

Alibaba Cloud Elastic IP Address

API Reference

Issue: 20190531

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information 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.
	This warning information 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 restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK.
<code>Courier</code> font	It is used for commands.	Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
<code>{}</code> or <code>{a b}</code>	It indicates that it is a required value, and only one item can be selected.	<code>switch {stand slave}</code>

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1 API overview

The following are available Elastic IP Address (EIP) APIs. The endpoint of EIP is `vpc.aliyuncs.com`. For more information on how to use EIP APIs, see the VPC API documentation.

API	Description
AllocateEipAddress	Create an EIP.
AssociateEipAddress	Associate an EIP with a cloud product instance in the same region.
#unique_6	Disassociate an EIP from a cloud product instance.
#unique_7	Query created EIPs in a region.
ModifyEipAddressAttribute	Modify the name, description, and peak bandwidth of an EIP.
#unique_9	Release an EIP.

2 Call APIs

Elastic IP Address (EIP) and VPC use the same service address (endpoint). When you call an EIP API, an HTTP GET request is sent to the API service address of EIP, and the system responds according to the parameters set in the request. Both the request and the response are UTF-8-encoded.

Request syntax

EIP APIs use RPC style. You can call EIP APIs by sending HTTP GET requests.

The request syntax is as follows:

```
http :// Endpoint /? Action = xx & Parameters
```

where:

- **Endpoint** : The endpoint of EIP APIs is `vpc . aliyuncs . com` .
- **Action** : the name of the action. For example, if you need to create an EIP, the action is `AllocateEipAddress`.
- **Version** : the version of the API. The version of EIP APIs is `2016 - 04 - 28` .
- **Parameters** : the request parameters. Separate multiple parameters by using ampersands (&).

Request parameters include common parameters and API-specific parameters.

Common parameters include API version and identity authentication information among other parameters. For more information, see [Common parameters](#).

The following is an example of calling `AllocateEipAddress` to create an EIP:



Note:

The following code has been edited to ease readability.

```
https :// vpc . aliyuncs . com /? Action = AllocateEi pAddress
& Format = xml
& Version = 2016 - 04 - 28
& Signature = xxxx % xxxx % 3D
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 1521552885 2396
& SignatureV ersion = 1 . 0
& AccessKeyI d = key - test
& Timestamp = 2012 - 06 - 01T12 : 00 : 00Z
```

...

API authorization

To maintain account security, we recommend that you use the Access Keys (AKs) of RAM users to call APIs. Before you call APIs using the AKs of RAM users, you need to grant permissions to the RAM users by attaching corresponding policies to them.

For a list of EIP resources and interfaces that can be authorized, see [RAM authentication](#).

API signature

Authentication is required by the EIP service for each API call, which is provided by the inclusion of signature information in the request.

EIP uses an AccessKeyID and AccessKeySecret pair (that is, an AK) and symmetric encryption to authenticate the identity of the request sender. AKs are certificates that Alibaba Cloud issues to Alibaba Cloud accounts and RAM users for authentication. It is similar to a logon password. The AccessKeyID is used to identify the visitor's identity. The AccessKeySecret is the key used to encrypt the signature string. The server uses the AccessKeySecret to decrypt the signature string. The AccessKeySecret must be kept confidential.

For an RPC API, you must add the signature to the API request in the following format :

```
https://endpoint/?SignatureVersion= 1 . 0 &SignatureMethod= HMAC - SHA1
&Signature= XXXX % 3D & SignatureN once = 3ee8c1b8 - 83d3 - 44af -
a94f - 4e0axxxxxx xx
```

Take the API call of `AllocateEipAddress` as an example. If your AccessKeyID is `testid` , and your AccessKeySecret is `testsecret` , then, the URL in the signature is as follows:

```
http :// vpc . aliyuncs . com /? Action = AllocateEi pAddress
& Timestamp = 2016 - 05 - 23T12 : 46 : 24Z
& Format = XML
& AccessKeyI d = testid
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 3ee8c1b8 - 83d3 - 44af - a94f - 4e0axxxxxx xx
& Version = 2014 - 05 - 26
& SignatureV ersion = 1 . 0
```

