

Alibaba Cloud ActionTrail Event Management

Issue: 20190919

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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 History search

Procedure

1. Log on to the [ActionTrail console](#).
2. In the left-side navigation pane, click History search, and you can see the operation records of the last 30 days.
3. Click an operation record to expand its details.
4. Apply a filter to query ActionTrail records.



Note:

The filter can perform queries based on criteria like the user name, event name, resource type, resource name, and time range. Events for global services can be queried in historical events across all regions.

2 ActionTrail event log syntax

Key fields in an event log

apiVersion

- **Type:** String
- **Required:** Yes
- **Description:** The version of the API being called.

eventId

- **Type:** String
- **Required:** Yes
- **Description:** The GUID generated by ActionTrail for the event.

eventName

- **Type:** String
- **Required:** Yes
- **Description:** The name of the API being called. For example, `StopInstance` of `Ecs`. For more information, see the List of operations by function section of each Alibaba Cloud service supported by ActionTrail.

eventSource

- **Type:** String
- **Required:** Yes
- **Description:** The URL of the server for processing the API request. For example, `ram.aliyuncs.com`.

eventTime

- **Type:** String
- **Required:** Yes
- **Description:** The UTC date and time when the event occurred.

eventType

- **Type:** String
- **Required:** Yes

- **Description:** The type of the event. Event types include `ApiCall` (event triggered when a user or the console calls an API) and `ConsoleSignin` (event triggered when a user uses the primary or RAM account to log on to the console).

eventVersion

- **Type:** String
- **Required:** Yes
- **Description:** The version of the ActionTrail event format. The current version is 1.

errorCode

- **Type:** String
- **Required:** No
- **Description:** The error code returned when an error occurs during API request processing. For example, `NoPermission`.

errorMessage

- **Type:** String
- **Required:** No
- **Description:** The error message returned when an error occurs during API request processing. For example, "You are not authorized."

requestId

- **Type:** String
- **Required:** Yes
- **Description:** The unique ID generated by the Alibaba Cloud service in use for the API request that is received.

requestParameters

- **Type:** Dictionary
- **Required:** No
- **Description:** The parameters in the API request. For more information, see the List of operations by function section of each Alibaba Cloud service supported by ActionTrail.

responseElements

- **Type:** Dictionary

- **Required:** No
- **Description:** The elements in the API response. For more information, see the [List of operations by function](#) section of each Alibaba Cloud service supported by ActionTrail.

referencedResources

- **Type:** Dictionary
- **Required:** No
- **Description:** The resources referenced by the API.

serviceName

- **Type:** String
- **Required:** Yes
- **Description:** The name of the Alibaba Cloud service in use. For example, `Ecs` , `Rds` , and `Ram` .

sourceIpAddress

- **Type:** String
- **Required:** Yes
- **Description:** The IP address from which the API request is sent. If the API is called by a user on the console, the user's IP address is recorded, not the IP address of the web server of the console.

userAgent

- **Type:** String
- **Required:** Yes
- **Description:** The agent through which the API request is sent. The value is set to `AliyunConsole` for the console, and `aliyuncli / 2 . 0 . 6` for SDK.

userIdentity

- **Type:** Dictionary
- **Required:** Yes
- **Description:** The identity information of the requester.

Fields in the userIdentity syntax

Name	Required	Description
type	Yes	The identity type. Valid values: <code>root</code> - <code>account</code> (primary accounts), <code>ram</code> - <code>user</code> (RAM users), and <code>assumed</code> - <code>role</code> (RAM roles).
principalId	Yes	The ID of the requester . If the request is made by a primary account , the ID of the primary account is recorded. If the request is made by a RAM user, the RAM user ID is recorded. If the request is made by a RAM role, <code>RoleID:RoleSessionName</code> is recorded.
accountId	Yes	The ID of the primary account.
accessKeyId	No	This parameter is required when the API request is made through SDK, and is not required when the API request is made through the console.
userName	No	If the request is made by a RAM user, the RAM user ID is recorded. If the request is made by a RAM role, <code>roleName:roleSessionName</code> is recorded.

