 1. Currently , the value must be 1.
FailureThreshold	Integer	5	After the last check succeeded, the minimum number of consecutive times that a check must fail before the check is declared failed. Default value : 3.
TimeoutSeconds	Integer	1	The timeout period of the check. Default value: 1. Minimum value: 1. Unit: seconds.
Exec	Struct	N/A	The commands used to check the container.
Command	List	<code>[/bin/sh -c "touch /tmp/healthy; sleep 30; rm -rf /tmp/healthy; sleep 600"]</code>	The commands used to check the container.
TcpSocket	Struct	N/A	The TCP socket method used to check the container.
Port	Integer	8080	The port for the TCP socket method.
HttpGet	Struct	N/A	The HTTP GET method used to check the container.
Scheme	String	HTTP	The scheme used for connecting to the host. Valid values: HTTP and HTTPS.

Parameter	Type	Example	Description
Path	String	/usr/laocal/	The path to the HTTP GET method.
Port	Integer	80	The port for the HTTP GET method.
DnsConfig	Struct	N/A	The DNS settings.
Options	Array	N/A	The objects. Each object is a name-value pair. The value is optional.
Name	String	test-xxx	The name of the object.
Value	String	xiao	The value of the object.
NameServers	List	['1.2.3.4', '2.2.12.3']	The IP addresses of DNS servers.
Searches	List	["svc.local.kubernetes", "svc.local.kubernetes"]	The DNS search domains.
SecurityContext	Struct	N/A	The security context of the container group.
Sysctls	Array	N/A	The system information.
Name	String	kernel.msgmax	The name of the variable.
Value	String	0	The value of the variable.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=ExportContainerGroupTemplate
&ContainerGroupId=eci-bp17da5olmkuagfrzurh
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<Template>
  <SecurityGroupId>sg-bp118knl07ymorgzfhyw</SecurityGroupId>
  <Spec>
```

```

<RestartPolicy>Always</RestartPolicy>
<Containers>
  <Name>test</Name>
  <ImagePullPolicy>IfNotPresent</ImagePullPolicy>
  <ReadinessProbe>
    <Exec/>
    <TcpSocket/>
    <HttpGet/>
  </ReadinessProbe>
  <Image>busybox</Image>
  <SecurityContext/>
  <LivenessProbe>
    <Exec/>
    <TcpSocket/>
    <HttpGet/>
  </LivenessProbe>
  <Resources>
    <Memory>2</Memory>
    <Cpu>1</Cpu>
  </Resources>
</Containers>
<DnsPolicy>ClusterFirst</DnsPolicy>
</Spec>
<RegionId>cn-hangzhou</RegionId>
<ResourceGroupId>rg-acfm3us3oddykq</ResourceGroupId>
<ZoneId>cn-hangzhou-h</ZoneId>
<ContainerGroupName>test</ContainerGroupName>
<VSwitchId>vsw-bp1jrgfqy54kg5hcf8bc</VSwitchId>
<Resources>
  <Cpu>1</Cpu>
  <Memory>2</Memory>
</Resources>
</Template>
<RequestId>CADE4B4A-15EA-4DB1-BCE2-23CE4F59823F</RequestId>

```

JSON format

```

{
  "Template": {
    "SecurityGroupId": "sg-bp118knl07ymorgzfyw",
    "Spec": {
      "RestartPolicy": "Always",
      "Containers": [
        {
          "Name": "test",
          "ImagePullPolicy": "IfNotPresent",
          "ReadinessProbe": {
            "Exec": {},
            "TcpSocket": {},
            "HttpGet": {}
          },
          "Image": "busybox",
          "SecurityContext": {},
          "LivenessProbe": {
            "Exec": {},
            "TcpSocket": {},
            "HttpGet": {}
          },
          "Resources": {
            "Memory": 2.0,
            "Cpu": 1.0
          }
        }
      ]
    }
  }
}

```

