一、oenstack搭建

<https://blog.csdn.net/shiyu1157758655/article/details/76373341>

安装部署教程

<https://blog.csdn.net/bbwangj/article/details/79568821>

二、hadoop大数据平台搭建

<http://www.cnblogs.com/molyeo/p/7484627.html>

三 openstack搭建

<http://blog.51cto.com/liuleis/2094190> 社区openstack queens版本部署安装详解

<https://www.cnblogs.com/klb561/p/8660264.html> 全面认识openstack openstack架构详解

<https://www.cnblogs.com/yaohong/archive/2017/07/29/7251852.html> openstack部署步骤详解

<https://www.jb51.net/article/98137.htm> openstack 创建项目和虚拟机详细介绍

四 大数据

<https://www.ibm.com/developerworks/cn/opensource/os-cn-bigdata-ambari/index.html> 大数据平台的搭建利器

<https://www.yiibai.com/jenkins/jenkins_configuration.html> jenkins配置

<http://www.runoob.com/docker/docker-rm-command.html> docker命令

<https://www.cnblogs.com/zishengY/p/6819160.html?utm_source=itdadao&utm_medium=referral> linux下haddop2.7.1集群环境的搭建

<https://www.cnblogs.com/xmzncc/p/6218666.html> 大数据平台hadoop和spark搭建

<https://blog.csdn.net/chenguohong88/article/details/77850882> spark+mongodb大数据环境搭建

五 springcloud文档

<http://blog.didispace.com/springcloud5/> springcloudg构建微服务架构

<http://www.ityouknow.com/springboot/2016/01/06/springboot(%E4%B8%80)-%E5%85%A5%E9%97%A8%E7%AF%87.html> springcloud微服务

<https://blog.csdn.net/cj4480269876/article/details/49911493> ssm框架知识  
<https://blog.csdn.net/fanxiangru999/article/details/79381966> springboot整合activiti

<https://blog.csdn.net/forezp/article/details/70148833/> 史上最简单的springcloud教程

<https://blog.csdn.net/zhaoenweiex/article/details/74122293> springcloud采坑实战笔记

<https://blog.csdn.net/winter_chen001/article/details/77249029> springboot整合mybatis

<https://blog.csdn.net/u013725455/article/details/52091088> 三种方式实现二维码

数据库mysql性能优化

<https://www.w3cschool.cn/bwyfi/bwyfi-354t24x4.html>