To generate the signature, follow these steps:

1. Create the string to be signed by using the request parameter.

```
GET &% 2F & AccessKeyI d % 3Dtestid & Action % 3DAllocate
EipAddress & Format % 3DXML & SignatureM ethod % 3DHMAC - SHA1 &
SignatureN once % 3D3ee8c1b8 - 83d3 - 44af - a94f - 4e0axxxxxx xx
& SignatureV ersion % 3D1 . 0 & TimeStamp % 3D2016 - 02 - 23T12 %
253A46 % 253A24Z & Version % 3D2014 - 05 - 15
```

.

2. Calculate the HMAC value of the string.

Add an ampersand (&) after the AccessKeySecret to add the key of the HMAC value.

In this example, the key is `testsecret &`.

```
CT9X0VtwR8 6fNWS ***** juE =
```

3. Add the signature to the request parameter.

```
http :// vpc . aliyuncs . com /? Action = AllocateEi pAddress
& Timestamp = 2016 - 05 - 23T12 : 46 : 24Z
& Format = XML
& AccessKeyI d = testid
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 3ee8c1b8 - 83d3 - 44af - a94f - 4e0axxxxxx xx

& Version = 2014 - 05 - 26
& SignatureV ersion = 1 . 0
& Signature = XXXX % 3D
```

3 Common parameters

Common request parameters

The following table describes common request parameters used in most Alibaba Cloud APIs.

Table 3-1: Common request parameters

Parameter	Type	Required?	Description
Format	String	No	The format of the response. Valid values: JSON (default) XML
Version	String	Yes	The version of the API. It uses the date format <code>YYYY-MM-DD</code> . Valid value: 2016-04-28
AccessKeyId	String	Yes	The AccessKey ID of the user who calls the API.
Signature	String	Yes	The request signature.
SignatureMethod	String	Yes	The algorithm used to create the request signature. Valid value: HMAC-SHA1
Timestamp	String	Yes	The time at which the request is signed. It uses the format: <code>YYYY-MM-DDThh:mm:ssZ</code> . For example, 2013-01-10T12:00:00Z.
SignatureVersion	String	Yes	The signature version to use. Valid value: 1.0
SignatureNonce	String	Yes	A random number for the signature to prevent from network attacks. Different random numbers must be used for different requests.

Common response parameters

Alibaba Cloud API responses all use a unified format. A status code of the format 2xx indicates a successful call, and a status code of the 4xx or 5xx format indicates a failed call. For successful calls, returned data can be in a XML or JSON format. You can specify the format of the returned data when sending a request. The default format is XML.

A `RequestId` is returned no matter if it is successful or not.

- XML format

```
<? xml version =" 1 . 0 " encoding =" utf - 8 "? >
<!-- The root node of the result -->
< Action + Response >
    <!-- The returned result -->
    < RequestId > 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16
</ RequestId >
    <!-- The returned result -->
</ Action + Response >
```

- JSON format

```
{
  " RequestId ":" 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16
",
  /* The returned result */
}
```

4 Elastic IP Address

4.1 AllocateEipAddress

Creates an Elastic IP Address (EIP).

After you call this action, an EIP in the Available state is allocated in the specified region. EIP supports ICMP, TCP, and UDP protocols, but does not support the IGMP and SCTP protocols.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AllocateEipAddress	The name of this action. Value: AllocateEipAddress.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs. To query the region ID, call DescribeRegions .

Parameter	Type	Required?	Example value	Description
AutoPay	Boolean	No	false	Indicates whether to pay automatically. Valid values: · false: Do not enable automatic payment. You need to go to the order center to complete the payment after an order is generated. · true: Enable automatic payment. The order is paid automatically.  Note: This parameter is required when the value of the InstanceChargeType parameter is PrePaid.
Bandwidth	String	No	5	The peak bandwidth in Mbps of the EIP.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-001xxxxxxxxx	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 64 ASCII characters in length.
ISP	String	No	BGP	The type of the line. Default value: BGP.  Note: This field is required if you are a financial cloud user. In this case, select the Hangzhou region. Valid value: BGP_FinanceCloud.