```
    ],
    "InitContainers": [],
    "DnsPolicy": "ClusterFirst"
  },
  "RegionId": "cn-hangzhou",
  "ResourceGroupId": "rg-acfm3us3oddylkq",
  "ZoneId": "cn-hangzhou-h",
  "ContainerGroupName": "test",
  "VSwitchId": "vsw-bp1jrgfqy54kg5hcf8bc",
  "Resources": {
    "Cpu": 1.0,
    "Memory": 2.0
  }
},
"RequestId": "CADE4B4A-15EA-4DB1-BCE2-23CE4F59823F"
}
```

7 Image caches

7.1 CreateImageCache

Creates an image cache.

Description

Version: 2018-08-08

SDK version: Java 1.0.10 or later and Python 1.0.7 or later

Limits

1. A maximum of 20 image caches can be created under each account. You need to delete the caches that you no longer use in time. By default, the cache that fails to be created can only be retained for one day.
2. You need to estimate the total size of images to be cached. If the total size exceeds the specified cache size, the image cache will fail to be created.
3. Each time you create an image cache, a container group will be created automatically. After the image cache is created, the container group must be deleted in time to stop being billed. You must keep the group when you create an image cache. Otherwise, the cache will fail to be created.
4. To stop creating the image cache when certain image issues occur, delete the image caches returned. You can also stop creating the image cache by deleting the corresponding container group job. However, it is not a recommended method.

Note: Each image cache corresponds to one snapshot. Keep the snapshot for an image cache. If you delete the snapshot, the image cache cannot work properly.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	CreateImageCache	The operation that you want to perform. Set the value to CreateImageCache.
RegionId	String	Yes	cn-hangzhou	The region ID of the image cache. Specify the same region as the container group.
ImageCacheName	String	Yes	test-cache	The name of the image cache.
Image.N	RepeatList	Yes	registry-vpc.cn-beijing.aliyuncs.com/eci_open/busybox:1.3	The images to be cached.
SecurityGroupId	String	Yes	sg-uf66jeqopgqa9hdn2***	The ID of the security group. You do not need to specify the same security group as the container group.
VSwitchId	String	Yes	vsw-uf6h3rbwbm90urjwav***	The ID of the VSwitch. You do not need to specify the same VSwitch as the container group.
ZoneId	String	No	cn-hangzhou-g	N/A
ImageRegistryCredential.N.Server	String	No	registry-vpc.cn-shanghai.aliyuncs.com	The image repository address without the http:// or https:// prefix.
ImageRegistryCredential.N.UserName	String	No	username	The username used to log on to the image repository.
ImageRegistryCredential.N.Password	String	No	password	The password used to log on to the image repository.

Parameter	Type	Required	Example	Description
EipInstanceId	String	No	eip-xxx	The instance ID of the Elastic IP Address (EIP). If you want to pull images from the Internet, you must specify an EIP to make sure that the container group can access the Internet. You can also configure the network address translation (NAT) gateway. We recommend that you configure the NAT gateway for the Internet access.
ImageCache Size	Integer	No	15	The size of the image cache. Default value: 20. Unit: GiB.
RetentionDays	Integer	No	7	The retention days of the image cache. Once the image cache expires, it will be cleared. By default, the image cache never expires. Note: The image cache that fails to be created is retained for only one day.
ResourceGroupID	String	No	rg-aekzh43v *****	The ID of the resource group.

Parameter	Type	Required	Example	Description
ClientToken	String	No	123e4567-xxx-xxx-xxxx-42665544xxxx	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see #unique_30

Response parameters

Parameter	Type	Example	Description
RequestId	String	FC5F8BF8-4546-4E42-B156-881DB1607FFC	The unique ID of the request.
ImageCacheId	String	imc-2zebxkiifuyzzlhl1***	The ID of the image cache.
ContainerGroupJobId	String	eci-2zebxkiifuyzzlhl1***	The ID of the container group job that is used to create the image cache.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=CreateImageCache
&RegionId=cn-hangzhou
&ImageCacheName=test-cache
&Image.1=registry-vpc.cn-beijing.aliyuncs.com/eci_open/busybox:1.3
&SecurityGroupId=sg-uf66jeqopgqa9hdn2***
&VSwitchId=vsw-uf6h3rbwbm90urjwaw***
&<Common request parameters>
```

Sample success responses

JSON format

```
{
  "ImageCacheId": "imc-2zebxkiifuyzzlhl1***",
```

```
"RequestId": "FC5F8BF8-4546-4E42-B156-881DB1607FFC",
"ContainerGroupId": "eci-2zebxkiifuyzzlhl1***"
}
```

XML format

```
<ImageCacheId>imc-2zebxkiifuyzzlhl1***</ImageCacheId>
<RequestId>FC5F8BF8-4546-4E42-B156-881DB1607FFC</RequestId>
<ContainerGroupId>eci-2zebxkiifuyzzlhl1***</ContainerGroupId>
```

Error codes

HTTP status code	Error code	Error message	Description
400	Account.Arrearage	Your account has an outstanding payment.	The error message returned because your account has an overdue payment.
400	DryRunOperation	Request validation has been passed with DryRun flag set .	The error message returned because the specified dry run passed.
400	InvalidParameter.CPU.Memory	The specified cpu and memory are not allowed	The error message returned because the CPU and memory specifications are invalid.
403	OperationDenied.NoStock	Sales of this resource are temporarily suspended in the specified region; please try again later.	The error message returned because the specified resource is insufficient. Specify another resource, region, or zone.
403	OperationDenied.VswZoneMismatch	The specified VSwitchId is not in the specified Zone.	The error message returned because the specified VSwitch is not deployed in the specified zone.
403	QuotaExceeded	%s quota exceeded.	The error message returned because the number of container groups that you have created has reached the upper limit.

HTTP status code	Error code	Error message	Description
403	Zone.NotOnSale	The specified zone is not available for purchase.	The error message returned because the specified zone is unavailable or the VSwitch of the specified Virtual Private Cloud (VPC) is unavailable in the specified zone. Specify another zone.
403	Forbidden.RiskControl	This operation has been identified as an abnormal operation and cannot be processed.	The error message returned because the operation has been identified as an anomaly and cannot be processed.
403	Forbidden.SubUser	The specified action is not available for you.	The error message returned because the current user cannot perform the specified operation.
403	Forbidden.OnlyForInvitedTest	Eci create action is only open to invited users during public beta.	The error message returned because ECI is only available to invited users during the public preview period.
400	IncorrectStatus	%s	The error message returned because the status of the specified container group is invalid.
403	OperationDenied.SecurityGroupMismatch	The specified VSwitchId and SecurityGroupId are not in the same VPC.	The error message returned because the specified VSwitch and security group are not deployed in the same VPC.
403	InvalidVSwitchId.IpNotEnough	The specified VSwitch does not have enough IP addresses.	The error message returned because the VSwitch does not have sufficient IP addresses.