Name	Required	Description
sessionContext	No	The session context recorded when an STS token is used to call an API, or an operation is performed through the console. For more information about an STS token, see #unique_5 . sessionContext includes creationDate (the time when a session is created) and mfaAuthenticated (whether multi-factor authentication is used for logging on to the console).

userIdentity examples

- An operation performed by a RAM user through SDK

```
"userIdentity": {
  "type": "ram - user",
  "principalId": "2881533486_8278_****",
  "accountId": "1122334455_66_****",
  "accessKeyId": "55nCtAwMPL_kk_****",
  "userName": "B_**"
}
```

- An operation performed by a RAM user through the console

```
"userIdentity": {
  "type": "ram - user",
  "principalId": "2881533486_8278_****",
  "accountId": "1122334455_66_****",
  "userName": "B_**",
  "sessionContext": {
    "attributes": {
      "mfaAuthenticated": "true",
      "creationDate": "2015 - 12 - 31T06 : 33 : 14Z"
    }
  }
}
```

- An operation performed by a RAM role through SDK

```
"userIdentity": {
  "type": "assumed - role",
  "principalId": "2881533486_8278_****: a_****",
  "accountId": "1122334455_66_****",
}
```

```
" accessKeyId ": " STS . F24gnHkUE7 dER4rsFFQ4 n ****",  
" userName ": " manager : a ****"  
}
```

3 ActionTrail Event Examples

3.1 ECS event log examples

A RAM user stops the specified ECS instance by using the console

```
{
  " apiVersion ": " 2014 - 05 - 26 ",
  " eventId ": " f4788483 - 70fc - 476b - 839b - af5ed11170 cd ",
  " eventName ": " StopInstan ce ",
  " eventSource ": " ecs - cn - hangzhou . aliyuncs . com ",
  " eventTime ": " 2016 - 01 - 04T09 : 47 : 40Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " recipientAccountId ": " 4 ****",
  " requestId ": " 275A832E - 4C6A - 47BE - A432 - C18DDD79FD AB ",
  " requestParameters ": {
    " ForceStop ": " true ",
    " InstanceId ": " i - 22nyr ****"
  },
  " serviceName ": " Ecs ",
  " sourceIpAddress ": " 42 . 120 . XX . XX ",
  " userAgent ": " AliyunCons ole ",
  " userIdentity ": {
    " type ": " ram - user ",
    " accountId ": " 4 ****",
    " principalId ": " 2881533486 8278 ****",
    " userName ": " B **",
    " sessionContext ": {
      " attributes ": {
        " creationDate ": " 2016 - 01 - 04T09 : 47 : 40Z ",
        " mfaAuthenticated ": " true "
      }
    }
  }
}
```

A RAM user stops the specified ECS instance by using the SDK

```
{
  " apiVersion ": " 2014 - 05 - 26 ",
  " eventId ": " e0cdf18f - e5ec - 4c5f - b37c - 99b608b941 8c ",
  " eventName ": " StopInstan ce ",
  " eventSource ": " ecs - cn - hangzhou . aliyuncs . com ",
  " eventTime ": " 2016 - 01 - 04T09 : 47 : 40Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " recipientAccountId ": " 4 ****",
  " requestId ": " FC33D0AB - 1C6B - 4B4E - 911D - E939122AA2 48 ",
  " requestParameters ": {
    " ForceStop ": " true ",
    " InstanceId ": " i - 84udj ****"
  },
  " serviceName ": " Ecs ",
}
```

```

    "sourceIpAddress": "42.120.XX.XX",
    "userAgent": "aliyuncli / 2.0.6",
    "userIdentity": {
      "type": "ram-user",
      "accountId": "4****",
      "principalId": "2881533486_8278****",
      "userName": "B**",
      "accessKeyId": "IE8ITksrR3_SD****"
    }
  }
}

