

# list-roles — AWS CLI 2.34.23 Command Reference

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## Description

Lists the IAM roles that have the specified path prefix. If there are none, the operation returns an empty list. For more information about roles, see [IAM roles](#) in the *IAM User Guide* .

## Note

IAM resource-listing operations return a subset of the available attributes for the resource. This operation does not return the following attributes, even though they are an attribute of the returned object:

- PermissionsBoundary
- RoleLastUsed
- Tags

To view all of the information for a role, see [GetRole](#) .

You can paginate the results using the `MaxItems` and `Marker` parameters.

See also: [AWS API Documentation](#)

`list-roles` is a paginated operation. Multiple API calls may be issued in order to retrieve the entire data set of results. You can disable pagination by providing the `--no-paginate` argument. When using `--output text` and the `--query` argument on a paginated response, the `--query` argument must extract data from the results of the following query expressions: `Roles`

## Synopsis

```
list-roles
[--path-prefix <value>]
[--max-items <value>]
[--cli-input-json | --cli-input-yaml]
[--starting-token <value>]
[--page-size <value>]
[--generate-cli-skeleton <value>]
[--debug]
[--endpoint-url <value>]
[--no-verify-ssl]
[--no-paginate]
[--output <value>]
[--query <value>]
```

```

[--profile <value>]
[--region <value>]
[--version <value>]
[--color <value>]
[--no-sign-request]
[--ca-bundle <value>]
[--cli-read-timeout <value>]
[--cli-connect-timeout <value>]
[--cli-binary-format <value>]
[--no-cli-pager]
[--cli-auto-prompt]
[--no-cli-auto-prompt]
[--cli-error-format <value>]

```

## Options¶

`--path-prefix` (string)

The path prefix for filtering the results. For example, the prefix `/application_abc/component_xyz/` gets all roles whose path starts with `/application_abc/component_xyz/`.

This parameter is optional. If it is not included, it defaults to a slash (/), listing all roles. This parameter allows (through its [regex pattern](#)) a string of characters consisting of either a forward slash (/) by itself or a string that must begin and end with forward slashes. In addition, it can contain any ASCII character from the ! ( `\u0021` ) through the DEL character ( `\u007F` ), including most punctuation characters, digits, and upper and lowercased letters.

Constraints:

- min: 1
- max: 512
- pattern: `\u002F[\u0021-\u007F]*`

`--max-items` (integer)

The total number of items to return in the command's output. If the total number of items available is more than the value specified, a `NextToken` is provided in the command's output. To resume pagination, provide the `NextToken` value in the `starting-token` argument of a subsequent command. **Do not** use the `NextToken` response element directly outside of the AWS CLI.

For usage examples, see [Pagination](#) in the *AWS Command Line Interface User Guide*.

`--cli-input-json` | `--cli-input-yaml` (string) Reads arguments from the JSON string provided. The JSON string follows the format provided by `--generate-cli-skeleton`. If other arguments are provided on the command line, those values will override the JSON-provided values. It is not possible to pass arbitrary binary

values using a JSON-provided value as the string will be taken literally. This may not be specified along with `--cli-input-yaml`.

`--starting-token` (string)

A token to specify where to start paginating. This is the `NextToken` from a previously truncated response.

For usage examples, see [Pagination](#) in the *AWS Command Line Interface User Guide*.

`--page-size` (integer)

The size of each page to get in the AWS service call. This does not affect the number of items returned in the command's output. Setting a smaller page size results in more calls to the AWS service, retrieving fewer items in each call. This can help prevent the AWS service calls from timing out.

For usage examples, see [Pagination](#) in the *AWS Command Line Interface User Guide*.

`--generate-cli-skeleton` (string) Prints a JSON skeleton to standard output without sending an API request. If provided with no value or the value `input`, prints a sample input JSON that can be used as an argument for `--cli-input-json`. Similarly, if provided `yaml-input` it will print a sample input YAML that can be used with `--cli-input-yaml`. If provided with the value `output`, it validates the command inputs and returns a sample output JSON for that command. The generated JSON skeleton is not stable between versions of the AWS CLI and there are no backwards compatibility guarantees in the JSON skeleton generated.

## Global Options¶

`--debug` (boolean)

Turn on debug logging.

`--endpoint-url` (string)

Override command's default URL with the given URL.

