AWS Fault Injection Simulator

API Reference

API Version 2020-12-01

AWS Fault Injection Simulator: API Reference

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Welcome

AWS Fault Injection Simulator is a managed service that enables you to perform fault injection experiments on your AWS workloads. For more information, see the AWS Fault Injection Simulator User Guide.

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Actions

The following actions are supported:

CreateExperimentTemplate

Creates an experiment template.

An experiment template includes the following components:

- **Targets**: A target can be a specific resource in your AWS environment, or one or more resources that match criteria that you specify, for example, resources that have specific tags.
- **Actions**: The actions to carry out on the target. You can specify multiple actions, the duration of each action, and when to start each action during an experiment.
- **Stop conditions**: If a stop condition is triggered while an experiment is running, the experiment is automatically stopped. You can define a stop condition as a CloudWatch alarm.

For more information, see Experiment templates in the *AWS Fault Injection Simulator User Guide*.

Request Syntax

```
POST /experimentTemplates HTTP/1.1
Content-type: application/json

{
   "actions": {
      "string" : {
         "actionId": "string",
         "description": "string",
         "parameters": {
            "string" : "string"
         },
         "startAfter": [ "string" ],
         "targets": {
            "string" : "string"
         }
      }
   },
   "clientToken": "string",
   "description": "string",
   "roleArn": "string",
   "stopConditions": [
      {
         "source": "string",
         "value": "string"
      }
   ],
   "tags": {
      "string" : "string"
   },
   "targets": {
      "string" : {
         "filters": [
            {
               "path": "string",
               "values": [ "string" ]
            }
         ],
         "resourceArns": [ "string" ],
         "resourceTags": {
            "string" : "string"
         },
         "resourceType": "string",
         "selectionMode": "string"
```

```
        }
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

actions (p. 3)

> The actions for the experiment.
>
> Type: String to CreateExperimentTemplateActionInput (p. 50) object map
>
> Key Length Constraints: Maximum length of 64.
>
> Key Pattern: [\S]+
>
> Required: Yes

clientToken (p. 3)

> Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 1024.
>
> Pattern: [\S]+
>
> Required: Yes

description (p. 3)

> A description for the experiment template.
>
> Type: String
>
> Length Constraints: Maximum length of 512.
>
> Pattern: [\s\S]+
>
> Required: Yes

roleArn (p. 3)

> The Amazon Resource Name (ARN) of an IAM role that grants the AWS FIS service permission to perform service actions on your behalf.
>
> Type: String
>
> Length Constraints: Minimum length of 20. Maximum length of 2048.
>
> Pattern: [\S]+
>
> Required: Yes

stopConditions (p. 3)

The stop conditions.

Type: Array of CreateExperimentTemplateStopConditionInput (p. 52) objects

Required: Yes

tags (p. 3)

The tags to apply to the experiment template.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

targets (p. 3)

The targets for the experiment.

Type: String to CreateExperimentTemplateTargetInput (p. 53) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experimentTemplate": {
      "actions": {
         "string" : {
            "actionId": "string",
            "description": "string",
            "parameters": {
               "string" : "string"
            },
            "startAfter": [ "string" ],
            "targets": {
               "string" : "string"
            }
         }
      },
      "creationTime": number,
      "description": "string",
      "id": "string",
      "lastUpdateTime": number,
```

```
        "roleArn": "string",
        "stopConditions": [
            {
                "source": "string",
                "value": "string"
            }
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
                "resourceType": "string",
                "selectionMode": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experimentTemplate (p. 5)

> Information about the experiment template.

> Type: ExperimentTemplate (p. 68) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ConflictException

> The request could not be processed because of a conflict.

> HTTP Status Code: 409

ResourceNotFoundException

> The specified resource cannot be found.

> HTTP Status Code: 404

ServiceQuotaExceededException

> You have exceeded your service quota.

> HTTP Status Code: 402

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

Examples

Terminate EC2 instances

The following example terminates three instances in the specified VPC with the tag env=test.

Sample Request