Parameter	Type	Required ?	Example value	Description
InstanceChargeType	String	No	PostPaid	The billing method of the EIP. Valid values: PostPaid (default): Pay-As-You-Go.
InternetChargeType	String	No	PayByBandwidth	The billing method of the EIP. Valid values: PayByTraffic: The EIP is billed based on the traffic.
Netmode	String	No	Public	The network type. Default value: Public.
Period	Integer	No	10	The validity period of subscription. Valid values: - Monthly subscription value range: 1 to 9. - Yearly subscription value range: 1 to 3. This parameter is required if the InstanceChargeType value is PrePaid.
PricingCycle	String	No	Month	The billing cycle of purchase. Valid values: - Month(default): billing on a monthly basis - Year: billing on a yearly basis  Note: This parameter is required if the InstanceChargeType value is PrePaid.

Parameter	Type	Required?	Example value	Description
ResourceGroupId	String	No	rg-acfmxazxxx xxxxx	The ID of the enterprise resource group.

Response parameters

Parameter	Type	Example value	Description
EipAddress	String	12.xx.xx.78	The allocated EIP.
AllocationId	String	eip-25877c70xx xxxxxx	The ID of the EIP.
OrderId	Long	10	The order number. This parameter is returned only when the Subscription billing method is selected.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.
ResourceGroupId	String	rg-acfmxazxxx xxxxx	The ID of the enterprise resource group.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AllocateEipAddress
&RegionId=cn-beijing
&CommonParameters
```

Response example

XML format

```
<AllocateEipAddressResponse>
  <AllocationId>eip-25877c70xx xxxxxx</AllocationId>
  <EipAddress>123.xx.xx.206</EipAddress>
  <RequestId>B6B9F518-60F8-4D81-9242-1207B356754D</RequestId>
```

```
</ AllocateEipAddressResponse >
```

JSON format

```
{
  "RequestId ":" B6B9F518 - 60F8 - 4D81 - 9242 - 1207B35675 4D ",
  "EipAddress ":" 123 . xx . xx . 206 ",
  "Allocation Id ":" eip - 25877c70xx xxxxxx "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.
400	QuotaExceeded.Eip	Elastic IP address quota exceeded	The number of EIPs has exceeded the limit. If you need more EIPs, open a ticket to increase the limit . We recommend that you use NAT Gateway.
400	InvalidParameter	Specified value of "InternetChargeType" is not valid	The value of the InternetChargeType parameter is invalid.
400	InvalidParameter	Specified value of "Bandwidth" is not valid.	The specified bandwidth value is invalid.
400	QuotaExceeded.Eip	Elastic IP address quota exceeded.	The quota of EIPs has been reached. To increase the quota, open a ticket . Alternatively, we recommend that you use NAT Gateway to obtain more IP addresses.
400	ReserveIpFail	Reserve eip failed.	The operation failed to reserve the EIP.
400	InvalidRegion.NotSupport	The specified region does not support.	The specified region does not support this operation .

[See common error codes](#)

4.2 AssociateEipAddress

Associates an EIP with a cloud product instance in the same region.

Note the following when you call this action:

- You can associate an EIP with a VPC ECS instance, a VPC SLB instance, or a NAT Gateway in the same region.
- To associate an EIP with a NAT Gateway, make sure that there was no NAT bandwidth package under your account before January 26, 2018. Otherwise open a ticket to associate the EIP with the NAT Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AssociateEipAddress	The name of this action. Value: AssociateEipAddress.
AllocationId	String	Yes	eip-2zeerraiwb7ujxxxxxxxxx	The ID of the EIP.
InstanceId	String	Yes	i-2zebb08phyCZxxxxxxxxx	The ID of the instance to associate.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.
InstanceRegionId	String	No	cn-hangzhou	The ID of the region to which the associated instance belongs.

