**Self-Healing Infrastructure with Prometheus, Alertmanager & Ansible**

By Guru Sahib Ji’s grace tried for above project which was understood that if any resource or component of the project goes into failure state, based upon the alert and then triggering an action to be taken for the self healing purpose means to have our infrastructure of project continually run smoothly with event-driven automation, without manually starting failure resources again.

Considering this project where 3 containers were run from using docker-compose.yml, one Prometheus container for monitoring our project, second- Alertmanager container for displaying the events with certain failure or success rate. Third was event-driven container. If there is any firing status, so it can automatically managed by the ansible playbooks as per their resource name as conditions were mentioned in ansible-rulebook. Combined everything was there in Dockerfile, from monitoring to event-driven automation using ansible. Screenshots related to project is added on Github repository.

Basically this project was tried over wsl2 linux system of windows, docker was installed locally, docker compose too. Taken help for links mentioned in reference file over github, faced issues- try to solve them searching online. Ansible image was downloaded using docker. Ansible rulebook includes sources, rules and action. Pipx tool was also used during installation steps. Ansible.eda collection was installed using Ansible Galaxy command-line tool. Overall, tools named includes: Prometheus, Alertmanager, Ansible, wsl2, Docker.

Some key steps involved installing Prometheus and alertmanager through docker-compose.yml. IP address of the system was added under webhok\_configs in alertmanager.yml file. Inventory file includes localhost. Integrate event- driven ansible in the docker-compose.yml file. Initallised the project using: docker compose up.

At last, learned something new about Prometheus, alertmanager, ansible and its event-driven principle, ansible-rulebook with conditions in it, Dockerfile, ansible-playbooks, etc. Overall project was to do self-healing using event-driven principle of ansible integrating with other tools.

Thanks