```
{
    "description": "Test instance termination",
    "targets": {
        "to-terminate": {
            "resourceType": "aws:ec2:instance",
            "resourceTags": {
                "env": "test"
            },
            "filters": [
                "path": "VpcId",
                "values": [
                    "vpc-1234567890abcdef0"
                ]
            ],
            "selectionMode": "COUNT(3)"
        }
    },
    "actions": {
        "TerminateInstances": {
            "actionId": "aws:ec2-terminate-instances",
            "description": "terminate instances",
            "targets": {
                "Instances": "to-terminate"
            }
        }
    },
    "stopConditions": [
        {
            "source": "none"
        }
    ],
    "roleArn": "arn:aws:iam:123456789012:role/ExperimentRole",

}
```

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteExperimentTemplate

Deletes the specified experiment template.

Request Syntax

```
DELETE /experimentTemplates/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 9)

> The ID of the experiment template.
>
> Length Constraints: Maximum length of 64.
>
> Pattern: `[\S]+`
>
> Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experimentTemplate": {
      "actions": {
         "string" : {
            "actionId": "string",
            "description": "string",
            "parameters": {
               "string" : "string"
            },
            "startAfter": [ "string" ],
            "targets": {
               "string" : "string"
            }
         }
      },
      "creationTime": number,
      "description": "string",
      "id": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "stopConditions": [
         {
            "source": "string",
            "value": "string"
         }
```

```
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
                "resourceType": "string",
                "selectionMode": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experimentTemplate (p. 9)

> Information about the experiment template.
>
> Type: ExperimentTemplate (p. 68) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

> The specified resource cannot be found.
>
> HTTP Status Code: 404

ValidationException

> The specified input is not valid, or fails to satisfy the constraints for the request.
>
> HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetAction

Gets information about the specified AWS FIS action.

Request Syntax

```
GET /actions/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 12)

>   The ID of the action.
>
>   Length Constraints: Maximum length of 128.
>
>   Pattern: `[\S]+`
>
>   Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "action": {
        "description": "string",
        "id": "string",
        "parameters": {
            "string" : {
                "description": "string",
                "required": boolean
            }
        },
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "resourceType": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

action (p. 12)

Information about the action.

Type: Action (p. 44) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

The specified resource cannot be found.

HTTP Status Code: 404

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetExperiment

Gets information about the specified experiment.

Request Syntax

```
GET /experiments/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 14)

> The ID of the experiment.
>
> Length Constraints: Maximum length of 64.
>
> Pattern: [\S]+
>
> Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experiment": {
      "actions": {
         "string" : {
            "actionId": "string",
            "description": "string",
            "parameters": {
               "string" : "string"
            },
            "startAfter": [ "string" ],
            "state": {
               "reason": "string",
               "status": "string"
            },
            "targets": {
               "string" : "string"
            }
         }
      },
      "creationTime": number,
      "endTime": number,
      "experimentTemplateId": "string",
      "id": "string",
      "roleArn": "string",
```

```
        "startTime": number,
        "state": {
            "reason": "string",
            "status": "string"
        },
        "stopConditions": [
            {
                "source": "string",
                "value": "string"
            }
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
                "resourceType": "string",
                "selectionMode": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experiment (p. 14)

Information about the experiment.

Type: Experiment (p. 55) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

The specified resource cannot be found.

HTTP Status Code: 404

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetExperimentTemplate

Gets information about the specified experiment template.

Request Syntax

```
GET /experimentTemplates/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 17)

>   The ID of the experiment template.
>
>   Length Constraints: Maximum length of 64.
>
>   Pattern: `[\S]+`
>
>   Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experimentTemplate": {
      "actions": {
         "string" : {
            "actionId": "string",
            "description": "string",
            "parameters": {
               "string" : "string"
            },
            "startAfter": [ "string" ],
            "targets": {
               "string" : "string"
            }
         }
      },
      "creationTime": number,
      "description": "string",
      "id": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "stopConditions": [
         {
            "source": "string",
            "value": "string"
         }
```

```
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
                "resourceType": "string",
                "selectionMode": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experimentTemplate (p. 17)

>   Information about the experiment template.

>   Type: ExperimentTemplate (p. 68) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

>   The specified resource cannot be found.

>   HTTP Status Code: 404

ValidationException

>   The specified input is not valid, or fails to satisfy the constraints for the request.

>   HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListActions

Lists the available AWS FIS actions.

Request Syntax