Parameter	Type	Required?	Example value	Description
InstanceType	String	No	EcsInstance	The type of the cloud product instance to associate. Valid values: Nat SlbInstance EcsInstance NetworkInterface.
Mode	String	No	NAT	The mode of associating. Valid values: NAT MULTI_BINDED.
PrivateIpAddress	String	No	192.xx.xx.4	An IP address in the CIDR block of the VSwitch. If you leave the option empty, the system allocates a private IP address according to the VPC ID and VSwitch ID.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	C0FD0EED-F90D-4479-803D-DD62335357E5	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = AssociateEipAddress
& Allocation Id = eip - 2zeerraiwb 7ujxxxxxxxx x
& InstanceId = i - 2zebb08phy czxxxxxxxx
&< CommonParameters >
```

Response example

XML format

```
< AssociateEipAddressResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
```

```
</ AssociateElasticIpAddressResponse >
```

JSON format

```
{
  "RequestId": "0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidAssociation. Duplicated	Specified instance already is associated.	This instance is already associated with an EIP or a Global Acceleration instance. You must delete this instance before you can associate it with a different EIP or Global Acceleration instance.
400	OperationDenied	Specified instance is not in VPC.	The specified instance does not exist in the VPC.
400	InvalidParameter. Mismatch	Specified elastic IP address and ECS instance are not in the same region.	The specified EIP and ECS instance are not in the same region.
400	IncorrectElasticIpStatus	Current elastic IP status does not support this operation	The current status of the specified EIP address does not support this operation.
404	InvalidInstanceId. NotFound	Specified instance does not exist.	The specified instance does not exist.
400	IncorrectInstanceStatus	Current instance status does not support this operation.	The current instance status does not support this operation.
400	InvalidInstanceType. ValueNotSupported	The specified value of InstanceType is not supported.	The value of the InstanceType parameter is invalid.

HTTP status code	Error code	Error message	Description
400	IncorrectHaVipStatus	HaVip can be operated by this action only when it's status is Available or InUse.	You can perform this operation only if the HAVIP is the Available or InUse state.
400	InvalidParameter	The specified parameter is not valid.	The specified parameter value is invalid.
400	OperationDenied	Eip of default vpc not allow this operation	The EIP of the default VPC does not support this operation.
400	Forbidden	The eip instance owner error	You need to be authorized to call the EIP. Please check that you have the appropriate permissions and try again.
400	InvalidBindingStatus	The eip binding status invalid.	The associating status of the EIP is invalid.
400	BIND_INSTANCE_HAVE_PORTMAP_OR_BIND_EIP	The instance may have portMap or already bind eip.	You must delete the existing port forwarding rule associated with the ECS instance first.
400	BIND_INSTANCE_OWNER_ERROR	Cannot operate the eip.	You cannot operate this EIP.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.
400	InvalidParams.NotFound	instance not found	The specified instance does not exist.

[See common error codes](#)

4.3 ModifyEipAddressAttribute

Modifies the name, description, and peak bandwidth of an EIP.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK example codes, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyEipAddressAttribute	The value of this action. Value: ModifyEipAddressAttribute
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the VPC that the route table belongs to is located.
Bandwidth	String	No	100	The peak bandwidth of the EIP. Unit: Mbps.
Description	String	No	Description	The description of the EIP. The description must be 2 to 256 characters in length. It must start with a letter but cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
Name	String	No	Test123	The name of the EIP. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter. It cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyEipAddressAttribute
&AllocationId=eip-25877c70xxxxxx
&Name=eip1
&<CommonParameters>
```

Response example

- XML format

