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EC2 Instance Start & Stop Using CloudWatch Rule as a target using SSMAutomations

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Reviewed by:

Accepted By:

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# Overview

## EC2 Start & Stop:

This scenario is Start & Stop an EC2 instance in Specific time for each server using SSM Automation with Cloudwatch rule.

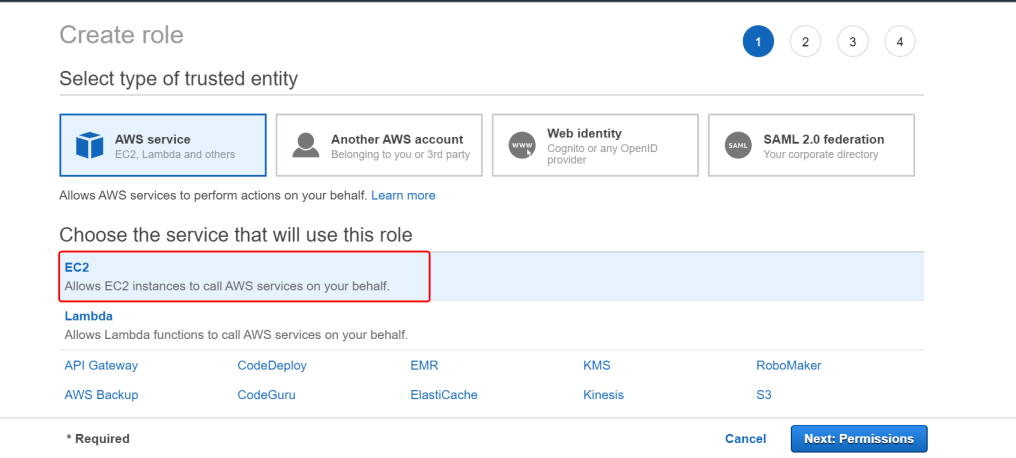
# Goals

1. Create a IAM role(SSM\_Full) for EC2 instance role policy is SSM Full Access
2. Attach a SSM\_Full role to Specified EC2 Instance
3. Install a SSM Agent in All EC2 instance
4. Create a IAM role for AutomationAssumeRole for Cloudwatch target SSMAutomation
5. Create a Cloudwatch rule for EC2 instance stop
6. Create a Cloudwatch rule for EC2 instance start

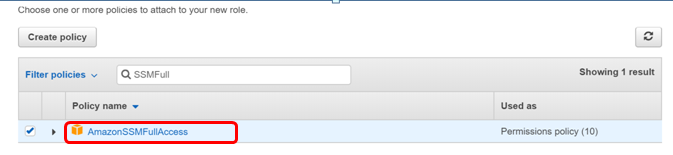
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## Step1: Create an IAM Role for EC2 Instance SSM Full Access:

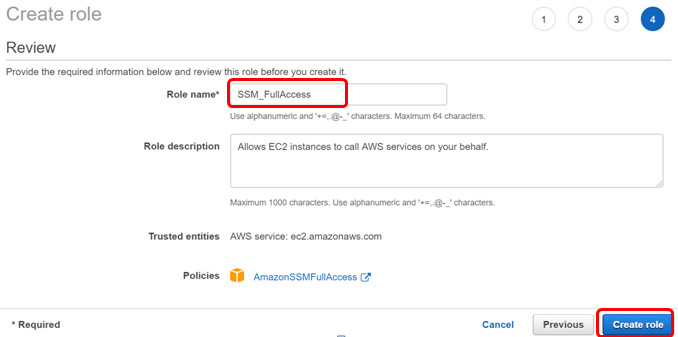
Go to IAM Console create a Role for EC2 with SSM Full Access.