HTTP status code	Error code	Error message	Description
403	Forbidden. UserBussinessStatus	This operation is not allowed, because you have overdue bills. Pay the overdue bill and try again.	The error message returned because you have overdue payments. Settle the overdue payments and try again later.
403	Forbidden. UserNotRealNameAuthentication	This operation is not allowed, because you have not passed the real-name verification.	The error message returned because you have not completed real-name verification and the specified operation is not allowed.
400	ServiceNotEnabled	%s	The error message returned because the service required to call the operation is not activated. Activate the service and try again later.
400	DiskVolume. NotSupport	The disk volume is not supported.	The error message returned because the disk as a volume is not supported . If the problem persists , contact Alibaba Cloud customer service.
403	InvalidUser. PassRoleForbidden	The RAM user is not authorized to assume a RAM role.	The error message returned because RAM users do not have the permission to assume the RAM role.
400	RamRole. NotSupport	The RAM role is not supported.	The error message returned because the specified RAM role is not supported.
400	ImageCache. IncorrectStatus	%s	The error message returned because the status of the specified image cache is invalid.

HTTP status code	Error code	Error message	Description
400	ImageCacheNotSupport	Image cache is not available for all users. If you want to enable this function, contact us.	The error message returned because the image cache feature is not available to all users. If you need to use this feature, contact Alibaba Cloud customer service.

**Note:**

For more information about how to create a container group by using an image cache, see [.#unique_32](#)

7.2 DescribeImageCaches

Queries information about image caches.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
RegionId	String	Yes	cn-beijing	The region ID of the image cache.
Action	String	No	DescribeImageCaches	The operation that you want to perform. Set the value to DescribeImageCaches.
Image	String	No	registry-vpc.cn-beijing.aliyuncs.com/eci_open/busybox:1.3	The name of the image. You can use the image name to query the image caches.
ImageCacheId	String	No	imc-2zebxiifu yzzlhl199f	The ID of the image cache.

Parameter	Type	Required	Example	Description
ImageCacheName	String	No	liu-test-cache2	The name of the image cache.
SnapshotId	String	No	s-2zec5oj8e1 yhxiytkfrr	The ID of the snapshot.

Response parameters

Parameter	Type	Example	Description
ImageCaches	Array	N/A	The image caches returned. A maximum of 20 records can be returned for a query.
ContainerGroupId	String	eci-bp18oq3m15 prd9jbcznm	The ID of the container group.
CreationTime	String	2019-11-10T10:21:13Z	The time when the image cache was created.
Events	Array	N/A	The events returned.
Count	Integer	1	The number of returned events.
FirstTimestamp	String	2019-11-12T14:52:56Z	The beginning of the time range to query.
LastTimestamp	String	2019-11-12T14:52:56Z	The end of the time range to query.
Message	String	Success pull image nginx	The message of the event.
Name	String	nginx	The name of the event.
Type	String	Normal	The type of the event.
ExpireDate	String	2019-11-10T09:00:48Z	The time when the image cache expires.
ImageCacheId	String	imc-2zebxiifu yzzlhl199f	The ID of the image cache.

Parameter	Type	Example	Description
ImageCache Name	String	liu-test-cache1	The name of the image cache.
Images	List	registry-vpc.cn-beijing.aliyuncs.com/eci_open/busybox:1.3	The images in the image cache.
Progress	String	100%	The progress of creating the image cache.
SnapshotId	String	s-2zec5oj8e1yhxijtkfrr	The ID of the snapshot.
Status	String	Ready	The status of the image cache.
RequestId	String	B34CDB47-2F2B-41F5-B6A2-9DE802C22C83	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeImageCaches
&RegionId=cn-beijing
&<Common request parameters>
```

Sample success responses

XML format

```
<ImageCaches>
  <CreationTime>2019-09-19T09:12:52Z</CreationTime>
  <Status>Failed</Status>
  <ContainerGroupId>eci-uf6amgvixmldxely9bn8</ContainerGroupId>
  <ImageCacheId>imc-uf6amgvixmldxely9bn8</ImageCacheId>
  <ImageCacheName>liu-test-cache</ImageCacheName>
  <SnapshotId/>
  <ExpireDateTime/>
  <Images>registry-vpc.cn-beijing.aliyuncs.com/eci_open/centos:7</Images>
  <Images>registry-vpc.cn-beijing.aliyuncs.com/eci_open/jenkins:2.60.3</Images>
  <Images>registry-vpc.cn-beijing.aliyuncs.com/liumi/redis:1.0</Images>
  <Progress>0%</Progress>
</ImageCaches>
<ImageCaches>
  <CreationTime>2019-09-18T12:39:57Z</CreationTime>
  <Status>Ready</Status>
  <ContainerGroupId>eci-uf69bpjhcmcot7kjkj9d</ContainerGroupId>
  <ImageCacheId>mc-uf69bpjhcmcot7kjkj9d</ImageCacheId>
  <ImageCacheName>liu-test-cache</ImageCacheName>
```