```
<ModifyEipAddressAttributeResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0
</RequestId>
</ModifyEipAddressAttributeResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
```

}

Error codes

HTTP status code	Error code	Error message	Description
400	InsufficientBalance.Eip	Your account does not have enough balance.	Your account does not have a sufficient balance . Recharge your account first.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.
400	InvalidParameter	Specified value of "Bandwidth" is not supported.	The specified bandwidth value is invalid.
500	InternalServerError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found..	The specified public IP address does not exist.
400	InvalidParameter	The parameter is invalid.	The specified parameter value is invalid.
404	Forbidden.RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.

[See common error codes](#)

4.4 DescribeEipAddresses

Queries EIPs in a region.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeEipAddresses	The name of this action. Value: DescribeEipAddresses
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs. To query the region ID, call DescribeRegions.
AllocationId	String	No	eip-2zeerraiwb7ujxxxxxxxxx	The ID of the EIP.
AssociatedInstanceId	String	No	i-2zebb08phyxxxxxxxxx	The ID of the cloud resource to which the EIP is attached.

Parameter	Type	Required?	Example value	Description
AssociatedInstanceType	String	No	EcsInstance	The cloud resource to which the EIP is bound. Valid values: - EcsInstance (default): an ECS instance of the VPC network - SlbInstance: an SLB instance of the VPC network - Nat: NAT Gateway - HaVip: HAVIP instance Each ECS and SLB instance can be attached to only one EIP. However, a NAT Gateway can be attached to multiple EIPs.
ChargeType	String	No	PostPaid	The billing method of the EIP. - PostPaid: Pay-As-You-Go. - PrePaid: Subscription.
EipAddress	String	No	116.xx.xx.28	The IP address of the EIP. After it is specified, you can view the information related to the EIP.
Filter.1.Key	String	No	Filter.1.Name	The filter condition to use.
Filter.1.Value	String	No	value1	The value of the corresponding filter condition.
Filter.2.Key	String	No	Filter.2.Description	The filter condition to use.
Filter.2.Value	String	No	value2	The value of the corresponding filter condition.

Parameter	Type	Required?	Example value	Description
ISP	String	No	BGP	The service provider. In most cases, BGP data centers are used.
IncludeReservationData	Boolean	No	true	Indicates whether order data that has not taken effect is included. Default value: false.
LockReason	String	No	financial	The locking type. - Financial: locked because the bill is overdue. - Security: locked for security protection.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
ResourceGroupId	String	No	rg-acfmxazb4p xxxxxxxx	The ID of the resource group.
Status	String	No	Available	The status of the EIP. Valid values: - Associating : being attached - Unassociating : being detached - InUse : attached - Available : available

Response parameters

Parameter	Type	Example value	Description
EipAddresses	N/A	N/A	A list of EIPs.
└Allocation Id	String	eip-2zeerraiwb 7ujxxxxxxxxx	The ID of the EIP.
└Allocation Time	String	2019-04-23T01:37 :38Z	The time at which the EIP was created.
└AvailableR egions	N/A	cn-hangzhou	The ID of the region.
└Bandwidth	String	5	The peak bandwidth in Mbps of the EIP.
└ BandwidthP ackageId	String	cbwp-bp1ego3i4j 07xxxxxxxxx	The ID of the Internet Shared Bandwidth to which the EIP is added.
└ BandwidthP ackageType	String	CommonBand widthPackage	The type of the Internet Shared Bandwidth.
└ ChargeType	String	PayByTraffic	The billing method of the EIP.
└Descriptio n	String	Description	The description of the EIP.
└ EipBandwid th	String	101	The bandwidth of the EIP before it is added to or removed from Internet Shared Bandwidth
└ ExpiredTime	String	2019-04-29T02:37 :38Z	The expiration time according to ISO8601 standard. UTC time must be used. Format: YYYY-MM-DDThh:mmZ.
└ HDMonitorS tatus	String	false	Indicates whether the EIP has enabled second-level monitoring.

Parameter	Type	Example value	Description
⌞HasReservationData	String	wwedayhddrhht	The value is true only if the IncludeReservationData parameter is true and there is order data that has not taken effect.
⌞ISP	String	BGP	The service provider. Usually, BGP data centers are used.
⌞InstanceId	String	vpc-bp15zckdt37xxxxxxx	The ID of the instance to which the EIP is attached.
⌞InstanceIdRegionId	String	cn-hangzhou	The ID of the region to which the attached resource belongs.
⌞InstanceType	String	EcsInstance	The type of the attached instance.
⌞InternetChargeType	String	PayByBandwidth	The billing method of the EIP.
⌞IpAddress	String	101.xx.xx.36	The IP address of the EIP.
⌞Name	String	EIP	The name of the EIP.
⌞OperationLocks	N/A	financial	The reason that the EIP is locked. Valid values: - financial: locked because the bill is overdue - security: locked for security protection
⌞LockReason	String	financial	The reason that the EIP is locked. Valid values: financial: locked because the bill is overdue security: locked for security protection

Parameter	Type	Example value	Description
<code>RegionId</code>	String	cn-hangzhou	The ID of the region to which the EIP belongs.
<code>ReservationActiveTime</code>	String	2019-03-11T16:00:00Z	The time at which the renewal takes effect.
<code>ReservationBandwidth</code>	String	12	The renewal bandwidth.
<code>ReservationInternetChargeType</code>	String	PayByBandwidth	The payment type of renewal.
<code>ReservationOrderType</code>	String	RENEWCHANGE	The type of the renewal order. - RENEWCHANGE: renewal change - TEMP_UPGRADE: temporary upgrade - UPGRADE: upgrade
<code>ResourceGroupId</code>	String	rg-acfmxazxxx xxxxx	The ID of the resource group.
<code>Status</code>	String	Associating	The status of the EIP. - Associating: attaching - Unassociating: detaching - InUse: attached - Available: available
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeEipAddresses
&RegionId=cn-hangzhou
&CommonParameters
```