```
GET /actions?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults (p. 20)

The maximum number of results to return with a single call. To retrieve the remaining results, make another call with the returned `nextToken` value.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken (p. 20)

The token for the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[\S]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "actions": [
        {
            "description": "string",
            "id": "string",
            "tags": {
                "string" : "string"
            },
            "targets": {
                "string" : {
                    "resourceType": "string"
                }
            }
        }
    ],
    "nextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

actions (p. 20)

The actions.

Type: Array of ActionSummary (p. 47) objects

nextToken (p. 20)

The token to use to retrieve the next page of results. This value is `null` when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[\S]+`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListExperiments

Lists your experiments.

Request Syntax

```
GET /experiments?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults (p. 22)

The maximum number of results to return with a single call. To retrieve the remaining results, make another call with the returned `nextToken` value.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken (p. 22)

The token for the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[\S]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "experiments": [
        {
            "creationTime": number,
            "experimentTemplateId": "string",
            "id": "string",
            "state": {
                "reason": "string",
                "status": "string"
            },
            "tags": {
                "string" : "string"
            }
        }
    ],
    "nextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experiments (p. 22)

The experiments.

Type: Array of ExperimentSummary (p. 63) objects

nextToken (p. 22)

The token to use to retrieve the next page of results. This value is `null` when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[\S]+`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListExperimentTemplates

Lists your experiment templates.

Request Syntax

```
GET /experimentTemplates?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults (p. 24)

>   The maximum number of results to return with a single call. To retrieve the remaining results, make
>   another call with the returned `nextToken` value.
>
>   Valid Range: Minimum value of 1. Maximum value of 100.

nextToken (p. 24)

>   The token for the next page of results.
>
>   Length Constraints: Minimum length of 1. Maximum length of 1024.
>
>   Pattern: `[\S]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experimentTemplates": [
      {
         "creationTime": number,
         "description": "string",
         "id": "string",
         "lastUpdateTime": number,
         "tags": {
            "string" : "string"
         }
      }
   ],
   "nextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experimentTemplates (p. 24)

> The experiment templates.
>
> Type: Array of ExperimentTemplateSummary (p. 73) objects

nextToken (p. 24)

> The token to use to retrieve the next page of results. This value is `null` when there are no more results to return.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 1024.
>
> Pattern: `[\S]+`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ValidationException

> The specified input is not valid, or fails to satisfy the constraints for the request.
>
> HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListTagsForResource

Lists the tags for the specified resource.

Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 26)

> The Amazon Resource Name (ARN) of the resource.
>
> Length Constraints: Minimum length of 20. Maximum length of 2048.
>
> Pattern: `[\S]+`
>
> Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "tags": {
        "string" : "string"
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

tags (p. 26)

> The tags for the resource.
>
> Type: String to string map
>
> Map Entries: Maximum number of 50 items.
>
> Key Length Constraints: Maximum length of 128.
>
> Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

StartExperiment

Starts running an experiment from the specified experiment template.

Request Syntax

```
POST /experiments HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "experimentTemplateId": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken (p. 28)

Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: [\S]+

Required: Yes

experimentTemplateId (p. 28)

The ID of the experiment template.

Type: String

Length Constraints: Maximum length of 64.

Pattern: [\S]+

Required: Yes

tags (p. 28)

The tags to apply to the experiment.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "experiment": {
        "actions": {
            "string" : {
                "actionId": "string",
                "description": "string",
                "parameters": {
                    "string" : "string"
                },
                "startAfter": [ "string" ],
                "state": {
                    "reason": "string",
                    "status": "string"
                },
                "targets": {
                    "string" : "string"
                }
            }
        },
        "creationTime": number,
        "endTime": number,
        "experimentTemplateId": "string",
        "id": "string",
        "roleArn": "string",
        "startTime": number,
        "state": {
            "reason": "string",
            "status": "string"
        },
        "stopConditions": [
            {
                "source": "string",
                "value": "string"
            }
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
```

```
            "resourceType": "string",
            "selectionMode": "string"
        }
      }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experiment (p. 29)

Information about the experiment.

Type: Experiment (p. 55) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ConflictException

The request could not be processed because of a conflict.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource cannot be found.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

StopExperiment

Stops the specified experiment.

Request Syntax