Attach permissions policies



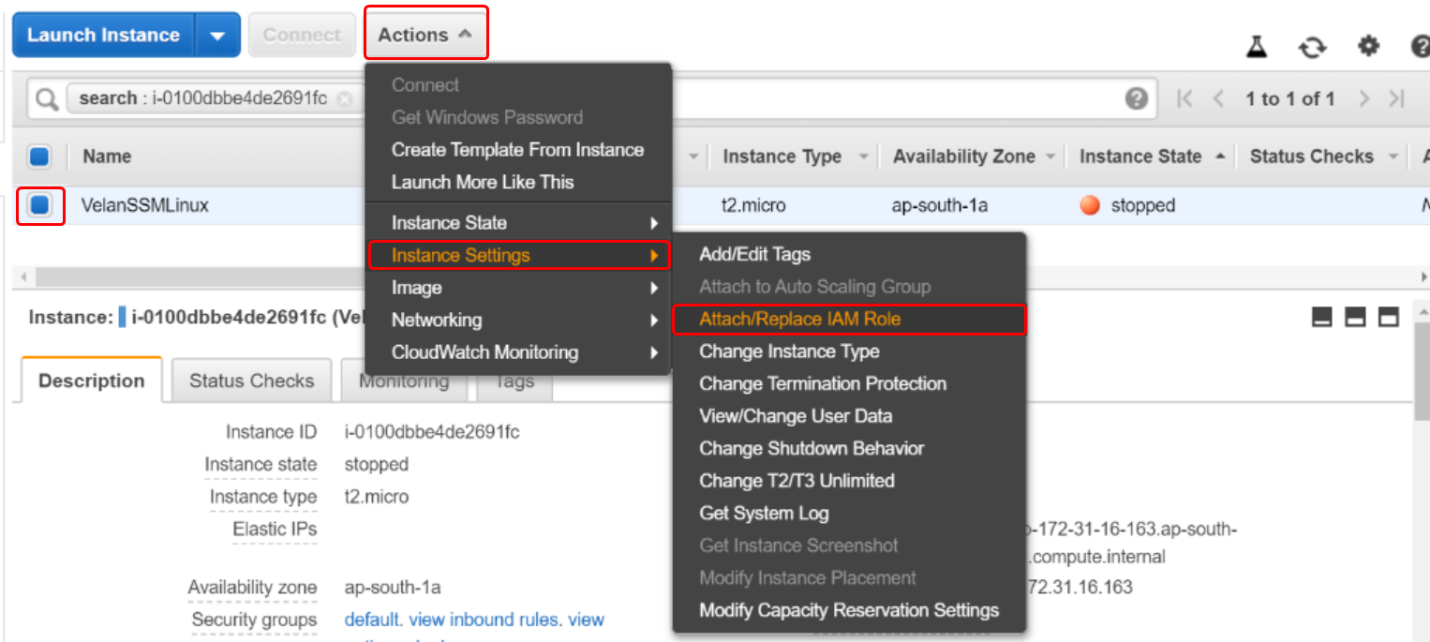
Provide a Role name & review to create



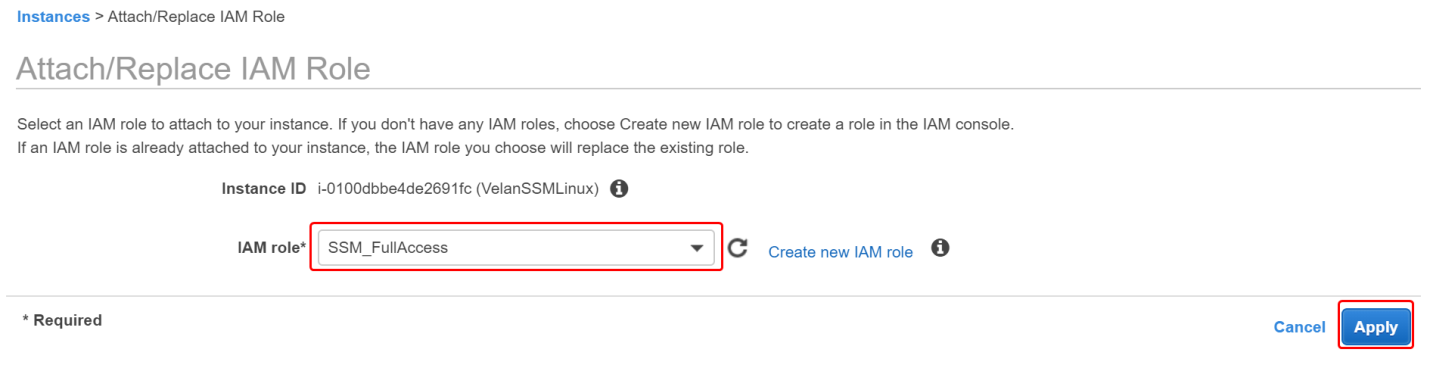
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## Step2: Attach a IAM Role for EC2 Instance

Go to Ec2 -> Choose a Instance -> Action-> Instance Setting-> Attach/Replace IAM role



Then choose your SSM Role name & Apply.



