

## \* K8S VS Docker

### K8S

Installation  
① It requires a series of manual steps to setup K8S master and worker nodes components in a cluster of nodes.

Logging  
② K8S provides no native storage sol<sup>n</sup> for log data.

Monitoring  
③ There are various open-source tools available for K8S application monitoring like prometheus, Grafana, Influx DB etc.

Scale Support  
④ Supports upto 5000 nodes

Flexibility  
⑤ More comprehensive and highly customizable.

Configuration  
⑥ You must manually configure your load balancing setting

Examples  
⑦ Google, Shopify, Udemy, Slack etc.

### Docker

① Installing Docker is a matter of one-line command on Linux platform like Debian, Ubuntu and CentOS.

② Logging driver plugins are available in Docker 17.05 and higher.

③ There are various tools available for monitoring purposes like prometheus, Docker API etc.

④ Supports upto 2000 nodes

⑤ Less extensive and customizable.

⑥ Does auto load balancing

⑦ Twitter, Spotify, PayPal, eBay etc.



PAGE NO:  
DATE: / /

### \* Containers Problems

Both Linux containers & Docker containers isolate the application from the host.

Fastest, Reliable, Efficient, light-weight and scalable

But Not easily scalable

- ① Containers could not communicate with each other
- ② Containers had to be deployed appropriately
- ③ Containers had to be managed carefully
- ④ Auto-scaling was not possible
- ⑤ Distributing traffic was still challenging