AWS EC2 Memory Utilization

Standard Operating Procedure (SOP)

Overview

This SOP outlines the process for monitoring EC2 instance memory utilization on AWS.
Login to the ec2 instance and kill all the processes related to stress-ng.

2. Platform
AWS

Code Language

Python

Required Dependencies

- boto3
- AWS SDK for Python

Credentials Required

- AWS_ACCESS_KEY_ID
- AWS_SECRET_ACCESS_KEY
- AWS_REGION

Input Parameters

1. host_ip
   Type: String
   Description: The unique IP of the EC2 instance to monitor
   Required: true
   Default: 98.82.183.147

Logic Flow

1. Pre-Creation Validation

- Validate AWS credentials
- Validate EC2 Host IP
- Kill all the processes associated with stress-ng by using pkill -9 stress-ng

2. Post-Creation Configuration

- Log Action
- Validate all the processes mentioned are terminated

3. Error Handling Scenarios

- Invalid EC2 Host IP
- Insufficient Permissions

Success Criteria

- Logs indicate the successful creation.
- print once you kill the process as "WorkNote" in the script if also fails.

Monitoring Considerations

- Review Memory Metrics

Tags

- aws
- ec2
- cloudwatch
- memory-utilization
- monitoring
- alarm