## Step3: Install the SSM Agent in your EC2 Instances

Refer the below link to install the agent.

<https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-manual-agent-install.html>

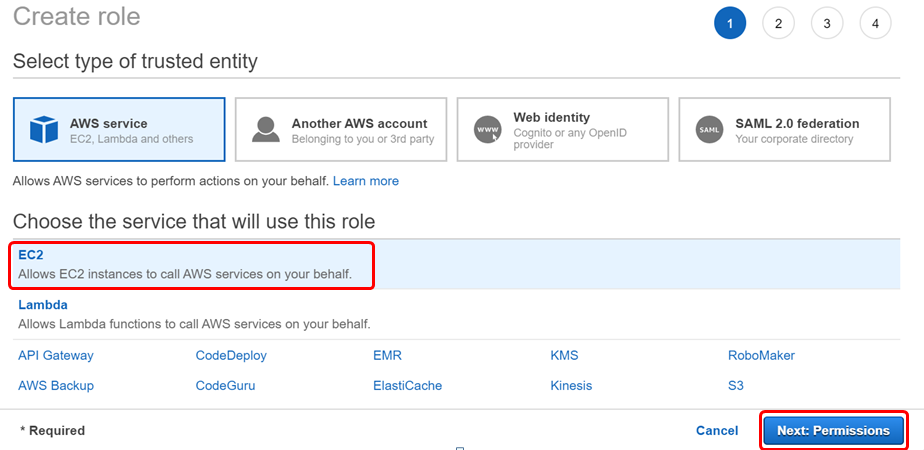
After installation check the ssm gent service is running & enable

Note : Latest AMI it will come by default in SSM.

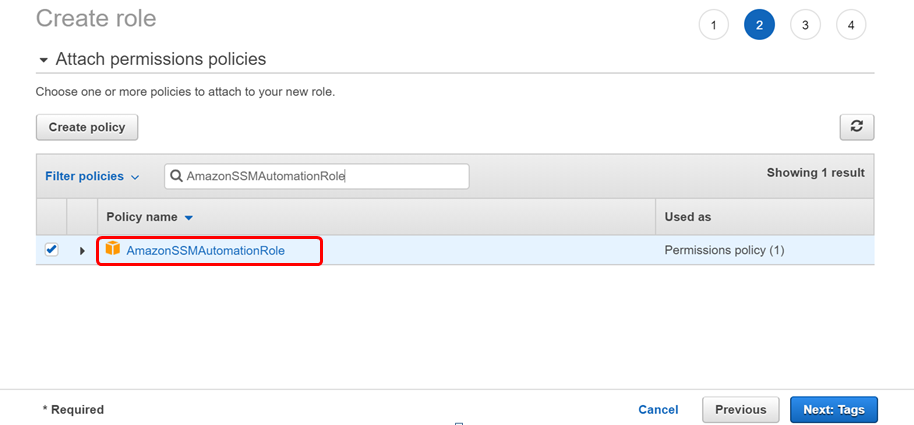
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## Step4: Create a IAM role for AutomationAssumeRole for Cloudwatch target SSMAutomation