```
DELETE /experiments/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 32)

> The ID of the experiment.
>
> Length Constraints: Maximum length of 64.
>
> Pattern: [\S]+
>
> Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "experiment": {
        "actions": {
            "string" : {
                "actionId": "string",
                "description": "string",
                "parameters": {
                    "string" : "string"
                },
                "startAfter": [ "string" ],
                "state": {
                    "reason": "string",
                    "status": "string"
                },
                "targets": {
                    "string" : "string"
                }
            }
        },
        "creationTime": number,
        "endTime": number,
        "experimentTemplateId": "string",
        "id": "string",
        "roleArn": "string",
```

```
        "startTime": number,
        "state": {
            "reason": "string",
            "status": "string"
        },
        "stopConditions": [
            {
                "source": "string",
                "value": "string"
            }
        ],
        "tags": {
            "string" : "string"
        },
        "targets": {
            "string" : {
                "filters": [
                    {
                        "path": "string",
                        "values": [ "string" ]
                    }
                ],
                "resourceArns": [ "string" ],
                "resourceTags": {
                    "string" : "string"
                },
                "resourceType": "string",
                "selectionMode": "string"
            }
        }
    }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experiment (p. 32)

Information about the experiment.

Type: Experiment (p. 55) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

The specified resource cannot be found.

HTTP Status Code: 404

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

TagResource

Applies the specified tags to the specified resource.

Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json

{
    "tags": {
        "string" : "string"
    }
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 35)

The Amazon Resource Name (ARN) of the resource.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags (p. 35)

The tags for the resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UntagResource

Removes the specified tags from the specified resource.

Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 37)

> The Amazon Resource Name (ARN) of the resource.
>
> Length Constraints: Minimum length of 20. Maximum length of 2048.
>
> Pattern: `[\S]+`
>
> Required: Yes

tagKeys (p. 37)

> The tag keys to remove.
>
> Length Constraints: Maximum length of 128.
>
> Pattern: `[\s\S]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateExperimentTemplate

Updates the specified experiment template.

