

KunlunBase 集群部署方式介绍

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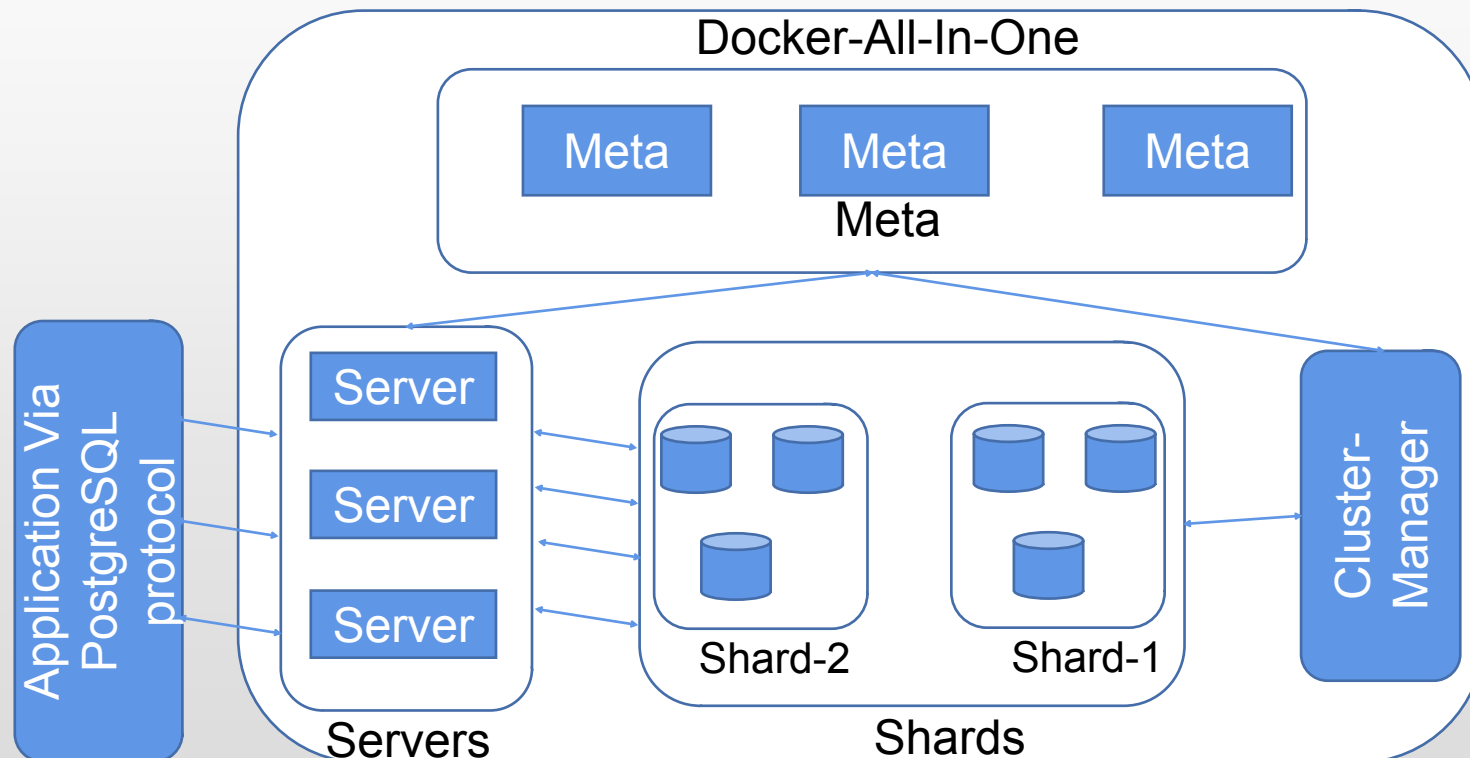
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极速部署模式 - Docker多合一镜像

