

Project WebApp

1. For most of the business persons a static website is sufficient.
2. We develop a simple platform to deploy static website with low cost to the end user.
3. We will design the platform in such a way that end user simply upload their static website zip file, then we will provide one of our cloud virtual machine ip, end user simply map that ip to his / her domain **A** record.
4. On single virtual machine we can deploy as many as websites. I deployed following websites on a single virtual machine with 512MB RAM, Used: 144MB, Free: 260MB.

https://vnandco.in	https://blitzsystems.in	https://bingo.balaji.network
https://gmtauto.in	https://geo.balaji.network	https://rubiks.balaji.network
https://joycatering.in	https://2048.balaji.network	https://bsc.results.balaji.network

```
ubuntu@karthik: ~/webapp
File Edit View Search Terminal Help
ubuntu@karthik:~/webapp$ ls -l
total 64
drwxr-xr-x 7 ubuntu ubuntu 4096 Oct 5 2018 2048.balaji.network
drwxrwxr-x 7 ubuntu ubuntu 4096 Jun 27 2018 bingo.balaji.network
drwxr-xr-x 7 ubuntu ubuntu 4096 Apr 9 2019 blitzsystems.in
drwxr-xr-x 7 ubuntu ubuntu 4096 Oct 5 2018 bsc.results.balaji.network
drwxr-xr-x 7 ubuntu ubuntu 4096 Oct 5 2018 geo.balaji.network
drwxrwxr-x 2 ubuntu ubuntu 4096 Mar 16 2019 geoip
drwxr-xr-x 6 ubuntu ubuntu 4096 Nov 9 2017 gmtauto.in
drwxrwxr-x 6 ubuntu ubuntu 4096 Jun 27 2018 joycatering.in
drwxrwxr-x 2 ubuntu ubuntu 4096 Oct 6 2018 lualib
drwxrwxr-x 4 ubuntu ubuntu 4096 Nov 29 2018 luaso
drwxrwxr-x 8 ubuntu ubuntu 4096 Jun 27 2018 nginx
drwxr-xr-x 5 ubuntu ubuntu 4096 Nov 30 2018 redis
drwxr-xr-x 7 ubuntu ubuntu 4096 Oct 5 2018 rubiks.balaji.network
drwxrwxr-x 3 ubuntu ubuntu 4096 Oct 9 2018 sqlite
drwxr-xr-x 6 ubuntu ubuntu 4096 Nov 22 2017 vashs.in
drwxr-xr-x 6 ubuntu ubuntu 4096 Oct 8 13:49 vnandco.in
ubuntu@karthik:~/webapp$
ubuntu@karthik:~/webapp$ free -h --total
              total        used        free      shared  buff/cache   available
Mem:           486M         144M         260M          5.6M          81M         307M
Swap:            0B           0B           0B
Total:          486M         144M         260M
ubuntu@karthik:~/webapp$
```

5. We will prepare the minimal virtual machine which consist only essential programs and NGINX Server only.
6. Linux From Scratch states they prepared 8MB Apache Web Server image.
Proof: <http://www.linuxfromscratch.org/lfs/>

Enhancement of the WebApp Project

- 1) Once we good in Image preparation and virtualization, Later we can enhance the Base Image with custom softwares, Like Apache Tomcat Image, Jenkins Image, NexusOSS Image, SonarQube Image, MySQL Image, PostgreSQL Image, Redis Image, Ansible Image, Python Image, Docker Software Image, Kubernetes Image.
- 2) As a DevSecOps Engineer, I observed few of my team mates struggled to install Jenkins Server, Nexus OSS Server, SonarQube with PostgreSQL Server, Kubernetes
- 3) By providing the Minimal Image with essentials we can save HDD, RAM and CPU utilization as well as we can win the customer heart.
- 4) We will develop a WebUI to spin an Image on the fly based on customer choice of Software. This will provision to the customer to prepare his / her own recepie.
- 5) Most of the Clients are not giving root / sudo privilege to development companies. For example X Client is not giving the root / sudo privilege to Y Development Company then how Y can Install / Start / Stop / Restart the Tomcat Server and deploy application on X's Virtual Machine.
- 6) We will provide an Image in such a way that with out root / sudo privilege he / she can deploy the application. Note: I already installed NGINX, Tomcat, Jenkins, NexusOSS with out root / sudo privilege.
- 7) If we are very good in static compilation from the source, we can achieve the most of the things and we can play.