Alibaba Cloud
Domain

Domain name management

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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.
`Courier font`	It is used for commands.	Run the `cd / d  C :/ windows` command to enter the Windows system folder.
Italics	It is used for parameters and variables.	`bae  log  list -- instanceid Instance_ID`
[] or [a|b]	It indicates that it is a optional value, and only one item can be selected.	`ipconfig [-all|-t]`

Style	Description	Example
{} or {a|b}	**It indicates that it is a required value, and only one item can be selected.**	`swich` *{stand | slave}*

Contents

1 Domain name management overview

Once you register a domain name from Alibaba Cloud or transfer your own domain name to Alibaba Cloud Domain service, you can always go to the *Alibaba Cloud Domain console* to perform management on these domain names. The functionality mainly involves maintaining domain name information and resolution, changing security settings, and viewing operation logs.

Domain name maintenance

Basic information

You can modify basic information of your domain names, such as domain name registrant, contact email, and expiration date.

Change DNS server

You can change the current DNS server to another DNS server. After the modification , the new DNS server will be responsible for domain name resolution.

Build a DNS host

You can build your own DNS server by using the current domain name to provide resolution services. Expertise is required for creating a DNS host. So we recommend you not to create it by yourself.

Transfer domain name out of Alibaba Cloud

You can transfer a domain name registered in Alibaba Cloud to a registrar other than Alibaba Cloud.

Domain name resolution

Domain Name Resolution indicates the way your domain names are resolved to their mapped IP address. The majority of resolutions from domain names to IP addresses are done through a procedure called DNS. After the resolution, the domain name can be used to access Internet in a much more convenient way.

Domain name security

Transfer prohibition lock

The transfer prohibition lock can prevent unauthorized outbound domain name transfers. This service effectively prevents domain names from being transferred

from Alibaba Cloud and domain name registrant information from being modified without authorization.

Domain name proxy service

Domain name proxy service can protect the identity and personal information of registrants, administrators, technical contacts, and payers by making the registration information unavailable in the WHOIS database. Enabling this service reduces the amount of spam you receive, minimizes the amount of personal information that is available, and does not affect using your domain name.

Update prohibition lock

The domain name update prohibition lock can lock your domain name and protect your domain name registration information against unauthorized modification or tampering. This service is an effective method to protect registration information of domain names.

Operation logs

Your operations on the domain name can be viewed, such as domain name registration, adding/changing/deleting resolution records, and changing DNS server.

2 Modify domain name information

Procedure

1. Log on to the *Domains console*.

2. Click Manage next to the required domain name.

3. -Click Info Modification from the left-side navigation pane. Modify the registrant's name, address, email, and other information, and then click Next.

4. Select the verification mode. Verify the information with the modified email address of the registrant, and click Get Verification Code for the Email Address.

5. Enter the verification code sent to the modified email, and click Confirm.

After the information is successfully modified, a notification of the domain name information modification is sent to the email addresses of the original registrant and the new registrant.

3 Change the DNS server

If a domain name is registered at Alibaba Cloud, Alibaba Cloud's DNS servers are used by default.

For example:

dns1.hichina.com

dns2.hichina.com

If you have your own DNS server, or use a third-party DNS server, you can change the DNS server so that the domain can use those instead.

To change the DNS server, follow these steps:

1. Log on to the *Domains console*.

2. Locate the domain name whose DNS you want to change, and then click Manage in the Action column.

3. On the Basic Information page, click DNS Modification from the left-side navigation pane.

4. Click Change DNS.

5. Enter the new DNS information, and click OK.

> 📋 Note:
> After the DNS server is changed, it may take up to 48 hours for the change in DNS resolution to take effect.

4 Renew a domain name

To renew a domain name, follow these steps:

1. Log on to the *Domains console*.

2. In the Domain Name List, locate the target domain name and click Renew. If you want to renew several domain names, select all the expected domain names and click Bulk Renew.

3. On the Shopping Cart page, select the domain name(s) you want to renew and the subscription duration, and click Buy Now.

4. On the Confirm Order page, click Place Order.

5. On the Payment page, click Pay.

5 Redeem a domain name

Redemption description

Generally, you have a 30-day renewal period after your domain name expires at Alibaba Cloud. If the domain name is not renewed within the renewal period, the domain name enters into the redemption period. You must then pay a higher price in the redemption period if you want to restore the domain name.

Procedure

To redeem your domain name, follow these steps:

1. Log on to the *Domains console*.

2. Click To Be Redeemed and locate the domain name to be redeemed.

3. Click Redeem.

4. Follow the on-screen instructions to submit your redemption request and complete any other redemption steps required.

To make sure that your domain name can be used properly, renew your domain name before it expires. This prevents you from having to pay extra for redemption. For more information, see *How to renew a domain name*.