```

<SnapshotId>s-uf60qp141knaik8ps6ra</SnapshotId>
<ExpireDateTime/>
<Images>registry-vpc.cn-shanghai.aliyuncs.com/eci_open/centos:7</Images>
<Images>registry-vpc.cn-shanghai.aliyuncs.com/eci_open/jenkins:2.60.3</Images>
<Images>registry-vpc.cn-shanghai.aliyuncs.com/liumi/redis:1.0</Images>
<Progress>100%</Progress>
</ImageCaches>
<ImageCaches>
  <CreationTime>2019-09-19T01:56:33Z</CreationTime>
  <Status>Failed</Status>
  <ContainerGroupId>eci-uf6csmmw6sf9zp9lnhu5</ContainerGroupId>
  <ImageCacheId>mc-uf6csmmw6sf9zp9lnhu5</ImageCacheId>
  <ImageCacheName>liu-test-cache</ImageCacheName>
  <SnapshotId/>
  <ExpireDateTime/>
  <Images>registry-vpc.cn-shanghai.aliyuncs.com/eci_open/centos:7</Images>
  <Images>registry-vpc.cn-shanghai.aliyuncs.com/eci_open/jenkins:2.60.3</Images>
  <Images>registry-vpc.cn-shanghai.aliyuncs.com/liumi/redis:1.0</Images>
  <Progress>0%</Progress>
</ImageCaches>
<RequestId>C09C4B30-6EB3-4621-9F24-7267D753E928</RequestId>

```

JSON format

```

{
  "ImageCaches": [
    {
      "CreationTime": "2019-09-19T09:12:52Z",
      "ContainerGroupId": "eci-uf6amgvixmldxely9bn8",
      "Status": "Failed",
      "ImageCacheId": "imc-uf6amgvixmldxely9bn8",
      "ImageCacheName": "liu-test-cache",
      "SnapshotId": "",
      "Events": [],
      "Images": [
        "registry-vpc.cn-beijing.aliyuncs.com/eci_open/centos:7",
        "registry-vpc.cn-beijing.aliyuncs.com/eci_open/jenkins:2.60.3",
        "registry-vpc.cn-beijing.aliyuncs.com/liumi/redis:1.0"
      ],
      "ExpireDateTime": "",
      "Progress": "0%"
    },
    {
      "CreationTime": "2019-09-18T12:39:57Z",
      "ContainerGroupId": "eci-uf69bpjhcmcot7kjkj9d",
      "Status": "Ready",
      "ImageCacheId": "mc-uf69bpjhcmcot7kjkj9d",
      "ImageCacheName": "liu-test-cache",
      "SnapshotId": "s-uf60qp141knaik8ps6ra",
      "Events": [],
      "Images": [
        "registry-vpc.cn-shanghai.aliyuncs.com/eci_open/centos:7",
        "registry-vpc.cn-shanghai.aliyuncs.com/eci_open/jenkins:2.60.3",
        "registry-vpc.cn-shanghai.aliyuncs.com/liumi/redis:1.0"
      ],
      "ExpireDateTime": "",
      "Progress": "100%"
    },
    {
      "CreationTime": "2019-09-19T01:56:33Z",
      "ContainerGroupId": "eci-uf6csmmw6sf9zp9lnhu5",
      "Status": "Failed",
      "ImageCacheId": "mc-uf6csmmw6sf9zp9lnhu5",

```



```

"ImageCacheName": "liu-test-cache",
"SnapshotId": "",
"Events": [],
"Images": [
  "registry-vpc.cn-shanghai.aliyuncs.com/eci_open/centos:7",
  "registry-vpc.cn-shanghai.aliyuncs.com/eci_open/jenkins:2.60.3",
  "registry-vpc.cn-shanghai.aliyuncs.com/liumi/redis:1.0"
],
"ExpireDateTime": "",
"Progress": "0%"
}
],
"RequestId": "C09C4B30-6EB3-4621-9F24-7267D753E928"
}

```

Error codes

HTTP status code	Error code	Error message	Description
400	Account.Arrearage	Your account has an outstanding payment.	The error message returned because your account has an overdue payment.
400	DryRunOperation	Request validation has been passed with DryRun flag set .	The error message returned because the specified dry run passed.
403	Forbidden.SubUser	The specified action is not available for you.	The error message returned because the current user cannot perform the specified operation.
403	Forbidden.UserBussinessStatus	This operation is not allowed, because you have overdue bills. Pay the overdue bill and try again.	The error message returned because you have overdue payments. Settle the overdue payments and try again later.
403	Forbidden.UserNotRealNameAuthentication	This operation is not allowed, because you have not passed the real-name verification.	The error message returned because you have not completed real-name verification and the specified operation is not allowed.

HTTP status code	Error code	Error message	Description
400	ServiceNotEnabled	%s	The error message returned because the service required to call the operation is not activated. Activate the service and try again later.
403	NoPermission	The RAM role does not belong to ECS.	The error message returned because the RAM role does not belong to ECS.

7.3 DeleteImageCache

Deletes an image cache.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
ImageCacheId	String	Yes	imc-2zebxkiifuyzzlhl199h	The ID of the image cache.
RegionId	String	Yes	cn-hangzhou	The region ID of the image cache.
Action	String	No	DeleteImageCache	The operation that you want to perform. Set the value to DeleteImageCache.

Parameter	Type	Required	Example	Description
ClientToken	String	No	123e4567-xxxx-12d3-xxxx-426655440000	The client token that is used to guarantee the idempotence of the request. You can use the client to generate the value, but you must make sure that the value is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. For more information, see #unique_30

Response parameters

Parameter	Type	Example	Description
RequestId	String	E76AF70F-8BDF-4403-B960-C4B02AFE73A8	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DeleteImageCache
&ImageCacheId=imc-2zebxkiifuyzzlhl199h
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>E76AF70F-8BDF-4403-B960-C4B02AFE73A8</RequestId>
```