`--no-verify-ssl` (boolean)

By default, the AWS CLI uses SSL when communicating with AWS services. For each SSL connection, the AWS CLI will verify SSL certificates. This option overrides the default behavior of verifying SSL certificates.

`--no-paginate` (boolean)

Disable automatic pagination. If automatic pagination is disabled, the AWS CLI will only make one call, for the first page of results.

`--output` (string)

The formatting style for command output.

- json
- text
- table
- yaml
- yaml-stream
- off

`--query` (string)

A JMESPath query to use in filtering the response data.

`--profile` (string)

Use a specific profile from your credential file.

`--region` (string)

The region to use. Overrides config/env settings.

`--version` (string)

Display the version of this tool.

`--color` (string)

Turn on/off color output.

- on
- off
- auto

`--no-sign-request` (boolean)

Do not sign requests. Credentials will not be loaded if this argument is provided.

`--ca-bundle` (string)

The CA certificate bundle to use when verifying SSL certificates. Overrides config/env settings.

`--cli-read-timeout` (int)

The maximum socket read time in seconds. If the value is set to 0, the socket read will be blocking and not timeout. The default value is 60 seconds.

`--cli-connect-timeout` (int)

The maximum socket connect time in seconds. If the value is set to 0, the socket connect will be blocking and not timeout. The default value is 60 seconds.

`--cli-binary-format` (string)

The formatting style to be used for binary blobs. The default format is base64. The base64 format expects binary blobs to be provided as a base64 encoded string. The raw-in-base64-out format preserves compatibility with AWS CLI V1 behavior and binary values must be passed literally. When providing contents from a file that map to a binary blob `fileb://` will always be treated as binary and use the file contents directly regardless of the `cli-binary-format` setting. When using `file://` the file contents will need to be properly formatted for the configured `cli-binary-format`.

- base64
- raw-in-base64-out

`--no-cli-pager` (boolean)

Disable cli pager for output.

`--cli-auto-prompt` (boolean)

Automatically prompt for CLI input parameters.

`--no-cli-auto-prompt` (boolean)

Disable automatically prompt for CLI input parameters.

`--cli-error-format` (string)

The formatting style for error output. By default, errors are displayed in enhanced format.

- legacy
- json
- yaml
- text
- table
- enhanced

## Examples¶

### Note

To use the following examples, you must have the AWS CLI installed and configured. See the [Getting started guide](#) in the *AWS CLI User Guide* for more information.

Unless otherwise stated, all examples have unix-like quotation rules. These examples will need to be adapted to your terminal's quoting rules. See [Using quotation marks with strings](#) in the *AWS CLI User Guide*.

### To list IAM roles for the current account

The following `list-roles` command lists IAM roles for the current account.

```
aws iam list-roles
```

Output:

```
{
  "Roles": [
    {
      "Path": "/",
      "RoleName": "ExampleRole",
      "RoleId": "AROAJ520TH4H7LEXAMPLE",
      "Arn": "arn:aws:iam::123456789012:role/ExampleRole",
      "CreateDate": "2017-09-12T19:23:36+00:00",
      "AssumeRolePolicyDocument": {
        "Version": "2012-10-17",
        "Statement": [
          {
            "Sid": "",
            "Effect": "Allow",
            "Principal": {
              "Service": "ec2.amazonaws.com"
            },
            "Action": "sts:AssumeRole"
          }
        ]
      },
      "MaxSessionDuration": 3600
    },
    {
      "Path": "/example_path/",
      "RoleName": "ExampleRoleWithPath",
      "RoleId": "AROAI4QRP7UFT7EXAMPLE",
      "Arn": "arn:aws:iam::123456789012:role/example_path/ExampleRoleWithPath",
      "CreateDate": "2023-09-21T20:29:38+00:00",
      "AssumeRolePolicyDocument": {
        "Version": "2012-10-17",
        "Statement": [
          {
            "Sid": "",
            "Effect": "Allow",
            "Principal": {
              "Service": "ec2.amazonaws.com"
            },
            "Action": "sts:AssumeRole"
          }
        ]
      }
    }
  ],
}
```

```

        "MaxSessionDuration": 3600
    }
]
}

```

For more information, see [Creating IAM roles](#) in the *AWS IAM User Guide*.