Response example

- XML format

```
< DescribeEipAddresses Response >
  < RequestId > 7EEF2D6B-D207-4197-AE37-01279C888757 </
RequestId >
  < PageNumber > 1 </ PageNumber >
  < EipAddresses >
    < EipAddress >
      < ChargeType > PostPaid </ ChargeType >
      < AllocationTime > 2018-01-15T11:17:30Z </
AllocationTime >
      < ResourceGroup > rg-acfmxazxxx-xxxxxx </ ResourceGr
oupId >
      < InstanceId > />
      < Description > />
      < IpAddress > 59.110.xx.xx </ IpAddress >
      < AllocationId > eip-2ze88m67qx5zxxxxxx </ AllocationId
>
      < InternetChargeType > PayByTraffic </ InternetCh
argeType >
      < InstanceType > />
      < Name > />
      < Status > Available </ Status >
      < BandwidthPackageId > />
      < InstanceRegionId > />
      < BandwidthPackageType > />
      < RegionId > cn-beijing </ RegionId >
      < OperationLocks > />
      < ExpiredTime > />
      < AvailableRegions >
        < AvailableRegion > cn-beijing </ AvailableRegion >
      </ AvailableRegions >
      < Bandwidth > 1 </ Bandwidth >
    </ EipAddress >
  </ EipAddresses >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
</ DescribeEipAddresses Response >
```

