Cloud Monitoring: Qwik Start

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Task 1: Create a Compute Engine Instance

1. Open the **Cloud Console** and navigate to **Compute Engine > VM Instances**.

2. Click **Create instance** and enter the following details:

a. **Name:** lamp-1-vm

b. **Region:** <REGION>

c. **Zone:** <ZONE>

d. **Series:** E2

e. **Machine Type:** e2-medium

3. Click **OS and storage**, select **Debian GNU/Linux 12 (bookworm)**.

4. Under **Networking**, check **Allow HTTP traffic**.

5. Click **Create** and wait for the instance to launch.

← Create an instance ✦ Create VM from...

Machine configuration

Machine configuration

Name *
lamp-1-vm ⑦

Region * ⑦
us-east1 (South Carolina) ▾

Zone * ⑦
us-east1-d ▾

Region is permanent   Zone is permanent

○✦ **NEW: General-purpose C4D machine series in Preview** ✕

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| ✓ General purpose | Compute optimized | Memory optimized | Storage optimized | GPUs |

Machine types for common workloads, optimized for cost and flexibility

Series ⑦	Description	vCPUs ⑦	Memory ⑦	CPU Platfor
○ C4	Consistently high performance	2 - 192	4 - 1.488 GB	Intel Emerald

Create Cancel ‹› Equivalent code

← Create an instance ✦ Create VM from...

Machine configuration
e2-medium, us-east1-d

OS and storage
Debian GNU/Linux 12 (bookworm)

Data protection
Snapshot schedules

Networking
1 firewall rule, 1 network interface

Observability
Install Ops Agent

Security

Networking

Firewall ⑦
Add tags and firewall rules to allow specific network traffic from the Internet
☑ Allow HTTP traffic
☐ Allow HTTPS traffic
☐ Allow Load Balancer Health Checks

Network tags ⑦

Hostname ⑦

Set a custom hostname for this instance or leave it default. Choice is permanent

IP forwarding ⑦
☐ Enable

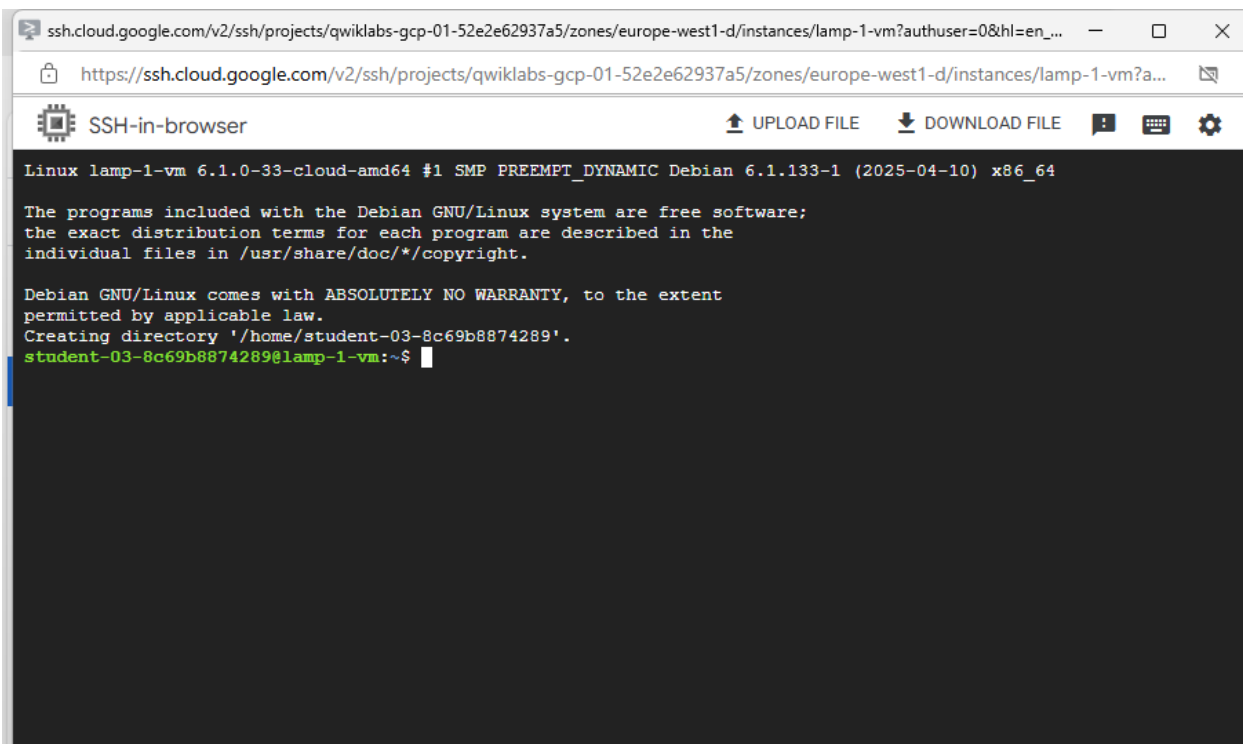**Create** Cancel ‹› Equivalent code

Task 2: Install Apache2 HTTP Server

1. Click **SSH** next to **lamp-1-vm** to open a terminal.

2. Run the following commands:

bash

```
sudo                          apt-get                        update
sudo          apt-get        install          apache2        php7.0
sudo              service            apache2            restart
```

