**Technical Documentation: Installing and Configuring Rundeck on Ubuntu in AWS Cloud**

This guide provides step-by-step instructions for installing Rundeck on an Ubuntu server hosted on AWS, scheduling two jobs to run Python scripts every 5 minutes, and inspecting job logs.

**Prerequisites**

1. AWS Ubuntu server with SSH access.

2. Python 3 installed on the server.

3. Access to the uploaded files:

• **Python scripts**: Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.py and Box\_Domain\_AllowList\_HealthCare.py.

• **Rundeck job definitions**: 1-Rundeck-Task-Definition-Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.yml and 2-Rundeck-Task Definition-Box\_Domain\_AllowList\_HealthCare.yml.

**Step 1: Install Rundeck on Ubuntu**

1. **Update the package index:**

sudo apt update

2. **Install Java (required by Rundeck):**

sudo apt install openjdk-11-jdk -y

3. **Add Rundeck repository:**

echo "deb https://packages.rundeck.com/pagerduty/rundeck/any/ any main" | sudo tee /etc/apt/sources.list.d/rundeck.list

curl -s https://packages.rundeck.com/pagerduty/rundeck/gpgkey | sudo apt-key add -

sudo apt update

4. **Install Rundeck:**

sudo apt install rundeck -y

5. **Start and enable Rundeck service:**

sudo systemctl start rundeckd

sudo systemctl enable rundeckd

6. **Access Rundeck:**

• Open your browser and navigate to http://<server-public-IP>:4440.

• Default login: admin/admin.

**Step 2: Configure Python Scripts on the Server**

1. **Upload Python scripts to the server:**

scp -i <keyfile.pem> Box\_\*.py ubuntu@<server-ip>:/etc/rundeck/

2. **Ensure scripts are executable:**

sudo chmod +x /etc/rundeck/Box\_\*.py

**Step 3: Import Rundeck Job Definitions**

1. **Copy job definition YAML files to your local machine:**

Use the Rundeck web interface:

• Navigate to **Jobs > Import Job**.

• Upload the YAML files:

• 1-Rundeck-Task-Definition-Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.yml

• 2-Rundeck-Task Definition-Box\_Domain\_AllowList\_HealthCare.yml.

2. **Verify job schedule:**

• Both jobs are set to run every 5 minutes.

• Adjust the schedule if needed using the Rundeck web interface.

**Step 4: Schedule Jobs to Run Python Scripts**

1. **Job 1: Run** Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.py

• Job is scheduled using the uploaded YAML file with a cron-like schedule (\*/5 \* \* \* \*).

2. **Job 2: Run** Box\_Domain\_AllowList\_HealthCare.py

• Similarly scheduled for every 5 minutes.

**Step 5: Inspect Rundeck Job Logs**

1. **Via Rundeck Web Interface:**

• Go to **Jobs > Job Name > Executions**.

• Click on the specific execution to view logs.

2. **Inspect Logs on the Server:**

• Logs are saved in /var/log/rundeck/:

tail -f /var/log/rundeck/Box\_Domain\_AllowList\_HealthCare.log

tail -f /var/log/rundeck/Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.log

3. **Example log output:**

2024-12-03 12:00:00 - Job Succeeded

2024-12-03 12:05:00 - Job Succeeded

**Step 6: Troubleshooting**

1. **Check Rundeck service status:**

sudo systemctl status rundeckd

2. **View Rundeck application logs:**

sudo tail -f /var/log/rundeck/service.log

3. **Debug Python scripts:**

• Manually execute the scripts:

python3 /etc/rundeck/Box\_Domain\_AllowList\_HealthCare.py

python3 /etc/rundeck/Box\_PDR\_Domain\_Allowlist\_HealthCare\_Box\_PDR\_Requests\_HealthCare.py

This documentation sets up Rundeck in an AWS environment and schedules Python scripts effectively. Let me know if you need further clarification!