Request Syntax

```
PATCH /experimentTemplates/id HTTP/1.1
Content-type: application/json

{
   "actions": {
      "string" : {
         "actionId": "string",
         "description": "string",
         "parameters": {
            "string" : "string"
         },
         "startAfter": [ "string" ],
         "targets": {
            "string" : "string"
         }
      }
   },
   "description": "string",
   "roleArn": "string",
   "stopConditions": [
      {
         "source": "string",
         "value": "string"
      }
   ],
   "targets": {
      "string" : {
         "filters": [
            {
               "path": "string",
               "values": [ "string" ]
            }
         ],
         "resourceArns": [ "string" ],
         "resourceTags": {
            "string" : "string"
         },
         "resourceType": "string",
         "selectionMode": "string"
      }
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

id (p. 39)

The ID of the experiment template.

Length Constraints: Maximum length of 64.

Pattern: [\S]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

actions (p. 39)

>   The actions for the experiment.
>
>   Type: String to UpdateExperimentTemplateActionInputItem (p. 79) object map
>
>   Key Length Constraints: Maximum length of 64.
>
>   Key Pattern: `[\S]+`
>
>   Required: No

description (p. 39)

>   A description for the template.
>
>   Type: String
>
>   Length Constraints: Maximum length of 512.
>
>   Pattern: `[\s\S]+`
>
>   Required: No

roleArn (p. 39)

>   The Amazon Resource Name (ARN) of an IAM role that grants the AWS FIS service permission to perform service actions on your behalf.
>
>   Type: String
>
>   Length Constraints: Minimum length of 20. Maximum length of 2048.
>
>   Pattern: `[\S]+`
>
>   Required: No

stopConditions (p. 39)

>   The stop conditions for the experiment.
>
>   Type: Array of UpdateExperimentTemplateStopConditionInput (p. 81) objects
>
>   Required: No

targets (p. 39)

>   The targets for the experiment.
>
>   Type: String to UpdateExperimentTemplateTargetInput (p. 82) object map
>
>   Key Length Constraints: Maximum length of 64.
>
>   Key Pattern: `[\S]+`
>
>   Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "experimentTemplate": {
      "actions": {
         "string" : {
            "actionId": "string",
            "description": "string",
            "parameters": {
               "string" : "string"
            },
            "startAfter": [ "string" ],
            "targets": {
               "string" : "string"
            }
         }
      },
      "creationTime": number,
      "description": "string",
      "id": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "stopConditions": [
         {
            "source": "string",
            "value": "string"
         }
      ],
      "tags": {
         "string" : "string"
      },
      "targets": {
         "string" : {
            "filters": [
               {
                  "path": "string",
                  "values": [ "string" ]
               }
            ],
            "resourceArns": [ "string" ],
            "resourceTags": {
               "string" : "string"
            },
            "resourceType": "string",
            "selectionMode": "string"
         }
      }
   }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

experimentTemplate (p. 41)

Information about the experiment template.

Type: ExperimentTemplate (p. 68) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 86).

ResourceNotFoundException

The specified resource cannot be found.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The specified input is not valid, or fails to satisfy the constraints for the request.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

Data Types

The AWS Fault Injection Simulator API contains several data types that various actions use. This section describes each data type in detail.

Note
The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

Action

Describes an action. For more information, see AWS FIS actions in the *AWS Fault Injection Simulator User Guide*.

Contents

description

The description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

id

The ID of the action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

parameters

The action parameters, if applicable.

Type: String to ActionParameter (p. 46) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

tags

The tags for the action.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

targets

The supported targets for the action.

Type: String to ActionTarget (p. 49) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionParameter

Describes a parameter for an action.

Contents

description

The parameter description.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

required

Indicates whether the parameter is required.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionSummary

Provides a summary of an action.

Contents

description

The description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

id

The ID of the action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

tags

The tags for the action.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

targets

The targets for the action.

Type: String to [ActionTarget (p. 49)](#) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionTarget

Describes a target for an action.

Contents

resourceType

The resource type of the target.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

CreateExperimentTemplateActionInput

Specifies an action for an experiment template.

For more information, see Actions in the *AWS Fault Injection Simulator User Guide*.

Contents

actionId

The ID of the action. The format of the action ID is: aws:*service-name*:*action-type*.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: Yes

description

A description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

parameters

The parameters for the action, if applicable.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 1024.

Value Pattern: `[\S]+`

Required: No

startAfter

The name of the action that must be completed before the current action starts. Omit this parameter to run the action at the start of the experiment.

Type: Array of strings

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

targets

The targets for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 64.

Value Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CreateExperimentTemplateStopConditionInput

Specifies a stop condition for an experiment template.

Contents

source

The source for the stop condition. Specify `aws:cloudwatch:alarm` if the stop condition is defined by a CloudWatch alarm. Specify `none` if there is no stop condition.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

value