```

3.2 RDS event log examples

A RAM user stops the specified RDS instance by using the console

```

{
  "apiVersion": "2014-08-15",
  "eventId": "2687bb47-548b-4338-8c0c-e839cd80f0ef",
  "eventName": "RestartDBInstance",
  "eventSource": "rds-cn-hangzhou.aliyuncs.com",
  "eventTime": "2016-01-04T09:48:13Z",
  "eventType": "ApiCall",
  "eventVersion": "1",
  "recipientAccountId": "43274",
  "requestId": "EC7BC9A6-C198-4187-AA52-61519826A3D5",
  "requestParameters": {
    "DBInstanceId": "rds43zn9z7-w7qrq21901"
  },
  "serviceName": "Rds",
  "sourceIpAddress": "42.120.74.96",
  "userAgent": "AliyunConsole",
  "userIdentity": {
    "type": "ram-user",
    "accountId": "43274",
    "principalId": "2881533486_82784898",
    "userName": "Bob",
    "sessionContext": {
      "attributes": {
        "creationDate": "2016-01-04T09:48:13Z",
        "mfaAuthenticated": "true"
      }
    }
  }
}

```

A RAM user stops the specified RDS instance by using the SDK

```

{
  "apiVersion": "2014-08-15",
  "eventId": "b14e6544-c5c0-47bd-a81f-893b7567e761",
  "eventName": "RestartDBInstance",
  "eventSource": "rds-cn-hangzhou.aliyuncs.com",
  "eventTime": "2016-01-04T09:48:13Z",
  "eventType": "ApiCall",
  "eventVersion": "1",
  "recipientAccountId": "43274",
  "requestId": "804431E9-3912-4544-B0F8-8737532D0117",
  "requestParameters": {
    "DBInstanceId": "rds43zn9z7-w7qrq21901"
  }
}

```

```

    },
    "serviceName": "Rds",
    "sourceIpAddress": "42.120.74.96",
    "userAgent": "aliyuncli / 2.0.6",
    "userIdentity": {
      "type": "ram-user",
      "accountId": "43274",
      "principalId": "288153348682784898",
      "userName": "Bob",
      "accessKeyId": "I8EITksrR3SoUz3"
    }
  }
}

```

3.3 SLB

A RAM user stops the specified SLB instance by using the console

```

{
  "apiVersion": "2014-05-15",
  "eventId": "a8a6d6db-6bc8-4f4d-8b9e-7aaad259079d",
  "eventName": "DeleteLoadBalancer",
  "eventSource": "slb-pop.aliyuncs.com",
  "eventTime": "2016-01-04T09:48:49Z",
  "eventType": "ApiCall",
  "eventVersion": "1",
  "recipientAccountId": "4****",
  "requestId": "AC792886-742C-4384-948E-24CE0026FC42",
  "requestParameters": {
    "LoadBalancerId": "1520c072d76-ap-southeast-os30****"
  },
  "serviceName": "Slb",
  "sourceIpAddress": "42.120.XX.XX",
  "userAgent": "AliyunConsole",
  "userIdentity": {
    "type": "ram-user",
    "accountId": "4****",
    "principalId": "28815334868278****",
    "userName": "B**",
    "sessionContext": {
      "attributes": {
        "creationDate": "2016-01-04T09:48:49Z",
        "mfaAuthenticated": "true"
      }
    }
  }
}

```

A RAM user stops the specified SLB instance by using the SDK

```

{
  "apiVersion": "2014-05-15",
  "eventId": "87b31697-aa12-4a0c-ad9c-c1b2b4c1a374",
  "eventName": "DeleteLoadBalancer",
  "eventSource": "slb-pop.aliyuncs.com",

```

```

    "eventTime": "2016-01-04T09:48:49Z",
    "eventType": "ApiCall",
    "eventVersion": "1",
    "recipientAccountId": "4 ****",
    "requestId": "D090401A-7BF6-48C8-BC14-2E774436630C",
    "requestParameters": {
      "LoadBalancerId": "1520c072d76-ap-southeast-os30 ****"
    },
    "serviceName": "Slb",
    "sourceIpAddress": "42.120.XX.XX",
    "userAgent": "aliyuncli/2.0.6",
    "userIdentity": {
      "type": "ram-user",
      "accountId": "4 ****",
      "principalId": "28815334868278 ****",
      "accessKeyId": "55nCtAwMPLkk ****",
      "userName": "B**"
    }
  }
}

