



AMS Advanced Change Type Examples

# AMS Advanced Change Management User Guide



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# AMS Advanced Change Management User Guide: AMS Advanced Change Type Examples

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## review-walkthroughs

### Topics

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## Create a DHCP option set

### Create a DHCP option set with the console

The following shows this change type in the AMS console.

▼ **Create DHCP option set**

ID	Execution mode	Version
ct-18rsjua1zosvo	Automated	1.0 (only version)

Classification  
Deployment -> Advanced stack components -> VPC -> Create DHCP option set

Description  
Create a Dynamic Host Configuration Protocol (DHCP) option set for resources in your VPC to communicate over your virtual network. Each Region has a default DHCP option set that configures various options including domain names, DNS servers, NTP servers, and more.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a DHCP option set with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification '{"Email"}: {"EmailRecipients": [{"email@example.com}]}'` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-18rsjua1zosvo" --change-type-version "1.0" --
title "AWSManagedServices-CreateDhcpOptionSet" --execution-parameters '{"DocumentName
\': \'AWSManagedServices-CreateDhcpOptionSet\',\'Region\': \'us-east-1\',\'Parameters
\': {\'DomainName\': \'example.com\',\'DomainNameServers\': [\'1.2.3.4\'],\'NtpServers
\': [\'4.5.6.7\'],\'NetBiosNameServers\': [\'3.4.5.6\'],\'NetBiosNodeType\': \'1\',
\'Ipv6AddressPreferredLeaseTime\': \'140\',\'DhcpOptionSetName\': \'optionsetname\']}'
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type; this example names it `CreateDhcpOptionSetParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-18rsjua1zosvo"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateDhcpOptionSetParams.json
```

2. Modify and save the execution `CreateDhcpOptionSetParams.json` file. For example, you can replace the contents with something like this:

```
{
  "DomainName": "example.com",
  "DomainNameServers": [
    "1.2.3.4"
  ],
}
```

```
"NtpServers": [  
  "4.5.6.7"  
],  
"NetBiosNameServers": [  
  "3.4.5.6"  
],  
"NetBiosNodeType": "1",  
"Ipv6AddressPreferredLeaseTime": "140",  
"DhcpOptionSetName": "optionsetname"  
"Priority": "Medium"  
}
```

3. Output the RFC template JSON file; this example names it CreateDhcpOptionSet.json:

```
aws amscm create-rfc --generate-cli-skeleton > CreateDhcpOptionSet.json
```

4. Modify and save the CreateDhcpOptionSet.json file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "1.0",  
  "ChangeTypeId": "ct-18rsjua1zosvo",  
  "Title": "Create Dhcp Option Set"  
}
```

5. Create the RFC, specifying the CreateDhcpOptionSet file and the CreateDhcpOptionSetParams file:

```
aws amscm create-rfc --cli-input-json file://CreateDhcpOptionSet.json --execution-parameters file://CreateDhcpOptionSetParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For information about VPCs, see [Virtual private clouds \(VPC\)](#).

# Create ELB Listener Rule

## Creating ELB Listener Rule with the Console

Screenshot of this change type in the AMS console:

### Create ELB Listener Rule

ID	Execution mode	Version
ct-18weo4vv83ynk	Automated	1.0 (most recent version)

#### Classification

Deployment -> Advanced stack components -> Load balancer (ELB) stack -> Create listener rule

#### Description

Create a listener rule for the specific listener. Application Load Balancer listener 'forward' and 'redirected' are the only supported rule types

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating ELB Listener Rule with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-18weo4vv83ynk" --change-type-version "1.0" --title "Create ALB Listener Rule" --execution-parameters "{\"DocumentName\": \"AWSManagedServices-CreateListenerRule\", \"Parameters\": {\"ListenerArn\": [\"LISTENER_ARN\"], \"Conditions\": [\"{\\\"Field\\\": \\\"path-pattern\\\", \\\"PathPatternConfig\\\": {\\\"Values\\\": [\\\"/img/*\\\"]}}\"], \"RuleType\": [\"redirect\"], \"Priority\": [\"200\"], \"TargetGroups\": [\"{}\"], \"TargetGroupStickinessConfig\": [\"\"], \"TargetGroupStickinessDuration\": [\"\"], \"RedirectProtocol\": [\"HTTP\"], \"RedirectPort\": [\"85\"], \"RedirectHost\": [\"www.example.com\"], \"RedirectPath\": [\"/new-path\"], \"RedirectQuery\": [\"page1\"], \"RedirectStatusCode\": [\"HTTP_301\"]}, \"Region\": \"REGION\"}"
```

```
aws amscm create-rfc --change-type-id "ct-18weo4vv83ynk" --change-type-version "1.0" --title "Create ALB Listener Rule" --execution-parameters "{\"DocumentName\": \"AWSManagedServices-CreateListenerRule\", \"Parameters\": {\"ListenerArn\": [\"LISTENER_ARN\"], \"Conditions\": [\"{\\\"Field\\\": \\\"path-pattern\\\", \\\"PathPatternConfig\\\": {\\\"Values\\\": [\\\"/img/*\\\"]}}\"], \"RuleType\": [\"forward\"], \"Priority\": [\"125\"], \"TargetGroups\": [\"{\\\"TargetGroupArn\\\": \\\"TARGET_GROUP_ARN\\\", \\\"Weight\\\": \\\"20\\\"}\"], \"TargetGroupStickinessConfig\": [\"Enabled\"], \"TargetGroupStickinessDuration\": [\"15\"], \"RedirectProtocol\": [\"\"], \"RedirectPort\": [\"\"], \"RedirectHost\": [\"\"], \"RedirectPath\": [\"\"], \"RedirectQuery\": [\"\"], \"RedirectStatusCode\": [\"\"]}, \"Region\": \"REGION\"}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters for this change type to a JSON file named `validateCreateRule.Actions.json`.

```
aws amscm get-change-type-version --change-type-id "ct-18weo4vv83ynk" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > validateCreateRule.Actions.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

All parameters example:

```
{
  "DocumentName": "AWSManagedServices-CreateListenerRule",
  "Region": "us-west-2",
  "Parameters": {
    "ListenerArn": ["LISTENER_ARN"],
    "Conditions": [{"Field": "host-header", "HostHeaderConfig": {"Values": ["example.com"]}}],
    "RuleType": ["forward"],
    "Priority": ["200"],
    "TargetGroups": [{"TargetGroupArn": "TARGET_GROUP_ARN", "Weight": "100"}],
    "TargetGroupStickinessConfig": ["Enabled"],
    "TargetGroupStickinessDuration": ["86400"],
    "RedirectProtocol": [""],
    "RedirectPort": [""],
    "RedirectHost": [""],
    "RedirectPath": [""],
    "RedirectQuery": [""],
    "RedirectStatusCode": [""],
    "Priority": "High"
  }
}
```

```
{
  "DocumentName": "AWSManagedServices-CreateListenerRule",
  "Parameters": {
    "ListenerArn": [
      LISTENER_ARN
    ],
    "Conditions": [
      {"Field": "path-pattern", "PathPatternConfig": {"Values": ["/img/*"]}}
    ],
    "RuleType": [
      forward
    ],
    "Priority": [
      125
    ],
    "TargetGroups": [
      {"TargetGroupArn": "TARGET_GROUP_ARN", "Weight": "20"}
    ],
    "TargetGroupStickinessConfig": [
      Enabled
    ]
  }
}
```

```
],
  "TargetGroupStickinessDuration": [
    "15"
  ],
  "RedirectProtocol": [
    ""
  ],
  "RedirectPort": [
    ""
  ],
  "RedirectHost": [
    ""
  ],
  "RedirectPath": [
    ""
  ],
  "RedirectQuery": [
    ""
  ],
  "RedirectStatusCode": [
    ""
  ]
},
"Region": "REGION",
"Priority": "High"
}
```

3. Output the JSON template to a file in your current folder; this example names it `CreateListenerRuleRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateListenerRuleRfc.json
```

4. Modify and save the `CreateListenerRuleRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-18weo4vv83ynk",
  "Title": "Create ALB Listener Rule"
}
```

5. Create the RFC, specifying the execution parameters file and the `validateCreateRule` file:

```
aws amscm create-rfc --cli-input-json file://CreateListenerRuleRfc.json --
execution-parameters file://validateCreateRule.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about AWS Application Load Balancers, see [What Is an Application Load Balancer?](#)

# Update VPC Endpoint Policy

## Updating a VPC Endpoint Policy

The following shows this change type in the AMS console.

### ▼ Update VPC Endpoint Policy

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-128mp7mbxobd0	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> VPC endpoint -> Update policy (managed automation)

#### Description

Update the policy for a VPC endpoint. After you update the policy, it takes a few minutes for the changes to take effect. There are several considerations outlined in the Amazon VPC AWS PrivateLink User Guide documentation on using endpoint policies.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating a VPC Endpoint Policy with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-128mp7mbxobd0" --change-type-version "1.0" --
title "Update VPC Endpoint Policy" --execution-parameters "{\"Region\": \"us-east-1\",
\"VpcEndpointId\": \"vpce-1a2b3c4d5e6f7g8h9\", \"PolicyDocument\": \"Example endpoint
policy\", \"PolicyAction\": \"Append\", \"Priority\": \"High\"}
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type; this example names it `UpdateVPCEndpointPolicyParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-128mp7mbxobd0"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateVPCEndpointPolicyParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "Region": "us-east-1",
  "VpcEndpointId": "vpce-1a2b3c4d5e6f7g8h9",
  "PolicyDocument": "Example endpoint policy"
  "PolicyAction" : "Append",
  "Priority": "High"
}
```

3. Output the RFC template JSON file; this example names it UpdateVPCEndpointPolicyRFC.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateVPCEndpointPolicyRFC.json
```

4. Modify and save the UpdateVPCEndpointPolicyRFC.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-128mp7mbxobd0",
  "Title": "Update VPC Endpoint Policy"
}
```

5. Create the RFC, specifying the UpdateVPCEndpointPolicyRFC file and the UpdateVPCEndpointPolicyParams file:

```
aws amscm create-rfc --cli-input-json file://UpdateVPCEndpointPolicyRFC.json --
execution-parameters file://UpdateVPCEndpointPolicyParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondance option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.

## Delete NAT gateway (Managed Automation)

This operation requires manual review and approval before its completed successfully.

## Deleting NAT gateway (Managed Automation)

### ▼ Delete NAT gateway (review required)

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1rexstryxe1b	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> NAT gateway -> Delete (managed automation)

#### Description

Request deletion of the specified NAT gateways. This operation requires manual review and approval before its completed successfully.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deleting NAT gateways with the CLI (Managed Automation)

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter  
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1rexstryxye1b" --change-type-version "1.0"
--title "Delete NAT Gateway" --execution-parameters "{\\"Region\\":\\"us-east-1\\",
\\"NatGatewayId\\":[\\"nat-1234567890abcdef0\\"],\\"Priority\\":\\"High\\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema to a file in your current folder. This example names it DeleteNATGatewayParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-1rexstryxye1b"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DeleteNATGatewayParams.json
```

2. Modify and save the DeleteNATGatewayParams.json file. For example, you can replace the contents with something like this:

```
{
  "Region": "us-west-1",
  "NatGatewayId": "nat-1234567890abcdef0"
  "Priority": "High"
}
```

3. Output the RFC template to a file in your current folder. This example names it DeleteNATGatewayRfc.json.

```
aws amscm create-rfc --generate-cli-skeleton > DeleteNATGatewayRfc.json
```

4. Modify and save the DeleteNATGatewayRfc.json file.

The internal quotation marks in the ExecutionParameters JSON extension must be escaped with a backslash (\). Example:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-1rexstryxye1b",
  "Title": "Delete-NAT-Gateway"
}
```

5. Create the RFC:

```
aws amscm create-rfc --cli-input-json file://DeleteNATGatewayRfc.json --execution-parameters file://DeleteNATGatewayParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondance option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.

## Update EC2 Instance Metadata Service (IMDS) Region Setting

### Updating EC2 instance IMDS region setting with the console

The following shows this change type in the AMS console.

#### ▼ Update IMDS Region-Level Default Settings (Review Required)

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-2o1knqxw39mkc	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> EC2 instance stack -> Update IMDS region-level default settings (managed automation)

#### Description

Modify the default version for the instance metadata service (IMDS) at the account level for each AWS region. When you launch a new instance, the instance metadata version is automatically set at the account-level to 'default'. You can manually override the value at launch, or after launch. Note, setting the account-level default does not reset existing instances. For example, if you set the account-level default to IMDSv2, any existing instances that are set to IMDSv1 are not affected. If you want to change the value on existing instances, you must manually change the value on the instances themselves.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating EC2 instance IMDS region setting with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-2o1knqwx39mkc" --change-type-version
"1.0" --title "Update IMDS region-level default settings" --execution-parameters
{"Region\":\"us-west-2\",\"HttpEndpoint\":\"Enabled\",\"HttpTokens\":\"Required\",
\"InstanceMetadataTags\":\"Enabled\",\"HttpPutResponseHopLimit\":1,\"Priority\":
\"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it `UpdateEC2ImdsRegionParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2o1knqwx39mkc"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateEC2ImdsRegionParams.json
```

2. Modify and save the `UpdateEC2ImdsRegionParams` file, retaining only the parameters that you want to change. For example, you can replace the contents with something like this:

```
{
```

```
"Region": "us-west-2",  
"HttpEndpoint": "Enabled",  
"HttpTokens": "Required"  
"InstanceMetadataTags" : "Enabled",  
"HttpPutResponseHopLimit": 1,  
"Priority": "High"  
}
```

3. Output the RFC template to a file in your current folder; this example names it `UPdateEC2ImdsRegionRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > UPdateEC2ImdsRegionRfc.json
```

4. Modify and save the `UPdateEC2ImdsRegionRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "1.0",  
  "ChangeTypeId": "ct-2o1knqxw39mkc",  
  "Title": "Update IMDS region-level default settings"  
}
```

5. Create the RFC, specifying the `UPdateEC2ImdsRegionRfc` file and the `UPdateEC2ImdsRegionParams` file:

```
aws amscm create-rfc --cli-input-json file://UPdateEC2ImdsRegionRfc.json --  
execution-parameters file://UPdateEC2ImdsRegionParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

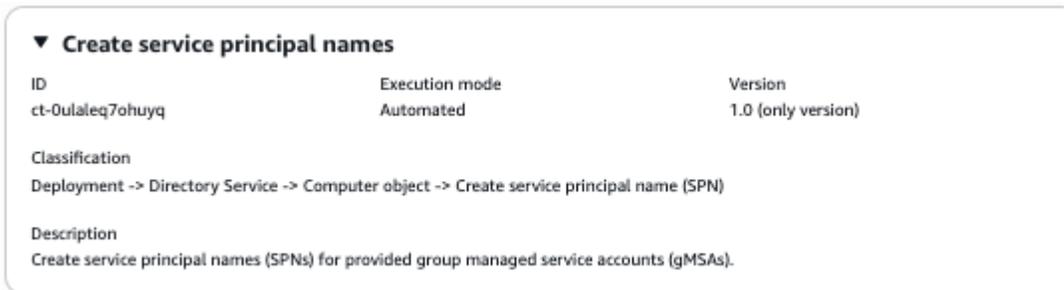
## Tips

You can set default values for the instance metadata options at the account level for each AWS Region. When an instance is launched, the instance metadata options are automatically set to the account-level values. You can change these values at launch. Account-level default values do not affect existing instances. For more information about Amazon EC2 IMDS settings, see [Where to configure instance metadata options](#)

# Create a computer object's SPN

## Creating a computer object's SPN from an AMS-managed AD with the console

The following shows this change type in the AMS console.



How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a computer object's SPN from an AMS-managed AD with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter  
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the `create RFC` command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-0ulaleq7ohuyq" --change-type-version "1.0"
--title "Create service principal names" --execution-parameters "{ \"DocumentName\":
\"AWSManagedServices-CreateADSPN-Admin\", \"Region\": \"us-east-1\", \"Parameters
\": { \"ServiceType\": \"MSSQLSvc\", \"Hostnames\": \"server1,server2\",
\"ServiceAccountName\": \"gmsa_sql\" } }"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it ComputerObjectCreateSpnParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-0ulaleq7ohuyq"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
ComputerObjectCreateSpnParams.json
```

Modify and save the ComputerObjectCreateSpnParams file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-CreateADSPN-Admin",
  "Region": "us-east-1",
  "Parameters": {
    "ServiceType": ["HOST"],
    "Hostnames": "server1",
    "ServiceAccountName": "gmsa_host",
    "Port": ["1433"],
    "ApplicationAccountId": "123456789012"
  }
}
```

2. Output the RFC template to a file in your current folder; this example names it ComputerObjectCreateSpnRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > ComputerObjectCreateSpnRfc.json
```

3. Modify and save the ComputerObjectCreateSpnRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0ulaleq7ohuyq",
```

```
"Title": "Create service principal names"
}
```

4. Create the RFC, specifying the `ComputerObjectCreateSpnRfc` file and the `ComputerObjectCreateSpnParams` file:

```
aws amscm create-rfc --cli-input-json file://ComputerObjectCreateSpnRfc.json --
execution-parameters file://ComputerObjectCreateSpnParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- For multi-account landing zone (MALZ), use this change type in the shared services account.
- For information about Directory Service, see the [Directory Service Admin Guide](#).

## Delete target groups (Managed Automation)

### Delete a Target Group with the Console

Screenshot of this change type in the AMS console:

#### ▼ Delete Target Group

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-0akjahmgqhu4u	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> Target group -> Delete (managed automation)

#### Description

Delete target groups that are not attached to any load balancer. Before deleting, deregister any targets associated with the target group and then ensure it's not referenced in any listener rules. Deleting a target group also deletes any associated health checks.

#### Note

When using manual CTs, AMS recommends that you use the **ASAP Scheduling** option (choose **ASAP** in the console, leave start and end time blank in the API/CLI) as these CTs require an AMS operator to examine the RFC, and possibly communicate with you

before it can be approved and run. If you schedule these RFCs, be sure to allow at least 24 hours. If approval does not happen before the scheduled start time, the RFC is rejected automatically.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Delete a Target Group with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.  
  
Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter  
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-0akjahmgqhu4u" --change-type-version "1.0"  
--title "Delete Target Group" --execution-parameters "{\"Region\": \"us-west-2\",  
\"TargetGroupArns\": [\"arn:aws:elasticloadbalancing:us-west-2:123456789012:targetgroup/  
my-targets/73e2d6bc24d8a067\"], \"Priority\": \"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it TgDeleteParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-0akjahmgqhu4u" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > TgDeleteParams.json
```

2. Modify and save the TgDeleteParams file. For example, you can replace the contents with something like this:

```
{
  "Region": "us-west-2",
  "TargetGroupArns": "arn:aws:elasticloadbalancing:us-
west-2:123456789012:targetgroup/my-targets/73e2d6bc24d8a067"
  "Priority": "High"
}
```

3. Output the RFC template to a file in your current folder named TgDeleteRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > TgDeleteRfc.json
```

4. Modify and save the TgDeleteRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0akjahmgqhu4u",
  "Title": "Delete Target Group"
}
```

5. Create the RFC, specifying the TgDeleteRfc file and the TgDeleteParams file:

```
aws amscm create-rfc --cli-input-json file://TgDeleteRfc.json --execution-
parameters file://TgDeleteParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondance option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.

- Deleting a target group also deletes any associated health checks.
- Deleting a target group does not affect its registered targets.
- For information about target groups, see [ELB Target Groups](#).

## Create application load balancer (ALB)

### Creating an ALB with the console

The following shows this change type in the AMS console.

Create Application Load Balancer		Modify version
Description		
Create an AWS Application Load Balancer (ALB), with additional listeners.		
ID	Version	
ct-111r1yayblnw4	3.0 (most recent version)	

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating an ALB with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm --profile saml --region us-east-1 create-rfc --change-type-id
"ct-111r1yayblnw4" --change-type-version "3.0" --title 'Create ALB' --description
"My Test ALB" --execution-parameters "{\"Description\": \"Test ALB\", \"VpcId\":
\"VPC_ID\", \"Name\": \"TestStack\", \"StackTemplateId\": \"stm-sd7uv5000000000000\",
\"TimeoutInMinutes\": 360, \"LoadBalancer\": {\"SecurityGroups\": [\"SG_ID\"], \"SubnetIds
\": [\"SUBNET_ID\", \"SUBNET_ID\"]}, \"Listener1\": {\"Port\": \"443\", \"Protocol\":
\"HTTPS\"}}\"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a JSON file. For example, you can replace the contents with something like this:

```
aws amscm get-change-type-version --change-type-id "ct-111r1yayblnw4" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > CreateAlbParams.json
```

2. Modify and save the `CreateAlbParams` file. For example:

```
{
  "Description":      "ALB-Create",
  "VpcId":            "VPC_ID",
  "Name":             "My-ALB",
  "StackTemplateId": "stm-sd7uv5000000000000",
  "TimeoutInMinutes" : 360,
```