- 镜像地址: registry.cn-hangzhou.aliyuncs.com/kunlun/kunlun:0.9.1

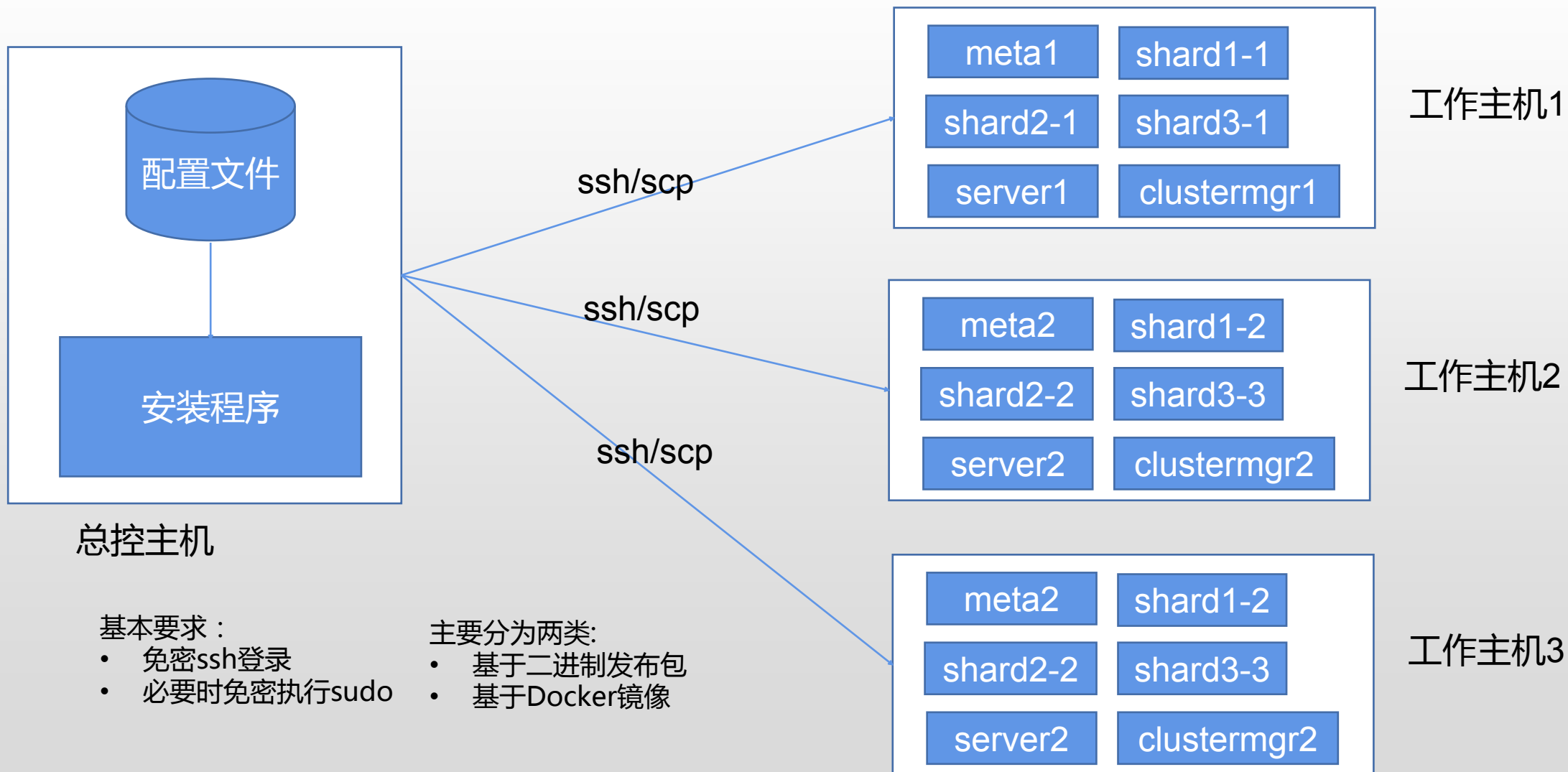
特点:

- 所有节点都部署在一个容器里
- 方便体验功能
- 熟悉集群结构
- 不适合规模化业务使用
- 0.8开始提供基于mgr的版本
- 0.9.2开始提供基于fullsync的版本



```
sudo docker run --privileged --name kunlun1 -p 7401:5401 -p 7402:5402 -p 7403:5403 \
  -itd registry.cn-hangzhou.aliyuncs.com/kunlun/kunlun:0.9.1 \
  bash -c 'bash /kunlun/start_kunlun.sh'
```