3. Click on the **External IP** of the VM to verify Apache2 is running.

Task 3: Set Up Monitoring Metrics Scope

1. Open **Cloud Console** > **Observability** > **Monitoring**.

2. Ensure the **metrics scope project** is ready.
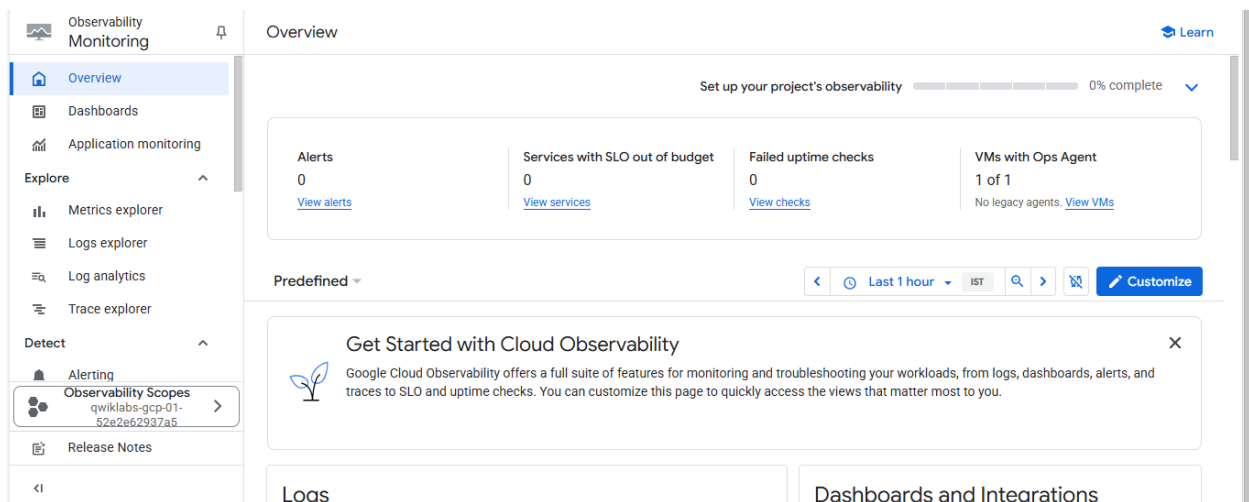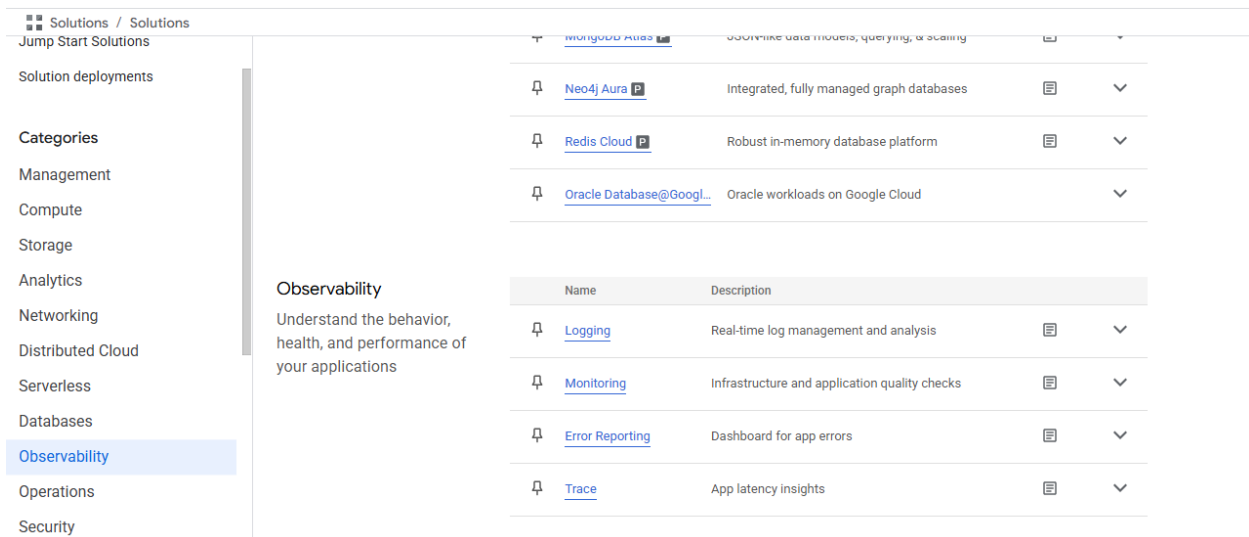
3. Install the monitoring and logging agents:

bash

```
curl -sSO https://dl.google.com/cloudagents/add-google-cloud-ops-agent-repo.sh
sudo bash add-google-cloud-ops-agent-repo.sh --also-install
sudo systemctl status google-cloud-ops-agent
sudo apt-get update
```