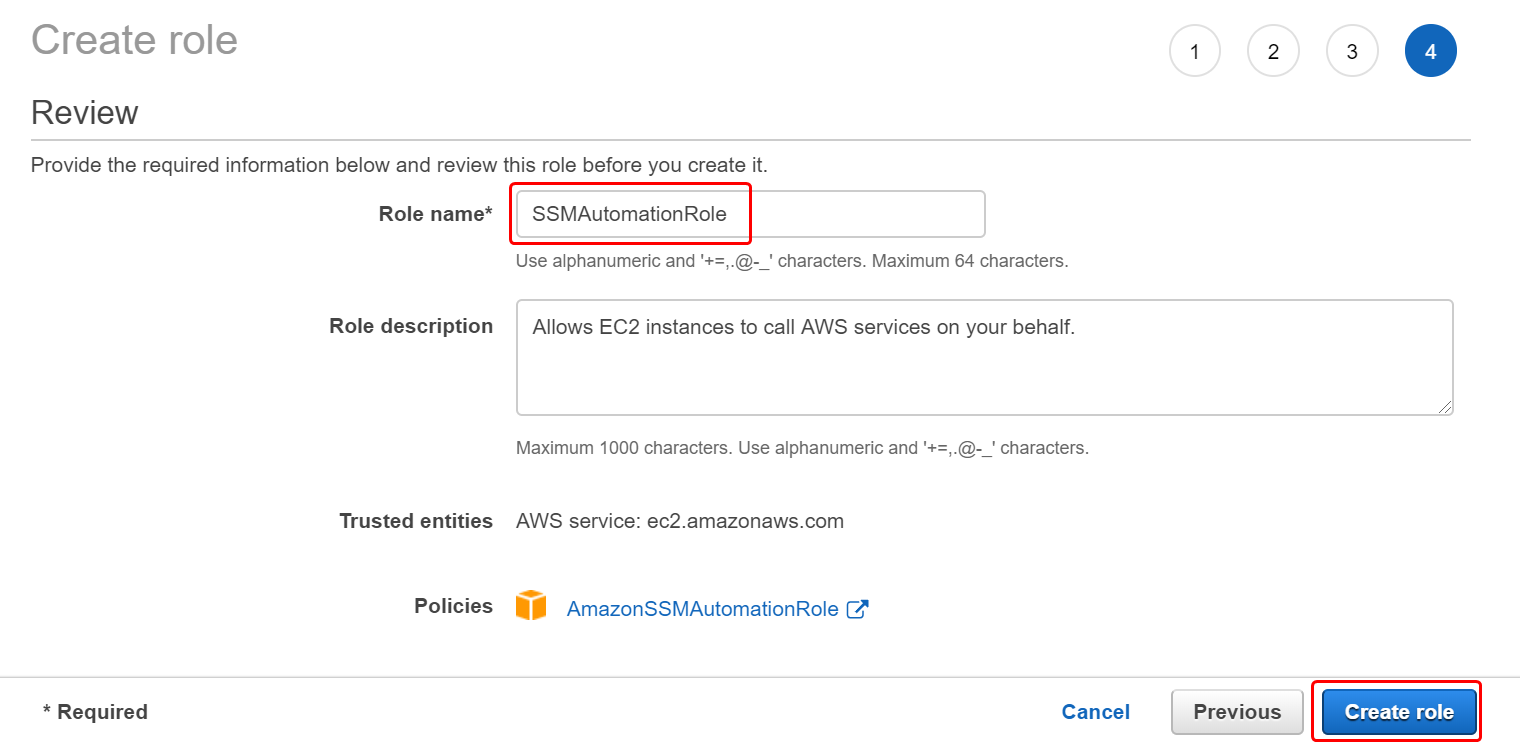
Go to IAM Console create a Role ( [SSMAutomationRole](https://console.aws.amazon.com/iam/home?region=ap-south-1#/roles/SSMAutomationRole)) for EC2 with AmazonSSMAutomationRole



Attach permissions policies (AmazonSSMAutomationRole)



Provide a role name & review to create



Go to the role (SSMAutomationRole) & click the Trust relationships to edit following

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"Service": [

"ec2.amazonaws.com",

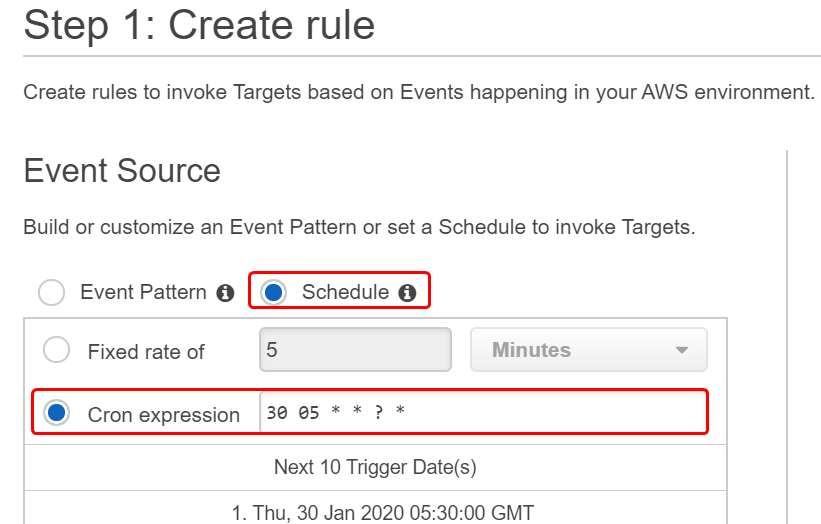
"ssm.amazonaws.com"