传统的多机部署模式 - 一键部署脚本



传统的多机部署模式 - 一键部署脚本

配置文件举例 - 二进制版

整体配置：

```
{
  "machines": [ machine_node, machine_node, ..],
  "cluster": {
    "name" : "test_cluster_1",
    "meta": {
      "ha_mode": "rbr",
      "nodes": [storage_node, storage_node, ..]
    }
    "comp": {
      "nodes": [comp_node, comp_node, ...]
    }
    "data": [shard, shard, shard],
    "clustermgr": {
      "nodes": [clustermgr_node, clustermgr_node, ..]
    },
    "haproxy": haproxy_node
  }
}
```

machine_node:

```
{
  "ip": "192.168.0.110",
  "basedir": "/kunlun",
  "user": "kunlun"
},
```

haproxy_node:

```
{
  "ip": "192.168.0.100",
  "port": 15401
}
```

Storage_node:

```
{
  "is_primary": true,
  "ip": "192.168.0.110",
  "port": 6001,
  "innodb_buffer_pool_size": "64MB",
  "data_dir_path": "/data1",
  "log_dir_path": "/data1/log",
  "user": "kunlun",
  "election_weight": 50
},
```

comp_node:

```
{
  "id": 1,
  "name": "comp1",
  "ip": "192.168.0.110",
  "port": 5401,
  "user": "dbuser",
  "password": "AxudFK1#",
  "datadir": "/pgdatadir"
},
```

clustermgr_node:

```
{
  "ip": "192.168.0.143",
  "brpc_raft_port": 35002
},
```

