Observing Cloud Resources

Author: Pham Anh Tuan

*SRE Project Template*

# Categorize Responsibilities

| **Prometheus and Grafana Screenshots** | | |
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| Provide a screenshot of the Prometheus node\_exporter service running on the EC2 instance. Use the following command to show that the system is running: sudo systemctl status node\_exporter | | |
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| **Host Metric**  **(CPU, RAM, Disk, Network)** | **Dashboard** | |
| *CPU* |  | |
| *Memory* |  | |
| *I/O Disk* |  | |
| *Network* |  | |
| **Responsibilities** | | |
| **1. The development team wants to release an emergency hotfix to production. Identify two roles of the SRE team who would be involved in this and why.** | | |
| 1. Infrastructure Engineer: Planning/executing system patches/updates. 2. Release Manager: Responsible for change management and code release. | | |
| **2. The development team is in the early stages of planning to build a new product. Identify two roles of the SRE team that should be invited to the meeting and why.** | | |
| 1. Team Lead: Control and contribure to architecture meetings. 2. System Architect: Make recommendations for technologies applicable for the project. | | |
| **3. The emergency hotfix from question 1 was applied and is causing major issues in production. Which SRE role would primarily be involved in mitigating these issues?** | | |
| 1. Monitoring Engineer | |  |

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# Team Formation and Workflow Identification

| **API Monitoring and Notifications** | | |
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| **Display the status of an API endpoint: Provide a screenshot of the Grafana dashboard that will show at which point the API is unhealthy (non-200 HTTP code), and when it becomes healthy again (200 HTTP code).** | | |
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| **Create a notification channel: Provide a screenshot of the Grafana notification which shows the summary of the issue and when it occurred.** | | |
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| **Configure alert rules: Provide a screenshot of the alert rules list in Grafana.** | | |
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# Applying the Concepts

| **Graph 1** | | |
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| **4a. Given the above graph, where does it show that the API endpoint is down? Where on the graph does this show that the API is healthy again?** | | |
| API endpoint is down at 15:27:30  API endpoint is healthy again at 15:36:30 | | |
| **4b. If there was no SRE team, how would this outage affect customers?** | | |
| * The Incident could happen for a long time and impact the uptime commitment with customers, lower product experience. * No one has responsibility (post mortem) to investigate and enforce the mitigation plan to prevent this outage from happening in the future | | |
| **4c. What could be put in place so that the SRE team could know of the outage before the customer does?** | | |
| 1. Define contact points for each stakeholder (Development team, DevOps team, Customer contact point) 2. Coordinate with stakeholders to define the application architecture, single point of failure 3. Setting up the live alerts & contact points 24/7 for monitoring. | | |

| **Graph 2** | | |
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| **5a. Given the above graph, which instance had the increase in traffic, and approximately how many bytes did it receive (feel free to round)?** | | |
| The instance with the increase in traffic is “**10.0.0.68**”. It received around 3MB/min (from 1MB/min to 4MB/min) | | |
| **5b. Which team members on the SRE team would be interested in this graph and why?** | | |
| Monitor team would be interested in this graph because this instance has surge traffic in comparison with other instances | | |

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