```
"LoadBalancer" : {
  "SecurityGroups" : ["SG_ID"],
  "SubnetIds" : ["SUBNET_ID", "SUBNET_ID"]
},
"Listener1" : {
  "Port" : "443",
  "Protocol" : "HTTPS"
}
}
```

3. Output the RFC template to a file in your current folder. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --generate-cli-skeleton > CreateAlbRfc.json
```

4. Modify and save the CreateAlbRfc.json file. For example:

```
{
  "ChangeTypeVersion": "3.0",
  "ChangeTypeId": "ct-111r1yayblnw4",
  "Title": "ALB-Create-RFC"
}
```

5. Create the RFC, specifying the CreateAlbRfc file and the CreateAlbParams file:

```
aws amscm create-rfc --cli-input-json file://CreateAlbRfc.json --execution-parameters file://CreateAlbParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

As of version 3.0, you can also configure four CloudWatch alarms with customized alarm thresholds.

**Note**

To open ports and associate all the load balancer resources, submit a Management | Advanced stack components | Security groups | Update RFC.

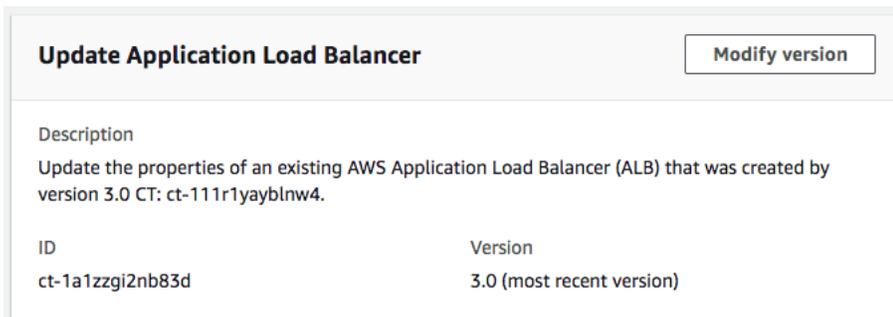
To learn more about AWS Application Load Balancers, see [What Is an Application Load Balancer?](#)

To create an Application Load Balancer target group, see [Target Group | Create \(For ALB\)](#).

## Update application load balancer (ALB)

### Updating an ALB with the console

The following shows this change type in the AMS console.



The screenshot shows a card for the 'Update Application Load Balancer' change type. At the top right of the card is a 'Modify version' button. Below the title is a 'Description' section with the text: 'Update the properties of an existing AWS Application Load Balancer (ALB) that was created by version 3.0 CT: ct-111r1yayblnw4.' Below the description is a table with two columns: 'ID' and 'Version'. The table contains one row with the ID 'ct-1a1zzgj2nb83d' and the version '3.0 (most recent version)'.

ID	Version
ct-1a1zzgj2nb83d	3.0 (most recent version)

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an ALB with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.  
  
Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter  
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status

changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the `create-rfc` command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title Test-Update-ALB --change-type-id ct-1a1zzgi2nb83d
--change-type-version 3.0 --execution-parameters '{"Description": "Updating Test
ALB", "VpcId": "VPC_ID", "StackTemplateId": "stm-sd7uv5000000000000", "Name": "Test-
Application-LoadBalancer", "TimeoutInMinutes": 360, "Parameters":
{"TargetGroupHealthCheckPath": "/myAppHealth"}'
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a JSON file. For example, you can replace the contents with something like this:

```
aws amscm get-change-type-version --change-type-id "ct-111r1yayblnw4" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > UpdateAlbParams.json
```

2. Modify and save the `UpdateAlbParams` file. For example:

```
{
  "Description":      "ALB-Update",
  "VpcId":            "VPC_ID",
  "Name":             "My-ALB",
  "StackTemplateId": "stm-sd7uv5000000000000",
  "TimeoutInMinutes" : 360,
  "Parameters": {
    "LoadBalancerSecurityGroups": [
      "sg-1234567890abcdef0"
    ],
    "LoadBalancerSubnetIds": [
      "subnet-1234567890abcdef0",
      "subnet-1234567890abcdef1"
    ]
  }
}
```

```

    ],
    "LoadBalancerDeletionProtection": "false",
    "LoadBalancerIdleTimeout": "60",
    "Listener1Port": "443",
    "Listener1Protocol": "HTTPS",
    "Listener1SSLCertificateArn": "arn:aws:acm:ap-
southeast-2:012345678912:certificate/e23c3545-e92d-4542-83b8-63483505b5a5",
    "Listener1SSLPolicy": "ELBSecurityPolicy-TLS-1-2-Ext-2018-06",
    "Listener2Port": "8080",
    "Listener2Protocol": "HTTP",
    "TargetGroupHealthCheckInterval": "10",
    "TargetGroupHealthCheckPath": "/thing/index.html",
    "TargetGroupHealthCheckPort": "8080",
    "TargetGroupHealthCheckProtocol": "HTTP",
    "TargetGroupHealthCheckTimeout": "10",
    "TargetGroupHealthyThreshold": "2",
    "TargetGroupUnhealthyThreshold": "10",
    "TargetGroupValidHTTPCode": "200",
    "TargetGroupDeregistrationDelayTimeout": "300",
    "TargetGroupSlowStartDuration": "30",
    "TargetGroupCookieExpirationPeriod": "20"
  }
}

```

3. Output the RFC template to a file in your current folder. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateAlbRfc.json
```

4. Modify and save the UpdateAlbRfc.json file. For example:

```

{
  "ChangeTypeVersion": "3.0",
  "ChangeTypeId": "ct-111r1yayblnw4",
  "Title": "ALB-Update-RFC"
}

```

5. Create the RFC, specifying the UpdateAlbRfc file and the UpdateAlbParams file:

```
aws amscm create-rfc --cli-input-json file://UpdateAlbRfc.json --execution-
parameters file://UpdateAlbParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

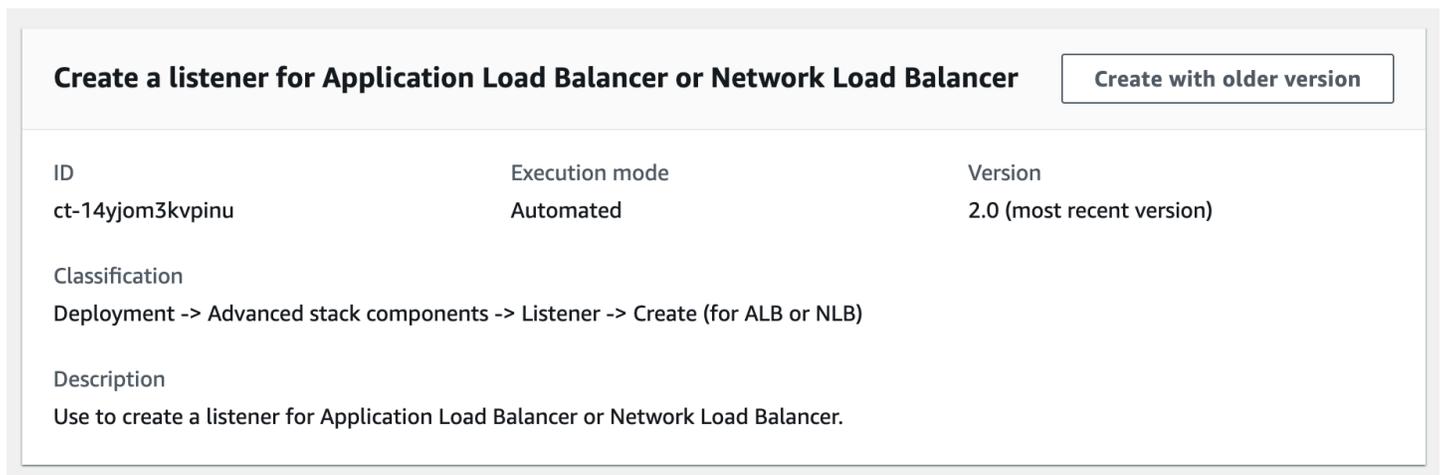
This change type is version 3.0, and can be used with the version 3.0 of the Create ALB change type (ct-111r1yayblnw4).

To learn more about AWS Application Load Balancers, see [What Is an Application Load Balancer?](#)

## Create listener

### Creating a Listener for an ALB or NLB with the Console

Screenshot of this change type in the AMS console:



The screenshot displays the AMS console interface for creating a listener. At the top, there is a title "Create a listener for Application Load Balancer or Network Load Balancer" and a button labeled "Create with older version". Below the title, there is a table with the following information:

ID	Execution mode	Version
ct-14yjom3kvpinu	Automated	2.0 (most recent version)

Below the table, there is a "Classification" section with the text "Deployment -> Advanced stack components -> Listener -> Create (for ALB or NLB)".

Below the classification, there is a "Description" section with the text "Use to create a listener for Application Load Balancer or Network Load Balancer."

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a Listener for an ALB or NLB with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### **Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws --profile saml --region us-east-1 amscm create-rfc --change-type-id
"ct-14yjom3kvpinu" --change-type-version "2.0" --title "TITLE" --execution-parameters
{"Description\":"DESCRIPTION", "VpcId\":"VPC_ID", "StackTemplateId\":"stm-
u5n0r6aacdvdwthhm", "Name\":"NAME", "TimeoutInMinutes\":60, "Parameters\":
{"LoadBalancerArn\":"LB-ARN","DefaultActionTargetGroupArn\":"TARGET-GROUP-ARN",
"Port\":"80","Protocol\":"HTTP"}}
```

### *TEMPLATE CREATE:*

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it `CreateListenerParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-14yjom3kvpinu" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > CreateListenerParams.json
```

2. Modify and save the `CreateListenerParams` file. For example, you can replace the contents with something like this:

```
{
  "Description": "Listener-Create",
```

```
"VpcId":           "VPC_ID",
"StackTemplateId": "stm-u5n0r6aacdvdwthhm",
"Name":           "My-Listener",

"Parameters": {
  "LoadBalancerArn":      ARN,
  "DefaultActionTargetGroupArn": ARN,
  "Port":                 PORT,
  "Protocol":             Protocol"
}
```

3. Output the RFC template to a file in your current folder; this example names it `CreateListenerRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateListenerRfc.json
```

4. Modify and save the `CreateListenerRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "2.0",
  "ChangeTypeId":      "ct-14yjom3kvpinu",
  "Title":             "Listener-Create-RFC"
}
```

5. Create the RFC, specifying the `CreateListenerRfc` file and the `CreateListenerParams` file:

```
aws amscm create-rfc --cli-input-json file://CreateListenerRfc.json --execution-parameters file://CreateListenerParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

Next Steps: Submit a Management | Other | Other | Update change type to open ports and associate security groups, see [Other | Other requests](#).

## Tips

### Note

You can specify up to four Target IDs, Ports, and Availability Zones.

## High availability one-tier stacks: Creating

### Creating a high availability one-tier stack with the console

▼ **Change type: Create high availability one-tier stack**

Description

Use to create an Application Load Balancer and an Auto Scaling Group.

ID	Version
ct-09t6q7j9v5hm	2.0

Execution mode

Automated

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.  
  
In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.
  4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
  5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a high availability one-tier stack with the CLI

How it works:

1. Use the Template Create method (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status

changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

#### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file in your current folder; this example names it `CreateOnetierStackParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-09t6q7j9v5hrn"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateOnetierStackParams.json
```

2. Modify the schema, replacing the *variables* as appropriate.

```
{
  "Description":      "HA-One-Tier-Stack",
  "Name":             "One-Tier-Stack",
  "TimeoutInMinutes": "360",
  "VpcId":            "VPC_ID",
  "ApplicationLoadBalancer": {
    "SubnetIds": [
      "SUBNET_ID",
      "SUBNET_ID"
    ]
  },
  "AutoScalingGroup": {
    "AmiId": "AMI-ID"
    "SubnetIds": [
      "SUBNET_ID",
      "SUBNET_ID"
    ]
  }
}
```

3. Output the `CreateRfc` JSON template to a file in your current folder; example names it `CreateOnetierStackRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateOnetierStackRfc.json
```

4. Modify the RFC template as appropriate and save it. Reset the start and end times for a scheduled RFC, or leave off for an ASAP RFC.

```
{
  "ChangeTypeVersion": 2.0,
  "ChangeTypeId": "ct-09t6q7j9v5hrn",
  "Title": "HA-One-Tier-RFC",
  "RequestedStartTime": "2019-04-28T22:45:00Z",
  "RequestedEndTime": "2019-04-28T22:45:00Z"
}
```

5. Create the RFC, specifying the `CreateOnetierStackRfc.json` file and the `CreateOnetierStackParams.json` execution parameters file:

```
aws amscm create-rfc --cli-input-json file://CreateOnetierStackRfc.json --
execution-parameters file://CreateOnetierStackParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

This is a large provisioning of resources, especially if you add `UserData`. The load balancer Amazon resource name (ARN) can be found through the Load Balancer page of the EC2 console by searching with the load balancer stack ID returned in the RFC execution output.

## Create IAM entity or policy (Managed Automation)

### Creating IAM resources (Managed Automation) with the console

▼ **Change type: Create IAM Resource**

Description  
Create Identity and Access Management (IAM) user, role, or policy.

ID	Version
ct-3dpd8mdd9jn1r	1.0

Execution mode  
Manual

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating IAM resources (Managed Automation) with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**Note**

When pasting in a policy document, note that the RFC only accepts policy pastes up to 20,480 characters. If your file has more than 20,480 characters, create a service request to upload the policy and then refer to that service request in the RFC that you open for IAM.

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-3dpd8mdd9jn1r" --change-type-version "1.0"
--title "TestIamCreate" --execution-parameters "{\"UseCase\": \"IAM_RESOURCE_DETAILS\",
\"IAM Role\": [{\"RoleName\": \"ROLE_NAME\", \"TrustPolicy\": \"TRUST_POLICY\",
\"RolePermissions\": \"ROLE_PERMISSIONS\"}], \"Operation\": \"Create\"}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; example names it `CreteIamResourceParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-3dpd8mdd9jn1r"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateIamResourceParams.json
```

2. Modify and save the `CreteIamResourceParams` file; example creates an IAM Role with policy documents pasted inline.

```
{
  "UseCase": "IAM_RESOURCE_DETAILS",
  "IAM Role": [
    {
      "RoleName": "codebuild_ec2_test_role",
      "TrustPolicy": {
        "Version": "2008-10-17",
        "Statement": [
          {
            "Effect": "Allow",
```

```

        "Principal": {
            "Service": "codebuild.amazonaws.com"
        },
        "Action": "sts:AssumeRole"
    }
]
},
"RolePermissions": {
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "ec2:DescribeInstanceStatus"
            ],
            "Resource": "*"
        }
    ]
}
}
],
"Operation": "Create"
}

```

3. Output the RFC template JSON file to a file named `CreateIamResourceRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateIamResourceRfc.json
```

4. Modify and save the `CreateIamResourceRfc.json` file. For example, you can replace the contents with something like this:

```

{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-3dpd8mdd9jn1r",
  "Title": "Create IAM Role"
}

```

5. Create the RFC, specifying the `CreateIamResourceRfc` file and the `CreateIamResourceParams` file:

```
aws amscm create-rfc --cli-input-json file://CreateIamResourceRfc.json --
execution-parameters file://CreateIamResourceParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- After an IAM role is provisioned in your account, you must onboard the role in your federation solution.
- When pasting in a policy document, note that the RFC only accepts policy pastes up to 20,480 characters. If your policy has more than 20,480 characters, create a service request to upload the policy, and then refer to that service request in the RFC that you open for IAM.
- This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondence option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.
- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#). For information about AMS permissions, see [Deploying IAM resources](#).

## Continue rollback on custom CloudFormation stack

### Continue rollback a CloudFormation ingest stack failed update using the console

#### ▼ Continue Update Rollback

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-32r1igwrwag4i	Manual	1.0 (only version)

#### Classification

Management -> Custom Stack -> Stack From CloudFormation Template -> Continue update rollback (managed automation)

#### Description

Request a ContinueUpdateRollback operation for the specified CloudFormation stack that's in the UPDATE\_ROLLBACK\_FAILED state. Use this operation when a CloudFormation stack is stopped due to a failed update rollback and you need AMS engineers to complete the rollback and return the stack to its last known working state.

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Continue rollback a CloudFormation ingest stack failed update using the CLI

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-32r1igwrwag4i" --change-type-version "1.0"
--title "Continue Update Rollback" --execution-parameters "{\"StackId\": \"STACK_ID\",
\"Region\": \"REGION\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file in your current folder; this example names it `ContinueRollbackParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-32r1igwrwag4i"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
ContinueRollbackParams.json
```

2. Modify and save the `ContinueRollbackParams.json` file. For example, you can replace the contents with something like this:

```
{
  "StackId": "stack-a1b2c3d4e5f67890e",
  "Region": "us-east-1",
  "Priority": "High"
}
```

```
}
```

3. Output the JSON template for CreateRfc to a file in your current folder; this example names it ContinueRollbackRfc.json:

```
aws amscm create-rtc --generate-cli-skeleton > ContinueRollbackRfc.json
```

4. Modify and save the ContinueRollbackRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-32r1igwrwag4i",
  "Title": "Continue Update Rollback"
}
```

5. Create the RFC, specifying the ContinueRollbackRfc file and the execution parameters file:

```
aws amscm create-rtc --cli-input-json file://ContinueRollbackRfc.json --execution-parameters file://ContinueRollbackParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For more information see [Continue rolling back an update](#).

## Manage the VPC Subnet IPv4 Address Auto Assignment

### Manage VPC Subnet IPv4 Address Auto Assignment with the console

The following shows this change type in the AMS console.

▼ Manage subnet public IPv4 auto assignment		
ID	Execution mode	Version
ct-1pqxczuw5uwu6	Automated	1.0 (only version)
Classification		
Management -> Advanced stack components -> VPC -> Manage subnet public IPv4 auto assignment		
Description		
Allow or disallow the automatic assignment of public IPv4 addresses for specified subnets.		

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Manage VPC Subnet IPv4 Address Auto Assignment with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1pqxczuw5uwu6" --change-type-version "1.0"
--title "AWSManagedServices-ManageSubnetPublicIpv4AutoAssign" --execution-parameters
"{\"DocumentName\": \"AWSManagedServices-ManageSubnetPublicIpv4AutoAssign\", \"Region
\": \"us-east-1\", \"Parameters\": {\"SubnetId\": \"subnet-0a1b2c3d4e5f67890\",
\"MapPublicIpOnLaunch\": true, \"AcknowledgeNetworkImpact\": [\"Yes\"]}}\"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type; this example names it `ManageSubnetAutoAddressParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-1pqxczuw5uwu6"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
ManageSubnetAutoAddressParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-ManageSubnetPublicIpv4AutoAssign",
  "Region": "us-east-1",
  "Parameters": {
    "SubnetId": "subnet-0a1b2c3d4e5f67890",
    "MapPublicIpOnLaunch": true,
    "AcknowledgeNetworkImpact": [
      "Yes"
    ]
  }
}
```

3. Output the RFC template JSON file; this example names it ManageSubnetAutoAddressRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > ManageSubnetAutoAddressRfc.json
```

4. Modify and save the ManageSubnetAutoAddressRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion" : "1.0",
  "ChangeTypeId" : "ct-1pqxczuw5uwu6",
  "Title" : "ManageSubnetAutoAddress"
}
```

5. Create the RFC, specifying the ManageSubnetAutoAddressRfc file and the ManageSubnetAutoAddressParams file:

```
aws amscm create-rfc --cli-input-json file://ManageSubnetAutoAddressRfc.json --
execution-parameters file://ManageSubnetAutoAddressParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For general information on VPCs and subnet addressing, see [IP addressing for your VPCs and subnets](#).

## Schedule add

### Adding an AMS Resource Scheduler schedule with the console

The following shows this change type in the AMS console.

### Add Resource Scheduler Schedule Modify version

**Description**  
Add a new schedule to be used in AMS Resource Scheduler. Schedules employ defined periods to determine when the specified resource should run.

ID	Version
ct-2bxelbn765ive	1.0 (only version)

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Adding an AMS Resource Scheduler schedule with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-2bxelbn765ive" --change-type-version
"1.0" --title "Add a schedule for AMS Resource Scheduler" --execution-parameters
{"\ "DocumentName\ ": "\ AWSManagedServices-AddOrUpdateSchedule\ ", "\ Region\ ":
\ "us-east-1\ ", "\ Parameters\ ": {\ "Action\ ": [\ "add\ "], "\ Name\ ": [\ "Schedule01\ "],
\ "Description\ ": [\ "Test schedule\ "], "\ Hibernate\ ": [\ "true\ "], "\ Enforced\ ":
[\ "false\ "], "\ OverrideStatus\ ": [\ "running\ "], "\ Periods\ ": [\ "period01\ ", "\ period02\ "],
\ "RetainRunning\ ": [\ "false\ "], "\ StopNewInstances\ ": [\ "true\ "], "\ SSMMaintenanceWindow\ ":
[\ "window01\ "], "\ TimeZone\ ": [\ "Australia/Sydney\ "], "\ UseMaintenanceWindow\ ": [\ "true\ "],
\ "UseMetrics\ ": [\ "false\ "]}}
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it AddScheduleParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-2bxelbn765ive" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > AddScheduleParams.json
```

2. Modify and save the AddScheduleParams file.

```
{
  "DocumentName" : "AWSManagedServices-AddOrUpdateSchedule",
  "Region" : "us-east-1",
  "Parameters" : {
    "Action" : ["add"],
    "Name" : ["Schedule01"],
    "Description" : ["Test schedule"],
    "Hibernate" : ["true"],
    "Enforced" : ["false"],
    "OverrideStatus" : ["running"],
    "Periods" : [
      "period01",
      "period02"
    ],
    "RetainRunning" : ["false"],
    "StopNewInstances" : ["true"],
```

```
"SSMMaintenanceWindow" : ["window01"],
"TimeZone" : ["Australia/Sydney"],
"UseMaintenanceWindow" : ["true"],
"UseMetrics" : ["false"]
}
}
```

3. Output the RFC template to a file in your current folder; this example names it AddScheduleRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > AddScheduleRfc.json
```

4. Modify and save the AddScheduleRfc.json file. For example, you can replace the contents with something like this:

```
{
"ChangeTypeVersion":    "1.0",
"ChangeTypeId":         "ct-2bxelbn765ive",
"Title":                 "Add a schedule for AMS Resource Scheduler"
}
```

5. Create the RFC, specifying the AddScheduleRfc file and the AddScheduleParams file:

```
aws amscm create-rfc --cli-input-json file://AddScheduleRfc.json --execution-parameters file://AddScheduleParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- Do not begin the maintenance window name with 'mw-'.
- For more information, see [How the AMS Resource Scheduler works](#).
- AMS Resource Scheduler is based on the AWS Instance Scheduler; to learn more, see [AWS Instance Scheduler](#).

