INSTALLATION AND USER MANUAL

Alerting new feature on Xgrid XC3 (sending alert notification)

Technology Innovation Project
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Introduction

Welcome to the User Manual for Alerting New Feature (sending alert notification based on AWS account usage threshold) on XC3 extension. This manual will guide you through setting up and using the sending notification, which utilizes AWS lambda function to send notifications via email and Slack channels. Specially, this document covers the notification part of the Alerting New Feature on XC3, which was designed and implemented by Byambadorj Burentogtokh.

Prerequisites

Before you proceed with the installation and configuration, ensure that you have the following:

- Python 3.9 installed
- Terraform installed
- An AWS account
- AWS CLI configured on your terminal

Installation steps

To install and use sending notification part, follow these steps:

- Clone the project repository to your local machine
- Navigate to the project directory in your terminal

Configuration

Before running the code, you need to configure AWS CLI, SES for email notifications, and Slack webhook for Slack notifications.

- **AWS CLI Configuration**
  - Open your terminal
  - Type 'aws configure' and provide AWS Access key ID, Secret Access Key, default region and output format.
- **SES Email Configuration**
  - Follow attached instructions to configure and subscribe your email for identifiers on Amazon SES. https://scribehow.com/shared/Step-by-Step_Guide_to_Subscribing_an_Email_Address_in_Amazon_SES_to_receive_alerting_email_from_Alerting_Feature__fe7gFaWOTHuD-V7YVO6U0A

- Slack Webhook Configuration
  - Create a webhook URL for your Slack channel following the attached instructions.
    https://scribehow.com/shared/Configuring_Slack_Webhook_Integration_for_Notifications__dRw6o-zyT_68nMyVP1uAUA

Configuration Lambda function

To customize the behaviour of the Lambda function for sending notifications, follow these steps:

- Open the '*ce_lambda_slack.py*' file.
- Locate the '*lambda_handler(event, context)*' function
  - Set the desired threshold by modifying the '*cost_threshold*' variable.
- Locate the '*send_slack(data, total_cost)*' function:
  - Input your Slack webhook URL within the *r = http.request(...)* call.
- Locate the *send_email()* function:
  - Input your email address (that you subscribed) into the *'SENDER',* and *'RECIPIENT',* variables.
  - Input your AWS region into the *'AWS_REGION'* variable.

Running the Code

- Make sure you have the '*logo.png*' file in the root directory of the project.
- Make sure AWS Cost Explorer enabled in your AWS account
- Navigate the project directory in your terminal.
- Run the Terraform commands to provision the necessary resources:
  - terraform init
  - terraform plan
  - terraform apply

Troubleshooting

If you encounter any issues during installation or usage, refer to the Troubleshooting section in the README file or contact support.

Contact Information

If you have any questions or need assistance, feel free to contact our support.