1. Setup Open Metal on-demand - Server Provider
    a. Cloud Core- Small
    b. Set Budget for limitation
    c. Open Terminal to get SSH Key
    d. Assets(only access first node) → terminal commands
    e. Horizon → Identity → Create Project
    f.
    g. Install Open Stack CLI

Dev Stack(Recommeded and pre configuered):

- The environment used for learning

OpenStack Automation:

- Kolla or Open stack ansible
    - Kolla-Ansible
        - Rollback is accessible in case errors are made
        - Docker compatible
        - Koyobe learning curve
        - More complete
    - OpenStack Ansible Pros Vs. Cons
        - Bare metal approach
        - Possibility to run Services in LXC (Linux Container)
    - OpenStack-Helm
        - Better for exclusively Kubernetes
    - Triple O
        - high levels of automation
        - Not enough documentation
    - Charmed OpenStack
        - well-suited for managing large-scale OpenStack clouds on Ubuntu based on Juju
        -
    -
- Terraform Vs Ansible Vs Juju
    - Kolla Ansible is specifically designed for deploying OpenStack clusters
    - Terraform excels at provisioning raw infrastructure across multiple clouds
    - Juju is for deploying applications on top of that infrastructure with advanced management capabilities
- Terraform and Ansible is best option.

Approaches to Note:

- Hardware Constraints
- Comparison
- Blog about multi-node kolla with LXD container
- Something to note for Kolla
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