

RHEL OSP's VM HA Power by Ceph

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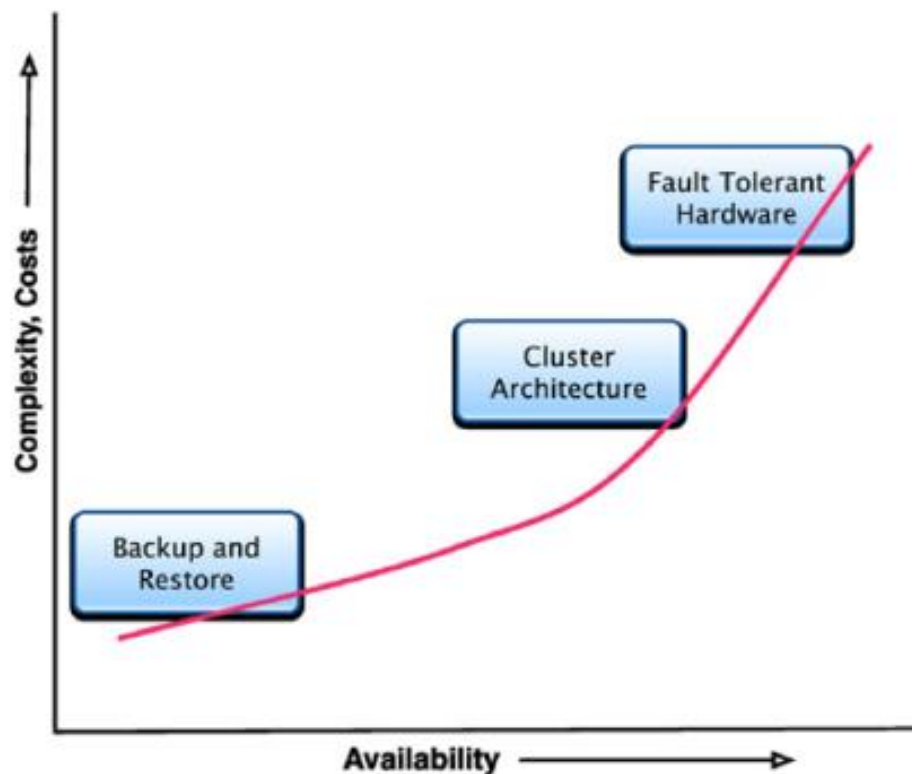
企业用户对RHEL-OSP 的期望是

- 99.999%的正常APIs运行时间&可扩展的控制平面
- 健壮的管理 & 安全模块
- 开放式体系结构
- 混合云互操作性
- 可扩展 & 弹性体系结构
- 全球支持 & 服务

业务和技术的传统要求

- 单租户
- 共享执行
- 稳定
- 长的生命周期支持
- 连续可用性
- 应用程序恢复能力

传统应用到云 艰苦的旅程



- 高可用性(HA)
- 灾难恢复(DR)