```

3.4 CDN event log examples

A RAM user uses the CDN service in the console

```

{
  "apiVersion": "2014-11-11",
  "eventId": "1f869a5d-7542-4f76-94e0-5c24b520 ****",
  "eventName": "AddCdnDomain",
  "eventSource": "cdn.aliyuncs.com",
  "eventTime": "2016-01-05T03:30:58Z",
  "eventType": "ApiCall",
  "eventVersion": "1",
  "recipientAccountId": "102440540619 ****",
  "requestId": "AF2FBB8D-64E1-4CC1-8849-E35C5BDB53A4",
  "requestParameters": {
    "CdnType": "web",
    "DomainName": "test2.jaso****.com",
    "SourceType": "oss",
    "Sources": "sampleshard.oss-cn-hangzhou.aliyuncs.com"
  },
  "serviceName": "Cdn",
  "sourceIpAddress": "42.120.XX.XX",
  "userAgent": "AliyunConsole",
  "userIdentity": {
    "type": "ram-user",
    "accountId": "102440540619 ****",
    "principalId": "24894915196108 ****",
    "userName": "lisi",
    "sessionContext": {
      "attributes": {
        "creationDate": "2016-01-05T03:30:58Z",
        "mfaAuthenticated": "false"
      }
    }
  }
}

```

```
}
```

A RAM user calls CDN through the SDK

```
{
  " apiVersion ": " 2014 - 11 - 11 ",
  " eventId ": " 1b6a3ec7 - 576b - 435f - b249 - 9edca1e980 8e ",
  " eventName ": " AddCdnDomain ",
  " eventSource ": " cdn . aliyuncs . com ",
  " eventTime ": " 2016 - 01 - 05T03 : 30 : 58Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " recipientAccountId ": " 1024405406 19 ****",
  " requestId ": " 179CDCB1 - CC2D - 496A - BE38 - 723CBAEA24 1A ",
  " requestParameters ": {
    " CdnType ": " web ",
    " DomainName ": " test2 . jason . com ",
    " SourceType ": " oss ",
    " Sources ": " sampleshard . oss - cn - hangzhou . aliyuncs . com "
  },
  " serviceName ": " Cdn ",
  " sourceIpAddress ": " 42 . 120 . XX . XX ",
  " userAgent ": " aliyuncli / 2 . 0 . 6 ",
  " userIdentity ": {
    " type ": " ram - user ",
    " accountId ": " 1024405406 19 ****",
    " principalId ": " 2489491519 6108 ****",
    " accessKeyId ": " 55nCtAwmPL kk ****",
    " userName ": " lisi "
  }
}
```

3.5 RAM

A RAM user uses the RAM service in the console

```
{
  " apiVersion ": " 2015 - 05 - 01 ",
  " eventId ": " 2cc52dee - d8d2 - 40c2 - 8de0 - 3a2cf1df ****",
  " eventName ": " DeleteGroup ",
  " eventSource ": " ram . aliyuncs . com ",
  " eventTime ": " 2015 - 11 - 03T13 : 41 : 49Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " requestId ": " 9AE24F49 - C52C - 4F0F - BCF9 - 9A4B8C22B1 47 ",
  " requestParameters ": {
    " GroupName ": " grp1 "
  },
  " serviceName ": " Ram ",
  " sourceIpAddress ": " 42 . 120 . XX . XX ",
  " userAgent ": " AliyunConsole ",
  " userIdentity ": {
    " type ": " ram - user ",
    " principalId ": " 2741806465 4829 ****",
    " accountId ": " 1234567890 12 ****",
  }
}
```

```

    " userName ":" Alice ",
    " sessionCon  text ":{
      " sessionAtt  ributes ":{
        " creationDa  te ":" 2015 - 11 - 03T13 : 41 : 48Z ",
        " mfaAuthent  icated ":" true "
      }
    }
  }
}