Task 4: Create an Uptime Check

1. Go to **Uptime checks** and click **Create Uptime Check**.

2. Configure as follows:

a. **Protocol:** HTTP

b. **Resource Type:** Instance

c. **Instance:** lamp-1-vm

d. **Check Frequency:** 1 minute

3. Click **Test**, verify connectivity, then click **Create**.

Task 5: Create an Alerting Policy

1. Navigate to **Alerting** > **Create Policy**.

2. Select **Network Traffic** metric.

3. Set Threshold:

a. **Position:** Above 500

b. **Retest window:** 1 min

4. Add a **Notification Channel** (email).

5. Save policy as **Inbound Traffic Alert**.

Create Email Channel

Email addresses can be set to receive notifications from your alerting when a new incident is created.
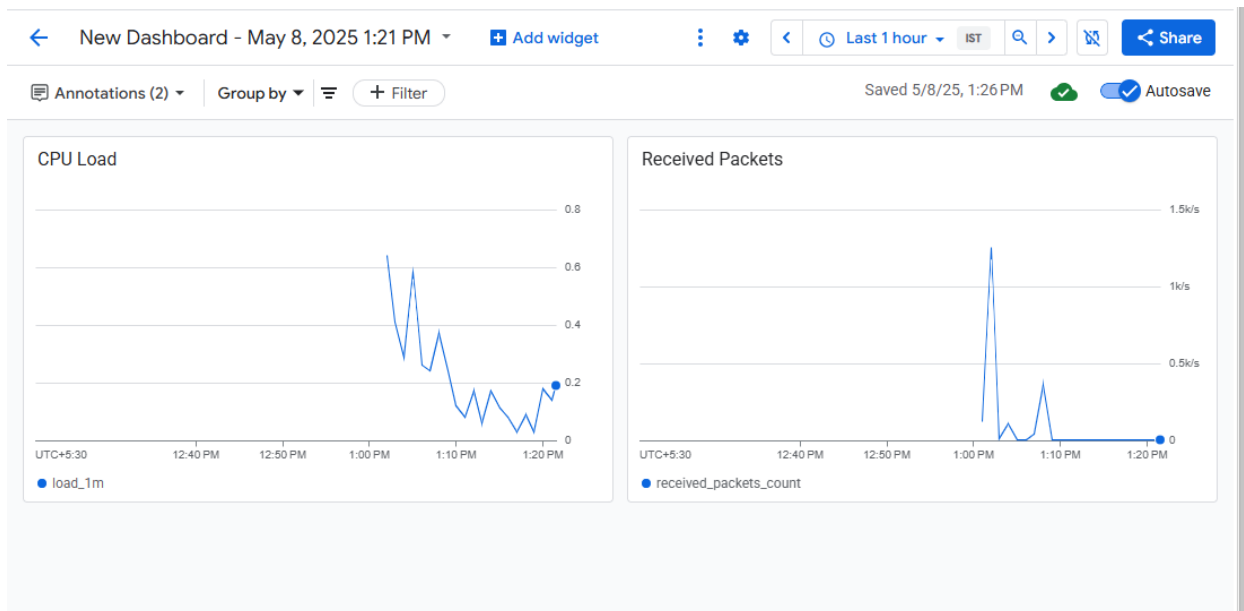
Email Address *
vinodvb00@gmail.com

Display Name *
Vinod

Cancel   **Save**

Task 6: Create a Dashboard

1. Navigate to **Dashboards** > **Create Custom Dashboard**.

2. Name it **Cloud Monitoring LAMP Qwik Start Dashboard**.

3. Add widgets:

a. **CPU Load:** Select **CPU load (1m)**.

b. **Received Packets:** Select **Received packets**

Task 8: Check Uptime & Alerts

1. Go to **Monitoring > Uptime checks** and verify status.

2. Check email notifications for alert triggers.

Uptime checks   ⬇   **+ Create uptime check**   **+ 1 recommended alert**   🎓 Learn

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≡ Filter   Enter property name or value   ⊙

Display Name ↑	Asia Pacific	Europe	North America	South America	Policies	
Lamp Uptime Check	✓	✓	✓	✓	1	⋮