实例高可用的 必要条件

- 监控

一种系统来检测虚拟机已失效

- 隔离

一种系统来隔离已失败的计算节点

- 恢复

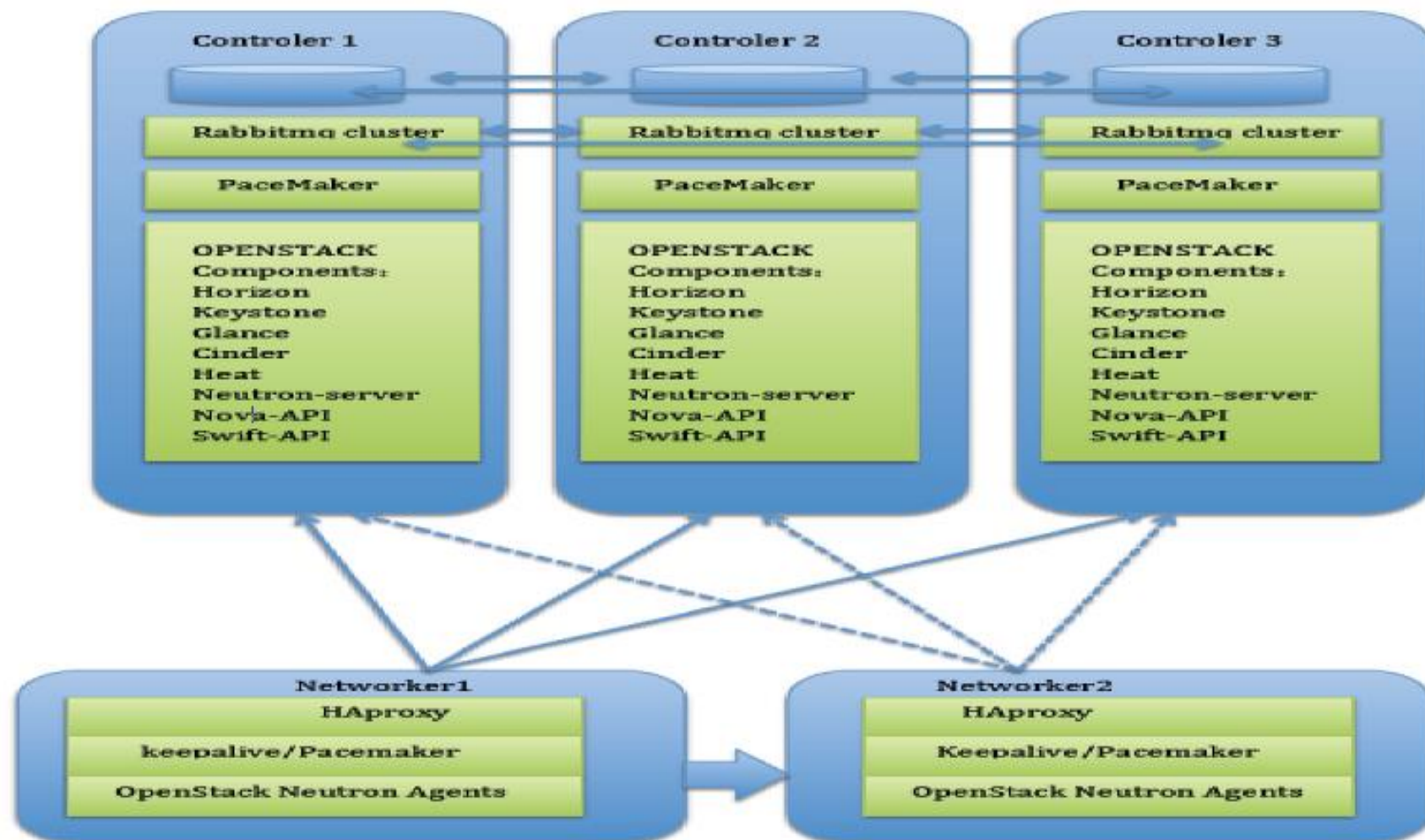
一种系统来编排从失败的虚拟机进行恢复