6 Create a registrant profile

Domain registrant profile indicates the domain registration template that contains all necessary information for submitting a domain name registration. Once a registrant profile is created and saved, you can access its details during domain name registration to simplify the information filling process.

Procedure

You can create a registrant profile either on the Registrant Profiles page or during a domain name registration.

When purchasing a domain name, you must select a Registrant Profile to confirm the order. In case no registrant profile has been created, you must click Create Registrant Profile to add one.

Alternatively, follow these steps to create a registrant profile:

1. Log on to the *Alibaba Cloud Domain console* and go to the Registrant Profiles page.
2. Click Create Registrant Profile on the upper right corner of the page.
3. Enter all the required information, and then click Save.

   > **Note:**
   > All the fields in a registrant profile are necessary, and we recommend that you provide compete, genuine, and valid information.

4. Once a registrant profile is added to the list, click corresponding Verify Now to verify the registrant's email address. According to the requirements of ICANN policies, the domain name registrant's email address must be genuine and valid.

On the Registrant Profiles page, you can also perform the following actions on an existing profile:

- Set as default: to set this profile as default for registration.
- Delete: to delete this profile.
- View: to view the details.

7 Use RAM in Domain Name

7.1 Overview

This document briefly introduces Resource Access Management (RAM) for domain name resources. If you do not need RAM, skip this section.

After you activate Alibaba Cloud domain name service, you have full permission to do operations on your Alibaba Cloud account resources by default. By enabling the RAM service, you can grant permissions for accessing and managing domain name resources under the Alibaba Cloud account to RAM users, that is, subusers.

For security purposes, we highly recommend that you *enable MFA service* for your sub-account to apply identity verification.

Before using RAM to grant permissions and access domain name resources, make sure that you have read the *RAM product documentation* and *API reference* carefully.

7.2 Resource Access Management

This document introduces Resource Access Management (RAM).

If you have more than one domain name under your account, and more than one user needs to manage those domain names, the following problems exist when these users share your account key:

· The shared key has a high risk of leakage.
· You are prone to security risks caused by misoperations because you cannot control other users' access permissions.

RAM is a resource access control service provided by Alibaba Cloud. You can manage your users with RAM, such as employees, systems, or applications, and you can also manage user permissions to control user access to specified resources in your account.

RAM can help you manage user permissions and control user access to specified resources. For example, you can apply one of the following authorization policies to a group to enhance security control:

- Aliyundomainfullaccess - Permission for managing domain names. This is the highest-level permission. The authorized sub-account is permitted to manage the domain name resources under the master account.

```
{
  " Statement ": [
#    {
#      " Action ": " domain :*",
#      " Effect ": " Allow ",
#      " Resource ": "*"
    }
#  ],
  " Version ": " 1 "
}
```

- Permission for managing a specific domain name. The authorized sub-account is permitted to manage the resources of a specific domain name.

```
{
  " Version ": " 1 ",
  " Statement ": [
    {
      " Action ": [
      " domain : DomainInfo  Modificati  on ",
      " domain : DomainTran  sferInOper  ation ",
      " domain : DnsModific  ation ",
      " domain : SecuritySe  tting ",
      " domain : RealNameVe  rification  Operation ",
      " domain : DomainTran  sferOutOpe  ration ",
      " domain : DnsHostMod  ification ",
      " domain : Registrant  ProfileOpe  ration ",
      " domain : DomainGrou  pOperation ",
      " domain : EmailVerif  icationOpe  ration ",
      " domain : DomainInfo  Modificati  on "
      ],
      " Resource ": " acs : domain :*:*: domain / example . com ",
      " Effect ": " Allow "
    },
    {
      " Action ":
      " domain : Query *",
      " Resource ": " acs : domain :*:*:*",
      " Effect ": " Allow "
    }
  ]
}
```

- AliyunDomainReadOnlyAccess - Permission for accessing domain names in a read-only state. The authorized sub-account is permitted to view but not manage the domain name resources under the master account.

```
{
    " Version ": " 1 ",
    " Statement ": [
      {
        " Action ": [
          " domain : Query *"
        ],
```

```
        " Resource ": " acs : domain :*:*:*",
        " Effect ": " Allow "
    }
  ]
}
```

For more information about RAM, see *RAM product documentation*.

7.3 Domain actions that can be authorized

This document describes the domain actions that can be authorized.

Authorized resources can carry out the following domain actions through RAM.