]

## Step5: Create a Cloudwatch rule for EC2 instance Stop

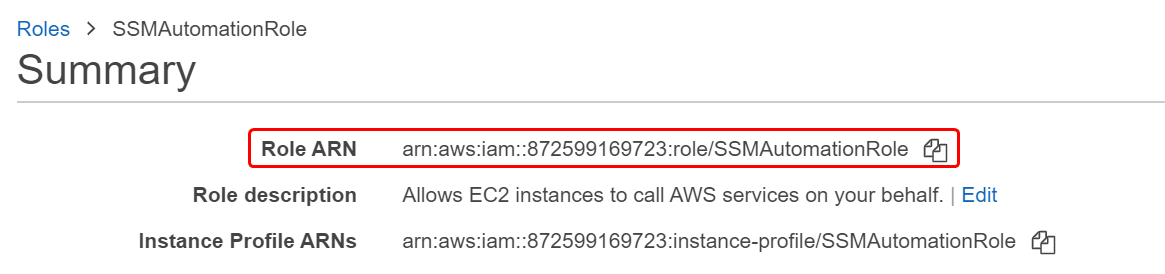
Go to Cloudwatch -> Events -> rules -> Create rule

Click a Schedule with Cron expression and provide a time to Stop

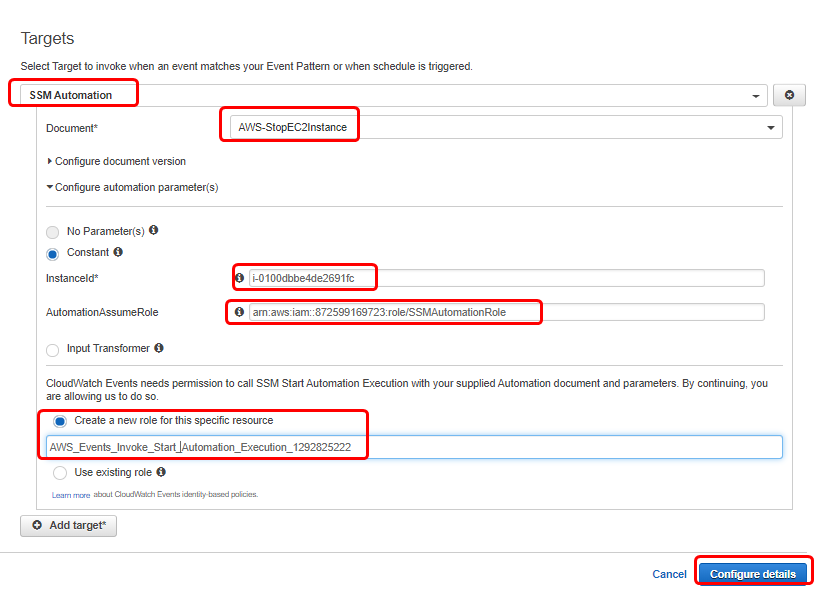


In the Same Page Click the target -> add target -> SSM Automation

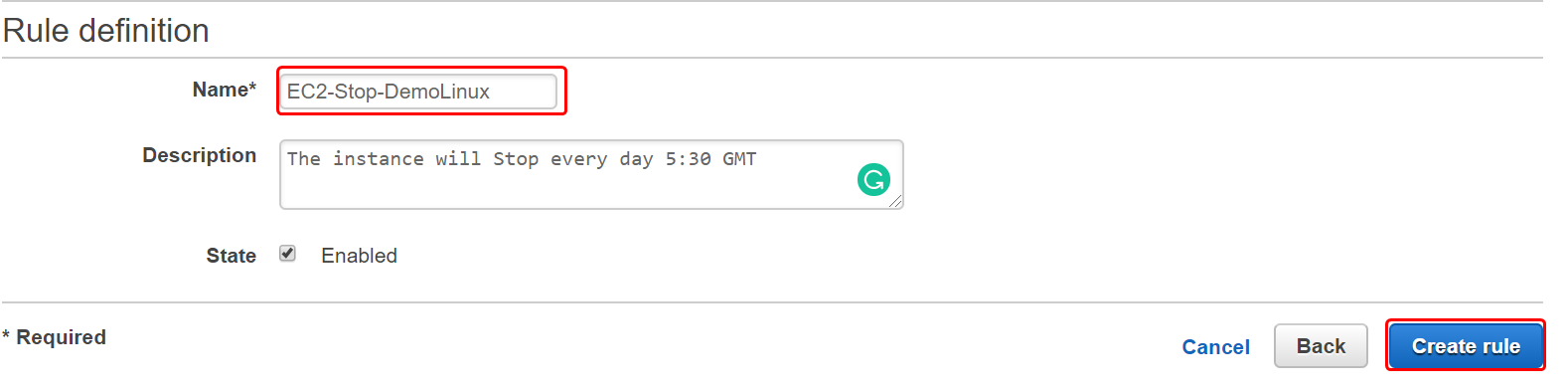
Collect an SSMAutomationRole ARN