```

A RAM user uses the RAM service through the SDK

```

{
  " apiVersion ":" 2015 - 05 - 01 ",
  " eventId ":" 234ef3c7 - 8938 - 4bd7 - bb80 - 11754b7b ****",
  " eventName ":" CreateGrou  p ",
  " eventSourc  e ":" ram . aliyuncs . com ",
  " eventTime ":" 2016 - 01 - 04T08 : 58 : 50Z ",
  " eventType ":" ApiCall ",
  " eventVersi  on ":" 1 ",
  " recipientA  ccountId ":" 43274 ",
  " requestId ":" 1485748C - DB62 - 4693 - AB7E - 4BA3F3A970  E1 ",
  " requestPar  ameters ":" {
    " Comments ":" this  is  a  test  group ",
    " GroupName ":" grp1 "
  },
  " serviceNam  e ":" Ram ",
  " sourceIpAd  dress ":" 42 . 120 . XX . XX ",
  " userAgent ":" aliyuncli / 2 . 0 . 6 ",
  " userIdenti  ty ":" {
    " type ":" ram - user ",
    " principalI  d ":" 2741806465  4829 ****",
    " accountId ":" 43274 ",
    " accessKeyI  d ":" f6Iz ***** EI4d ",
    " userName ":" Alice "
  }
}

```

3.6 STS event log examples

A RAM user switches the role by using the console

```

{
  " apiVersion ":" 2015 - 04 - 01 ",
  " eventId ":" 64e9b93e - 13da - 4ea4 - 8b72 - 081069ff4d  8c ",
  " eventName ":" AssumeRole ",
  " eventSourc  e ":" sts . aliyuncs . com ",
  " eventTime ":" 2016 - 01 - 05T02 : 41 : 58Z ",
  " eventType ":" ApiCall ",
  " eventVersi  on ":" 1 ",
  " recipientA  ccountId ":" 1024405406  19 ****",
  " requestId ":" F678C471 - BEAA - 4DE4 - B09E - FD7F5A5248  E8 ",
  " requestPar  ameters ":" {
    " RoleArn ":" acs : ram :: 43274 : role / ram - admin ",

```

```

    " RoleSessionName ": " lisi "
  },
  " serviceName ": " Sts ",
  " sourceIpAddress ": " 42 . 120 . 74 . 96 ",
  " userAgent ": " AliyunConsole ",
  " userIdentity ": {
    " type ": " ram - user ",
    " accountId ": " 1024405406 19 ****",
    " principalId ": " 2489491519 6108 *****",
    " userName ": " lisi ",
    " sessionContext ": {
      " attributes ": {
        " creationDate ": " 2016 - 01 - 05T02 : 41 : 58Z ",
        " mfaAuthenticated ": " true "
      }
    }
  }
}

```

A RAM user calls the STS to switch the role by using the SDK

```

{
  " apiVersion ": " 2015 - 04 - 01 ",
  " eventId ": " 23f2a6b5 - c628 - 49bb - 8dc9 - 8f9760503b c6 ",
  " eventName ": " AssumeRole ",
  " eventSource ": " sts . aliyuncs . com ",
  " eventTime ": " 2016 - 01 - 05T02 : 41 : 58Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " recipientAccountId ": " 1024 ***** 6576 ",
  " requestId ": " 8BE01A78 - 4026 - 4E7D - B4E1 - 95B0323E96 8E ",
  " requestParameters ": {
    " RoleArn ": " acs : ram :: 43274 : role / ram - admin ",
    " RoleSessionName ": " lisi "
  },
  " serviceName ": " Sts ",
  " sourceIpAddress ": " 42 . 120 . 74 . 96 ",
  " userAgent ": " aliyuncli / 2 . 0 . 6 ",
  " userIdentity ": {
    " type ": " ram - user ",
    " accountId ": " 1024405406 19 ****",
    " principalId ": " 2489491519 6108 ****",
    " accessKeyId ": " 55nCTAwMPL kk ****",
    " userName ": " lisi "
  }
}

```

3.7 KMS event log examples

Use the console to obtain key information

```

{
  " eventId ": " 122fa4a4 - 26b4 - 4ae5 - bc87 - 8131edb789 6e ",
  " eventVersion ": " 1 ",
  " requestParameters ": {
    " KeyId ": " b22d0501 - 510e - 4139 - b665 - c38cd3e1 ****"
  }
}

