**Docker 集群选型说明**

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| --- | --- | --- |
| History  Email:<wind.b.liu@leaptocloud.com> | | |
| 时间 | 作者 | 动作 |
| 2015-06-17 | 刘彬 | 创建该文档，加入集群项目比较 |
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Table 1.1

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| **项目名称** | **中文描述** | **英文描述** | **开源**  **证书** | **开发语言** | **备注** |
| *fleet* | 调度器和集群管理工具 | Base coreos ,  A Distributed init System | Apache 2.0 license | Go | 小众行 |
| *marathon* | 调度器和集群管理工具 | Deploy and manage containers (including Docker) on top of Apache Mesos at scale. | Apache 2.0 license | scale | 建议  使用 |
| *Swarm* | 调度器和集群管理工具 | Swarm: a Docker-native clustering system | Apache 2.0 license | Go | CLI方便，但不能提供http rest |
| *mesos* | 宿主机抽象服务，用于为调度器联合宿主机资源 | Apache Mesos is a cluster manager that provides efficient resource isolation and sharing across distributed applications, or frameworks. | Apache 2.0 license | C++ | 高层次抽象 |
| *kubernetes* | 一个管理容器组的工具，具有先进的调度能力 | Kubernetes is an open source system for managing containerized applications across multiple hosts, providing basic mechanisms for deployment, maintenance, and scaling of applications. | Apache 2.0 license | Go | 太复杂,不大适应于私有云环境 |
| *compose* | 一个用于创建容器组的容器编排工具 | Define and run multi-container applications with Docker | Apache 2.0 license | python | 小众型项目 |

Marathon 优点

* **HA** -- run any number of Marathon schedulers, but only one gets elected as leader; if you access a non-leader, your request gets proxied to the current leader
* **Constraints** - e.g., only one instance of an application per rack, node, etc.
* **Service Discovery & Load Balancing** via HAProxy or the events API (see below).
* **Health Checks**: check your application's health via HTTP or TCP checks.
* Event Subscription lets you supply an HTTP endpoint to receive notifications, for example to integrate with an external load balancer.
* Web UI
* **JSON/REST API for easy integration and scriptability**
* Basic Auth and SSL
* Metrics: available at /metrics in JSON format

该项由mesosphere公司主导，文档比较齐全，rest api较为完整，易于集成。