Then choose your document for AWS-StopEC2Instance and Instanced Role ARN.



Click to Configure & provide a Role name with Description, Then Click to Create rule



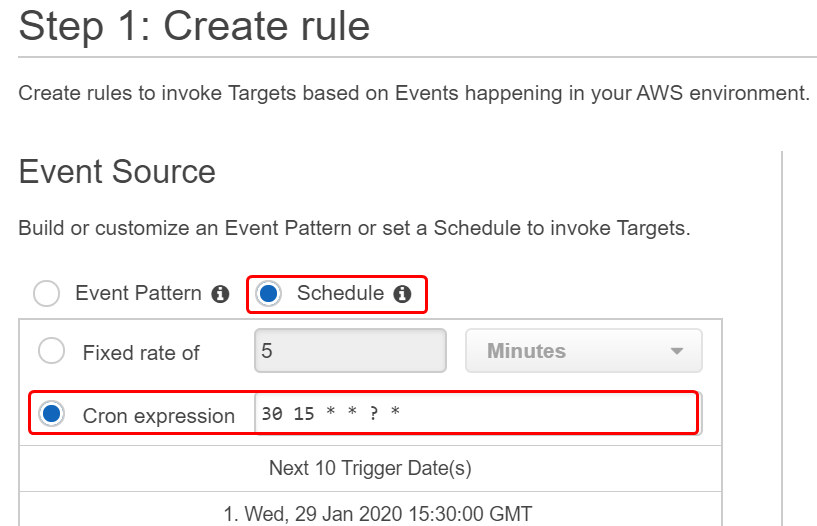
Rule is Created Successfully.



## Step5: Create a Cloudwatch rule for EC2 instance Start

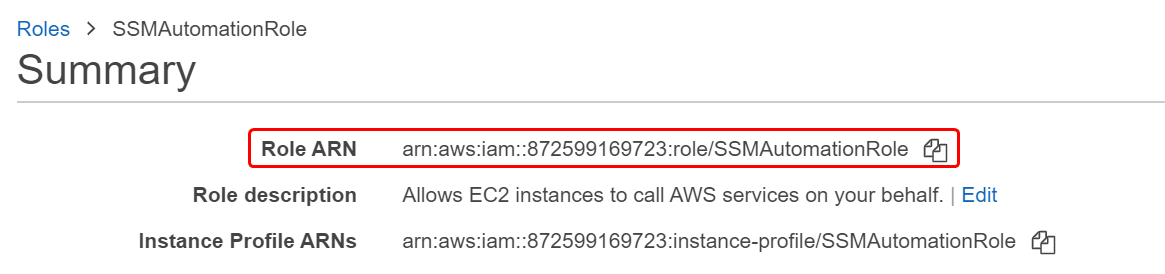
Go to Cloudwatch -> Events -> rules -> Create rule