JSON format

```
{
  "RequestId": "E76AF70F-8BDF-4403-B960-C4B02AFE73A8"
}
```

Error codes

8 Monitoring and logs

8.1 DescribeContainerGroupMetric

Queries the monitoring data of a container group.

Description

- Currently, a maximum of 50 monitoring data entries can be returned. If the number of monitoring data entries exceeds the upper limit, an error message is returned.
- Currently, you can only query the monitoring data generated in the last 5 minutes or 5 minutes ago. If the time range to query starts from 5 minutes ago and ends in the past 5 minutes, only the monitoring data generated 5 minutes ago is returned.
- Currently, you can only query the monitoring data of a container group that was created after 15:00 on April 3, 2019.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	No	DescribeContainerGroupMetric	The operation that you want to perform. Set the value to DescribeContainerGroupMetric .
ContainerGroupID	String	Yes	eci-bp17da5olmkuagfrzurh	The ID of the container group.
RegionID	String	Yes	cn-hangzhou	The region ID of the container group.

Parameter	Type	Required	Example	Description
StartTime	String	No	2019-03-12T01:00:00.000Z	<p>The beginning of the time range to query. The default value is the current time.</p> <ul style="list-style-type: none">The beginning of the time range must be a time point in the past 30 days. To query the data from 09:00 on March 12, 2019 in UTC+8, you can set the parameter to the following value: 2019-03-12T09:00:00.000+08:00 or 2019-03-12T01:00:00.000Z <p>The time must be a string. Specify the time in the RFC 3339 standard.</p>
EndTime	String	No	2019-09-12T01:00:00.000Z	<p>The end of the time range to query. The default value is the current time. The time must be a string. Specify the time in the RFC 3339 standard.</p>

Parameter	Type	Required	Example	Description
Period	String	No	15	The aggregation period. Valid values: 15, 30, 60, and 600. Default value: 60. Unit: seconds . Assume that both StartTime and EndTime are not specified . The system returns the data generated in the last 5 minutes and the default aggregation period is 15s. In this case, the aggregation period specified by you does not take effect.

Response parameters

Parameter	Type	Example	Description
RequestId	String	D81A4A13-6DCC-4579-AC62-90A6C3EC7BBC	The unique ID of the request.
ContainerGroupId	String	eci-bp1dqpye03ke5s6p2ijc	The ID of the container group.
Records	Array	N/A	The detailed monitoring data.
Timestamp	String	2019-03-29T10:38:50.734+08:00	The time when the monitoring data entry was collected.
Containers	Array	N/A	The information about the containers.
Name	String	u1	The name of the container.
CPU	Struct	N/A	The information about the CPU resources.
UsageNanoCores	Long	0	The number of used vCPUs on the node during the aggregation period.

Parameter	Type	Example	Description
UsageCoreNanoSeconds	Long	40876694	The usage duration of vCPUs on the node. Unit: seconds.
Load	Long	0	The load on the vCPUs.
Limit	Long	1024	The maximum number of allocated vCPUs.
Memory	Struct	N/A	The information about the memory resources.
AvailableBytes	Long	4285091840	The size of available memory. Unit: bytes.
UsageBytes	Long	9289728	The size of used memory. Unit: bytes.
Cache	Long	9289728	The size of the cache.
WorkingSet	Long	9289728	The virtual set size (VSS) of the consumed physical memory.
Rss	Long	9289728	The resident set size (RSS) of the used physical memory.
CPU	Struct	N/A	The information about the CPU resources.
UsageNanoCores	Long	0	The number of used vCPUs on the node during the aggregation period.
UsageCoreNanoSeconds	Long	40876694	The usage duration of vCPUs on the node. Unit: seconds.
Load	Long	0	The load on the vCPUs.
Limit	Long	1024	The maximum number of allocated vCPUs.