## Delete EBS snapshot (Managed Automation)

Use when you need extra help or communications about the snapshots to delete.

## Deleting EBS snapshots with the Console (Managed Automation)

### ▼ Delete EBS Snapshot

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1vrnixswq1uwf	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> EBS snapshot -> Delete (managed automation)

#### Description

Delete Elastic Block Store (EBS) snapshots. Once snapshots are deleted, they cannot be restored. Consider scheduling this RFC in case you decide to cancel the operation. If your snapshot is older than 30 days, we encourage you to use the automated CT (ct-30bfiwxjku1nu) for snapshot deletion, as it streamlines the process. However, if you are using the SnapshotCreationDate or SnapshotTag parameters, snapshots created within the last 30 days or snapshots is associated with any AMLs or created by AWS Backup service, use this manual CT option to ensure the correct snapshots are deleted.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deleting EBS snapshots with the CLI (Review Required)

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1vrnixswq1uwf" --change-type-version "1.0" --
title "Delete EBS Snapshot (managed automation)" --execution-parameters "{\"SnapshotIds
\": [\"snap-0a1b2c3d4e5f67890\", \"snap-1a2b3c4d5e6f78901\"], \"AMI\": \"No\", \"Region
\": \"us-east-1\", \"Priority\": \"Medium\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it DeleteEbsSnpstRrParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-1vrnixswq1uwf"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DeleteEbsSnpstRrParams.json
```

2. Modify and save the DeleteEbsSnpstRrParams file. For example, you can replace the contents with something like this:

```
{
  "SnapshotIds": [
    "snap-0a1b2c3d4e5f67890",
    "snap-1a2b3c4d5e6f78901"
  ],
  "AMI": "No",
  "Region": "us-east-1",
  "Priority": "Medium"
}
```

3. Output the RFC template JSON file to a file; this example names it DeleteEbsSnpstRrRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > DeleteEbsSnpstRrRfc.json
```

4. Modify and save the DeleteEbsSnpstRrRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-1vrnixswq1uwf",
```

```
"Title": "EBS-Snapshot-Delete-RR-RFC"
}
```

5. Create the RFC, specifying the DeleteEbsSnpstRrRfc file and the DeleteEbsSnpstRrParams file:

```
aws amscm create-rfc --cli-input-json file://DeleteEbsSnpstRrRfc.json --
execution-parameters file://DeleteEbsSnpstRrParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon EBS snapshots, see [Amazon EBS Snapshots](#).

## Update SNS topic

### Update SNS topic with the Console

Screenshot of this change type in the AMS console:

#### ▼ Update SNS Topic

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-0zzf0fjz76jmb	Manual	1.0 (only version)

#### Classification

Management -> Monitoring and notification -> SNS -> Update (managed automation)

#### Description

Modify the properties of an existing Amazon Simple Notification Service (SNS) topic.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Update SNS topic with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### **Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE* (minimal parameters):

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-0zzf0fjz76jmb" --change-type-version "1.0"
--title "Update SNS Topic" --execution-parameters "{\"TopicArn\": \"arn:aws:sns:us-
east-1:123456789101:My-SNS-Topic\", \"Priority\": \"Medium\", \"Parameters\":
{\"DisplayName\": \"My-SNS-Topic\", \"KmsMasterKeyId\": \"arn:aws:kms:us-
east-1:123456789101:key/cfe0542d-3be9-4166-9eac-d0cd6af61445\"}]}"
```

### *TEMPLATE CREATE* (all parameters):

1. Output the execution parameters JSON schema for this change type to a file; this example names it `SnsUpdateParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-3rcl9u1k017wu" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > SnsUpdateParams.json
```

2. Modify and save the `SnsUpdateParams` file. For example, you can replace the contents with something like this:

```
{
  "TopicArn": "arn:aws:sns:us-east-1:123456789101:Test-Stack",
  "Parameters": {
```

```

    "DisplayName": "My-Test-Stack",
    "DeliveryPolicy": "{ \"http\": { \"defaultHealthyRetryPolicy\": { \"minDelayTarget\": 20, \"maxDelayTarget\": 20, \"numRetries\": 3, \"numMaxDelayRetries\": 0, \"numNoDelayRetries\": 0, \"numMinDelayRetries\": 0, \"backoffFunction\": \"linear\" }, \"disableSubscriptionOverrides\": false, \"defaultRequestPolicy\": { \"headerContentType\": \"text/plain; charset=UTF-8\" } } }",
    "DataProtectionPolicy": "{ \"Name\": \"__example_data_protection_policy\", \"Description\": \"Exampledataprotectionpolicy\", \"Version\": \"2021-06-01\", \"Statement\": [ { \"DataDirection\": \"Inbound\", \"Principal\": [ \"arn:aws:iam::123456789101:user/ExampleUser\" ], \"DataIdentifier\": [ \"arn:aws:dataprotection::aws:data-identifier/CreditCardNumber\" ], \"Operation\": [ \"Deidentify\": { \"MaskConfig\": { \"MaskWithCharacter\": \"#\" } } ] } ] }",
    "KmsMasterKeyARN": "arn:aws:kms:ap-southeast-2:123456789101:key/bb43bd18-3a75-482e-822d-d0d3a5544dc8",
    "TracingConfig": "Active"
  },
  "Priority": "Medium"
}

```

3. Output the RFC template JSON file to a file named SnsUpdateRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > SnsUpdateRfc.json
```

4. Modify and save the SnsUpdateRfc.json file. For example, you can replace the contents with something like this:

```

{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0zzf0fjz76jmb",
  "Title": "Update-SNS-RFC"
}

```

5. Create the RFC, specifying the SnsUpdate Rfc file and the SnsUpdateParams file:

```
aws amscm create-rfc --cli-input-json file://SnsUpdateRfc.json --execution-parameters file://SnsUpdateParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about AWS Simple Notification Service (SNS), see [Amazon Simple Notification Service](#). Also see [Getting Started with Amazon SNS](#).

## Create an S3 access point

### Creating an S3 access point with the Console

Screenshot of this change type in the AMS console:

#### ▼ Create S3 access point

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1elb1vtam0ka5	Manual	1.0 (only version)

#### Classification

Deployment -> Advanced stack components -> S3 Access Point -> Create Access Point (managed automation)

#### Description

Create an access point and associate it with the specified S3 bucket.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating an S3 access point with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Add Static Route" --description="Create an access point
and associate it with the specified S3 bucket." --ct-id="ct-1elb1vtam0ka5" --ct-
```

```
version="1.0" --input-params="{\"Access Point Name\": \"accesspoint1\", \"Bucket Name\":  
\"s3bucket1\", \"Network Origin\": \"VPC\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it `CreateS3AccessPointParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-1elb1vtam0ka5"  
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >  
CreateS3AccessPointParams.json\"Access Point Policy\": \"Example access point  
policy\"
```

2. Modify and save the `CreateS3AccessPointParams` file.

```
{  
  "Access Point Name": "accesspoint1",  
  "Bucket Name": "s3bucket1",  
  "Network Origin": "VPC",  
  "Vpc Id": "vpc-12345678"  
  "Access Point Policy": "Example access point policy"  
}
```

3. Output the RFC template JSON file to a file named `CreateS3AccessPointRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateS3AccessPointRfc.json
```

4. Modify and save the `CreateS3AccessPointRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "1.0",  
  "ChangeTypeId": "ct-1elb1vtam0ka5",  
  "Title": "S3-Accesspoint-Create-RFC"  
}
```

5. Create the RFC, specifying the `CreateS3AccessPointRfc` file and the `CreateS3AccessPointParams` file:

```
aws amscm create-rfc --cli-input-json file://CreateS3AccesspointRfc.json --  
execution-parameters file://CreateS3AccesspointParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon S3, see [Amazon Simple Storage Service Documentation](#).

## Create Custom RDS Parameter Group

### Requesting administrator access with the console

The following shows this change type in the AMS console.

#### ▼ Create Custom RDS Parameter Group

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-3da2lxapob86	Manual	1.0 (only version)

#### Classification

Deployment -> Advanced stack components -> RDS database stack -> Create parameter group (managed automation)

#### Description

Create a custom RDS parameter group and optionally attach it to an existing RDS instance.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Requesting administrator access with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter  
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status

changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the `create rfc` command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-3da2lxapopb86" --change-type-version "1.0" --
title "Create Custom RDS Parameter Group" --execution-parameters "{\"ParameterGroupName
\": \"my-db-parameter-group\", \"ParameterGroupFamily\": \"mysql5.6\", \"Description
\": \"A meaningful description of the parameter group\", \"Priority\": \"Medium\",
\"Parameters\": [{\"ParameterName\": \"max_connections\", \"ParameterValue\":
\"100\"}], \"RDSInstanceName\": \"my-test-db\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it `RDSCreateParameterGroupParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-3da2lxapopb86"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
RDSCreateParameterGroupParams.json
```

Modify and save the `RDSCreateParameterGroupParams` file. For example, you can replace the contents with something like this:

```
{
  "ParameterGroupName": "my-db-parameter-group",
  "ParameterGroupFamily": "mysql5.6",
  "Description": "A meaningful description of the parameter group",
  "Priority": "Medium",
  "Parameters": [
    {
      "ParameterName": "max_connections",
      "ParameterValue": "100"
    }
  ]
}
```

```
    }  
  ],  
  "RDSInstanceName": "my-test-db"  
}
```

2. Output the RFC template to a file in your current folder; this example names it `RDSCreateParameterGroupRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > RDSCreateParameterGroupRfc.json
```

3. Modify and save the `RDSCreateParameterGroupRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeId":      "ct-3da2lxapopb86",  
  "ChangeTypeVersion": "1.0",  
  "Title":             "Create Custom RDS Parameter Group"  
}
```

4. Create the RFC, specifying the `RDSCreateParameterGroupRfc` file and the `GRDSCreateParameterGroupParams` file:

```
aws amscm create-rfc --cli-input-json file://RDSCreateParameterGroupRfc.json --  
execution-parameters file://GRDSCreateParameterGroupParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Add event notification to an Amazon S3 bucket

### Add an event notification to an S3 bucket with the Amazon S3 Console

The following is a screenshot of this change type in the AMS console:

## ▼ Add Event Notification

ID	Execution mode	Version
ct-0o4zi9bzg74lp	Automated	1.0 (only version)

### Classification

Management -> Advanced stack components -> S3 storage -> Add event notification

### Description

Add an event notification to the specified S3 bucket through direct API calls. The S3 bucket can be standalone or belong to a CloudFormation stack. For buckets in CloudFormation stacks, be aware that stack drift might occur if the bucket was provisioned through CFN ingestion.

## How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Add an event notification to an S3 bucket with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the `create` RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-0o4zi9bzig74lp" --change-type-version
"1.0" --title "Add event notification" --execution-parameters "{ \"DocumentName
\": \"AWSManagedServices-AddBucketEventNotification\", \"Region\": \"us-
east-1\", \"Parameters\": { \"BucketName\": \"bucketname\", \"EventName\":
\"eventname\", \"Prefix\": \"foo\", \"Suffix\": \".bar\", \"EventTypes\":
[ \"s3:ObjectCreated:Post\", \"s3:ObjectCreated:Put\" ], \"DestinationARN\":
\"arn:aws:lambda:us-east-1:123456789012:function:functionname\" } }"
```

## TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it AddEventNotificationS3Params.json.

```
aws amscm get-change-type-version --change-type-id "ct-220bdb8blaixf"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
AddEventNotificationS3Params.json
```

2. Modify and save the AddEventNotificationS3Params file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-AddBucketEventNotification",
  "Region": "us-east-1",
  "Parameters": {
    "BucketName": "bucketname",
    "EventName": "eventname",
    "Prefix": "foo",
    "Suffix": ".bar",
    "EventTypes": [
      "s3:ObjectCreated:Post",
      "s3:ObjectCreated:Put"
    ],
    "DestinationARN": "arn:aws:lambda:us-east-1:123456789012:function:functionname"
  }
}
```

3. Output the RFC template JSON file to a file named AddEventNotificationS3Rfc.json:

```
aws amscm create-rtc --generate-cli-skeleton > AddEventNotificationS3Rfc.json
```

4. Modify and save the AddS3LifecycleConfigRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0o4zi9bzig74lp",
  "Title": "Add Event Notification"
}
```

5. Create the RFC, specifying the AddEventNotificationS3Rfc file and the AddEventNotificationS3Params file:

```
aws amscm create-rfc --cli-input-json file://AddEventNotificationS3Rfc.json --
execution-parameters file://AddEventNotificationS3Params.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Update custom deny list for AMS Automated IAM Provisioning

### Update custom deny list with the Console

Screenshot of this change type in the AMS console:

#### ▼ Update custom deny list for Automated IAM Provisioning

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-2r9xvd3sdsic0	Manual	1.0 (only version)

#### Classification

Management -> Managed account -> Automated IAM provisioning with read-write permissions -> Update custom deny list (managed automation)

#### Description

Update the list of customer-defined denied actions for Automated IAM Provisioning. Make sure to provide the complete list of deny actions, including previously provisioned actions. The provided list replaces the previous list.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Update custom deny list with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-2r9xvd3sdsic0" --change-type-version "1.0" --
title "Update custom deny list for Automated IAM Provisioning" --execution-parameters
"{\"CustomerCustomDenyActionsList1\": \"ec2:RunInstances, s3:PutBucket, sagemaker:*\",
\"Priority\": \"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named `CustomerCustomDenyActionsList.json`.

```
aws amscm get-change-type-version --change-type-id "ct-2r9xvd3sdsic0"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CustomerCustomDenyActionsList.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-CustomerCustomDenyActionsList",
  "Region": "us-east-1",
```

```
"Parameters": {  
  "CustomerCustomDenyActionsList1": "ec2:RunInstances,s3:PutBucket,sagemaker:*",  
  "Priority": "High"  
}
```

3. Output the RFC template to a file in your current folder; this example names it `CustomerCustomDenyActionsListRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton >  
CustomerCustomDenyActionsListRfc.json
```

4. Modify and save the `CustomerCustomDenyActionsListRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "1.0",  
  "ChangeTypeId": "ct-2r9xvd3sdsic0",  
  "Title": "Update custom deny list for Automated IAM Provisioning"  
}
```

5. Create the RFC, specifying the `CreateAcmPublicRfc` file and the `CreateAcmPublicParams` file:

```
aws amscm create-rfc --cli-input-json file://CustomerCustomDenyActionsListRfc.json  
--execution-parameters file://CustomerCustomDenyActionsListParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Migrate AWS Managed Account DNS resolver to Route 53 for SALZ accounts (Managed Automation)

### Migrate AWS Managed Account DNS resolver to Route 53 (SALZ) with the console

The following shows this change type in the AMS console.

## ▼ Migrate AWS Managed Microsoft AD to Route 53 DNS resolver for SALZ accounts

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-2tqi3kjcusen4	Manual	1.0 (only version)

### Classification

Management -> Managed account -> DNS -> Migrate to Route 53 (managed automation)

### Description

Change the DNS resolution in your Amazon VPC by enabling Route 53 as the default DNS resolver for your SALZ account. This transition from Microsoft AD to Route 53 Resolver involves redirecting DNS traffic within your VPC through strategically implemented Route 53 Resolver Endpoints and Conditional Forwarders. These forwarders act as rules to intelligently route DNS queries, ensuring seamless resolution for various destinations. It's essential to plan the migration during a scheduled maintenance window to minimize potential disruptions caused by DNS changes.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Migrate AWS Managed Account DNS resolver to Route 53 (SALZ) with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

Required parameters only:

```
aws amscm create-rfc --change-type-id "ct-2tqi3kjcusen4" --change-type-version "1.0" --
title "Migrate AWS managed Microsoft AD to Route 53 DNS resolver for SALZ accounts" --
execution-parameters "{}"
```

All required and optional parameters:

```
aws amscm create-rfc --change-type-id "ct-2tqi3kjcusen4" --change-type-version "1.0" --
title "Migrate AWS managed Microsoft AD to Route 53 DNS resolver for SALZ accounts" --
execution-parameters "{\"Priority\": \"Medium\"}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters for this change type to a JSON file named `CreateMigrateToRoute53RequiredParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-2tqi3kjcusen4"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateMigrateToRoute53RequiredParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "Priority": "Medium"
}
```

3. Output the RFC template to a file in your current folder; this example names it `CreateMigrateToRoute53RequiredRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton >
CreateMigrateToRoute53RequiredRfc.json
```

4. Modify and save the `CreateMigrateToRoute53RequiredRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeId":      "ct-2tqi3kjcusen4",
  "ChangeTypeVersion": "1.0",
  "Title":             "Migrate AWS managed Microsoft AD to Route 53 DNS resolver
  for SALZ accounts"
}
```

5. Create the RFC, specifying the `CreateMigrateToRoute53RequiredRfc` file and the `CreateMigrateToRoute53RequiredParams` file:

```
aws amscm create-rfc --cli-input-json file://CreateMigrateToRoute53RequiredRfc.json
--execution-parameters file://CreateMigrateToRoute53RequiredParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondance option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.

## Disassociate resolver rules from VPC

### Disassociate resolver rules from a VPC with the console

The following shows this change type in the AMS console.