Authentication action	Description	API
Query common domain name information (QueryCommonInfo)	Query the domain name list under the current account.	*QueryDomainList*
	Query a domain name under the current account.	*QueryDomainByInstanceId*
	Query the contact information of a domain name.	*QueryContactInfo*
	Verify the contact information.	*VerifyContactField*
Query domain name logs (QueryChangeLog)	Queries operation logs.	*QueryChangeLogList*
Query domain name task (QueryDomainTask)	Query the domain name task list.	*QueryTaskList*
	Query the task history list of a domain name task.	*QueryTaskInfoHistory*
	Query the detail list of a domain name task.	*QueryTaskDetailList*
	Query the detail history list of a domain name task.	*QueryTaskDetailHistory*
	Query the task detail list of completed domain name tasks.	*PollTaskResult*
Modify domain name information (DomainInfo Modification)	Submit a single task for modifying domain name information.	*SaveSingleTaskForUpd atingContactInfo*

Authentication action	Description	API
	Submit a batch task for modifying domain name information.	*SaveBatchTaskForModifyingDomainDns*
	Submit a batch task for modifying domain name information by new registrant.	*SaveBatchTaskForUpdatingContactInfoByNewContact*
	Submit a single task for deleting a DNSHost.	SaveSingleTaskForDeletingDnsHost
Query email token (QueryEmailVerification)	Query email token	*ListEmailVerification*
Operations related to email token (EmailVerificationOperation)	Verify an email token.	*DeleteEmailVerification*
	Verify an email token.	*VerifyEmail*
	Re-send an email token.	*ResendEmailVerification*
	Send the list of email tokens.	*SubmitEmailVerification*
Query the information related to transferring in a domain name (QueryDomainTransferIn)	Check if it is permitted to transfer in a domain name .	*CheckTransferInFeasibility*
	Query the information related to transferring in a domain name by instance Id.	*QueryTransferInByInstanceId*
	Query the list of domain names transferred in.	*QueryTransferInList*
Email token for transferring in a domain name (TransferInCheckMailToken)	Email token for transferring in a domain name.	*TransferInCheckMailToken*
Transfer in a domain name (DomainTransferInOperation)	Re-enter the authorization code for transferring in a domain name.	*TransferInReenterTransferAuthorizationCod*
	Re-fetch the WHOIS email for transferring in a domain name.	*TransferInRefetchWhoisEmail*

Authentication action	Description	API
	Re-send the email token for transferring in a domain name.	*TransferInResendMailToken*
	Cancel a single task for transferring in a domain name.	*SaveSingleTaskForCancelingTransferIn*
Query the information related to transferring out a domain name (QueryDomainTransferOut)	Query the information related to transferring out a domain name.	*QueryTransferOutInfo*
Transfer out a domain name (DomainTransferOutOperation).	Cancel a single task for transferring out a domain name.	*SaveSingleTaskForCancelingTransferOut*
	Submit a single task for querying transfer authorization code.	*SaveSingleTaskForQueryingTransferAuthorizationCode*
Modify the DNSHost of a domain name (DnsHostModification)	Submit a single task for creating a DNSHost.	*SaveSingleTaskForCreatingDnsHost*
	Submit a single task for modifying a DNSHost.	*SaveSingleTaskForModifyingDnsHost*
	Submit a single task for synchronizing a DNSHost.	*SaveSingleTaskForSynchronizingDnsHost*
Query the DNSHost of a domain name (DnsHostQuery)	Query the DNSHost of a domain name	*QueryDnsHost*
Domain name DNS settings (DnsModification)	Submit a batch task for modifying DNS.	*SaveBatchTaskForModifyingDomainDns*
Security settings (SecuritySetting)	Submit a single task for transfer prohibition lock.	*SaveSingleTaskForTransferProhibitionLock*
	Submit batch task for transfer prohibition locks.	*SaveBatchTaskForTransferProhibitionLock*
	Submit a single task for update prohibition lock.	*SaveSingleTaskForUpdateProhibitionLock*
	Submit batch task for update prohibition locks.	*SaveBatchTaskForUpdateProhibitionLock*

Authentication action	Description	API
Operations related to registrant profile (RegistrantProfileOperation)	Create or save registrant profile of a domain name.	*SaveRegistrantProfile*
	Create or save the specified registrant profile of a domain name.	*DeleteRegistrantProfile*
Query registrant profile (QueryRegistrantProfile).	Query registrant profile in your account.	*QueryRegistrantProfiles*
Acknowledge task result (AcknowledgeTaskResult)	Acknowledge task result.	*AcknowledgeTaskResult*

7.4 Domain resource types that can be authorized

This document describes the domain resource types that can be authorized.

The following table lists the domain resource types that can be authorized through RAM.