Parameter	Type	Example	Description
Memory	Struct	N/A	The information about the memory resources.
AvailableBytes	Long	4285091840	The size of available memory. Unit: bytes.
UsageBytes	Long	9289728	The size of used memory. Unit: bytes.
Cache	Long	9289728	The size of the cache.
WorkingSet	Long	9289728	The VSS of the consumed physical memory.
Rss	Long	9289728	The RSS of the used physical memory.
Network	Struct	N/A	The information about the network.
Interfaces	Array	N/A	The information about the network interface controller (NIC).
TxBytes	Long	426	The number of bytes sent by the NIC.
RxBytes	Long	0	The number of bytes received by the NIC.
TxErrors	Long	0	The number of bytes that the NIC failed to send.
RxErrors	Long	0	The number of bytes that the NIC failed to receive.
Name	String	eth0	The name of the NIC.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeContainerGroupMetric
&ContainerGroupId=eci-123456
&RegionId=cn-hangzhou
```


<Common request parameters>

Sample success responses

XML format

```

<DescribeContainerGroupMetricResponse>
  <ContainerGroupId>eci-bp1dqpye03ke5s6p2ijc</ContainerGroupId>
  <Records>
    <Containers>
      <Name>redis-liu</Name>
      <Memory>
        <AvailableBytes>2145820672</AvailableBytes>
        <UsageBytes>1662976</UsageBytes>
      </Memory>
      <CPU>
        <Load>0</Load>
        <UsageNanoCores>0</UsageNanoCores>
        <UsageCoreNanoSeconds>40876694</UsageCoreNanoSeconds>
        <Limit>1024</Limit>
      </CPU>
    </Containers>
    <Containers>
      <Name>nginx-liu</Name>
      <Memory>
        <AvailableBytes>2145325056</AvailableBytes>
        <UsageBytes>2166784</UsageBytes>
      </Memory>
      <CPU>
        <Load>0</Load>
        <UsageNanoCores>0</UsageNanoCores>
        <UsageCoreNanoSeconds>43183279</UsageCoreNanoSeconds>
        <Limit>1024</Limit>
      </CPU>
    </Containers>
    <Memory>
      <AvailableBytes>4285091840</AvailableBytes>
      <UsageBytes>9289728</UsageBytes>
    </Memory>
    <Network>
      <Interfaces>
        <Name>eth0</Name>
        <TxBytes>426</TxBytes>
        <RxErrors>0</RxErrors>
        <TxErrors>0</TxErrors>
        <RxBytes>0</RxBytes>
      </Interfaces>
    </Network>
    <CPU>
      <Load>0</Load>
      <UsageNanoCores>7735803</UsageNanoCores>
      <UsageCoreNanoSeconds>122380547</UsageCoreNanoSeconds>
      <Limit>2048</Limit>
    </CPU>
    <Timestamp>2019-03-29T10:38:50.734+08:00</Timestamp>
  </Records>
  <Records>
    <Containers>
      <Name>nginx-liu</Name>
      <Memory>
        <AvailableBytes>2145488896</AvailableBytes>
        <UsageBytes>2021376</UsageBytes>

```

```

</Memory>
<CPU>
  <Load>0</Load>
  <UsageNanoCores>0</UsageNanoCores>
  <UsageCoreNanoSeconds>43183279</UsageCoreNanoSeconds>
  <Limit>1024</Limit>
</CPU>
</Containers>
<Containers>
  <Name>redis-liu</Name>
  <Memory>
    <AvailableBytes>2145910784</AvailableBytes>
    <UsageBytes>1572864</UsageBytes>
  </Memory>
  <CPU>
    <Load>0</Load>
    <UsageNanoCores>287628</UsageNanoCores>
    <UsageCoreNanoSeconds>44680652</UsageCoreNanoSeconds>
    <Limit>1024</Limit>
  </CPU>
</Containers>
<Memory></Memory>
<Network>
  <Interfaces>
    <Name>eth0</Name>
    <TxBytes>143562</TxBytes>
    <RxErrors>0</RxErrors>
    <TxErrors>0</TxErrors>
    <RxBytes>20410229</RxBytes>
  </Interfaces>
</Network>
<CPU></CPU>
<Timestamp>2019-03-29T10:39:05.734+08:00</Timestamp>
</Records>
<RequestId>D81A4A13-6DCC-4579-AC62-90A6C3EC7BBC</RequestId>
</DescribeContainerGroupMetricResponse>

```

JSON format

```

{
  "ContainerGroupId": "eci-bp1dqpye03ke5s6p2ijc",
  "Records": [
    {
      "Containers": [
        {
          "Name": "redis-liu",
          "Memory": {
            "AvailableBytes": 2145820672,
            "UsageBytes": 1662976
          },
          "CPU": {
            "Load": 0,
            "UsageNanoCores": 0,
            "UsageCoreNanoSeconds": 40876694,
            "Limit": 1024
          }
        },
        {
          "Name": "nginx-liu",
          "Memory": {
            "AvailableBytes": 2145325056,
            "UsageBytes": 2166784
          }
        }
      ]
    }
  ]
}

```