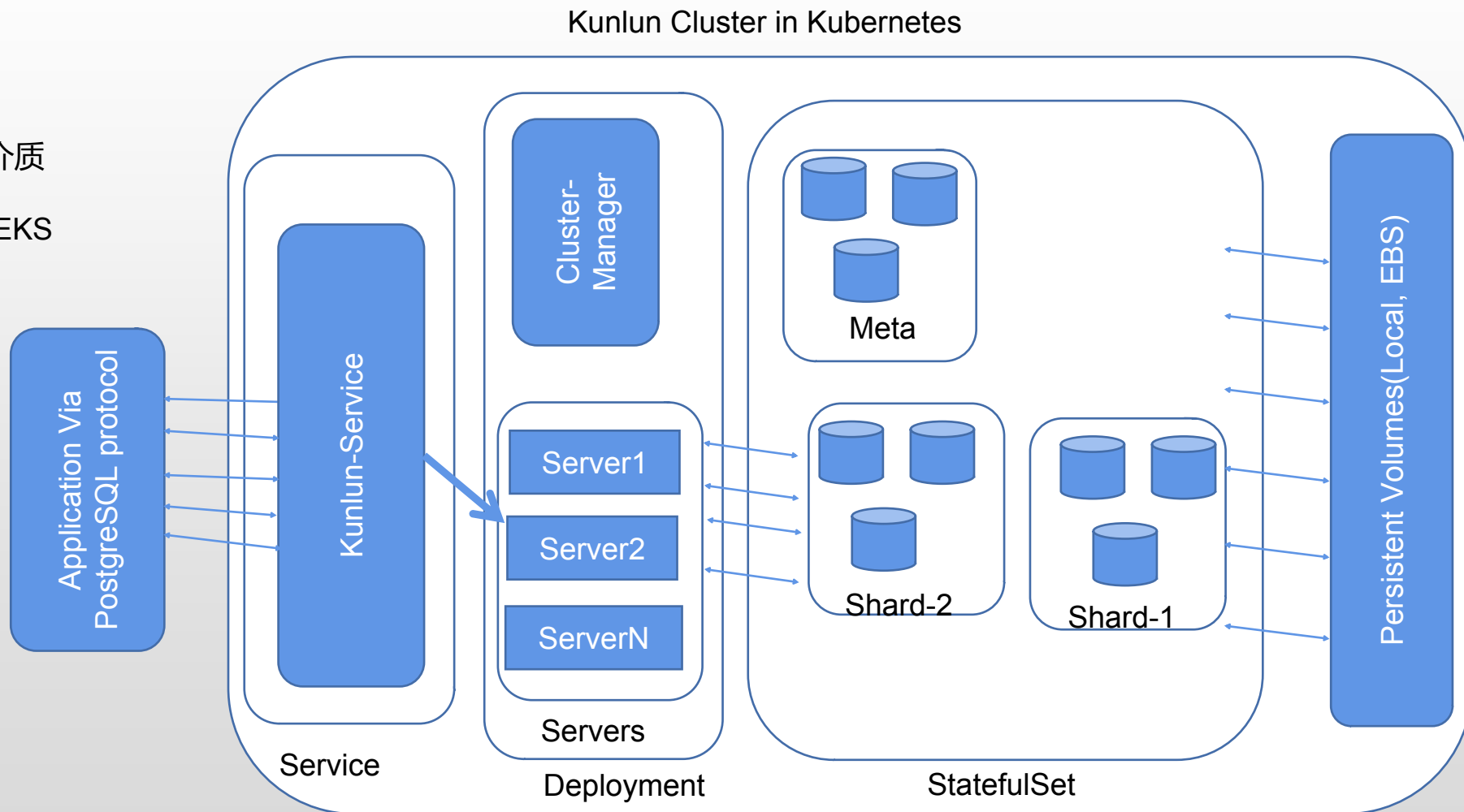
传统的多机部署模式 - 一键部署脚本

配置文件举例 - Docker版

```
{
  "network": "klnet",
  "machines": [
    { "ip": "192.168.0.110", "basedir": "/kunlun", "user": "kunlun" },
    { "ip": "192.168.0.111", "user": "kunlun" }
  ],
  "cluster": {
    "name": "mgrcluster_in_u2004cde",
    "namespace": "u2004cdemgr",
    "images": {
      "kunlun-storage": "192.168.0.104:15000/kunlun-storage",
      "kunlun-server": "192.168.0.104:15000/kunlun-server",
      "kunlun-cluster-manager": "192.168.0.104:15000/kunlun-cluster-manager"
    },
    "meta": {
      "nodes": [
        { "is_primary": true, "ip": "192.168.0.110" },
        { "is_primary": false, "ip": "192.168.0.111" },
        { "is_primary": false, "ip": "192.168.0.100" } ] },
    "comp": {
      "nodes": [
        { "ip": "192.168.0.110", "port": 5401, "user": "kunlun", "password": "Tx1Df2Mn#" },
        { "ip": "192.168.0.111", "port": 5401, "user": "kunlun", "password": "Tx1Df2Mn#" },
        { "ip": "192.168.0.100", "port": 5401, "user": "kunlun", "password": "Tx1Df2Mn#" }
      ]
    },
    "data": [
      { "nodes": [
        { "is_primary": true, "ip": "192.168.0.110", "innodb_buffer_pool_size": "536870912" },
        { "is_primary": false, "ip": "192.168.0.111", "innodb_buffer_pool_size": "536870912" },
        { "is_primary": false, "ip": "192.168.0.100" } ] },
      { "nodes": [
        { "is_primary": true, "ip": "192.168.0.111" },
        { "is_primary": false, "ip": "192.168.0.110", "innodb_buffer_pool_size": "536870912" },
        { "is_primary": false, "ip": "192.168.0.100" } ] },
    ],
    "clustermgr": { "nodes": { "ip": "192.168.0.110" } }
  }
}
```

一键部署 - Kubernetes版

- 0.8.4开始提供
- 支持local和ebs的存储介质
- 支持私有kubernetes和EKS



一键部署 - Kubernetes版

Kubernetes 部署的配置文件

```
{  
  "cluster": {  
    "name" : "kunlun1",  
    "comp_user": "dbuser",  
    "comp_password": "Tx1Df2Mn#",  
    "shards": 2,  
    "metaNodeSizeGB": 10,  
    "shardNodeSizeGB": 30,  
    "comps": 2,  
    "storage_image_url":  
      "registry.cn-hangzhou.aliyuncs.com/kunlundb/kunlun-storage:latest",  
    "comp_image_url":  
      "registry.cn-hangzhou.aliyuncs.com/kunlundb/kunlun-server:latest",  
    "clusterngr_image_url":  
      "registry.cn-hangzhou.aliyuncs.com/kunlundb/kunlun-cluster-manager:latest"  
  }  
}
```


一键部署 - 命令行举例

- 使用二进制发布包一键部署集群

```
kunlun@kunlun-test2:~/kunlun_scripts/cluster$ python generate_scripts.py --config=install.json --action=install  
['generate_scripts.py', '--config=install.json', '--action=install']  
kunlun@kunlun-test2:~/kunlun_scripts/cluster$ bash -e install/commands.sh
```

