Observing Cloud Resources

*SRE Project Template*

# Categorize Responsibilities

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| **Prometheus and Grafana Screenshots** | |
| 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** |
| *EC2 CPU utilization* |  |
| *EC2 Memory utilization* |  |
| *EC2 Disk I/O* |  |
| *EC2 Network utilization* |  |
| *Blackbox Exporter* |  |
| *CPU alert triggered* |  |
| *CPU alert message* |  |
| *CPU alert rule* |  |
| **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. | |
| * **Infrastructure Engineer:** Planning/executing system patches/updates * **Release Manager:** Executes the release, and rollback procedures | |
| 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. | |
| **System Architect:**   * Create scalable infrastructure * Document/Diagram infrastructure * Make recommendations for new technologies   **Team Lead:**   * Contributes to architecture meetings * Forms workflows of the team | |
| 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? | |
| **Monitoring Engineer** | |

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# Team Formation and Workflow Identification

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| **API Monitoring and Notifications** |
| 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

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| **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? |
| Down: 15:27  Up: 15:36 |
| 4b. If there was no SRE team, how would this outage affect customers? |
| *The endpoint (website) would be inaccessible for a longer time.* |
| 4c. What could be put in place so that the SRE team could know of the outage before the customer does? |
| *Shorten the alert period so that it fires sooner before it affects the end customer.* |

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| **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)? |
| *Instance: 10.0.0.68*  *Bytes Received: ~ 21000 Bytes (1000+1000+1500+3500+3500+3000+3000+4500)* |
| 5b. Which team members on the SRE team would be interested in this graph and why? |
| ***Monitoring Engineer:***   * *Creates dashboards* * *Manages alerting rules* * *Usually fsirst to know of an incident* |

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