The Amazon Resource Name (ARN) of the CloudWatch alarm. This is required if the source is a CloudWatch alarm.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\s\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CreateExperimentTemplateTargetInput

Specifies a target for an experiment. You must specify at least one Amazon Resource Name (ARN) or at least one resource tag. You cannot specify both ARNs and tags.

For more information, see Targets in the *AWS Fault Injection Simulator User Guide*.

Contents

filters

The filters to apply to identify target resources using specific attributes.

Type: Array of ExperimentTemplateTargetInputFilter (p. 78) objects

Required: No

resourceArns

The Amazon Resource Names (ARNs) of the resources.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: No

resourceTags

The tags for the target resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

resourceType

The AWS resource type. The resource type must be supported for the specified action.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

selectionMode

Scopes the identified resources to a specific count of the resources at random, or a percentage of the resources. All identified resources are included in the target.

- ALL - Run the action on all identified targets. This is the default.
- COUNT(n) - Run the action on the specified number of targets, chosen from the identified targets at random. For example, COUNT(1) selects one of the targets.
- PERCENT(n) - Run the action on the specified percentage of targets, chosen from the identified targets at random. For example, PERCENT(25) selects 25% of the targets.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Experiment

Describes an experiment.

Contents

actions

The actions for the experiment.

Type: String to ExperimentAction (p. 58) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

creationTime

The time the experiment was created.

Type: Timestamp

Required: No

endTime

The time that the experiment ended.

Type: Timestamp

Required: No

experimentTemplateId

The ID of the experiment template.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

id

The ID of the experiment.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

roleArn

The Amazon Resource Name (ARN) of an IAM role that grants the AWS FIS service permission to perform service actions on your behalf.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: [\S]+

Required: No

startTime

The time that the experiment was started.

Type: Timestamp

Required: No

state

The state of the experiment.

Type: ExperimentState (p. 61) object

Required: No

stopConditions

The stop conditions for the experiment.

Type: Array of ExperimentStopCondition (p. 62) objects

Required: No

tags

The tags for the experiment.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: [\s\S]+

Value Length Constraints: Maximum length of 256.

Value Pattern: [\s\S]*

Required: No

targets

The targets for the experiment.

Type: String to ExperimentTarget (p. 65) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: [\S]+

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentAction

Describes the action for an experiment.

Contents

actionId

The ID of the action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

description

The description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

parameters

The parameters for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 1024.

Value Pattern: `[\S]+`

Required: No

startAfter

The name of the action that must be completed before this action starts.

Type: Array of strings

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

state

The state of the action.

Type: ExperimentActionState (p. 60) object

Required: No

targets

The targets for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 64.

Value Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentActionState

Describes the state of an action.

Contents

reason

The reason for the state.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

status

The state of the action.

Type: String

Valid Values: `pending | initiating | running | completed | cancelled | stopping | stopped | failed`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentState

Describes the state of an experiment.

Contents

reason

The reason for the state.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

status

The state of the experiment.

Type: String

Valid Values: `pending | initiating | running | completed | stopping | stopped | failed`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentStopCondition

Describes the stop condition for an experiment.

Contents

source

The source for the stop condition.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

value

The Amazon Resource Name (ARN) of the CloudWatch alarm, if applicable.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\s\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentSummary

Provides a summary of an experiment.

Contents

creationTime

> The time that the experiment was created.
>
> Type: Timestamp
>
> Required: No

experimentTemplateId

> The ID of the experiment template.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Pattern: [\S]+
>
> Required: No

id

> The ID of the experiment.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Pattern: [\S]+
>
> Required: No

state

> The state of the experiment.
>
> Type: object
>
> Required: No

tags

> The tags for the experiment.
>
> Type: String to string map
>
> Map Entries: Maximum number of 50 items.
>
> Key Length Constraints: Maximum length of 128.
>
> Key Pattern: [\s\S]+
>
> Value Length Constraints: Maximum length of 256.
>
> Value Pattern: [\s\S]*
>
> Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTarget

Describes a target for an experiment.

Contents

filters

The filters to apply to identify target resources using specific attributes.

Type: Array of ExperimentTargetFilter (p. 67) objects

Required: No

resourceArns

The Amazon Resource Names (ARNs) of the resources.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: No

resourceTags

The tags for the target resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

resourceType

The resource type.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

selectionMode

Scopes the identified resources to a specific count or percentage.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTargetFilter

Describes a filter used for the target resources in an experiment.

Contents

path

The attribute path for the filter.

Type: String

Length Constraints: Maximum length of 256.

Pattern: `[\S]+`

Required: No

values

The attribute values for the filter.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplate

Describes an experiment template.

Contents

actions

The actions for the experiment.

Type: String to ExperimentTemplateAction (p. 70) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