```

```

" eventSource ": " kms - intranet . cn - shanghai . aliyuncs . com
",
" sourceIpAddress ": " 42 . 120 . XX . XX ",
" userAgent ": " AliyunConsole ",
" userIdentity ": {
  " accountId ": " 1996559326 09 ****",
  " principalId ": " 1996559326 09 ****",
  " userName ": " root ",
  " type ": " root - account "
},
" eventType ": " ApiCall ",
" referencedResources ": {
  " Key ": [
    " b22d0501 - 510e - 4139 - b665 - c38cd3e1 ****"
  ]
},
" serviceName ": " Kms ",
" apiVersion ": " 2016 - 01 - 20 ",
" requestId ": " 122fa4a4 - 26b4 - 4ae5 - bc87 - 8131edb789 6e ",
" eventTime ": " 2018 - 07 - 24T09 : 19 : 28Z ",
" acsRegion ": " cn - shanghai ",
" eventName ": " DescribeKey "
}

```

Use the SDK to create an alias

```

{
  " eventId ": " 52253b9e - 97ba - 4e08 - ae27 - 56d9892f2f 82 ",
  " eventVersion ": " 1 ",
  " requestParameters ": {
    " AliasName ": " alias / monitor - 9da5bffe - d846 - 49b5 - b763 -
af3ebc5f63 94 ",
    " KeyId ": " 9da5bffe - d846 - 49b5 - b763 - af3ebc5f ****"
  },
  " eventSource ": " kms . ap - southeast - 2 . aliyuncs . com ",
  " sourceIpAddress ": " 42 . 120 . XX . XX ",
  " userAgent ": " Go - http - client / 1 . 1 ",
  " userIdentity ": {
    " accessKeyId ": " uG1lPdIFfw fq ****",
    " accountId ": " 1996559326 09 ****",
    " principalId ": " 2318245593 2659 ****",
    " userName ": " monitor_user ",
    " type ": " ram - user "
  },
  " eventType ": " ApiCall ",
  " referencedResources ": {
    " Key ": [
      " 9da5bffe - d846 - 49b5 - b763 - af3ebc5f ****"
    ]
  },
  " serviceName ": " Kms ",
  " apiVersion ": " 2016 - 01 - 20 ",
  " requestId ": " 52253b9e - 97ba - 4e08 - ae27 - 56d9892f2f 82 ",
  " eventTime ": " 2018 - 07 - 24T09 : 13 : 04Z ",
  " acsRegion ": " ap - southeast - 2 ",
  " eventName ": " CreateAlias "
}

```

```
}
```

3.8 ActionTrail event log examples

A RAM user uses the ActionTrail service in the console

```
{
  " apiVersion ": " 2015 - 09 - 28 ",
  " eventId ": " b4e23d3c - 9ba7 - 441e - ad25 - 04dd2d0aeb 0f ",
  " eventName ": " UpdateTrail ",
  " eventSource ": " actiontrail . cn - hangzhou . aliyuncs .
com ",
  " eventTime ": " 2016 - 01 - 06T03 : 29 : 15Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " requestId ": " 3E2B90FE - 0B7B - 40FB - A9CE - 5C80A3F134 2F ",
  " requestParameters ": {
    " CreateNewBucket ": " false ",
    " Name ": " default ",
    " OssBucketName ": " trail ",
    " OssKeyPrefix ": "",
    " Region ": " cn - hangzhou ",
    " RoleName ": " aliyunactiontraildefaultrole ",
    " StartLogging ": " false "
  },
  " serviceName ": " Actiontrail ",
  " sourceIpAddress ": " 42 . 120 . 74 . 96 ",
  " userAgent ": " AliyunConsole ",
  " userIdentity ": {
    " type ": " ram - user ",
    " principalId ": " 2881533486 82784898 ",
    " accountId ": " 43274 ",
    " userName ": " Bob ",
    " sessionContext ": {
      " attributes ": {
        " creationDate ": " 2016 - 01 - 06T03 : 29 : 15Z ",
        " mfaAuthenticated ": " true "
      }
    }
  }
}
```