处理失败的事情

- 发现问题
- 防止脑裂
- 隔离物理节点
- 撤离/自动重启

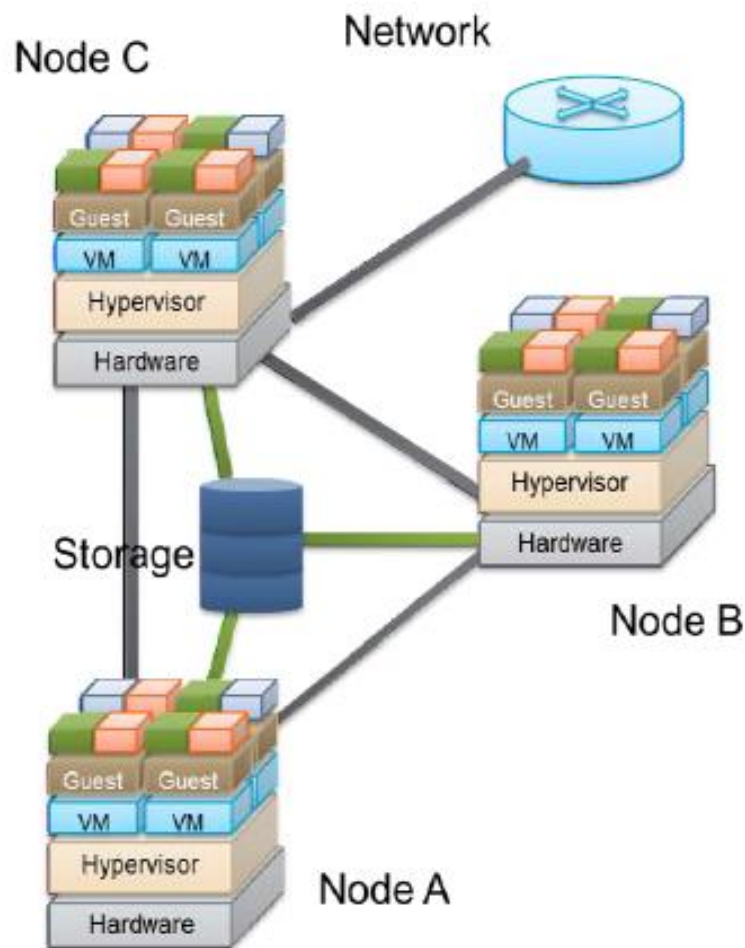
现今的 RHEL-OSP5

高可用