creationTime

The time the experiment template was created.

Type: Timestamp

Required: No

description

The description for the experiment template.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

id

The ID of the experiment template.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

lastUpdateTime

The time the experiment template was last updated.

Type: Timestamp

Required: No

roleArn

The Amazon Resource Name (ARN) of an IAM role.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: No

stopConditions

The stop conditions for the experiment.

Type: Array of ExperimentTemplateStopCondition (p. 72) objects

Required: No

tags

The tags for the experiment template.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

targets

The targets for the experiment.

Type: String to ExperimentTemplateTarget (p. 75) object map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplateAction

Describes an action for an experiment template.

Contents

actionId

The ID of the action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

description

A description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

parameters

The parameters for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 1024.

Value Pattern: `[\S]+`

Required: No

startAfter

The name of the action that must be completed before the current action starts.

Type: Array of strings

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

targets

The targets for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 64.

Value Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplateStopCondition

Describes a stop condition for an experiment template.

Contents

source

The source for the stop condition.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

value

The Amazon Resource Name (ARN) of the CloudWatch alarm, if applicable.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\s\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplateSummary

Provides a summary of an experiment template.

Contents

creationTime

The time that the experiment template was created.

Type: Timestamp

Required: No

description

The description of the experiment template.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

id

The ID of the experiment template.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

lastUpdateTime

The time that the experiment template was last updated.

Type: Timestamp

Required: No

tags

The tags for the experiment template.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplateTarget

Describes a target for an experiment template.

Contents

filters

The filters to apply to identify target resources using specific attributes.

Type: Array of ExperimentTemplateTargetFilter (p. 77) objects

Required: No

resourceArns

The Amazon Resource Names (ARNs) of the targets.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: No

resourceTags

The tags for the target resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

resourceType

The resource type.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

selectionMode

Scopes the identified resources to a specific count or percentage.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ExperimentTemplateTargetFilter

Describes a filter used for the target resources in an experiment template.

Contents

path

The attribute path for the filter.

Type: String

Length Constraints: Maximum length of 256.

Pattern: `[\S]+`

Required: No

values

The attribute values for the filter.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentTemplateTargetInputFilter

Specifies a filter used for the target resource input in an experiment template.

For more information, see Resource filters in the *AWS Fault Injection Simulator User Guide*.

Contents

path

The attribute path for the filter.

Type: String

Length Constraints: Maximum length of 256.

Pattern: `[\S]+`

Required: Yes

values

The attribute values for the filter.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateExperimentTemplateActionInputItem

Specifies an action for an experiment template.

Contents

actionId

The ID of the action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\S]+`

Required: No

description

A description for the action.

Type: String

Length Constraints: Maximum length of 512.

Pattern: `[\s\S]+`

Required: No

parameters

The parameters for the action, if applicable.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 1024.

Value Pattern: `[\S]+`

Required: No

startAfter

The name of the action that must be completed before the current action starts. Omit this parameter to run the action at the start of the experiment.

Type: Array of strings

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: No

targets

The targets for the action.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Key Pattern: `[\S]+`

Value Length Constraints: Maximum length of 64.

Value Pattern: `[\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateExperimentTemplateStopConditionInput

Specifies a stop condition for an experiment. You can define a stop condition as a CloudWatch alarm.

Contents

source

The source for the stop condition. Specify `aws:cloudwatch:alarm` if the stop condition is defined by a CloudWatch alarm. Specify `none` if there is no stop condition.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

value

The Amazon Resource Name (ARN) of the CloudWatch alarm.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\s\S]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateExperimentTemplateTargetInput

Specifies a target for an experiment. You must specify at least one Amazon Resource Name (ARN) or at least one resource tag. You cannot specify both.

Contents

filters

The filters to apply to identify target resources using specific attributes.

Type: Array of ExperimentTemplateTargetInputFilter (p. 78) objects

Required: No

resourceArns

The Amazon Resource Names (ARNs) of the targets.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `[\S]+`

Required: No

resourceTags

The tags for the target resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Maximum length of 128.

Key Pattern: `[\s\S]+`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\s\S]*`

Required: No

resourceType

The AWS resource type. The resource type must be supported for the specified action.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

selectionMode

Scopes the identified resources to a specific count or percentage.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\S]+`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signature Version 4 Signing Process in the *Amazon Web Services General Reference*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

InvalidAction

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

InvalidClientTokenId

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400