```
    "CPU": {
      "Load": 0,
      "UsageNanoCores": 0,
      "UsageCoreNanoSeconds": 43183279,
      "Limit": 1024
    }
  ],
  "Memory": {
    "AvailableBytes": 4285091840,
    "UsageBytes": 9289728
  },
  "Network": {
    "Interfaces": [
      {
        "Name": "eth0",
        "TxBytes": 426,
        "RxErros": 0,
        "TxErrors": 0,
        "RxBytes": 0
      }
    ]
  },
  "CPU": {
    "Load": 0,
    "UsageNanoCores": 7735803,
    "UsageCoreNanoSeconds": 122380547,
    "Limit": 2048
  },
  "Timestamp": "2019-03-29T10:38:50.734+08:00"
},
{
  "Containers": [
    {
      "Name": "nginx-liu",
      "Memory": {
        "AvailableBytes": 2145488896,
        "UsageBytes": 2021376
      },
      "CPU": {
        "Load": 0,
        "UsageNanoCores": 0,
        "UsageCoreNanoSeconds": 43183279,
        "Limit": 1024
      }
    },
    {
      "Name": "redis-liu",
      "Memory": {
        "AvailableBytes": 2145910784,
        "UsageBytes": 1572864
      },
      "CPU": {
        "Load": 0,
        "UsageNanoCores": 287628,
        "UsageCoreNanoSeconds": 44680652,
        "Limit": 1024
      }
    }
  ],
  "Memory": {},
  "Network": {
    "Interfaces": [
      {
```

```

        "Name": "eth0",
        "TxBytes": 143562,
        "RxErrors": 0,
        "TxErrors": 0,
        "RxBytes": 20410229
      }
    ]
  },
  "CPU": {},
  "Timestamp": "2019-03-29T10:39:05.734+08:00"
}
},
"RequestId": "D81A4A13-6DCC-4579-AC62-90A6C3EC7BBC"
}

```

Error codes

8.2 DescribeMultiContainerGroupMetric

Queries the monitoring data of multiple container groups at a time.

Description

- Currently, only the latest monitoring data entry of each container group is returned.
- Currently, you can only query the monitoring data of container groups that were created after 15:00 on April 3, 2019.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
ContainerGroupIds	String	Yes	['eci-xxx', 'eci-xxx']	The IDs of the container groups.
RegionId	String	Yes	cn-hangzhou	The region ID of the container groups.
Action	String	No	DescribeMultiContainerGroupMetric	The operation that you want to perform. Set the value to DescribeMultiContainerGroupMetric .

Parameter	Type	Required	Example	Description
ResourceGroupID	String	No	rg-xxx	The ID of the resource group.
MetricType	String	No	summary	The type of the monitoring data.

Response parameters

Parameter	Type	Example	Description
MonitorDatas	String	N/A	The monitoring data of the container group.
ContainerGroupID	String	eci-xxx	The ID of the container group.
Records	Array	N/A	The detailed monitoring data.
CPU	N/A	N/A	The information about the CPU resources.
Limit	Long	1024	The maximum number of allocated vCPUs.
Load	Long	0	The load on the vCPUs.
UsageCoreNanoSeconds	Long	40876694	The usage duration of vCPUs on the node. Unit: seconds.
UsageNanoCores	Long	0	The number of used vCPUs on the node during the aggregation period.
Containers	Array	N/A	The information about the containers.
CPU	N/A	N/A	The information about the CPU resources.
Limit	Long	1024	The maximum number of allocated vCPUs.
Load	Long	0	The load on the vCPUs.

Parameter	Type	Example	Description
UsageCoreNanoSeconds	Long	40876694	The usage duration of vCPUs on the node. Unit: seconds.
UsageNanoCores	Long	0	The number of used vCPUs on the node during the aggregation period.
Memory	N/A	N/A	The information about the memory resources.
AvailableBytes	Long	4285091840	The size of available memory. Unit: bytes.
Cache	Long	9289728	The size of the cache.
Rss	Long	9289728	The resident set size (RSS) of the used physical memory.
UsageBytes	Long	9289728	The size of used memory. Unit: bytes.
WorkingSet	Long	9289728	The virtual set size (VSS) of the consumed physical memory.
Name	String	u1	The name of the container.
Memory	N/A	N/A	The information about the memory resources.
AvailableBytes	Long	4285091840	The size of available memory. Unit: bytes.
Cache	Long	9289728	The size of the cache.
Rss	Long	9289728	The RSS of the used physical memory.
UsageBytes	Long	9289728	The size of used memory. Unit: bytes.
WorkingSet	Long	9289728	The VSS of the consumed physical memory.

Parameter	Type	Example	Description
Network	N/A	N/A	The information about the network.
Interfaces	Array	N/A	The information about the network interface controller (NIC).
Name	String	eth0	The name of the NIC.
RxBytes	Long	0	The number of bytes received by the NIC.
RxErrors	Long	0	The number of bytes that the NIC failed to receive.
TxBytes	Long	426	The number of bytes sent by the NIC.
TxErrors	Long	0	The number of bytes that the NIC failed to send.
Timestamp	String	2019-03-29T10:38:50.734+08:00	The time when the monitoring data entry was collected.
RequestId	String	D81A4A13-6DCC-4579-AC62-90A6C3EC7BBC	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeMultiContainerGroupMetric
&ContainerGroupIds=["eci-bp1dqpye03ke5s6p2ijc", "eci-bp1dqpye03ke5u5q6kih"]
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeMultiContainerGroupMetricResponse>
  <MonitorDatas>
    <ContainerGroupId>eci-bp13hu581cgkmwd377gc</ContainerGroupId>
    <Records>
      <Memory>
        <Rss>0</Rss>
```

```

    <WorkingSet>3284992</WorkingSet>
    <AvailableBytes>2144198656</AvailableBytes>
    <Cache>0</Cache>
    <UsageBytes>3284992</UsageBytes>
  </Memory>
  <Network>
    <Interfaces>
      <Name>eth0</Name>
      <TxBytes>53891967</TxBytes>
      <RxErrors>0</RxErrors>
      <TxErrors>0</TxErrors>
      <RxBytes>17309162</RxBytes>
    </Interfaces>
  </Network>
  <CPU>
    <Load>0</Load>
    <UsageNanoCores>0</UsageNanoCores>
    <UsageCoreNanoSeconds>3842685323</UsageCoreNanoSeconds>
    <Limit>0</Limit>
  </CPU>
  <Timestamp/>
</Records>
</MonitorDatas>
<MonitorDatas>
  <ContainerGroupId>eci-bp13hu581cgkmwd377gd</ContainerGroupId>
  <Records>
    <Memory>
      <Rss>77824</Rss>
      <WorkingSet>3280896</WorkingSet>
      <AvailableBytes>2144202752</AvailableBytes>
      <Cache>0</Cache>
      <UsageBytes>3280896</UsageBytes>
    </Memory>
    <Network>
      <Interfaces>
        <Name>eth0</Name>
        <TxBytes>53873098</TxBytes>
        <RxErrors>0</RxErrors>
        <TxErrors>0</TxErrors>
        <RxBytes>17295698</RxBytes>
      </Interfaces>
    </Network>
    <CPU>
      <Load>0</Load>
      <UsageNanoCores>0</UsageNanoCores>
      <UsageCoreNanoSeconds>3859842001</UsageCoreNanoSeconds>
      <Limit>0</Limit>
    </CPU>
    <Timestamp/>
  </Records>
</MonitorDatas>
<RequestId>4E0E793D-3B35-40C9-9C45-D7FCB4C62359</RequestId>
</DescribeMultiContainerGroupMetricResponse>