Resource type	Description in authorizat ion policy	Description
Domain	acs:domain:*:$accountid:* acs:domain:*:$accountid: domain/$domainName	Authorize a sub-account to manage your domain names. Includes the permission to modify domain name information , apply for name verificati on, configure DNS settings , configure security settings and transfer domain name.

7.5 Domain API Authentication Rules

This document describes domain API authentication rules.

DNS API authentication rules for access to the main account resources by sub-accounts.

When a RAM user requests access to the Domain resources of the primary account by using the Domain APIs, the Domain backend sends a request to RAM to perform the

request authentication. This authentication ensures that the resource owner indeed has granted access to these resources to the caller.

For each Domain API, the resources need to be checked are determined by the involved resources and the semantics of the API. The following table lists the authentication rules for each API.

Table 7-1: Resource level authorization

API	Authorization action	Authorization Resource
SaveSingleTaskForUpdatingContactInfo	domain:DomainInfo Modification	acs:domain:*:$accountid: domain/$domainName
SaveBatchTaskForUpdatingContactInfo		acs:domain:*:$accountid: domain/$domainName
SaveBatchTaskForUpda tingContactInfoByNew Contact		acs:domain:*:$accountid: domain/$domainName
TransferInReenterTransferAuthorizationCode	domain:DomainTran sferInOperation	acs:domain:*:$accountid: domain/$domainName
TransferInRefetchWhoisEmail		acs:domain:*:$accountid: domain/$domainName
TransferInResendMailToken		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForCancelingTransferIn		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForCancelingTransferOut	domain:DomainTran sferOutOperation	acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForQueryingTransferAuthorizationCode		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForModifyingDnsHost	domain:DnsHostMod ification	acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForCreatingDnsHost		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForSynchronizingDnsHost		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForDel etingDnsHost		acs:domain:*:$accountid: domain/$domainName

API	Authorization action	Authorization Resource
SaveBatchTaskForModifyingDomainDns	domain:DnsModification	acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForTransferProhibitionLock	domain:SecuritySetting	acs:domain:*:$accountid: domain/$domainName
SaveBatchTaskForTransferProhibitionLock		acs:domain:*:$accountid: domain/$domainName
SaveSingleTaskForUpdateProhibitionLock		acs:domain:*:$accountid: domain/$domainName
SaveBatchTaskForUpdateProhibitionLock		acs:domain:*:$accountid: domain/$domainName

Table 7-2: Operation Level authorization

API	Authorization action	Authorization Resource
QueryDomainList	domain:QueryCommonInfo	acs:domain:*:$accountid:*
QueryDomainByInstanceId		acs:domain:*:$accountid:*
QueryContactInfo		acs:domain:*:$accountid:*
VerifyContactField		acs:domain:*:$accountid:*
QueryTaskList	domain:QueryDomainTask	acs:domain:*:$accountid:*
QueryTaskInfoHistory		acs:domain:*:$accountid:*
QueryTaskDetailList		acs:domain:*:$accountid:*
QueryTaskDetailHistory		acs:domain:*:$accountid:*
PollTaskResult		acs:domain:*:$accountid:*
QueryChangeLogList	domain:QueryChangeLog	acs:domain:*:$accountid:*
QueryTransferInByInstanceId	domain:QueryDomainTransferIn	acs:domain:*:$accountid:*
QueryTransferInList		acs:domain:*:$accountid:*
CheckTransferInFeasibility		acs:domain:*:$accountid:*
TransferInCheckMailToken	domain:TransferInCheckMailToken	acs:domain:*:$accountid:*
QueryTransferOutInfo	domain:QueryDomainTransferOut	acs:domain:*:$accountid:*
QueryDnsHost	domain:QueryDnsHost	acs:domain:*:$accountid:*

API	Authorization action	Authorization Resource
QueryRegistrantProfiles	domain:QueryRegistrantProfile	acs:domain:*:$accountid:*
ListEmailVerification	domain:QueryEmailVerification	acs:domain:*:$accountid:*
AcknowledgeTaskResult	domain:AcknowledgeTaskResult	acs:domain:*:$accountid:*
SaveRegistrantProfile	domain:RegistrantProfileOperation	acs:domain:*:$accountid:*
DeleteRegistrantProfile		acs:domain:*:$accountid:*
DeleteEmailVerification	domain:EmailVerificationOperation	acs:domain:*:$accountid:*
VerifyEmail		acs:domain:*:$accountid:*
ResendEmailVerification		acs:domain:*:$accountid:*
SubmitEmailVerification		acs:domain:*:$accountid:*

Table 7-3: Service level authorization

API	Authorization action	Authorization Resource
*	domain:*	acs:domain:*:$accountid:*