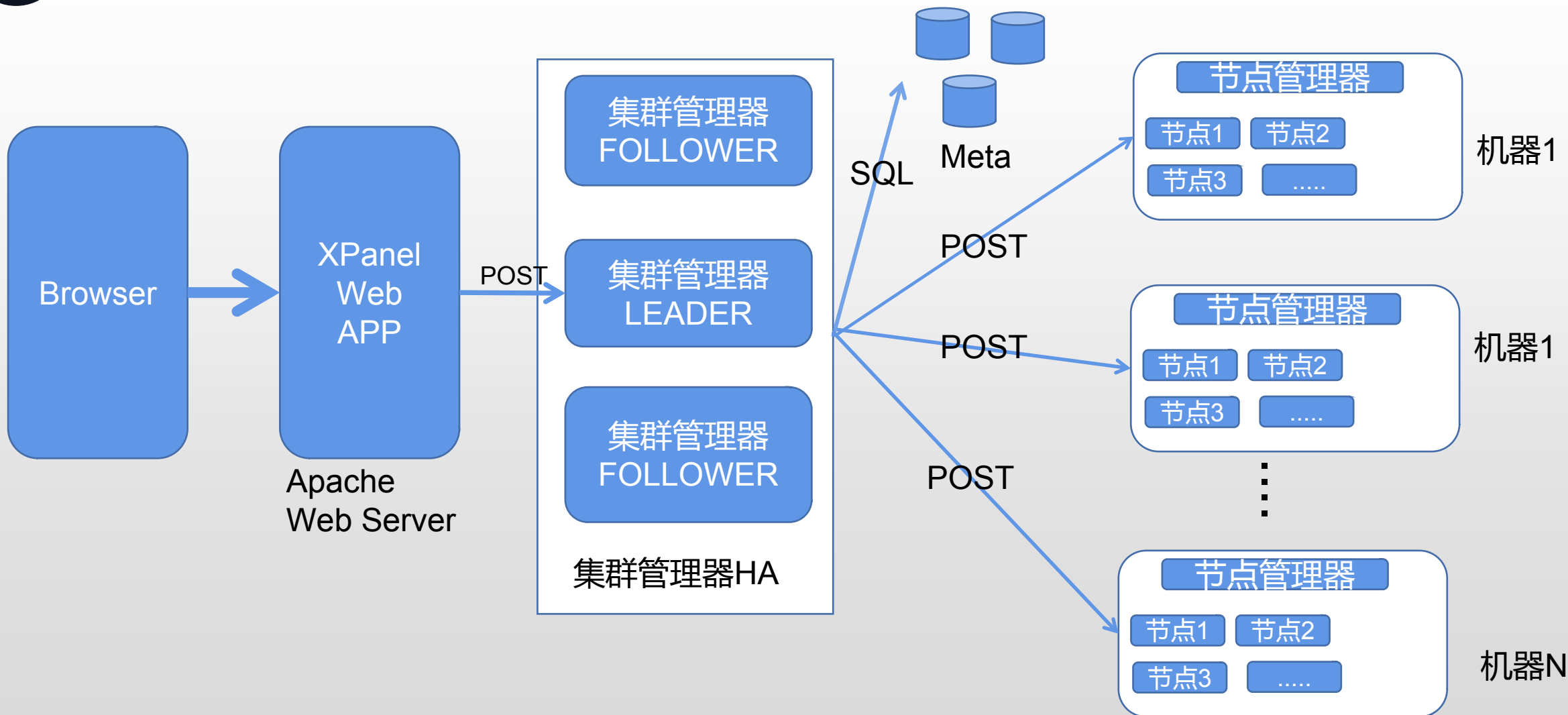
- 使用Docker镜像一键部署集群:

```
kunlun@kunlun-test2:~/kunlun_scripts/cluster_docker$ python generate_scripts.py --config=install_docker.json --action=install  
['generate_scripts.py', '--config=install_docker.json', '--action=install']  
kunlun@kunlun-test2:~/kunlun_scripts/cluster_docker$ bash -e install.sh
```

- 在Kubernetes中一键部署集群:

```
kunlun@kunlun-test2:~/kubernetes_scripts$ python generate_scripts.py --kunlun_cluster_config=awsreq2.json \  
> --gentype=ebs-auto --namespace kunlun_aws  
kunlun@kunlun-test2:~/kubernetes_scripts$ bash -e build_cluster.sh
```

下一代部署方式 - XPanel



下一代部署方式 - XPanel

XPanel 界面



使用说明: <http://www.kunlunbase.com:8181/docs/kunlunbase/kunlunbase-1do3t6c8bbrv8>

下一代部署方式 - XPanel

XPanel部署步骤

- 使用初始化脚本 `setup_cluster_manager.py` 设置所有工作机器
- 在 Apache Web Server 中部署 XPanel Web APP
- 设置 XPanel Web APP 的集群管理器地址组
- 启动 XPanel Web APP

Thank you

Q & A