## Disassociate resolver rules from VPC

ID	Execution mode	Version
ct-2pfarpvczsstr	Automated	1.0 (only version)

### Classification

Management -> Advanced stack components -> Route 53 Resolver -> Disassociate resolver rules from VPC

### Description

Disassociates multiple resolver rules from a VPC.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Disassociate resolver rules from a VPC with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the `create` RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws --profile sam1 --region us-east-1 amscm create-rfc --change-type-id
"ct-3e3prksxmdhw8" --change-type-version "2.0" --title "AMI-Create-IC" --
execution-parameters "{\"AMIName\":\"MyAmi\",\"VpcId\":\"VPC_ID\",\"EC2InstanceId\":
\"INSTANCE_ID\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it CreateAmiFromAsgParams.json:

```
aws amscm create-rfc --change-type-id "ct-3e3prksxmdhw8" --change-type-version
"1.0" --title "Create AMI from an Auto Scaling group" --execution-parameters
"{\"DocumentName\": \"AWSManagedServices-CreateAmiInAutoScalingGroup\", \"Region
\": \"us-east-1\", \"Parameters\": {\"AutoScalingGroupName\": [\"stack-ab0123cdef-
ASG-1ABC2345\"], \"Sysprep\": [\"False\"], \"StopInstance\": [\"False\"]}}"
```

2. Modify and save the execution parameters CreateAmiFromAsgParams.json file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-CreateAmiInAutoScalingGroup",
  "Region": "us-east-1",
  "Parameters": {
    "AutoScalingGroupName": [
      "stack-ab0123cdef-ASG-1ABC2345"
    ],
    "Sysprep": [
      "False"
    ],
    "StopInstance": [
      "False"
    ]
  }
}
```

3. Output the RFC template JSON file to a file in your current folder; this example names it CreateAmiFromAsgRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > CreateAmiFromAsgRfc.json
```

4. Modify and save the CreateAmiFromAsgRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-3e3prksxmdhw8",
  "Title": "Create AMI from an Auto Scaling group"
}
```

5. Create the RFC, specifying the CreateAmiFromAsgRfc file and the CreateAmiFromAsgParams file:

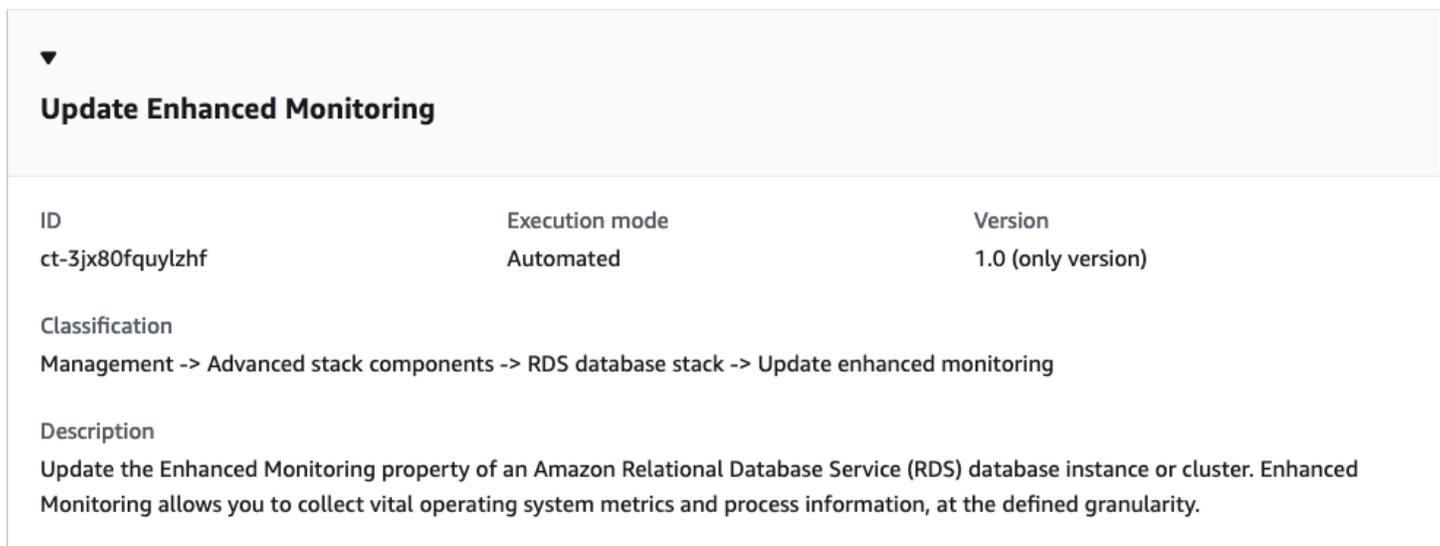
```
aws amscm create-rfc --cli-input-json file://CreateAmiFromAsgRfc.json --execution-parameters file://CreateAmiFromAsgParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Update Enhanced Monitoring

### Updating enhanced monitoring with the console

The following shows this change type in the AMS console.



The screenshot shows a dropdown menu with the title 'Update Enhanced Monitoring'. Below the title is a table with three columns: ID, Execution mode, and Version. The ID is 'ct-3jx80fquylzhf', the Execution mode is 'Automated', and the Version is '1.0 (only version)'. Below the table, there is a 'Classification' section with the path 'Management -> Advanced stack components -> RDS database stack -> Update enhanced monitoring'. Below that is a 'Description' section with the text: 'Update the Enhanced Monitoring property of an Amazon Relational Database Service (RDS) database instance or cluster. Enhanced Monitoring allows you to collect vital operating system metrics and process information, at the defined granularity.'

ID	Execution mode	Version
ct-3jx80fquylzhf	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> RDS database stack -> Update enhanced monitoring

**Description**  
Update the Enhanced Monitoring property of an Amazon Relational Database Service (RDS) database instance or cluster. Enhanced Monitoring allows you to collect vital operating system metrics and process information, at the defined granularity.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating enhanced monitoring with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification '{"Email": {"EmailRecipients": ["email@example.com"]}}'` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-3jx80fqyylzhf" --change-type-
version "1.0" --title "Update Enhanced Monitoring" --execution-parameters
'{"DocumentName": "AWSManagedServices-UpdateRDSEnhancedMonitoring", "Region
": "us-east-1", "Parameters": {"DBIdentifierArn": ["arn:aws:rds:us-
east-1:000000000000:db:testdbinstance"], "MonitoringInterval": ["60"],,
"MonitoringRoleName": "ds-monitoring-role"}'}
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named `RotateRdsCertParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-3jx80fqyylzhf"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateRDSEnhancedMonitoringParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateRDSEnhancedMonitoring",
  "Region": "us-east-1",
  "Parameters": {
    "DBIdentifierArn": "arn:aws:rds:us-east-1:000000000000:db:testdbinstance",
    "MonitoringInterval": "60",
    "MonitoringRoleName": [
      "rds-monitoring-role"
    ]
  }
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateRDSEnhancedMonitoringRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateRDSEnhancedMonitoringRfc.json
```

4. Modify and save the UpdateRDSEnhancedMonitoringRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-3jx80fqyylzhf",
  "Title": "Update Enhanced Monitoring"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateRDSEnhancedMonitoringRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdateRDSEnhancedMonitoringRfc.json --
execution-parameters file://UpdateRDSEnhancedMonitoringParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Associate VPC with Resolver Rule

### Requesting administrator access with the console

The following shows this change type in the AMS console.

## Run RFC

### ▼ Associate VPC With Resolver Rule

ID	Execution mode	Version
ct-2pbqoffhclpek	Automated	1.0 (only version)

#### Classification

Management -> Advanced stack components -> Route 53 Resolver -> Associate VPC with resolver rule

#### Description

Associate a VPC with a Route 53 resolver rule, this causes the resolver to forward all DNS queries for the domain name specified in the rule, and that originate in the VPC, to the IP addresses specified in the rule.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Requesting administrator access with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Associate VPC with Resolver Rule" --ct-id="ct-2pbqoffhclpek" --ct-version="1.0" --execution-parameters "{\"Description\": \"Associate VPC with Resolver Rule\", \"ResolverRuleId\": \"rslvr-rr-974b1666869a4d27b\", \"VPCId\": \"vpc-02a18ed0cd3c17e71\"}"
```

#### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type; this example names it VPCAssociateResolverRule.json:

```
aws amscm get-change-type-version --change-type-id "ct-2pbqoffhclpek" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > VPCAssociateResolverRule.json
```

2. Modify and save the execution parameters as VPCAssociateResolverRuleParams.json. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-AssociateVPCWithResolverRule",
  "Region": "us-east-1",
  "Parameters": {
    "Name": "resolver-rule-associate-vpc-test",
    "ResolverRuleId": "rslvr-rr-1234567890abcdefg",
    "VPCId": "vpc-1a2b3c4d"
  }
}
```

3. Output the RFC template JSON file; this example names it VPCAssociateResolverRuleRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > VPCAssociateResolverRuleRfc.json
```

4. Modify and save the VPCAssociateResolverRuleRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion" : "1.0",
  "ChangeTypeId" : "ct-2pbqoffhclpek",
```

```
"Title" : "Associate VPC with Resolver Rule "
}
```

5. Create the RFC, specifying the VPCAssociateResolverRuleRfc file and the VPCAssociateResolverRuleParams file:

```
aws amscm create-rfc --cli-input-json file://VPCAssociateResolverRuleRfc.json --
execution-parameters file://VPCAssociateResolverRuleParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Deploy AMS pattern (Managed Automation)

### Deploying an AMS pattern (Managed Automation) with the Console

Screenshot of this change type in the AMS console:

#### ▼ Deploy AMS Patterns

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-2jndrh7uit8uf	Manual	1.0 (only version)

#### Classification

Deployment -> AMS patterns -> Solution -> Deploy (managed automation)

#### Description

Deploy an AMS pattern to the current account. Patterns provide tools, architectures, and step-by-step guidance for implementing the methodologies for the migration strategy. Multi-account landing zone accounts can also specify OrganizationalUnit to deploy the pattern to all the accounts in that OU.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deploying an AMS pattern (Managed Automation) with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-2jndrh7uit8uf" --change-type-version
"1.0" --title "Deploy AMS Patterns" --execution-parameters "{\"PatternName
\": \"amsEbsVolumeSnapshotTagger\", \"PatternParameters\": {\"ExcludedTags\":
\"BackupProd, Backup\", \"ASMGuardRail\": \"enabled\"}, \"OrganizationalUnit\":
\"ou-9dyd-s2vptest\"}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type; this example names it `DeployAMSPatternsParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2jndrh7uit8uf"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DeployAMSPatternsParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "PatternName": "amsEbsVolumeSnapshotTagger",
  "ExcludeAccounts": ["123456789012"],
  "OrganizationalUnitIds": ["ou-9dyd-jvsei4yg"],
  "Priority": "Medium",
  "PatternParameters": [
```

```
{
  "Name": "Foo",
  "Value": "Bar"
}
]
```

3. Output the RFC template JSON file; this example names it `DeployAMSPatternsRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > DeployAMSPatternsRfc.json
```

4. Modify and save the `DeployAMSPatternsRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-2jndrh7uit8uf",
  "Title": "Deploy AMS Patterns"
}
```

5. Create the RFC, specifying the `DeployAMSPatternsRfc` file and the `DeployAMSPatternsParams` file:

```
aws amscm create-rfc --cli-input-json file://DeployAMSPatternsRfc.json --execution-parameters file://DeployAMSPatternsParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Share AWS KMS Key

### Share an AWS KMS key with the console

The following shows this change type in the AMS console.

## ▼ Share KMS Key

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-05yb337abq3x5	Manual	1.0 (only version)

### Classification

Management -> Advanced stack components -> KMS key -> Share (managed automation)

### Description

Allow cross-account access to a KMS key by adding a statement to the key policy with encrypt and decrypt permissions.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
  2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
    - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Share an AWS KMS key with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the `create RFC` command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Add Static Route" --description="Share KMS Key"
--ct-id="ct-05yb337abq3x5" --ct-version="1.0" --input-params="{\"KMSKeyArn\":
\"arn:aws:kms:us-east-1:111122223333:key/06506094-64e2-47f3-94bd-f919eefa22f5\",
\"TargetAccountId\": \"000000000000\", \"IncludeKeyGrantOperations\": \"false\",
\"IAMUserOrRole\": \"arn:aws:iam::000000000000:role/role-name\", \"Priority\": \"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it `ShareKmsKeyParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-05yb337abq3x5" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > ShareKmsKeyParams.json
```

Modify and save the `ShareKmsKeyParams` file. For example, you can replace the contents with something like this:

```
{
  "Description": "Share KMS Key",
  "Parameters": {
    "KMSKeyArn": "arn:aws:kms:us-east-1:111122223333:key/06506094-64e2-47f3-94bd-
f919eefa22f5",
    "TargetAccountId": "000000000000",
    "IncludeKeyGrantOperations": "false"
    "IAMUserOrRole": "arn:aws:iam::000000000000:role/role-name"
  }
}
```

2. Output the RFC template to a file in your current folder; this example names it `ShareKmsKeyParamsRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > ShareKmsKeyParamsRfc.json
```

3. Modify and save the `ShareKmsKeyParams.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeId": {
    "ChangeTypeVersion": "1.0",
    "ChangeTypeId": "ct-05yb337abq3x5",
    "Title": "Share KMS Key"
  }
}
```

```
}
```

4. Create the RFC, specifying the ShareKmsKeyParamsRfc file and the ShareKmsKeyParams file:

```
aws amscm create-rfc --cli-input-json file://ShareKmsKeyParamsRfc.json --execution-parameters file://ShareKmsKeyParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

To log in to the instance through a bastion, follow the next procedure, [Instance access examples](#).

## Create Active Directory Trust

### Adding an AD trust with the console

The following shows this change type in the AMS console.

▼ Create Active Directory Trust		
ID	Execution mode	Version
ct-0x6dylrnfgz5	Automated	1.0 (only version)
Classification		
Management -> Directory Service -> Directory -> Create AD trust		

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Adding an AD trust with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-0x6dylrnfjgz5" --change-type-version "1.0" --
title "Create AD Trust" --execution-parameters '
{"DocumentName":"AWSManagedServices-CreateADTrust","Region":"ap-
southeast-2","Parameters":{"DirectoryId":["d-976774e42f"],"RemoteDomainName":
["onprem.local"],"SecretArn":["arn:aws:secretsmanager:ap-
southeast-2:996606605561:secret:customer-shared/CorrectTPW-BI79uu"],"TrustType":
["External"],"ConditionalForwarderIpAddresses":["10.153.28.39"]}]}'
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; this example names it `CreateADTrustParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-0x6dylrnfjgz5" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > CreateADTrustParams.json
```

Modify and save the `CreateADTrustParams.json` file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-CreateADTrust",
  "Region": "ap-southeast-2",
  "Parameters": {
```

```
"DirectoryId": [
  "d-976774e42f"
],
"RemoteDomainName": [
  "onprem.local"
],
"SecretArn": [
  "arn:aws:secretsmanager:ap-southeast-2:996606605561:secret:customer-shared/
CorrectTPW-BI79uu"
],
"TrustType": [
  "External"
],
"ConditionalForwarderIpAddresses": [
  "10.153.28.39"
]
}
}
```

2. Output the RFC template to a file in your current folder; this example names it `CreateADTrustRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateADTrustRfc.json
```

3. Modify and save the `CreateADTrustRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeId": "ct-0x6dylrnfjgz5",
  "ChangeTypeVersion": "1.0",
  "Title": "Active Directory Trust"
}
```

4. Create the RFC, specifying the `CreateADTrustRfc` file and the `CreateADTrustParams` file:

```
aws amscm create-rfc --cli-input-json file://CreateADTrustRfc.json --execution-
parameters file://CreateADTrustParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For information about Directory Service, see the [Directory Service Admin Guide](#).

# Override Stack Access Duration (Managed automation)

## Override stack access duration with the Console

Screenshot of this change type in the AMS console:

### ▼ Override Stack Access Duration

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-0jb01cofkhwk1	Manual	1.0 (only version)

#### Classification

Management -> Managed account -> Stack access duration -> Override (managed automation)

#### Description

Use to override maximum stack access time for all stacks in this account for single landing zone (SALZ) and for all stacks of the member accounts of an organization for multi-landing zone (MALZ). For multi-landing zone (MALZ), please raise a request for change (RFC) from shared-services account with this change type (CT) ID. Access can be overridden from a minimum of 1 hour to a maximum of 120 hours, default stack access is granted for 12 hours.

## How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Override stack access duration with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not

the execution parameters). For a list of all CreateRfc parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Override Stack Access Duration" --description="Override Stack Access Duration" --ct-id="ct-0jb01cofkhwk1" --ct-version="1.0" --input-params="{\"TimeRequestedInHours\": 15,\"Priority\": \"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file. This example names it `OverrideStackAccessDurationParameters.json`:

```
aws amscm get-change-type-version --change-type-id "ct-0jb01cofkhwk1" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > OverrideStackAccessDurationParameters.json
```

2. Modify and save the `OverrideStackAccessDurationParameters.json` file. For example, you can replace the contents with something like this:

```
{
  "TimeRequestedInHours": 15,
  "Priority": "High"
}
```

3. Output the RFC template JSON file to a file named `OverrideStackAccessDuration.json`:

```
aws amscm create-rfc --generate-cli-skeleton > OverrideStackAccessDuration.json
```

4. Modify and save the `OverrideStackAccessDuration.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0jb01cofkhwk1",
```

```
"Title": "Override Stack Access Duration"
}
```

## 5. Create the RFC:

```
aws amscm create-rfc --cli-input-json file://OverrideStackAccessDuration.json --
execution-parameters file://OverrideStackAccessDurationParameters.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

# Enable automated IAM provisioning with read-write permissions

## Enable automated AWS Identity and Access Management provisioning with read/write permissions with the Console

Screenshot of this change type in the AMS console:

▼ **Enable Automated IAM Provisioning**  
Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1706xvkv6j9hf	Manual	1.0 (only version)

**Classification**  
Management -> Managed account -> Automated IAM provisioning with read-write permissions -> Enable (review required)

**Description**  
Enable Automated IAM provisioning with read-write permissions in the account used to submit this CT. Once enabled, a new role 'AWSManagedServicesIAMProvisionAdminRole' is created in that account. Additionally, you can use three related change types (ct-1n9gfnog5x7fl, ct-1e0xmuy1diafq, ct-17cj84y7632o6) to create, update, or delete IAM roles and policies using Automated IAM provisioning with read-write permissions, which employs an automated review process with a predefined set of rules for IAM and AMS. Before using, we recommend a good familiarity with IAM rules. To confirm that an account has Automated IAM provisioning enabled, look for the IAM role 'AWSManagedServicesIAMProvisionAdminRole' in the IAM console for that account.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Enable automated AWS Identity and Access Management provisioning with read/write permissions with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1706xvvk6j9hf" --change-type-version "1.0" --
title "Enable (managed automation)" --execution-parameters "{\"SAMLIdentityProviderArns
\": [\"arn:aws:iam::123456789012:saml-provider/customer-saml\"], \"IamEntityArns\":
 [\"arn:aws:iam::123456789012:role/test-role-one\", \"arn:aws:iam::123456789012:role/
test-role-two\"], \"Priority\": \"High\"}"
```

### *TEMPLATE CREATE:*

1. Output the execution parameters JSON schema for this change type to a file; this example names it `EnableAutomatedIAMProvisioningParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-1706xvvk6j9hf"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
EnableAutomatedIAMProvisioningParams.json
```

2. Modify and save the `EnableAutomatedIAMProvisioningParams` file. For example, you can replace the contents with something like this:

```
{
```

```
"SAMLIdentityProviderArns": ["arn:aws:iam::123456789012:saml-provider/customer-saml"],
"IamEntityArns": ["arn:aws:iam::123456789012:role/test-role-one",
"arn:aws:iam::123456789012:role/test-role-two"],
"Priority": "High"
}
```

3. Output the RFC template JSON file to a file named EnableAutomatedIAMProvisioningRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton >
EnableAutomatedIAMProvisioningRfc.json
```

4. Modify and save the EnableAutomatedIAMProvisioningRfc.json file. For example, you can replace the contents with something like this:

```
{
"ChangeTypeVersion": "1.0",
"ChangeTypeId": "ct-1706xvvk6j9hf",
"Title": "Enable-Automated-IAM-Provisioning-RFC"
}
```

5. Create the RFC, specifying the UpdateSecurityPolicy Rfc file and the UpdateSecurityPolicyParams file:

```
aws amscm create-rfc --cli-input-json file://EnableAutomatedIAMProvisioningRfc.json
--execution-parameters file://EnableAutomatedIAMProvisioningParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Add VPC static route (Managed Automation)

### Add a static route with the console

The following shows this change type in the AMS console.

## ▼ Add Static Route

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-06bwg93ukgg8t	Manual	1.0 (only version)

### Classification

Deployment -> Advanced stack components -> VPC -> Add static route (managed automation)

### Description

Create a static route on your route table inside a VPC.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Adding a static route with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the `create` RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Add Static Route" --description="Add static route"
--ct-id="ct-06bwg93ukgg8t" --ct-version="1.0" --input-params="{\"RouteTableId
\": \"rtb-0123abcd\", \"DestinationCidrBlock\": \"172.31.0.0/16\", \"Target\":
\": \"pcx-0123456789abcdefg\", \"Priority\": \"High\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type; this example names it `EncryptAmiParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-06bwg93ukgg8t" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > AddStaticRouteParams.json
```

2. Modify and save the execution `AddStaticRouteParams.json` file. For example, you can replace the contents with something like this:

```
{
  "RouteTableId": "rtb-0123abcd",
  "DestinationCidrBlock": "172.31.0.0/16",
  "Target": "pcx-0123456789abcdefg",
  "Priority": "High"
}
```

3. Output the RFC template JSON file; this example names it `AddStaticRouteRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > AddStaticRouteRfc.json
```

4. Modify and save the `AddStaticRouteRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-06bwg93ukgg8t",
  "Title": "Add static route"
}
```