## Output

Roles -> (list)

A list of roles.

(structure)

Contains information about an IAM role. This structure is returned as a response element in several API operations that interact with roles.

Path -> (string) [required]

The path to the role. For more information about paths, see [IAM identifiers](#) in the *IAM User Guide*.

Constraints:

- min: 1
- max: 512
- pattern: `(\u002F)|(\u002F[\u0021-\u007E]+\u002F)`

RoleName -> (string) [required]

The friendly name that identifies the role.

Constraints:

- min: 1
- max: 64
- pattern: `[\w+=, .@- ]+`

RoleId -> (string) [required]

The stable and unique string identifying the role. For more information about IDs, see [IAM identifiers](#) in the *IAM User Guide*.

Constraints:

- min: 16
- max: 128

- pattern: `[\w]+`

Arn -> (string) [required]

The Amazon Resource Name (ARN) specifying the role. For more information about ARNs and how to use them in policies, see [IAM identifiers](#) in the *IAM User Guide* guide.

Constraints:

- min: `20`
- max: `2048`

CreateDate -> (timestamp) [required]

AssumeRolePolicyDocument -> (string)

The policy that grants an entity permission to assume the role.

Constraints:

- min: `1`
- max: `131072`
- pattern: `[\u0009\u000A\u000D\u0020-\u00FF]+`

Description -> (string)

A description of the role that you provide.

Constraints:

- max: `1000`
- pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]*`

MaxSessionDuration -> (integer)

The maximum session duration (in seconds) for the specified role. Anyone who uses the CLI, or API to assume the role can specify the duration using the optional `DurationSeconds` API parameter or `duration-seconds` CLI parameter.

Constraints:

- min: `3600`
- max: `43200`

PermissionsBoundary -> (structure)

The ARN of the policy used to set the permissions boundary for the role.

For more information about permissions boundaries, see [Permissions boundaries for IAM identities](#) in the *IAM User Guide* .

PermissionsBoundaryType -> (string)

The permissions boundary usage type that indicates what type of IAM resource is used as the permissions boundary for an entity. This data type can only have a value of `Policy` .

Possible values:

- `PermissionsBoundaryPolicy`

PermissionsBoundaryArn -> (string)

The ARN of the policy used to set the permissions boundary for the user or role.

Constraints:

- min: `20`
- max: `2048`

Tags -> (list)

A list of tags that are attached to the role. For more information about tagging, see [Tagging IAM resources](#) in the *IAM User Guide* .

Constraints:

- max: `50`

(structure)

A structure that represents user-provided metadata that can be associated with an IAM resource. For more information about tagging, see [Tagging IAM resources](#) in the *IAM User Guide* .

Key -> (string) [required]

The key name that can be used to look up or retrieve the associated value. For example, `Department` or `Cost Center` are common choices.

Constraints:

- min: `1`
- max: `128`
- pattern: `[\p{L}\p{Z}\p{N}_\.\:/=\+\-@]+`

Value -> (string) [required]

The value associated with this tag. For example, tags with a key name of `Department` could have values such as `Human Resources`, `Accounting`, and `Support`. Tags with a key name of `Cost Center` might have values that consist of the number associated with the different cost centers in your company. Typically, many resources have tags with the same key name but with different values.

Constraints:

- min: `0`
- max: `256`
- pattern: `[\p{L}\p{Z}\p{N}_./+=\-\@]*`

RoleLastUsed -> (structure)

Contains information about the last time that an IAM role was used. This includes the date and time and the Region in which the role was last used. Activity is only reported for the trailing 400 days. This period can be shorter if your Region began supporting these features within the last year. The role might have been used more than 400 days ago. For more information, see [Regions where data is tracked](#) in the *IAM user Guide*.

LastUsedDate -> (timestamp)

Region -> (string)

The name of the Amazon Web Services Region in which the role was last used.

IsTruncated -> (boolean)

A flag that indicates whether there are more items to return. If your results were truncated, you can make a subsequent pagination request using the `Marker` request parameter to retrieve more items. Note that IAM might return fewer than the `MaxItems` number of results even when there are more results available. We recommend that you check `IsTruncated` after every call to ensure that you receive all your results.

Marker -> (string)

When `IsTruncated` is `true`, this element is present and contains the value to use for the `Marker` parameter in a subsequent pagination request.