- JSON format

```
{
  "DescribeEipAddressesResponse": {
    "PageNumber": "1",
    "EipAddresses": {
      "EipAddress": {
        "ChargeType": "PostPaid",
        "Status": "Available",
        "RegionId": "cn-beijing",
```

```

    " ResourceGroup " : " rg - acfmxazxxx xxxxx ",
    " Allocation Time " : " 2018 - 01 - 15T11 : 17 : 30Z ",
    " IpAddress " : " 59 . 110 . xx . xx ",
    " Allocation Id " : " eip - 2ze88m67qx 5zxxxxx ",
    " AvailableRegions " : {
      " AvailableRegion " : " cn - beijing "
    },
    " InternetChargeType " : " PayByTraffic ",
    " Bandwidth " : " 1 "
  },
  " TotalCount " : " 1 ",
  " PageSize " : " 10 ",
  " RequestId " : " 7EEF2D6B - D207 - 4197 - AE37 - 01279C8887 57 "
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	Forbidden. RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
404	InvalidFilterKey. NotFound		The specified key in the key/value pair of the filter is invalid.
404	InvalidFilterValue		The specified value in the key/value pair of the filter is invalid.
404	InvalidLockReason. NotFound	The specified LockReason is not found	The reason that the EIP is locked was not found.
400	InvalidAssociatedInstanceType. ValueNotSupported	The specified value of AssociatedInstanceType is not supported.	The specified Associated InstanceType value is invalid.
400	InvalidChargeType. ValueNotSupported	The specified ChargeType is not supported.	This billing method is not supported.

[See common error codes](#)

4.5 UnassociateEipAddress

Detaches an EIP from a cloud resource.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UnassociateEipAddress	The name of this action. Value: <code>UnassociateEipAddress</code>
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.
InstanceId	String	Yes	i-12345678	The ID of the cloud resource.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.
InstanceType	String	No	EcsInstance	The type of the cloud resource. Valid values: <code>EcsInstance</code> (default): a VPC ECS instance <code>SlbInstance</code>: a VPC SLB instance <code>Nat</code>: NAT Gateway <code>HaVip</code>: HAVIP

Response parameters

Parameter	Type	Example value	Description
RequestId	String	220F3179-5238-47F0-A0CA-1272AA2BC41F	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=UnassociateEipAddresses
&AllocationId=eip-25877c70x
&InstanceId=i-25skktcp4
&<CommonParameters>
```

Response example

• XML format

```
<UnassociateEipAddressesResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</
  RequestId>
</UnassociateEipAddressesResponse>
```

• JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
400	InvalidInstanceId.NotFound	Specified instance does not exist.	The specified instance does not exist.
400	IncorrectInstanceStatus	The current status of instance does not support this operation.	The current instance status does not support this operation.

HTTP status code	Error code	Error message	Description
400	InvalidInstanceType. ValueNotSupported	The specified value of InstanceType is not supported.	The InstanceType value is invalid.
400	IncorrectHaVipStatus	This operation is denied because satus of the specified HaVip is neither Available nor InUse.	This operation cannot be performed because the HAVIP is in the Available or InUse state.
400	OperationDenied	Eip of default vpc not allow this operation	The EIP of the default VPC does not support this operation.
404	Forbidden. RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
400	InvalidParameter	The specified parameter is not valid.	The specified parameter value is invalid.
400	Forbbiden	The eip instance owener error	You are not authorized to call this EIP.
400	InvalidBindingStatus	The eip binding status invalid.	The attaching status of the EIP is invalid.

[See common error codes](#)

4.6 ReleaseEipAddress

Releases an Elastic IP Address (EIP).



Note:

Only EIPs in the Available state can be released.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ReleaseEipAddress	The name of this action. Value: ReleaseEipAddress
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	748C38F6-9A3D-482E-83FB-DB6C39C68AEA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ReleaseEipAddress
&AllocationId=eip-25877c70x
&<CommonParameters>
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<ReleaseEipAddressResponse>
  <RequestId>748C38F6-9A3D-482E-83FB-DB6C39C68AEA</RequestId>
</ReleaseEipAddressResponse>
```

• JSON format

```
{
  "RequestId": "748C38F6-9A3D-482E-83FB-DB6C39C68AEA"
```

}

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
500	InternalError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
404	Forbidden.RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
400	Forbidden.ChargeTypeIsPrepaid	It's forbidden to release a prepaid EIP	The subscription EIP addresses cannot be released.
400	Forbidden	The eip instance owner error	You need to be authorized to use the specified EIP. Check that you have the appropriate permissions and try again.
400	TaskConflict.AssociateGlobalAccelerationInstance	Operate too frequent.	The server cannot process this many requests. Please try again later.

[See common error codes](#)