5. Create the RFC, specifying the `AddStaticRouteRfc` file and the `AddStaticRouteParams` file:

```
aws amscm create-rfc --cli-input-json file://AddStaticRouteRfc.json --execution-
parameters file://AddStaticRouteParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For information about VPCs, see [Virtual private clouds \(VPC\)](#).

# Create IAM entity or policy

## Creating IAM entity or policy with the console

### ▼ Enable Automated IAM Provisioning

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1706xvkv6j9hf	Manual	1.0 (only version)

#### Classification

Management -> Managed account -> Automated IAM provisioning with read-write permissions -> Enable (managed automation)

#### Description

Enable Automated IAM provisioning with read-write permissions in the account used to submit this CT. Once enabled, a new role 'AWSManagedServicesIAMProvisionAdminRole' is created in that account. Additionally, you can use three related change types (ct-1n9gfnog5x7fl, ct-1e0xmuy1diafq, ct-17cj84y7632o6) to create, update, or delete IAM roles and policies using Automated IAM provisioning with read-write permissions, which employs an automated review process with a predefined set of rules for IAM and AMS. Before using, we recommend a good familiarity with IAM rules. To confirm that an account has Automated IAM provisioning enabled, look for the IAM role 'AWSManagedServicesIAMProvisionAdminRole' in the IAM console for that account.

## How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating IAM entity or policy with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status

changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1n9gfnog5x7f1" --change-type-version "1.0" --title "Create role or policy" --execution-parameters '{"DocumentName":"AWSManagedServices-HandleAutomatedIAMProvisioningCreate-Admin","Region":"us-east-1","Parameters":{"ValidateOnly":"No"},"RoleDetails":{"Roles":[{"RoleName":"RoleTest01","Description":"This is a test role","AssumeRolePolicyDocument":{"Version": "2012-10-17","Statement":[{"Effect":"Allow","Principal":{"AWS":"arn:aws:iam::123456789012:root"},"Action":"sts:AssumeRole"}]}],"ManagedPolicyArns":["arn:aws:iam::123456789012:policy/policy01","arn:aws:iam::123456789012:policy/policy02"],"Path":"/","MaxSessionDuration":"7200","PermissionsBoundary":"arn:aws:iam::123456789012:policy/permission_boundary01","InstanceProfile":"No"}]},"ManagedPolicyDetails":{"Policies":[{"ManagedPolicyName":"TestPolicy01","Description":"This is customer policy","Path":"/test/","PolicyDocument":{"Version":"2012-10-17","Statement":[{"Sid":"AllQueueActions","Effect":"Allow","Action":"sqs:ListQueues","Resource":"*","Condition":{"ForAllValues:StringEquals":{"aws:tagKeys":["temporary"]}}}}]}]}}'
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; example names it `CreatelamResourceParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-1n9gfnog5x7f1" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > CreateIamResourceParams.json
```

2. Modify and save the `CreatelamResourceParams` file; example creates an IAM Role with policy documents pasted inline.

```
{
```

```
"DocumentName": "AWSManagedServices-HandleAutomatedIAMProvisioningCreate-Admin",
"Region": "us-east-1",
"Parameters": {
  "ValidateOnly": "No"
},
"RoleDetails": {
  "Roles": [
    {
      "RoleName": "RoleTest01",
      "Description": "This is a test role",
      "AssumeRolePolicyDocument": {
        "Version": "2012-10-17",
        "Statement": [
          {
            "Effect": "Allow",
            "Principal": {
              "AWS": "arn:aws:iam::123456789012:root"
            },
            "Action": "sts:AssumeRole"
          }
        ]
      },
      "ManagedPolicyArns": [
        "arn:aws:iam::123456789012:policy/policy01",
        "arn:aws:iam::123456789012:policy/policy02"
      ],
      "Path": "/",
      "MaxSessionDuration": "7200",
      "PermissionsBoundary": "arn:aws:iam::123456789012:policy/
permission_boundary01",
      "InstanceProfile": "No"
    }
  ],
  "ManagedPolicyDetails": {
    "Policies": [
      {
        "ManagedPolicyName": "TestPolicy01",
        "Description": "This is customer policy",
        "Path": "/test/",
        "PolicyDocument": {
          "Version": "2012-10-17",
          "Statement": [
            {
```



## Tips

- After an IAM role is provisioned in your account, depending on the role and the policy document you attach to the role, you may need to onboard the role in your federation solution.
- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#). For information about AMS permissions, see [Deploying IAM resources](#).

## Update IAM entity or policy

### Updating IAM entity or policy with the console

▼

**Update Entity or Policy (read-write permissions)**

ID	Execution mode	Version
ct-1e0xmuy1diafq	Automated	1.0 (only version)

Classification  
Management -> Advanced stack components -> Identity and Access Management (IAM) -> Update entity or policy (read-write permissions)

Description  
Update Identity and Access Management (IAM) role or policy with read-write permissions. You must have enabled this feature with change type ct-1706xvvk6j9hf before submitting this request. Automated IAM provisioning with read-write permissions runs over 200 validations to help ensure successful outcomes.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating IAM entity or policy with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-1e0xmuy1diafq" --change-type-version
"1.0" --title "Update role or policy" --execution-parameters "{\"DocumentName
\": \"AWSManagedServices-HandleAutomatedIAMProvisioningUpdate-Admin\", \"Region
\": \"us-east-1\", \"Parameters\": {\"ValidateOnly\": \"No\"}, \"RoleDetails
\": {\"Roles\": [{\"RoleName\": \"RoleTest01\", \"Description\": \"This is a test
role\", \"AssumeRolePolicyDocument\": {\"Version\": \"2012-10-17\",
\"Statement\": [{\"Effect\": \"Allow\", \"Principal\": {\"AWS\":
\"arn:aws:iam::123456789012:root\"}, \"Action\": \"sts:AssumeRole
\"]}]}, \"ManagedPolicyArns\": [\"arn:aws:iam::123456789012:policy/policy01\",
\"arn:aws:iam::123456789012:policy/policy02\"], \"MaxSessionDuration\": \"7200\",
\"PermissionsBoundary\": \"arn:aws:iam::123456789012:policy/permission_boundary01\"}],
\"ManagedPolicyDetails\": {\"Policies\": [{\"ManagedPolicyName\": \"TestPolicy01\",
\"PolicyDocument\": {\"Version\": \"2012-10-17\", \"Statement\":
[{\"Sid\": \"AllQueueActions\", \"Effect\": \"Allow\", \"Action
\": \"sqs:ListQueues\", \"Resource\": \"*\", \"Condition\": {
\"ForAllValues:StringEquals\": {\"aws:tagKeys\": [\"temporary\"]}}]}]}\"}
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; example names it `UpdateIamResourceParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-1e0xmuy1diafq"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateIamResourceParams.json
```

2. Modify and save the UpdateIamResourceParams file; example creates an IAM Role with policy documents pasted inline.

```
{
  "DocumentName": "AWSManagedServices-HandleAutomatedIAMProvisioningUpdate-Admin",
  "Region": "us-east-1",
  "Parameters": {
    "ValidateOnly": "No"
  },
  "RoleDetails": {
    "Roles": [
      {
        "RoleName": "RoleTest01",
        "Description": "This is a test role",
        "AssumeRolePolicyDocument": {"Version": "2012-10-17", "Statement":
[{"Effect": "Allow", "Principal":
[{"AWS": "arn:aws:iam::123456789012:root"}, {"Action": "sts:AssumeRole"}]}]},
        "ManagedPolicyArns": [
          "arn:aws:iam::123456789012:policy/policy01",
          "arn:aws:iam::123456789012:policy/policy02"
        ],
        "MaxSessionDuration": "7200",
        "PermissionsBoundary": "arn:aws:iam::123456789012:policy/
permission_boundary01"
      }
    ]
  },
  "ManagedPolicyDetails": {
    "Policies": [
      {
        "ManagedPolicyName": "TestPolicy01",
        "PolicyDocument": {"Version": "2012-10-17", "Statement":
[{"Sid": "AllQueueActions", "Effect": "Allow", "Action": "sqs:ListQueues", "Resource": "*", "Condit
{"ForAllValues:StringEquals": {"aws:tagKeys": ["temporary"]}]}]}]}
      }
    ]
  }
}
```

3. Output the RFC template JSON file to a file named `UpdateIamResourceRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateIamResourceRfc.json
```

4. Modify and save the `UpdateIamResourceRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-1e0xmuy1diafq",
  "Title": "Update entity or policy (read-write permissions)"
}
```

5. Create the RFC, specifying the `UpdateIamResourceRfc` file and the `UpdateIamResourceParams` file:

```
aws amscm create-rfc --cli-input-json file://UpdateIamResourceRfc.json --
execution-parameters file://UpdateIamResourceParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#). For information about AMS permissions, see [Deploying IAM resources](#).

# Delete IAM entity or policy

## Deleting IAM entity or policy with the console

▼

**Delete Entity or Policy (read-write permissions)**

ID	Execution mode	Version
ct-17cj84y7632o6	Automated	1.0 (only version)

Classification  
Management -> Advanced stack components -> Identity and Access Management (IAM) -> Delete entity or policy (read-write permissions)

Description  
Delete Identity and Access Management (IAM) role or policy created with Change Type ct-1n9gfnog5x7fl.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deleting IAM entity or policy with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-17cj84y7632o6" --change-type-version
"1.0" --title "Delete role or policy" --execution-parameters "{\"DocumentName
\": \"AWSManagedServices-HandleAutomatedIAMProvisioningDelete-Admin\", \"Region
\": \"us-east-1\", \"Parameters\": {\"RoleName\": [\"TestRole01\", \"TestRole02\"],
\"ManagedPolicyName\": [\"TestPolicy01\", \"TestPolicy02\"]}}\"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; example names it DeletelamResourceParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-17cj84y7632o6"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DeleteIamResourceParams.json
```

2. Modify and save the DeletelamResourceParams file; example creates an IAM Role with policy documents pasted inline.

```
{
  "DocumentName" : "AWSManagedServices-HandleAutomatedIAMProvisioningDelete-Admin",
  "Region" : "us-east-1",
  "Parameters": {
    "RoleName": ["TestRole01", "TestRole02"],
    "ManagedPolicyName": ["TestPolicy01", "TestPolicy02"]
  }
}
```

3. Output the RFC template JSON file to a file named DeletelamResourceRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > DeleteIamResourceRfc.json
```

4. Modify and save the DeletelamResourceRfc.json file. For example, you can replace the contents with something like this:

```
{
```

```
"ChangeTypeVersion": "1.0",  
"ChangeTypeId": "ct-17cj84y7632o6",  
"Title": "Delete entity or policy (read-write permissions)"  
}
```

5. Create the RFC, specifying the DeletelamResourceRfc file and the DeletelamResourceParams file:

```
aws amscm create-rfc --cli-input-json file://DeleteIamResourceRfc.json --  
execution-parameters file://DeleteIamResourceParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

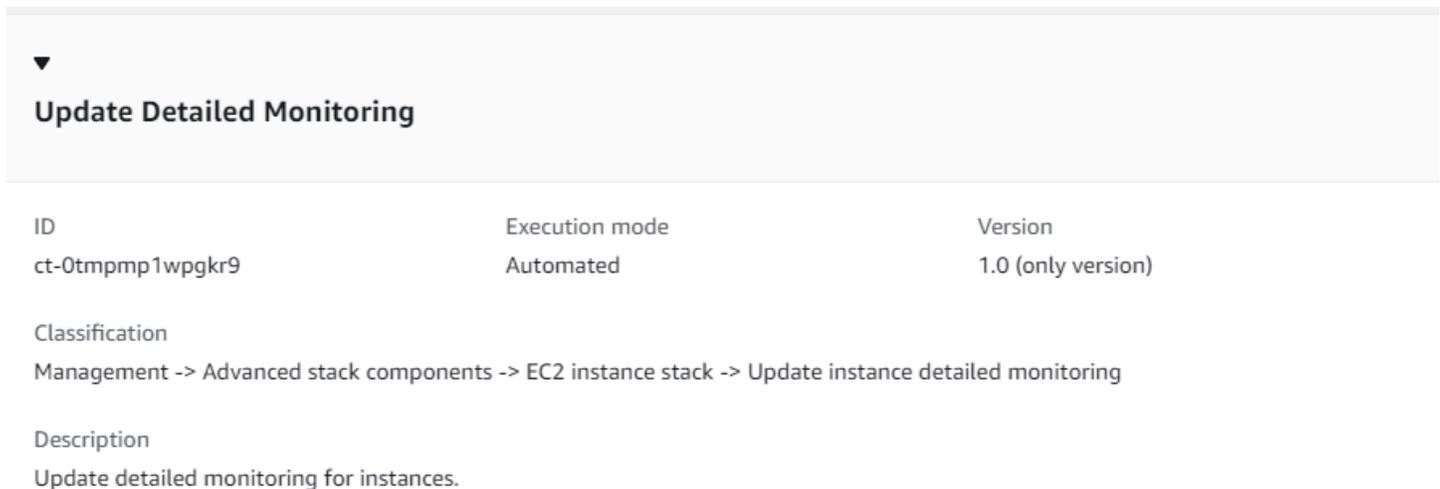
## Tips

- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#).

## Update detailed monitoring

### Updating EC2 instances with the Console

Screenshot of this change type in the AMS console:



The screenshot shows a dropdown menu with the selected option 'Update Detailed Monitoring'. Below the dropdown is a table with three columns: ID, Execution mode, and Version. The ID is 'ct-0tmpmp1wpgkr9', the Execution mode is 'Automated', and the Version is '1.0 (only version)'. Below the table, there are sections for 'Classification' and 'Description'.

ID	Execution mode	Version
ct-0tmpmp1wpgkr9	Automated	1.0 (only version)

Classification  
Management -> Advanced stack components -> EC2 instance stack -> Update instance detailed monitoring

Description  
Update detailed monitoring for instances.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating EC2 instances with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title "Update EC2 detailed monitoring" -update --change-
type-id ct-0tmpmp1wpgkr9 --change-type-version 1.0 --execution-parameters
'{"DocumentName":"AWSManagedServices-UpdateInstanceEnhancedMonitoring","Region":"us-
east-1","Parameters":{"InstanceIds":["i-09d65b13db992e8d4","i-0cdbc78ad80d2378c"]}}'
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it `UpdateEc2MonitoringParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-0tmpmp1wpgkr9"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateEc2MonitoringParams.json
```

2. Modify and save the UpdateEc2MonitoringParams file, retaining only the parameters that you want to change. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateInstanceEnhancedMonitoring",
  "Region": "us-east-1",
  "Parameters": {
    "InstanceIds": [
      "i-09d65b13db992e8d4",
      "i-0cdbc78ad80d2378c"
    ],
    "MonitoringValue": "enabled"
  }
}
```

3. Output the RFC template to a file in your current folder; this example names it UpdateEc2MonitoringRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateEc2MonitoringRfc.json
```

4. Modify and save the UpdateEc2MonitoringRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0tmpmp1wpgkr9",
  "Title": "EC2 Update Detailed Monitoring"
}
```

5. Create the RFC, specifying the UpdateEc2MonitoringRfc file and the UpdateEc2MonitoringParams file:

```
aws amscm create-rfc --cli-input-json file://UpdateEc2MonitoringRfc.json --
execution-parameters file://UpdateEc2MonitoringParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon EC2, see [Amazon Elastic Compute Cloud Documentation](#).

# Share directory

## Share a directory with the console

The following shows this change type in the AMS console.

### Share Directory Create with older version

ID	Execution mode	Version
ct-369odask0pd9w	Automated	1.0 (only version)

**Classification**  
Management -> Directory Service -> Directory -> Share directory

**Description**  
Share a specified directory in your AWS account (directory owner) with another AWS account (directory consumer). Run this in your Shared Service account that has Managed Active Directory.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Share a directory with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-369odosk0pd9w" --change-type-version
"1.0" --title "Share Directory" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-ShareDirectory\", \"Region\": \"ap-southeast-2\", \"Parameters\":
{\"DirectoryId\": [\"d-123456ab7c\"], \"TargetAccountId\": [\"012345678912\"]}]}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; this example names it DirectorySharingParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-369odosk0pd9w"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DirectorySharingParams.json
```

Modify and save the DirectorySharingParams.json file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-ShareDirectory",
  "Region": "us-east-1",
  "Parameters": {
    "DirectoryId": [
      "d-123456ab7c"
    ],
    "TargetAccountId": [
      "012345678912"
    ]
  }
}
```

2. Output the RFC template to a file in your current folder; this example names it DirectorySharingRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > DirectorySharingRfc.json
```

3. Modify and save the DirectorySharingRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeId": "ct-369odosk0pd9w",
  "ChangeTypeVersion": "1.0",
  "Title": "Share Directory"
}
```

4. Create the RFC, specifying the DirectorySharingRfc file and the DirectorySharingParams file:

```
aws amscm create-rfc --cli-input-json file://DirectorySharingRfc.json --execution-parameters file://DirectorySharingParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For related CTs, see [Directory Service Subcategory](#).

## Unshare directory

### Unshare a directory with the console

The following shows this change type in the AMS console.

### Unshare Directory

Create with older version

ID	Execution mode	Version
ct-2xd2anlb5hbzo	Automated	1.0 (only version)

**Classification**  
Management -> Directory Service -> Directory -> Unshare directory

**Description**  
Stops the directory sharing between the directory owner and consumer accounts. Run this in your Shared Service account that has Managed Active Directory.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Unshare a directory with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-2xd2anlb5hbzo" --change-type-version
"1.0" --title "Unshare Directory" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-ShareDirectory\", \"Region\": \"ap-southeast-2\", \"Parameters\":
{\"DirectoryId\": [\"d-123456ab7c\"], \"UnshareTarget\": [\"012345678912\"]}}\"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it `DirectoryUnsharingParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2xd2anlb5hbzo"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
DirectoryUnsharingParams.json
```

Modify and save the `DirectoryUnsharingParams.json` file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UnshareDirectory",
  "Region": "us-east-1",
  "Parameters": {
    "DirectoryId": [
      "d-123456ab7c"
    ],
    "UnshareTarget": [
      "012345678912"
    ]
  }
}
```

2. Output the RFC template to a file in your current folder; this example names it `DirectoryUnsharingRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > DirectoryUnsharingRfc.json
```

3. Modify and save the `DirectoryUnsharingRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeId": "ct-2xd2an1b5hbzo",
  "ChangeTypeVersion": "1.0",
  "Title": "Unshare Directory"
}
```

4. Create the RFC, specifying the `DirectoryUnsharingRfc` file and the `DirectoryUnsharingParams` file:

```
aws amscm create-rfc --cli-input-json file://DirectoryUnsharingRfc.json --
execution-parameters file://DirectoryUnsharingParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

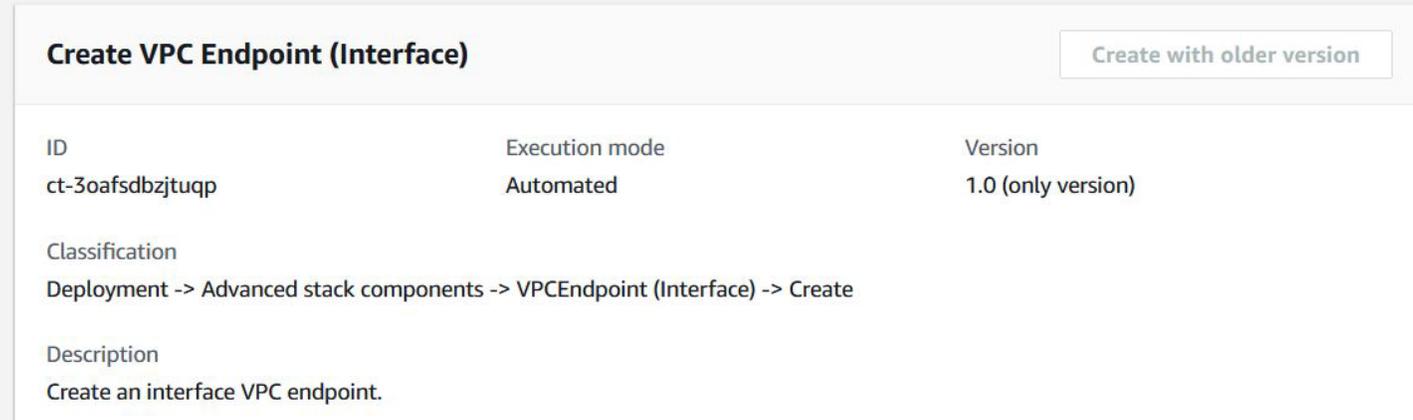
## Tips

For related CTs, see [Directory Service Subcategory](#).

## Create VPC endpoint

### Creating a VPC endpoint with the console

The following shows this change type in the AMS console.



The screenshot displays the 'Create VPC Endpoint (Interface)' change type in the AMS console. It includes a table with the following information:

ID	Execution mode	Version
ct-3oafbdbzjtupq	Automated	1.0 (only version)

Classification  
Deployment -> Advanced stack components -> VPCEndpoint (Interface) -> Create

Description  
Create an interface VPC endpoint.