Click a Schedule with Cron expression and provide a time to Start

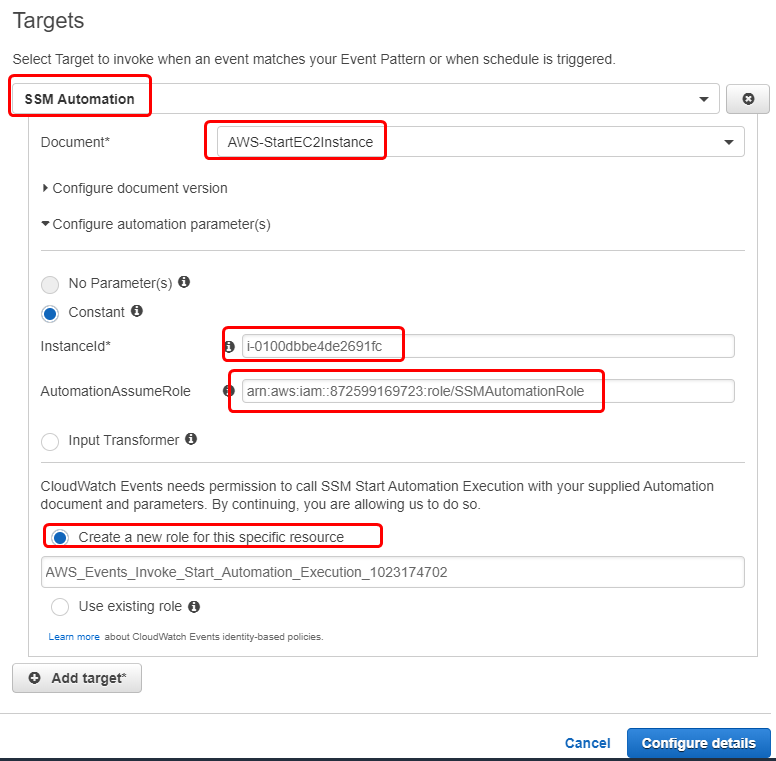


In the Same Page Click the target -> add target -> SSM Automation

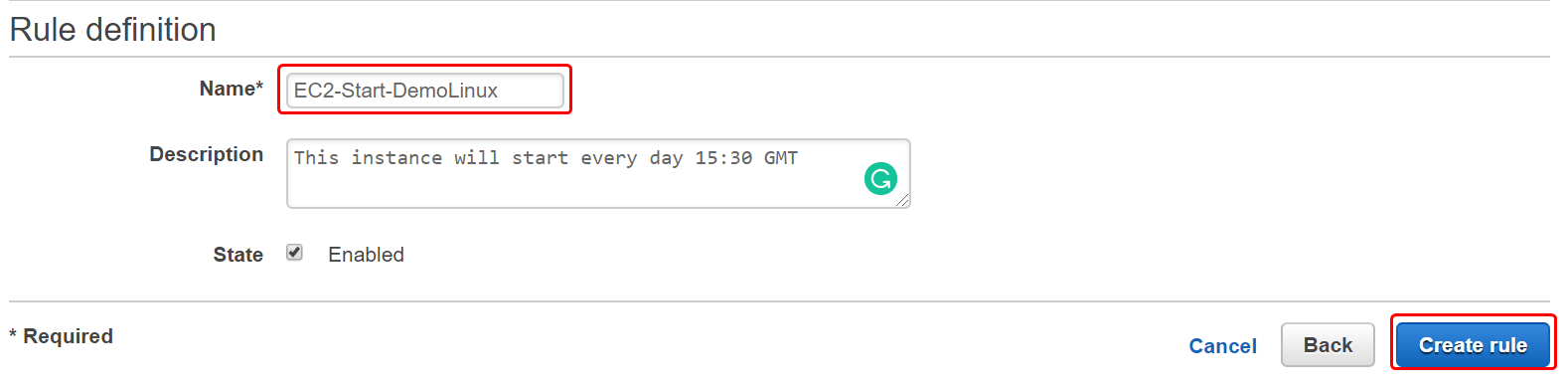
Collect an SSMAutomationRole ARN



Then choose your document for AWS-StartEC2Instance and Instanced Role ARN.



Click to Configure & provide a Role name with Description, Then Click to Create rule



Rule is Created Successfully.