```

JSON format

```

{
  "MonitorDatas": [
    {
      "ContainerGroupId": "eci-bp13hu581cgkmwd377gc",
      "Records": [
        {
          "Containers": [],

```



```
"Memory": {
  "Rss": 0,
  "WorkingSet": 3284992,
  "AvailableBytes": 2144198656,
  "Cache": 0,
  "UsageBytes": 3284992
},
"Network": {
  "Interfaces": [
    {
      "Name": "eth0",
      "TxBytes": 53891967,
      "RxErrors": 0,
      "TxErrors": 0,
      "RxBytes": 17309162
    }
  ]
},
"CPU": {
  "Load": 0,
  "UsageNanoCores": 0,
  "UsageCoreNanoSeconds": 3842685323,
  "Limit": 0
},
"Timestamp": ""
}
],
{
  "ContainerGroupId": "eci-bp13hu581cgkmwd377gd",
  "Records": [
    {
      "Containers": [],
      "Memory": {
        "Rss": 77824,
        "WorkingSet": 3280896,
        "AvailableBytes": 2144202752,
        "Cache": 0,
        "UsageBytes": 3280896
      },
      "Network": {
        "Interfaces": [
          {
            "Name": "eth0",
            "TxBytes": 53873098,
            "RxErrors": 0,
            "TxErrors": 0,
            "RxBytes": 17295698
          }
        ]
      },
      "CPU": {
        "Load": 0,
        "UsageNanoCores": 0,
        "UsageCoreNanoSeconds": 3859842001,
        "Limit": 0
      },
      "Timestamp": ""
    }
  ]
}
],
"RequestId": "4E0E793D-3B35-40C9-9C45-D7FCB4C62359"
```

}

Error codes

8.3 DescribeContainerLog

Queries the logs of a container.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
ContainerGroupID	String	Yes	eci-uf6fonng hi50v6nqj40l	The ID of the container group.
ContainerName	String	Yes	u1	The name of the container.
RegionId	String	Yes	cn-hangzhou	The region ID of the container group.
Action	String	No	DescribeContainerLog	The operation that you want to perform. Set the value to DescribeContainerLog .
LastTime	Boolean	No	false	Specifies whether to query logs about last termination of the container.
SinceSeconds	Integer	No	10	The time duration to query logs. Unit: seconds. Example: 10, 20, and 30.
StartTime	String	No	2018-08-02T15:00:00Z	The beginning of the time range to query. Specify the time in the RFC 3339 standard. The time must be in UTC.

Parameter	Type	Required	Example	Description
Tail	Integer	No	2000	The number of log entries to be returned. Default value: 500. Maximum value: 2000. A maximum of 1 MB of logs can be returned.

Response parameters

Parameter	Type	Example	Description
ContainerName	String	u1	The name of the container.
Content	String	{}	The log content.
RequestId	String	CA850ADA-E850-4AC8-8355-5B5990EAB7D0	The unique ID of the request.

Examples

Sample requests

```
http(s)://eci.aliyuncs.com/? Action=DescribeContainerLog
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeContainerLogResponse>
  <RequestId>CA850ADA-E850-4AC8-8355-5B5990EAB7D0</RequestId>
  <ContainerName>u1</ContainerName>
  <Content></Content>
</DescribeContainerLogResponse>
```

JSON format

```
{
  "RequestId": "CA850ADA-E850-4AC8-8355-5B5990EAB7D0",
  "ContainerName": "u1",
  "Content": ""
}
```

Error codes