There is also a button labeled 'Create with older version' in the top right corner of the console view.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a VPC endpoint with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not

the execution parameters). For a list of all CreateRfc parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline) and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-3oafsdzbzjtuqp" --change-type-version
"1.0" --title "Create VPC Endpoint" --execution-parameters "{\"Description\": \"VPC
endpoint interface\", \"VpcId\": \"vpc-1234567890abcdef0\", \"Name\": \"VPC endpoint
interface\", \"StackTemplateId\": \"stm-f0cumpt1rfc1p1739\", \"TimeoutInMinutes
\": 60, \"Parameters\": {\"VpcId\": \"vpc-1234567890abcdef0\", \"ServiceName\":
\"com.amazonaws.us-east-1.codedeploy\", \"SecurityGroups\": [\"sg-1234567890abcdef0\",
\"sg-1234567890abcdef1\"], \"SubnetIds\": [\"subnet-1234567890abcdef0\",
\"subnet-1234567890abcdef1\"], \"EnablePrivateDns\": \"false\"}}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type; this example names it VPCEndpointCreateParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-3oafsdzbzjtuqp"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
VPCEndpointCreateParams.json
```

2. Modify and save the execution parameters as VPCEndpointCreateParams.json. For example, you can replace the contents with something like this:

```
{
  "Description": "VPC endpoint interface",
  "VpcId": "vpc-1234567890abcdef0",
  "Name": "VPC endpoint interface",
  "StackTemplateId": "stm-f0cumpt1rfc1p1739",
  "TimeoutInMinutes": 60,
  "Parameters": {
    "VpcId": "vpc-1234567890abcdef0",
    "ServiceName": "com.amazonaws.us-east-1.codedeploy",
    "SecurityGroups": [
```

```
    "sg-1234567890abcdef0",
    "sg-1234567890abcdef1"
  ],
  "SubnetIds": [
    "subnet-1234567890abcdef0",
    "subnet-1234567890abcdef1"
  ],
  "EnablePrivateDns": "false"
}
}
```

3. Output the RFC template JSON file; this example names it VPCEndpointCreateRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > VPCEndpointCreateRfc.json
```

4. Modify and save the VPNGatewayCreateRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion" : "1.0",
  "ChangeTypeId" : "ct-3oafsdzbzjtuqp",
  "Title" : "Create VPC Endpoint "
}
```

5. Create the RFC, specifying the VPCEndpointCreateRfc file and the VPCEndpointCreateParams file:

```
aws amscm create-rfc --cli-input-json file://VPCEndpointCreateRfc.json --
execution-parameters file://VPCEndpointCreateParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

## Update RDS storage

### Updating RDS storage with the Console

Screenshot of this change type in the AMS console:

## Update RDS Storage

Create with older version

ID	Execution mode	Version
ct-0loed9dzig1ze	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> RDS database stack -> Update Storage

**Description**  
Change the RDS instance storage type, capacity or IOPS through direct API calls. The RDS instance can be standalone or belong to a CloudFormation stack, in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-12w49boaiwtzp instead, or ct-361tlo1k7339x if the RDS instance was provisioned via CFN ingestion.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating RDS storage with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-0loed9dzig1ze" --change-type-version
"1.0" --title "Update RDS storage" --execution-parameters "{\\"DocumentName\\":
\\"AWSManagedServices-UpdateRDSStorage\\",\\"Region\\":\\"us-east-1\\",\\"Parameters\\":
{\\"DBInstanceIdentifier\\":[\\"rt123456789\\"], \\"AllocatedStorage\\": [\\"100\\"],,
\\"ApplyImmediately\\": \\"true\\"}"}
```

#### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdateStorageParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-0loed9dzig1ze" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > UpdateStorageParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateRDSStorage",
  "Region": "us-east-1",
  "Parameters": {
    "DBInstanceIdentifier": [
      "rt123456789"
    ],
    "AllocatedStorage": [
      "100"
    ],
    "ApplyImmediately": "false"
  }
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateStorageRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateStorageRfc.json
```

4. Modify and save the UpdateStorageRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion":    "1.0",
  "ChangeTypeId":        "ct-01oed9dzig1ze",
  "Title":                "Update RDS storage"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateStorageRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdateStorageRfc.json --execution-parameters file://UpdateStorageParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

AMS employs drift detection on certain stacks, including RDS stacks, to determine if configuration changes. The AMS disallows updates to an RDS stack that has been determined to have configuration drift. The RFC will fail with the following error message: "Update cannot be performed on this stack, please contact AMS for further assistance."

To learn more about Amazon RDS, including size recommendations, see [Amazon Relational Database Service Documentation](#).

To update an RDS stack for Aurora, see [RDS Database Stack | Update](#).

## Update an RDS multi-AZ deployment

### Updating an RDS multi-AZ deployment with the Console

Screenshot of this change type in the AMS console:

## Change RDS MultiAZ Setting

Create with older version

ID	Execution mode	Version
ct-36jq7gwyty8h	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> RDS database stack -> Update MultiAZ setting

**Description**  
Change the DB instance MultiAZ value through direct API calls. The MultiAZ setting determines whether or not the DB instance is deployed across multiple availability zones (AZs). The RDS instance can be standalone or belong to a CloudFormation stack; in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-12w49boaiwtzp instead, or ct-361tlo1k7339x if the RDS instance was provisioned via CFN ingestion.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an RDS multi-AZ deployment with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-36jq7gvwyty8h" --change-type-version
"1.0" --title "Update RDS Multiple AZ" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-UpdateRDSMultiAZ\", \"Region\": \"us-east-1\", \"Parameters\":
{\"DBInstanceIdentifier\": [\"rt123456789\"], \"MultiAZ\": \"true\", \"ApplyImmediately
\": \"true\"}]}"
```

#### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdateMultipleAzParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-36jq7gvwyty8h"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateMultipleAzParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateRDSMultiAZ",
  "Region": "us-east-1",
  "Parameters": {
    "DBInstanceIdentifier": [
      "rt123456789"
    ],
    "MultiAZ": "true",
    "ApplyImmediately": "false"
  }
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateMultipleAzRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateMultipleAzRfc.json
```

4. Modify and save the UpdateMultipleAzRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion":    "1.0",
  "ChangeTypeId":        "ct-36jq7gvwyty8h",
  "Title":                "Update RDS Multiple AZ"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateMultipleAzRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdateMultipleAzRfc.json --execution-parameters file://UpdateMultipleAzParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

AMS employs drift detection on certain stacks, including RDS stacks, to determine if configuration changes. The AMS disallows updates to an RDS stack that has been determined to have configuration drift. The RFC will fail with the following error message: "Update cannot be performed on this stack, please contact AMS for further assistance."

To learn more about Amazon RDS, including size recommendations, see [Amazon Relational Database Service Documentation](#).

To update an RDS stack for Aurora, see [RDS Database Stack | Update](#).

## Update an RDS instance type

### Updating an RDS instance type with the Console

Screenshot of this change type in the AMS console:

## Update Instance Type Create with older version

ID	Execution mode	Version
ct-13swbwdxg106z	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> RDS database stack -> Update instance type

**Description**  
Change the DB instance type through direct API calls. The RDS instance can be standalone or belong to a CloudFormation stack; in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-12w49boaiwtzp instead, or ct-361tlo1k7339x if the RDS instance was provisioned via CFN ingestion.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an RDS instance type with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-13swbwdxg106z" --change-type-version
"1.0" --title "Update rds instance type" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-UpdateRDSInstanceType\", \"Region\": \"us-east-1\", \"Parameters\":
{ \"DBInstanceIdentifier\": [\"rt123456789\"], \"DBInstanceClass\": [\"db.m4.large\"],
\"ApplyImmediately\": \"true\"}}"
```

#### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdateInstanceTypeParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-13swbwdxg106z"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateInstanceTypeParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateRDSInstanceType",
  "Region": "us-east-1",
  "Parameters": {
    "DBInstanceIdentifier": [
      "rt123456789"
    ],
    "DBInstanceClass": [
      "db.m4.large"
    ],
    "ApplyImmediately": "false"
  }
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateInstanceTypeRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateInstanceTypeRfc.json
```

4. Modify and save the UpdateInstanceTypeRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion":    "1.0",
  "ChangeTypeId":        "ct-13swbwdxg106z",
  "Title":                "Update RDS instance type"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateInstanceTypeRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdateInstanceTypeRfc.json --
execution-parameters file://UpdateInstanceTypeParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

AMS employs drift detection on certain stacks, including RDS stacks, to determine if configuration changes. The AMS disallows updates to an RDS stack that has been determined to have configuration drift. The RFC will fail with the following error message: "Update cannot be performed on this stack, please contact AMS for further assistance."

To learn more about Amazon RDS, including size recommendations, see [Amazon Relational Database Service Documentation](#).

To update an RDS stack for Aurora, see [RDS Database Stack | Update](#).

## Update S3 bucket versioning

### Updating S3 bucket versioning with the Console

Screenshot of this change type in the AMS console:

### Change S3 Bucket Versioning Setting Create with older version

ID	Execution mode	Version
ct-2hh93eyzmbkdk	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> S3 storage -> Update versioning

**Description**  
Change S3 bucket versioning setting through direct API calls. The S3 bucket can be standalone or belong to a CloudFormation stack; in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-1gi93jhwj28eg instead, or ct-361tlo1k7339x if the S3 bucket was provisioned via CFN ingestion.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating S3 bucket versioning with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-2hh93eyzmbkd" --change-type-version
"1.0" --title "Update bucket versioning" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-UpdateBucketVersioning\", \"Region\": \"us-east-1\", \"Parameters\":
{\"BucketName\": [\"BucketName\"], \"Versioning\": \"Enabled\"}}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdateBucketVersioningParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-2hh93eyzmbkd"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateBucketVersioningParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DocumentName": "AWSManagedServices-UpdateBucketVersioning",
  "Region": "us-east-1",
  "Parameters": {
    "BucketName": [
      "BucketName"
    ],
    "Versioning": "Enabled"
  }
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateBucketVersioningRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateBucketVersioningRfc.json
```

4. Modify and save the UpdateBucketVersioningRfc.json file. For example, you can replace the contents with something like this:

```
{
```

```

"ChangeTypeVersion":    "1.0",
"ChangeTypeId":         "ct-2hh93eyzmbkd",
"Title":                "Update bucket versioning"
}

```

5. Create the RFC, specifying the execution parameters file and the UpdateRdsRfc file:

```

aws amscm create-rfc --cli-input-json file://UpdateBucketVersioningRfc.json --
execution-parameters file://UpdateBucketVersioningParams.json

```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon S3, see [Amazon Simple Storage Service Documentation](#).

## Update S3 bucket encryption

### Updating S3 bucket encryption with the Console

Screenshot of this change type in the AMS console:

The screenshot displays the details of an RFC titled "Change S3 Bucket Encryption Setting". At the top right, there is a button labeled "Create with older version". Below the title, a table lists the RFC's ID, execution mode, and version. The ID is "ct-128svy9nn2yj8", the execution mode is "Automated", and the version is "1.0 (only version)". Underneath the table, the "Classification" is "Management -> Advanced stack components -> S3 storage -> Update encryption". The "Description" states: "Enable or update S3 bucket encryption setting through direct API calls. The S3 bucket can be standalone or belong to a CloudFormation stack; in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-1gi93jhvj28eg instead, or ct-361tlo1k7339x if the S3 bucket was provisioned via CFN ingestion."

ID	Execution mode	Version
ct-128svy9nn2yj8	Automated	1.0 (only version)

**Classification**  
Management -> Advanced stack components -> S3 storage -> Update encryption

**Description**  
Enable or update S3 bucket encryption setting through direct API calls. The S3 bucket can be standalone or belong to a CloudFormation stack; in the latter case, the change might cause stack drift. To avoid causing stack drift, please use ct-1gi93jhvj28eg instead, or ct-361tlo1k7339x if the S3 bucket was provisioned via CFN ingestion.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating S3 bucket encryption with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-128svy9nn2yj8" --change-type-version
"1.0" --title "Update bucket encryption" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-UpdateBucketEncryption\", \"Region\": \"us-east-1\", \"Parameters
\": {\"BucketName\": [\"BucketName\", \"ServerSideEncryption\": \"KmsManagedKeys\",
\"KMSKeyId\": [\"01234567-abcd-abcd-abcd-0123456789ab\"]}}\"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named `UpdateBucketEncryptionParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-128svy9nn2yj8"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateBucketEncryptionParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
```

```
"DocumentName": "AWSManagedServices-UpdateBucketEncryption",
"Region": "us-east-1",
"Parameters": {
  "BucketName": [
    "BucketName"
  ],
  "ServerSideEncryption": "KmsManagedKeys",
  "KMSKeyId": [
    "01234567-abcd-abcd-abcd-0123456789ab"
  ]
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateBucketEncryptionRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateBucketEncryptionRfc.json
```

4. Modify and save the UpdateBucketEncryptionRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-128svy9nn2yj8",
  "Title": "Update bucket encryption"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateBucketEncryptionRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdateBucketEncryptionRfc.json --
execution-parameters file://UpdateBucketEncryptionParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

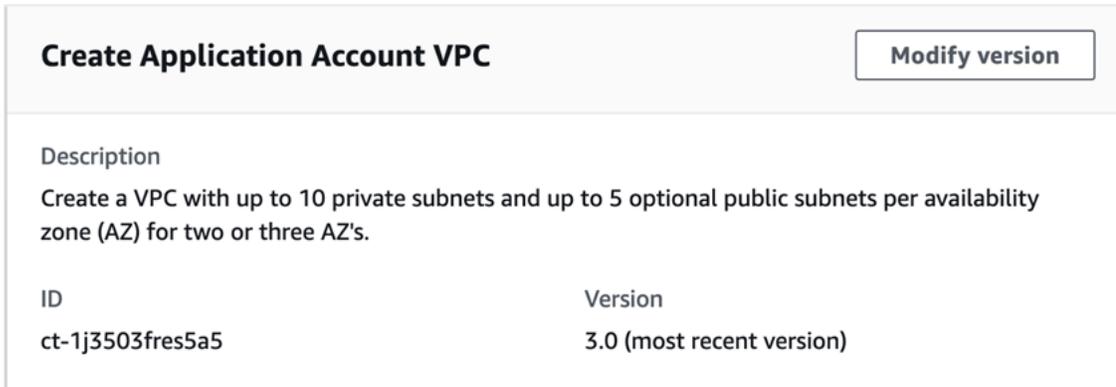
## Tips

To learn more about Amazon S3, see [Amazon Simple Storage Service Documentation](#).

# Updating an application account (Managed Automation)

## Updating an application account with the Console

Screenshot of this change type in the AMS console:



How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an application account with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

**Note**

Run this change type from your Application account.

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-0fuztxgwy37rf" --change-type-version
"1.0" --title "Child Application Account RFC" --execution-parameters "'{\RfcId\":
\"7cc277c6-9b55-1f63-361b-5811fce9f830\", \"Comment\":"test RFC\"}'"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; this example names it CreateAppAcctVpcParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-0fuztxgwy37rf" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > UpdateAppAcctParams.json
```

2. Modify and save the UpdateAppAcctParams file. For example, you can replace the contents with something like this:

```
{
  "RfcId": "7cc277c6-9b55-1f63-361b-5811fce9f830",
  "Comment": "test RFC"
}
```

3. Output the RFC template JSON file to a file; this example names it UpdateAppAcctRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateAppAcctRfc.json
```

4. Modify and save the UpdateAppAcctRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0fuztxgwy37rf",
  "Title": "Child Application Account RFC"
```

```
}

```

5. Create the RFC, specifying the UpdateAppAcctRfc file and the UpdateAppAcctParams file:

```
aws amscm create-rfc --cli-input-json file://UpdateAppAcctRfc.json --execution-parameters file://UpdateAppAcctParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

-  **Important**  
 To create an additional public subnet in a new availability zone (AZ), a private subnet must already be present.
- This change type is now at version 3.0 and it has been automated (it is no longer manually run by AMS). The 2.0 version of this change type was a "managed automation" (manual) change type.
- To learn more about AMS multi-account landing zone, see [VPC sharing: A new approach to multiple accounts and VPC management](#).

## Associate private IP addresses (Managed Automation) ct-1pvlhug439gl2

### Associate private IP addresses with the console

The following shows this change type in the AMS console.

#### ▼ Associate Private IP Addresses

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1pvlhug439gl2	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> EC2 instance stack -> Associate private IP addresses (managed automation)

#### Description

Associate one or more secondary private IP addresses to the specified network interface.

## How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a pre-ingest instance with the CLI

### How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.

2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --title="Associate Private IP Addresses" --description="Associate Private IP Addresses" --ct-id="ct-1pvlhug439gl2" --ct-version="1.0" --input-params="{\"NetworkInterfaceId\": \"eni-0123456789abcdef0\", \"PrivateIpAddresses\": [\"10.0.0.82\", \"10.0.0.83\"]}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it `AssociatePrivateIPAddressesParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-1pvlhug439gl2"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
AssociatePrivateIPAddressesParams.json
```

2. Modify and save the AssociatePrivateIPAddressesParams file. For example, you can replace the contents with something like this:

```
{
  "NetworkInterfaceId": "eni-0123456789abcdef0",
  "PrivateIpAddresses": ["10.0.0.82", "10.0.0.83"]
}
```

3. Output the RFC template to a file in your current folder; this example names it AssociatePrivateIPAddressesRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > AssociatePrivateIPAddressesRfc.json
```

4. Modify and save the AssociatePrivateIPAddressesRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-1pvlhug439gl2",
  "Title": "Associate Private IP Addresses"
}
```

5. Create the RFC, specifying the AssociatePrivateIPAddressesRfc file and the AssociatePrivateIPAddressesParams file:

```
aws amscm create-rfc --cli-input-json file://AssociatePrivateIPAddressesRfc.json
--execution-parameters file://AssociatePrivateIPAddressesParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For more information about Amazon EC2 IP addresses, see [Amazon EC2 instance IP addressing](#).

If needed, see [EC2 instance stack create fail](#).

# Create Amazon RDS option group (Managed Automation)

## Creating an Amazon RDS Option Group with the Console

Screenshot of this change type in the AMS console:

### ▼ Create RDS Option Group

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-10yi1sd9nst1c	Manual	1.0 (only version)

#### Classification

Deployment -> Advanced stack components -> RDS database stack -> Create option group (managed automation)

#### Description

An option group specifies features (options), and their settings, that you then associate with an Amazon RDS DB instance. When you associate a DB instance with an option group, the specified options and option settings are enabled for that DB instance.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.
 

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating an Amazon RDS Option Group with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

## INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-10yi1sd9nst1c" --change-type-version
"1.0" --title "Create option group (managed automation)" --execution-parameters
{"\"OptionGroupName\": \"CreatingTheOptionGroup\", \"Description\": \"RDS option
group\", \"EngineName\": \"sqlserver-ee\", \"MajorEngineVersion\": \"10.01\",
\"DBInstanceName\": \"database-1\", \"Priority\": \"Medium\"}"
```

## TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named `CreateRdsOptionGroupParams.json`.

```
aws amscm get-change-type-version --change-type-id "ct-10yi1sd9nst1c"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateRdsOptionGroupParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "OptionGroupName": "OptionGroup",
  "EngineName": "sqlserver-ee",
  "MajorEngineVersion": "10.01"
}
```

3. Output the JSON template to a file in your current folder; this example names it `CreateRdsOptionGroupRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateRdsOptionGroupRfc.json
```

4. Modify and save the `CreateRdsOptionGroupRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-10yi1sd9nst1c",
```

```
"Title": "RDS-Create-RFC"
}
```

5. Create the RFC, specifying the execution parameters file and the CreateRdsOptionGroupRfc file:

```
aws amscm create-rfc --cli-input-json file://CreateRdsOptionGroupRfc.json --
execution-parameters file://CreateRdsOptionGroupParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- To learn more about Amazon RDS DB option groups, see [Working with option groups](#).
- You can add up to 50 tags, but to do so you must enable the **Advanced** view.

## Remove TGW static route

### Networking account: Remove a TGW static route with the Console

Screenshot of this change type in the AMS console:

The screenshot displays the details for a change type named 'Remove TGW Static Route'. It includes a table with columns for ID, Execution mode, and Version. Below the table, there are sections for Classification and Description.

ID	Execution mode	Version
ct-0rmgrnr9w8mzh	Automated	1.0 (most recent version)

**Classification**  
Management -> Managed landing zone -> Networking account -> Remove TGW static route

**Description**  
Remove the specified TGW static route from the specified transit gateway (TGW) route table.  
Use this multi-account landing zone (MALZ) change type only in a Networking account.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Networking account: Remove a TGW static route with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-0rmgrnr9w8mzh" --change-type-version
"1.0" --title "Remove TGW Static Route" --execution-parameters "{\"DocumentName
\": \"AWSManagedServices-RemoveRouteFromTGWRouteTable\", \"Region\": \"us-east-1\",
\"Parameters\": {\"TransitGatewayRouteTableId\": \"tgw-rtb-06ddc751c0c0c881c\",
\"DestinationCidrBlock\": \"10.16.1.0/24\"}}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it `RemoveTgwStaticRouteParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-0rmgrnr9w8mzh"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
RemoveTgwStaticRouteParams.json
```

2. Modify and save the `RemoveTgwStaticRouteParams` file. For example, you can replace the contents with something like this:

```
{
```

```
"DocumentName": "AWSManagedServices-RemoveRouteFromTGWRouteTable",
"Region": "us-east-1",
"Parameters": {
  "TransitGatewayRouteTableId": "tgw-rtb-06ddc751c0c0c881c",
  "DestinationCidrBlock": "10.16.1.0/24"
}
}
```

3. Output the RFC template JSON file to a file; this example names it `RemoveTgwStaticRouteRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > RemoveTgwStaticRouteRfc.json
```

4. Modify and save the `RemoveTgwStaticRouteRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-0rmgrnr9w8mzh",
  "Title": "Remove TGW Static Route"
}
```

5. Create the RFC, specifying the `RemoveTgwStaticRouteRfc` file and the `RemoveTgwStaticRouteParams` file:

```
aws amscm create-rfc --cli-input-json file://RemoveTgwStaticRouteRfc.json --
execution-parameters file://RemoveTgwStaticRouteParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

This Change Type is only valid in Multi-account Landing Zone (MALZ) Networking accounts.