A RAM user calls ActionTrail through the SDK

```
{
  " apiVersion ": " 2015 - 09 - 28 ",
  " eventId ": " aee5874f - 1478 - 47df - 932f - 0ffd1851fc 5f ",
  " eventName ": " UpdateTrail ",
  " eventSource ": " actiontrail . cn - hangzhou . aliyuncs .
com ",
  " eventTime ": " 2016 - 01 - 06T03 : 29 : 15Z ",
  " eventType ": " ApiCall ",
  " eventVersion ": " 1 ",
  " requestId ": " 0D690264 - 0D51 - 4B4F - 8AEE - CDEB3ABD19 29 ",
  " requestParameters ": {
```

```

    "CreateNewBucket": "false",
    "Name": "default",
    "OssBucketName": "trail",
    "OssKeyPrefix": "",
    "Region": "cn-hangzhou",
    "RoleName": "aliyunactiontraildefaultrole",
    "StartLogging": "false"
  },
  "serviceName": "ActionTrail",
  "sourceIpAddress": "42.120.74.96",
  "userAgent": "aliyuncli / 2.0.6",
  "userIdentity": {
    "type": "ram-user",
    "principalId": "274180646548292385",
    "accountId": "43274",
    "accessKeyId": "f6Iz*****EI4d",
    "userName": "Alice"
  }
}

```

3.9 ConsoleSignin event log examples

A RAM user logs on to the console

- A RAM user successfully log on to the console

```

{
  "additionalEventData": {
    "callbackUrl": "https://home.console.aliyun.com/",
    "mfaChecked": "true"
  },
  "eventId": "93e806df-a005-40a8-b6b1-f58004aebb28",
  "eventName": "ConsoleSignin",
  "eventSource": "signin.aliyun.com",
  "eventTime": "2016-01-20T01:47:45Z",
  "eventType": "ConsoleSignin",
  "eventVersion": "1",
  "requestId": "621948aa-c03a-4acd-b4b0-116a9fa3257a",
  "serviceName": "Aas",
  "sourceIpAddress": "42.120.74.96",
  "userAgent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/47.0.2526.106 Safari/537.36",
  "userIdentity": {
    "accountId": "1122334455667788",
    "principalId": "288153348682784898",
    "type": "ram-user",
    "userName": "zhangsan"
  }
}

```

- A RAM user fails to log on to the console

```

{

```

```

    "additionalEventData": {
      "callbackUrl": "https://home.console.aliyun.com/",
      "mfaChecked": "false"
    },
    "errorCode": "Authentication.Failed",
    "errorMessage": "Failed authentication.",
    "eventId": "f31de4a1-fb34-4299-b2e1-ae8803c1e2c",
    "eventName": "ConsoleSignin",
    "eventSource": "signin.aliyun.com",
    "eventTime": "2016-01-20T04:17:23Z",
    "eventType": "ConsoleSignin",
    "eventVersion": "1",
    "requestId": "7fecff6c-5ca0-4be5-99b4-61dc7e1d984c",
    "serviceName": "Aas",
    "sourceIpAddress": "42.120.74.96",
    "userAgent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/47.0.2526.106 Safari/537.36",
    "userIdentity": {
      "accountId": "1122334455667788",
      "principalId": "288153348682784898",
      "type": "ram-user",
      "userName": "zhangsan"
    }
  }
}

```

A user logs on to the console by using the primary account

A user successfully logs on to the console by using the primary account

```

{
  "additionalEventData": {
    "isMFAChecked": false,
    "loginAccount": "testuser@aliyun.com"
  },
  "eventId": "a53844f9-7d41-4c39-aaf7-350e04cac2f1",
  "eventName": "ConsoleSignin",
  "eventSource": "account.aliyun.com",
  "eventTime": "2016-01-20T01:48:58Z",
  "eventType": "ConsoleSignin",
  "eventVersion": "1",
  "requestId": "00693be9-3e1c-4d77-84a0-025d44add80b",
  "serviceName": "Aas",
  "sourceIpAddress": "42.120.74.96",
  "userAgent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/47.0.2526.106 Safari/537.36",
  "userIdentity": {
    "accountId": "1234567890123456",
    "principalId": "1234567890123456",
    "type": "root-account"
  }
}

```

4 FAQ

4.1 What operations does ActionTrail record?

ActionTrail records all operations including querying, creation, modification, and deletion performed on the services listed in [#unique_18](#). You can query all events on the History Search page. You can also create a trail to deliver events to the specified Log Service Logstore or OSS bucket.