To learn more about AMS multi-account landing zones, see [AWS Managed Services \(AMS\) Now Offers Managed Landing Zones](#).

## Create for WIGS (Managed Automation)

### Creating an instance for WIGS with the console

The following shows this change type in the AMS console.

#### ▼ Create EC2 for WIGS

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-36emj2uapfbu8	Manual	2.0 (most recent version)

#### Classification

Deployment -> Standalone resources -> EC2 instance -> Create for WIGS (managed automation)

#### Description

Create an Amazon Elastic Compute Cloud (EC2) instance for use with Workload Ingest (WIGS) change type (ct-257p9zjk14ija). For information, see AMS documentation on WIGS in the AMS Application Developer's Guide.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating an instance for WIGS with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

## INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-36emj2uapfbu8" --change-type-version "2.0"
  --title "Create Pre-Ingestion Instance" --execution-parameters "{\"InstanceVpcId
  \": \"vpc-1234567890abcdef0\", \"InstanceAmiId\": \"ami-1234567890abcdef0\",
  \"InstanceEBSOptimized\": false, \"InstanceRootVolumeSize\": 60, \"InstanceNameTagValue
  \": \"temp-wigs\", \"InstanceType\": \"t3.large\", \"InstanceSubnetId\":
  \"subnet-0bb1c79de3EXAMPLE\"}"
```

## TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it `CreateEc2PreIngestParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-36emj2uapfbu8"
  --query "ChangeTypeVersion.ExecutionInputSchema" --output text >
  CreateEc2PreIngestParams.json
```

2. Modify and save the `CreateEc2PreIngestParams` file. For example, you can replace the contents with something like this:

```
{
  "InstanceVpcId": "vpc-1234567890abcdef0",
  "InstanceAmiId": "ami-1234567890abcdef0",
  "InstanceEBSOptimized": false,
  "InstanceRootVolumeSize": 60,
  "InstanceSubnetId": "subnet-1234567890abcdef0",
  "InstanceType": "t3.large",
  "InstanceNameTagValue": "temp-wigs",
}
```

3. Output the RFC template to a file in your current folder; this example names it `CreateEc2PreIngestRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateEc2PreIngestRfc.json
```

4. Modify and save the CreateEc2PreIngestRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "2.0",
  "ChangeTypeId": "ct-36emj2uapfbu8",
  "Title": "Create Pre-Ingestion Instance"
}
```

5. Create the RFC, specifying the CreateEc2PreIngestRfc file and the CreateEc2PreIngestParams file:

```
aws amscm create-rfc --cli-input-json file://CreateEc2PreIngestRfc.json --
execution-parameters file://CreateEc2PreIngestParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- To use the AWS Marketplace AMI, you must subscribe to the AMI from your AWS Marketplace account and agree to the terms of the AMI. AMS can't perform these actions for you because, as a buyer, you perform these actions yourself. If you need additional IAM permissions for these actions, use the [Identity and Access Management \(IAM\) | Create EC2 Instance Profile](#) change type in a separate RFC to request them.

## Modify EBS volume

### Modifying an EBS Volume with the Console

Screenshot of this change type, in the AMS console:

## Modify EBS Volume

[Modify version](#)

### Description

Modify an EBS Volume that is not attached to an EC2 instance in an Auto Scaling group. If you resize the volume, then you may need to extend the operating system (OS) file system on the volume to use any newly allocated space. If a drift is introduced in the CloudFormation stack that was used to create the volume, then the automation can try to remediate the stack drift for stacks that are not created using CloudFormation ingest change type (ct-36cn2avfrrj9v).

ID	Version
ct-1wle0ai4en6km	1.0 (only version)

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Modifying an EBS Volume with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1wle0ai4en6km" --change-type-version
"2.0" --title "Modify EBS Volume" --execution-parameters "{\"DocumentName\":
\\\"AWSManagedServices-ModifyEBSVolumes\\\", \\\"Region\\\": \\\"us-east-1\\\", \\\"Parameters
\\\": {\\\"VolumeIds\\\": [\\\"vol-1234567890abcdef1\\\", \\\"vol-1234567890abcdef2\\\",
\\\"vol-1234567890abcdef3\\\", \\\"vol-1234567890abcdef4\\\", \\\"vol-1234567890abcdef5\\\"],
\\\"CreateSnapshot\\\": [\\\"False\\\"], \\\"VolumeType\\\": [\\\"gp3\\\"], \\\"VolumeSize\\\": [\\\"40\\\"], \\\"Iops
\\\": [\\\"3000\\\"], \\\"Throughput\\\": [\\\"200\\\"], \\\"RemediateStackDrift\\\": [\\\"False\\\"]}]}"
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it ModifyEBSVolumeParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-1wle0ai4en6km"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
ModifyEBSVolumeParams.json
```

2. Modify and save the ModifyEBSVolumeParams file.

```
{
  "DocumentName" : "AWSManagedServices-ModifyEBSVolumes",
  "Region" : "us-east-1",
  "Parameters" : {
    "VolumeIds" : [
      "vol-1234567890abcdef1",
      "vol-1234567890abcdef2",
      "vol-1234567890abcdef3",
      "vol-1234567890abcdef4",
      "vol-1234567890abcdef5"
    ],
    "CreateSnapshot" : [
      "False"
    ],
    "VolumeType" : [
      "gp3"
    ],
  },
}
```

```
"VolumeSize" : [  
  "40"  
],  
"Iops" : [  
  "3000"  
],  
"Throughput" : [  
  "200"  
],  
"RemediateStackDrift" : [  
  "False"  
]  
}  
}
```

3. Output the RFC template to a file in your current folder; this example names it `ModifyEBSVolumeRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > ModifyEBSVolumeRfc.json
```

4. Modify and save the `ModifyEBSVolumeRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "2.0",  
  "ChangeTypeId": "ct-1wle0ai4en6km",  
  "Title": "Modify EBS Volume"  
}
```

5. Create the RFC, specifying the `ModifyEBSVolumeRfc` file and the `ModifyEBSVolumeParams` file:

```
aws amscm create-rfc --cli-input-json file://ModifyEBSVolumeRfc.json --execution-parameters file://ModifyEBSVolumeParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon EBS, see [Amazon Elastic Block Store \(EBS\)](#).

# Update AWS Backup plan (Managed Automation)

## Updating an AWS Backup plan with the console

The following shows this change type in the AMS console.

### ▼ Update AWS Backup Plan

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-1ay83wy4vxa3k	Manual	1.0 (only version)

#### Classification

Management -> AWS Backup -> Backup plan -> Update (managed automation)

#### Description

Update an existing backup plan. Please note that any changes that you make to a backup plan have no effect on existing backups created by the backup plan. The changes apply only to backups that are created in the future.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an AWS Backup plan with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-1ay83wy4vxa3k" --change-type-version
"1.0" --title "Update AWSBackup Plan" --execution-parameters "{ \"BackupPlanName
\": \"PLAN_NAME\", \"ResourceTagKey\": \"TAG_KEY\", \"ResourceTagValue\":
\"TAG_VALUE\", \"BackupRuleName\": \"RULE_NAME\", \"BackupRuleVault\": \"VAULT\",
\"BackupRuleCompletionWindowMinutes\": 120, \"BackupRuleScheduleExpression\": \"cron(0
1 ? * * *)\", \"BackupRuleDeleteAfterDays\": 90, \"BackupRuleMoveToColdStorageAfterDays
\": 365, \"BackupRuleStartWindowMinutes\": 60, \"BackupRuleRecoveryPointTagKey
\": \"TAG_KEY\", \"BackupRuleRecoveryPointTagValue\": \"TAG_VALUE\",
\"BackupRuleEnableContinuousBackup\": \"false\", \"BackupRuleCopyActionsDestVaultArn
\": \"VAULT\", \"BackupRuleCAMoveToColdStorageAfterDays\": 0,
\"BackupRuleCopyActionsDeleteAfterDays\": 90}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it UpdateBackupPlanParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-1ay83wy4vxa3k"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateBackupPlanParams.json
```

2. Modify and save the UpdateBackupPlanParams file.

```
{
  "BackupPlanName": "MyCustomBackupPlan",
  "ResourceTagKey": "custom_backup_test",
  "ResourceTagValue": "true",
  "WindowsVSS": "disabled",
  "BackupRuleName": "BackupRule",
  "BackupRuleVault": "ams-custom-backups",
  "BackupRuleCompletionWindowMinutes": 1440,
  "BackupRuleScheduleExpression": "cron(0 2 ? * * *)",
  "BackupRuleDeleteAfterDays": 0,
  "BackupRuleMoveToColdStorageAfterDays": 0,
  "BackupRuleStartWindowMinutes": 180,
  "BackupRuleRecoveryPointTagKey": "test",
```

```
"BackupRuleRecoveryPointTagValue": "test",
"BackupRuleEnableContinuousBackup": "false",
"BackupRuleCopyActionsDestVaultArn": "",
"BackupRuleCAMoveToColdStorageAfterDays": 0,
"BackupRuleCopyActionsDeleteAfterDays": 0
}
```

3. Output the RFC template to a file in your current folder; this example names it UpdateBackupPlanRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateBackupPlanRfc.json
```

4. Modify and save the UpdateBackupPlanRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-1ay83wy4vxa3k",
  "Title": "Update AWS Backup Plan"
}
```

5. Create the RFC, specifying the UpdateBackupPlanRfc file and the UpdateBackupPlanParams file:

```
aws amscm create-rfc --cli-input-json file://UpdateBackupPlanRfc.json --execution-parameters file://UpdateBackupPlanParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

Not all resource types supported by AWS Backup are enabled by default. Review the enabled resource types in your account using [Getting Started 1: Service Opt-In](#).

To learn more about AWS Backup, see [AWS Backup: How It Works](#).

Before creating backup plans, confirm supported resources at [Feature availability by resource](#).

## Confirm offboarding

### **⚠ Important**

After confirming your intent to offboard the application account, you have 48 hours to run the [Management account: Offboard Application account](#) change type (ct-0vdiy51oyrhhm). After 48 hours, the offboarding request fails and the process of confirming and then offboarding must be restarted.

### Application account: Confirming offboarding with the Console

Screenshot of this change type in the AMS console:

Confirm Account Offboarding		
ID	Execution mode	Version
ct-2wifo2jxj2rkj	Automated	1.0 (only version)
Classification		
Management -> Managed landing zone -> Application account -> Confirm offboarding		
Description		
Confirm offboarding of the specified application account. Run this from the application account that you want offboarded. Once confirmed, run the Execute offboarding CT (ct-0vdiy51oyrhhm) from the associated management account. Note that this offboarding is intended for account closure and cannot be undone		

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Application account: Confirming offboarding with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

**Note**

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

**INLINE CREATE:****Note**

Run this change type from your Application account.

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-2wlfo2jxj2rkj" --change-type-version "1.0" --
title "Confirm Offboarding" --execution-parameters "{\"AccountID\": \"000000000000\",
\"AccountEmail\": \"email@amazon.com\"}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; this example names it `ConfirmAppAcctOffBParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2wlfo2jxj2rkj"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
ConfirmAppAcctOffBParams.json
```

2. Modify and save the `ConfirmAppAcctOffBParams` file. For example, you can replace the contents with something like this:

```
{
  "AccountID": "000000000000",
```

```
"AccountEmail": "email@amazon.com",  
}
```

3. Output the RFC template JSON file to a file; this example names it ConfirmAppAcctOffBRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > ConfirmAppAcctOffBRfc.json
```

4. Modify and save the ConfirmAppAcctOffBRfc.json file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "1.0",  
  "ChangeTypeId": "ct-2wlfo2jxj2rkj",  
  "Title": "Confirm Offboarding"  
}
```

5. Create the RFC, specifying the ConfirmAppAcctOffBRfc file and the ConfirmAppAcctOffBParams file:

```
aws amscm create-rfc --cli-input-json file://ConfirmAppAcctOffBRfc.json --  
execution-parameters file://ConfirmAppAcctOffBParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- The second step to offboarding the AMS multi-account landing zone Application account is to submit the [Management account: Offboard Application account](#) change type (ct-0vdiy51oyrhhm) from the application account *within 48 hours* of successfully running this change type confirming the intent to offboard.
- For application accounts (other than Customer Managed), run this from the Application account that you want offboarded. After successful confirmation, run the [Offboard application account](#) CT (ct-0vdiy51oyrhhm) from the associated management account. Offboarding is intended for account closure and cannot be undone.

- Do not use this CT for Customer Managed application accounts. Go directly to [Offboard application account](#) CT (ct-0vdiy51oyrhhm).

## Management account: Offboard Application account

### **⚠ Important**

You have 48 hours to offboard the specified application account after successfully running the [Confirm offboarding](#) change type (ct-2wlfo2jxj2rkj). After 48 hours, the offboarding request fails and the process of confirming and then offboarding must be restarted.

## Management account: Offboarding an Application account with the Console

Screenshot of this change type in the AMS console:

### Offboard Application Account

ID	Execution mode	Version
ct-0vdiy51oyrhhm	Automated	2.0 (most recent version)

#### Classification

Management -> Managed landing zone -> Management account -> Offboard application account

#### Description

Offboard the specified application account. Run this from the management account for the application account that you want offboarded. You must first confirm the offboarding request by submitting the Confirm offboarding CT (ct-2wlfo2jxj2rkj) from the application account. If you are offboarding a customer-managed account, then ct-2wlfo2jxj2rkj is not needed. After you successfully submit both CTs, AMS can't undo the offboarding, repurpose the account, or help you to remediate issues in the account.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.

2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Management account: Offboarding an Application account with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification '{"Email\": {"EmailRecipients \": [{"email@example.com\}]}}'` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

*INLINE CREATE:*

### Note

Run this change type from the Management account associated with the application account being offboarded.

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-0vdiy51oyrhhm" --change-type-version
"2.0" --title "Run Offboarding" --execution-parameters '{"AccountID\":
\ "000000000000 \", \"AccountEmail\": \ "email@amazon.com \", \"Confirmation\": \ "confirm \",
\ \"DeleteTransitGatewayAttachment\": true}'
```

*TEMPLATE CREATE:*

1. Output the execution parameters JSON schema for this change type to a file; this example names it `RunAppAcctOffBParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-0vdiy51oyrhhm" --query
"ChangeTypeVersion.ExecutionInputSchema" --output text > RunAppAcctOffBParams.json
```

2. Modify and save the RunAppAcctOffBParams file. For example, you can replace the contents with something like this:

```
{
  "AccountID": "000000000000",
  "AccountEmail": "email@amazon.com",
  "Confirmation": "confirm",
  "DeleteTransitGatewayAttachment" : true
}
```

3. Output the RFC template JSON file to a file; this example names it RunAppAcctOffBRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > RunAppAcctOffBRfc.json
```

4. Modify and save the RunAppAcctOffBRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "2.0",
  "ChangeTypeId": "ct-0vdiy51oyrhhm",
  "Title": "Execute Offboarding"
}
```

5. Create the RFC, specifying the RunAppAcctOffBRfc file and the RunAppAcctOffBParams file:

```
aws amscm create-rfc --cli-input-json file://RunAppAcctOffBRfc.json --
execution-parameters file://RunAppAcctOffBParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- The first step to offboarding the AMS multi-account landing zone Application account is to submit the [Confirm offboarding](#) CT (ct-2wlfo2jxj2rkj) from the application account.

Run this change type within 48 hours of successfully running the confirmation change type.

- There is no prerequisite or confirmation CT for Customer Managed application accounts.

- Note that offboarding is irreversible.
- If you intend to self-operate the account after offboarding from AMS, then make sure to specify `DeleteTransitGatewayAttachment` parameter as `false` to retain connectivity.

## Deploy AMS Resource Scheduler Solution

### Deploying AMS Resource Scheduler solution with the console

The following shows this change type in the AMS console.

#### Deploy AMS Resource Scheduler

ID	Execution mode	Version
ct-0ywnhc8e5k9z5	Automated	2.0 (most recent version)

#### Classification

Deployment -> AMS Resource Scheduler -> Solution -> Deploy

#### Description

Deploy the AMS Resource Scheduler solution in the account. The AMS Resource Scheduler lets you schedule automatic start and/or stop for Auto Scaling groups, EC2s, and RDS instances. Note that the Resource Scheduler deploys in an enabled state, by default; you can manage that with the AMS Resource Scheduler Disable and Enable change types.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deploying AMS Resource Scheduler solution with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not

the execution parameters). For a list of all CreateRfc parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id ct-0ywnhc8e5k9z5 --change-type-version "2.0" --title "Deploy Resource Scheduler" --execution-parameters '{"DocumentName":"AWSManagedServices-HandleAMSResourceSchedulerStack-Admin","Region":"us-east-1","Parameters":{"SchedulingActive":["Yes"],"ScheduledServices":["ec2,rds,autoscaling"],"TagName":["Schedule"],"DefaultTimezone":["America/New_York"],"Action":["Deploy"]}}'
```

### TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it DeployResSchedulerParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-0ywnhc8e5k9z5" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > DeployResSchedulerParams.json
```

2. Modify and save the DeployResSchedulerParams file.

```
{
  "DocumentName": "AWSManagedServices-HandleAMSResourceSchedulerStack-Admin",
  "Region": "us-east-1",
  "Parameters": {
    "SchedulingActive": [
      "Yes"
    ],
    "ScheduledServices": [
      "ec2,rds,autoscaling"
    ],
    "TagName": [
      "Schedule"
    ],
  },
}
```

```
"DefaultTimezone": [  
  "America/New_York"  
],  
"Action": [  
  "Deploy"  
]  
}  
}
```

3. Output the RFC template to a file in your current folder; this example names it `DeployResSchedulerRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > DeployResSchedulerRfc.json
```

4. Modify and save the `DeployResSchedulerRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion": "2.0",  
  "ChangeTypeId": "ct-0ywnhc8e5k9z5",  
  "Title": "Deploy AMS Resource Scheduler"  
}
```

5. Create the RFC, specifying the `DeployResSchedulerRfc` file and the `DeployResSchedulerParams` file:

```
aws amscm create-rfc --cli-input-json file://DeployResSchedulerRfc.json --  
execution-parameters file://DeployResSchedulerParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For background information, see [How the AMS Resource Scheduler works](#). For a quick-start tutorial, see [AMS Resource Scheduler quick start](#).

AMS Resource Scheduler is based on the AWS Instance Scheduler; to learn more, see [AWS Instance Scheduler](#).

# Update AMS Resource Scheduler Solution

## Updating AMS Resource Scheduler solution with the console

The following shows this change type in the AMS console.

### Update AMS Resource Scheduler

ID	Execution mode	Version
ct-2c7ve50jost1v	Automated	2.0 (most recent version)

#### Classification

Management -> AMS Resource Scheduler -> Solution -> Update

#### Description

Update the AMS Resource Scheduler solution in the account.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating AMS Resource Scheduler solution with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

## INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id ct-2c7ve50jost1v --change-type-version "2.0" --title "Update Resource Scheduler Configurations" --execution-parameters '{"DocumentName":"AWSManagedServices-HandleAMSResourceSchedulerStack-Admin","Region":"us-east-1","Parameters":{"SchedulingActive":["Yes"],"ScheduledServices":["ec2,rds,autoscaling"],"TagName":["Schedule"],"DefaultTimezone":["America/New_York"],"Action":["Update"]}}'
```

## TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a JSON file; this example names it UpdateResSchedulerParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-2c7ve50jost1v" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > UpdateResSchedulerParams.json
```

2. Modify and save the UpdateResSchedulerParams file.

```
{
  "DocumentName": "AWSManagedServices-HandleAMSResourceSchedulerStack-Admin",
  "Region": "us-east-1",
  "Parameters": {
    "SchedulingActive": [
      "Yes"
    ],
    "ScheduledServices": [
      "ec2,rds,autoscaling"
    ],
    "TagName": [
      "Schedule"
    ],
    "DefaultTimezone": [
      "America/New_York"
    ],
    "Action": [
      "Update"
    ]
  }
}
```

```
    ]  
  }  
}
```

3. Output the RFC template to a file in your current folder; this example names it `UpdateResSchedulerRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateResSchedulerRfc.json
```

4. Modify and save the `UpdateResSchedulerRfc.json` file. For example, you can replace the contents with something like this:

```
{  
  "ChangeTypeVersion":    "2.0",  
  "ChangeTypeId":        "ct-2c7ve50jost1v",  
  "Title":                "Update Resource Scheduler Configurations"  
}
```

5. Create the RFC, specifying the `UpdateResSchedulerRfc` file and the `UpdateResSchedulerParams` file:

```
aws amscm create-rfc --cli-input-json file://UpdateResSchedulerRfc.json --  
execution-parameters file://UpdateResSchedulerParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For background information, see [How the AMS Resource Scheduler works](#). For a quick-start tutorial, see [AMS Resource Scheduler quick start](#).

AMS Resource Scheduler is based on the AWS Instance Scheduler; to learn more, see [AWS Instance Scheduler](#).

# Delete or deactivate access key

## Deleting or deactivating access key with the console

### ▼ Delete or Deactivate Access Key

ID	Execution mode	Version
ct-37qquo9wbpa8x	Automated	2.0 (most recent version)
Classification		
Management -> Advanced stack components -> Identity and Access Management (IAM) -> Delete or deactivate access key		
Description		
Deactivates AWS IAM Access key ID for the specified user and conditionally deletes associated secrets based on the Delete parameter.		

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Deleting or deactivating access key with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### Note

When pasting in a policy document, note that the RFC only accepts policy pastes up to 5,000 characters. If your file has more than 5,000 characters, create a service request to upload the policy and then refer to that service request in the RFC that you open for IAM.

**INLINE CREATE:**

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-37qquo9wbpa8x" --change-type-version "2.0"
  --title "Delete or deactivate access key" --execution-parameters "{\"DocumentName
  \": \"AWSManagedServices-DeactivateIAMAccessKeyV2\", \"Region\": \"\", \"Parameters\":
  {\"UserName\": \"test-user\", \"AccessKeyId\": \"AKIAIOSFODNN7EXAMPLE\", \"Delete
  \": false}}"
```

**TEMPLATE CREATE:**

1. Output the execution parameters JSON schema for this change type to a file; example names it DeactivatelamAccessKeyParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-37qquo9wbpa8x"
  --query "ChangeTypeVersion.ExecutionInputSchema" --output text >
  DeactivateIamAccessKeyParams.json
```

2. Modify and save the DeactivatelamAccessKey file; example creates an IAM Role with policy documents pasted inline.

```
{
  "DocumentName": "AWSManagedServices-DeactivateIAMAccessKeyV2",
  "Region": "us-east-1",
  "Parameters": {
    "UserName": "test-user",
    "AccessKeyId": "AKIAIOSFODNN7EXAMPLE",
    "Delete": false
  }
}
```

3. Output the RFC template JSON file to a file named DeactivatelamAccessKeyRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > DeactivateIamAccessKeyRfc.json
```

4. Modify and save the DeactivatelamAccessKeyRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "2.0",
  "ChangeTypeId": "ct-37qquo9wbpa8x",
  "Title": "Delete or Deactivate Access Key"
}
```

5. Create the RFC, specifying the `DeactivateIamAccessKeyRfc.json` file and the `CreateIamResourceNrrParams` file:

```
aws amscm create-rfc --cli-input-json file://DeactivateIamAccessKeyRfc.json --
execution-parameters file://DeactivateIamAccessKeyParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#). For information about AMS permissions, see [Deploying IAM resources](#).

## Create access key

### Creating access key with the console

▼ **Create Access Key**

ID	Execution mode	Version
ct-2hhqzgxvkcg8	Automated	2.0 (most recent version)

**Classification**  
Deployment -> Advanced stack components -> Identity and Access Management (IAM) -> Create access key

**Description**  
Create a new AWS secret access key and corresponding AWS access key ID for the specified user.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating access key with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### Note

When pasting in a policy document, note that the RFC only accepts policy pastes up to 5,000 characters. If your file has more than 5,000 characters, create a service request to upload the policy and then refer to that service request in the RFC that you open for IAM.

## INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-2hhqzgxvkcig8" --change-type-version
"2.0" --title "Create access key" --execution-parameters "{\"DocumentName\":
\"AWSManagedServices-CreateIAMAccessKey\", \"Region\": \"us-east-1\", \"Parameters\":
{\"UserARN\": \"arn:aws:iam::012345678910:user/myusername\"}}\"
```

## TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; example names it `CreatelamAccessKeyParameters.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2hhqzgxvkcig8"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
CreateIamAccessKeyParameters.json
```

2. Modify and save the `CreatelamAccessKeyParameters.json` file; example creates an IAM Role with policy documents pasted inline.

```
{
  "DocumentName": "AWSManagedServices-CreateIAMAccessKey",
  "Region": "ap-southeast-2",
  "Parameters": {
    "UserARN": "arn:aws:iam::012345678910:user/myusername"
  }
}
```

3. Output the RFC template JSON file to a file named `CreatelamAccessKeyRfc.json`:

```
aws amscm create-rfc --generate-cli-skeleton > CreateIamAccessKeyRfc.json
```

4. Modify and save the `CreatelamAccessKeyRfc.json` file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "2.0",
  "ChangeTypeId": "ct-2hhqzgxvkcig8",
  "Title": "Create IAM access key"
}
```

5. Create the RFC, specifying the `CreatelamAccessKeyRfc.json` file and the `CreatelamAccessKeyParameters.json` file:

```
aws amscm create-rfc --cli-input-json file://CreateIamAccessKeyRFC.json --
execution-parameters file://CreateIamAccessKeyParameters.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

- For information about AWS Identity and Access Management, see [AWS Identity and Access Management \(IAM\)](#) and for policy information, see [Managed policies and inline policies](#). For information about AMS permissions, see [Deploying IAM resources](#).

## Enable Detailed Monitoring

### Enable detailed monitoring with the console

The following shows this change type in the AMS console.

#### ▼ Enable Detailed Monitoring

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-211l2gxvsrrhy	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> EC2 instance stack -> Enable detailed monitoring (managed automation)

#### Description

Enable detailed monitoring for the specified EC2 instance. Detailed monitoring incurs a charge. EC2 detailed monitoring provides more frequent metrics, published at one-minute intervals, instead of the five-minute intervals used in Amazon EC2 basic monitoring.

How it works:

- Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
- Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.

3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Enable detailed monitoring with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not

the execution parameters). For a list of all CreateRfc parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-21112gxvsrrhy" --change-type-version "1.0"
--title "Enable Detailed Monitoring" --execution-parameters "{\"InstanceIds\":
[\"i-1234567890abcdef0\", \"i-1234567890abcdef1\"]}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it EnableDetailedMonitoringParams.json:

```
aws amscm get-change-type-version --change-type-id "ct-21112gxvsrrhy"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
EnableDetailedMonitoringParams.json
```

2. Modify and save the EnableDetailedMonitoringParams file, retaining only the parameters that you want to change. For example, you can replace the contents with something like this:

```
{
  "InstanceIds": ["i-0cc489fa851c31a21", "i-0cc489fa851c31a22"]
}
```

3. Output the RFC template to a file in your current folder; this example names it EnableDetailedMonitoringRfc.json:

```
aws amscm create-rtc --generate-cli-skeleton > EnableDetailedMonitoringRfc.json
```

4. Modify and save the EnableDetailedMonitoringRfc file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
```

```
"ChangeTypeId": "ct-21112gxvsrrhy",
  "Title": "Enable Detailed Monitoring"
}
```

5. Create the RFC, specifying the EnableDetailedMonitoringRfc file and the EnableDetailedMonitoringParams file:

```
aws amscm create-rfc --cli-input-json file://EnableDetailedMonitoringRfc.json --
execution-parameters file://EnableDetailedMonitoringParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

For more information about Amazon EC2, including size recommendations, see [Amazon Elastic Compute Cloud Documentation](#).

## Update the DeleteOnTermination option (Managed Automation)

### Updating the DeleteOnTermination option with the Console

Screenshot of this change type in the AMS console:

#### ▼ Update DeleteOnTermination

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-2aaaqid7asjy6	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> EC2 instance stack -> Update DeleteOnTermination (managed automation)

#### Description

Update the EBS volume DeleteOnTermination property of the specified EC2 instance devices.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating the DeleteOnTermination option with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rtc --change-type-id "ct-2aaaqid7asjy6" --change-type-version
"1.0" --title "Update DeleteOnTermination" --execution-parameters "{\"InstanceId
\": \"i-1234567890abcdef0\", \"DeviceNames\": [\"/dev/sda1\", \"/dev/xvda\"],
\"DeleteOnTermination\": \"False\"}"
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file; this example names it `UpdateDeleteOnTerminationParams.json`:

```
aws amscm get-change-type-version --change-type-id "ct-2aaaqid7asjy6"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateDeleteOnTerminationParams.json
```

2. Modify and save the `UpdateDeleteOnTerminationParams.json` file, retaining only the parameters that you want to change. For example, you can replace the contents with something like this:

```
{
  "InstanceId": "i-0cc489fa851c31a21",
```

```
"DeviceNames": [
  "/dev/sda1",
  "/dev/xvda"
],
"DeleteOnTermination": "False"
}
```

3. Output the RFC template to a file in your current folder; this example names it UpdateDeleteOnTerminationRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateDeleteOnTerminationRfc.json
```

4. Modify and save the UpdateDeleteOnTerminationRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-2aaaqid7asjy6",
  "Title": "Update DeleteOnTermination"
}
```

5. Create the RFC, specifying the UpdateDeleteOnTerminationRfc.json file and the UpdateDeleteOnTerminationParams.json file:

```
aws amscm create-rfc --cli-input-json file://UpdateDeleteOnTerminationRfc.json --
execution-parameters file://UpdateDeleteOnTerminationParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

6. You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

To learn more about Amazon EC2, including size recommendations, see [Amazon Elastic Compute Cloud Documentation](#).

# Update RDS maintainance window (Managed Automation)

## Updating an RDS maintainance window with the Console

Screenshot of this change type in the AMS console:

### ▼ Update RDS Maintenance Window

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-27jy5wnrfef2	Manual	1.0 (only version)

#### Classification

Management -> Advanced stack components -> RDS database stack -> Update maintenance window (managed automation)

#### Description

Update an existing RDS maintenance window, which is a weekly time range (in UTC) during which system maintenance can occur. Changing an RDS maintenance window doesn't result in an outage. If moving this window to the current time, there must be at least 30 minutes between the current time and the end of the current window to ensure pending changes are applied.

How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.
5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating an RDS maintenance window with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

## INLINE CREATE:

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-27jyy5wnrfef2" --change-type-version "1.0"
--title "Update RDS Maintenance Window" --execution-parameters "{\"DBIdentifierArn\":
\"arn:aws:rds:us-east-1:123456789101:db:database-1\", \"PreferredMaintenanceWindow\":
\"Sun:04:00-Sun:04:30\"}"
```

## TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdateRDSMaintenanceWindowParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-27jyy5wnrfef2"
--query "ChangeTypeVersion.ExecutionInputSchema" --output text >
UpdateRDSMaintenanceWindowParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DBIdentifierArn": "arn:aws:rds:us-east-1:123456789101:db:database-1",
  "PreferredMaintenanceWindow": "Sun:04:00-Sun:04:30"
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdateRDSMaintenanceWindowRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdateRDSMaintenanceWindowRfc.json
```

4. Modify and save the UpdateRDSMaintenanceWindowRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-27jyy5wnrfef2",
  "Title": "Update RDS Maintenance Window"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateRDSMaintenanceWindowRfc.json file:

```
aws amscm create-rfc --cli-input-json file://UpdateRDSMaintenanceWindowRfc.json --  
execution-parameters file://UpdateRDSMaintenanceWindowParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

6. You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

AMS employs drift detection on certain stacks, including RDS stacks, to determine if configuration changes. The AMS disallows updates to an RDS stack that has been determined to have configuration drift. The RFC will fail with the following error message: "Update cannot be performed on this stack, please contact AMS for further assistance."

To learn more about Amazon RDS, including size recommendations, see [Amazon Relational Database Service Documentation](#).

## Update RDS performance insights (Managed Automation)

### Updating an RDS performance insights with the Console

Screenshot of this change type in the AMS console:

## ▼ Update Performance Insights.

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-31eyj2hlvqjwu	Manual	1.0 (only version)

### Classification

Management -> Advanced stack components -> RDS database stack -> Update Performance Insights (managed automation)

### Description

Update Performance Insights for a DB instance or Multi-AZ DB cluster. Amazon RDS Performance Insights is a database performance tuning and monitoring feature that helps you assess the load on your database. You can change settings, enable, or disable the feature.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.

- **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.

- **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Updating performance insights with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotation marks when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws amscm create-rfc --change-type-id "ct-31eyj2h1vqjwu" --change-type-version "1.0" --title "Update Performance Insights." --execution-parameters {"DBIdentifierArn": \"arn:aws:rds:us-east-1:123456789012:cluster:database-1\", \"PerformanceInsights\": \"true\", \"PerformanceInsightsKMSKeyId\": \"default\", \"PerformanceInsightsRetentionPeriod\": \"7 days\"}
```

### TEMPLATE CREATE:

1. Output the execution parameters for this change type to a JSON file named UpdatePerformanceInsightsParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-31eyj2h1vqjwu" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > UpdatePerformanceInsightsParams.json
```

2. Modify and save the execution parameters JSON file. For example, you can replace the contents with something like this:

```
{
  "DBIdentifierArn": "arn:aws:rds:us-east-1:123456789101:cluster:database-1",
  "PerformanceInsights": "true",
  "PerformanceInsightsKMSKeyId": "default",
  "PerformanceInsightsRetentionPeriod": "7 days"
}
```

3. Output the JSON template to a file in your current folder; this example names it UpdatePerformanceInsightsRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > UpdatePerformanceInsightsRfc.json
```

4. Modify and save the UpdatePerformanceInsightsRfc.json file. For example, you can replace the contents with something like this:

```
{
  "ChangeTypeVersion": "1.0",
  "ChangeTypeId": "ct-31eyj2h1vqjwu",
  "Title": "Update Performance Insights"
}
```

5. Create the RFC, specifying the execution parameters file and the UpdateRdsRfc file:

```
aws amscm create-rfc --cli-input-json file://UpdatePerformanceInsightsRfc.json --  
execution-parameters file://UpdatePerformanceInsightsParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

6. You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

AMS employs drift detection on certain stacks, including RDS stacks, to determine if configuration changes. The AMS disallows updates to an RDS stack that has been determined to have configuration drift. The RFC will fail with the following error message: "Update cannot be performed on this stack, please contact AMS for further assistance."

To learn more about Amazon RDS, including size recommendations, see [Amazon Relational Database Service Documentation](#).

To update an RDS stack for Aurora, see [RDS Database Stack | Update](#).

## Create security group (Managed Automation)

### Creating a Security Group (Managed Automation) with the Console

Screenshot of this change type in the AMS console:

## ▼ Create Security Group (review required)

Manual RFCs may take over 24 hours to complete

ID	Execution mode	Version
ct-10xx2g2d7hc90	Manual	2.0 (most recent version)

### Classification

Deployment -> Advanced stack components -> Security group -> Create (managed automation)

### Description

Create a security group, and optionally associate it with AWS resources.

### How it works:

1. Navigate to the **Create RFC** page: In the left navigation pane of the AMS console click **RFCs** to open the RFCs list page, and then click **Create RFC**.
2. Choose a popular change type (CT) in the default **Browse change types** view, or select a CT in the **Choose by category** view.
  - **Browse by change type:** You can click on a popular CT in the **Quick create** area to immediately open the **Run RFC** page. Note that you cannot choose an older CT version with quick create.

To sort CTs, use the **All change types** area in either the **Card** or **Table** view. In either view, select a CT and then click **Create RFC** to open the **Run RFC** page. If applicable, a **Create with older version** option appears next to the **Create RFC** button.
  - **Choose by category:** Select a category, subcategory, item, and operation and the CT details box opens with an option to **Create with older version** if applicable. Click **Create RFC** to open the **Run RFC** page.
3. On the **Run RFC** page, open the CT name area to see the CT details box. A **Subject** is required (this is filled in for you if you choose your CT in the **Browse change types** view). Open the **Additional configuration** area to add information about the RFC.

In the **Execution configuration** area, use available drop-down lists or enter values for the required parameters. To configure optional execution parameters, open the **Additional configuration** area.

4. When finished, click **Run**. If there are no errors, the **RFC successfully created** page displays with the submitted RFC details, and the initial **Run output**.

5. Open the **Run parameters** area to see the configurations you submitted. Refresh the page to update the RFC execution status. Optionally, cancel the RFC or create a copy of it with the options at the top of the page.

## Creating a Security Group (Managed Automation) with the CLI

How it works:

1. Use either the Inline Create (you issue a `create-rfc` command with all RFC and execution parameters included), or Template Create (you create two JSON files, one for the RFC parameters and one for the execution parameters) and issue the `create-rfc` command with the two files as input. Both methods are described here.
2. Submit the RFC: `aws amscm submit-rfc --rfc-id ID` command with the returned RFC ID.

Monitor the RFC: `aws amscm get-rfc --rfc-id ID` command.

To check the change type version, use this command:

```
aws amscm list-change-type-version-summaries --filter
Attribute=ChangeTypeId,Value=CT_ID
```

### Note

You can use any `CreateRfc` parameters with any RFC whether or not they are part of the schema for the change type. For example, to get notifications when the RFC status changes, add this line, `--notification "{\"Email\": {\"EmailRecipients\": [\"email@example.com\"]}}\"` to the RFC parameters part of the request (not the execution parameters). For a list of all `CreateRfc` parameters, see the [AMS Change Management API Reference](#).

### *INLINE CREATE:*

Issue the create RFC command with execution parameters provided inline (escape quotes when providing execution parameters inline), and then submit the returned RFC ID. For example, you can replace the contents with something like this:

```
aws --profile saml amscm create-rfc --change-type-id "ct-10xx2g2d7hc90" --change-type-version "2.0" --title "Test-SG-RR" --execution-parameters "{\"Description\": \"Test-SG-RR\", \"Name\": \"Test-SG-IC\", \"InboundRules\": {\"Protocol\": \"TCP\", \"PortRange\": \"49152-65535\", \"Source\": \"203.0.113.5/32\"}, \"OutboundRules\": {\"Protocol\": \"TCP\", \"PortRange\": \"49152-65535\", \"Destination\": \"203.0.113.5/32\"}}"
```

## TEMPLATE CREATE:

1. Output the execution parameters JSON schema for this change type to a file; this example names it CreateSgRrParams.json.

```
aws amscm get-change-type-version --change-type-id "ct-10xx2g2d7hc90" --query "ChangeTypeVersion.ExecutionInputSchema" --output text > CreateSgRrParams.json
```

2. Modify and save the CreateSgRrParams file. For example, you can replace the contents with something like this:

```
{
  "Description": "SG-Create-With-Review",
  "Name": "My-SG",
  "VpcId": "vpc-12345abc",
  "InboundRules": {
    "Protocol": "TRAFFIC_PROTOCOL",
    "PortRange": "PORT_RANGE",
    "Source": "TRAFFIC_SOURCE"
  },
  "OutboundRules": {
    "Protocol": "TRAFFIC_PROTOCOL",
    "PortRange": "PORT_RANGE",
    "Destination": "TRAFFIC_DESTINATION"
  }
}
```

3. Output the RFC template JSON file to a file named CreateSgRrRfc.json:

```
aws amscm create-rfc --generate-cli-skeleton > CreateSgRrRfc.json
```

4. Modify and save the CreateSgRrRfc.json file. For example, you can replace the contents with something like this:

```
{
```

```
"ChangeTypeVersion":    "2.0",  
"ChangeTypeId":         "ct-10xx2g2d7hc90",  
"Title":                "SG-Create-RR-RFC"  
}
```

5. Create the RFC, specifying the CreateSgRrRfc file and the CreateSgRrParams file:

```
aws amscm create-rfc --cli-input-json file://CreateSgRrRfc.json --execution-  
parameters file://CreateSgRrParams.json
```

You receive the ID of the new RFC in the response and can use it to submit and monitor the RFC. Until you submit it, the RFC remains in the editing state and does not start.

## Tips

### Note

There is an automated change type for creating a security group, Deployment | Advanced stack components | Security group | Create (no managed automation) (ct-3pc215bnwb6p7) that provides options for TCP and ICMP ingress and egress rules. If those rules are adequate, the Create (auto) change type will execute more quickly than this change type. For details, see [Security Group | Create](#).

### Note

Once the security group is created, use [Security Group | Associate](#) to associate the security group with your AMS resources. In order to delete a security group, it must have associated resources.

### Note

Outbound rules are not required; however, if they are not specified, then a "127.0.0.1/32 Blackhole Rule" is used, meaning that the resource will only be able to communicate to itself and not with other resources. You can see this default outbound rule when using the AMS console, but not when using the AMS API/CLI.

This is a manual change type (an AMS operator must review and run the CT), which means that the RFC can take longer to run and you might have to communicate with AMS through the RFC details page correspondance option. Additionally, if you schedule a manual change type RFC, be sure to allow at least 24 hours, if approval does not happen before the scheduled start time, the RFC is rejected automatically.

To learn more about AWS security groups and creating security groups, see [Security Group Rules Reference](#); this page can help you determine the rules you want and, importantly, how to name your security group so choosing it when creating other resources is intuitive. Also see [Amazon EC2 Security Groups for Linux Instances](#) and/or [Security Groups for Your VPC](#).

To better understand general AWS security, see [Best Practices for Security, Identity, & Compliance](#).

Once the security group is created, use [Security Group | Associate](#) to associate the security group with your AMS resources. In order to delete a security group, it must have associated resources.