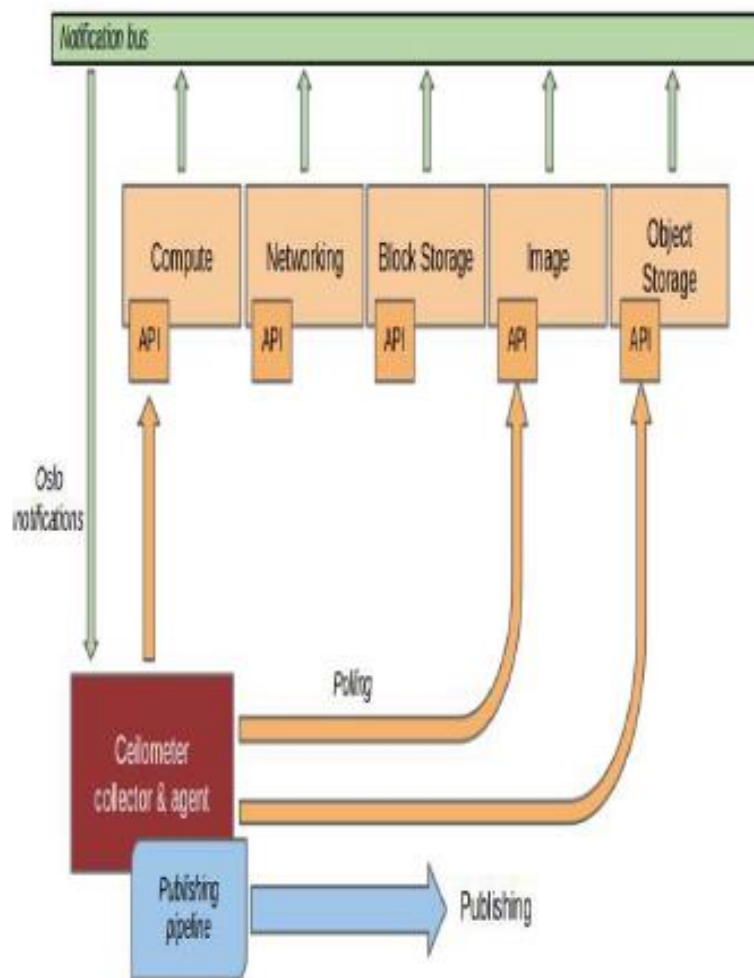
实例的高可用

- 共享的虚拟存储
- 共享的虚拟网络

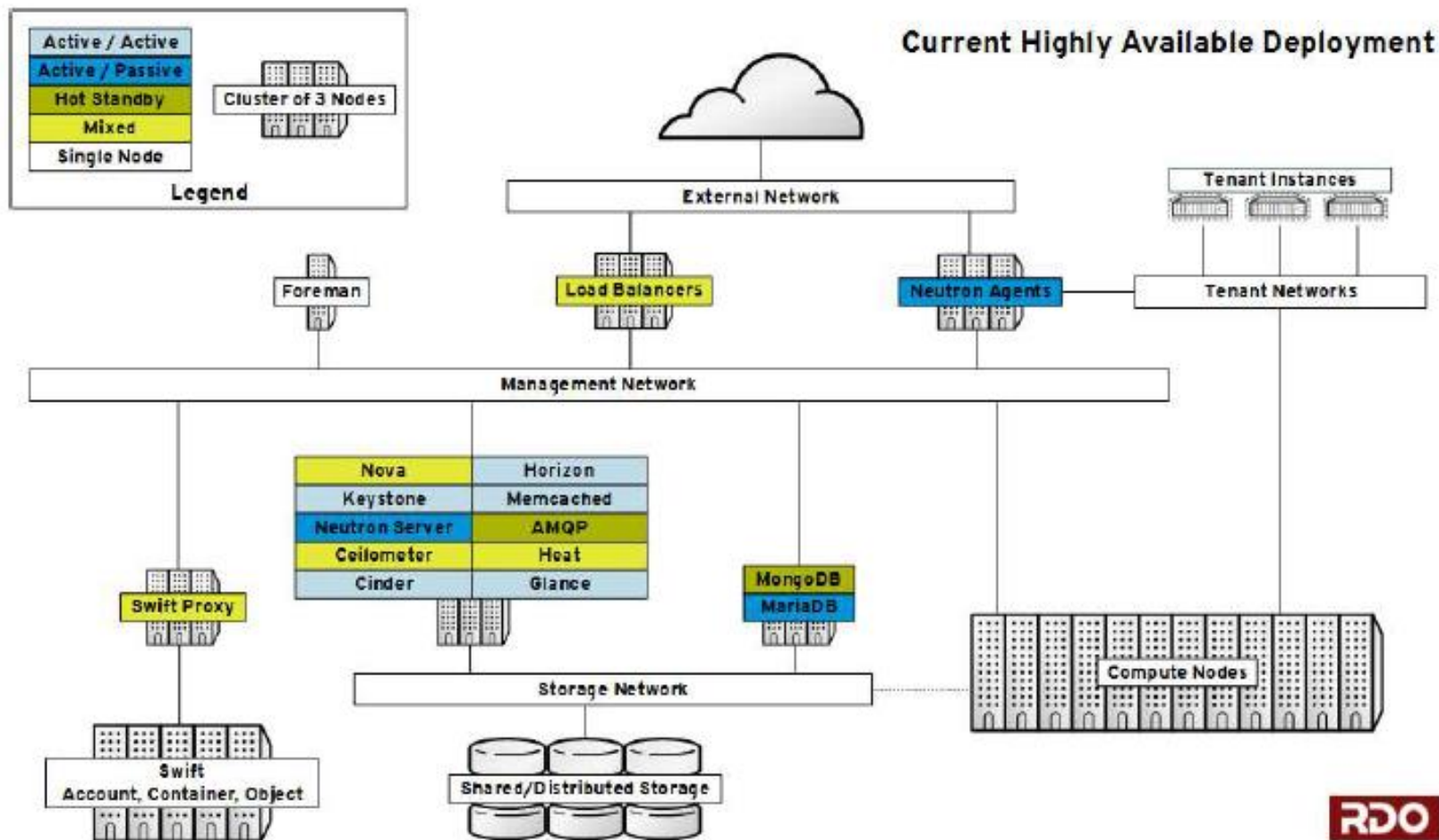


实例的高可用方法

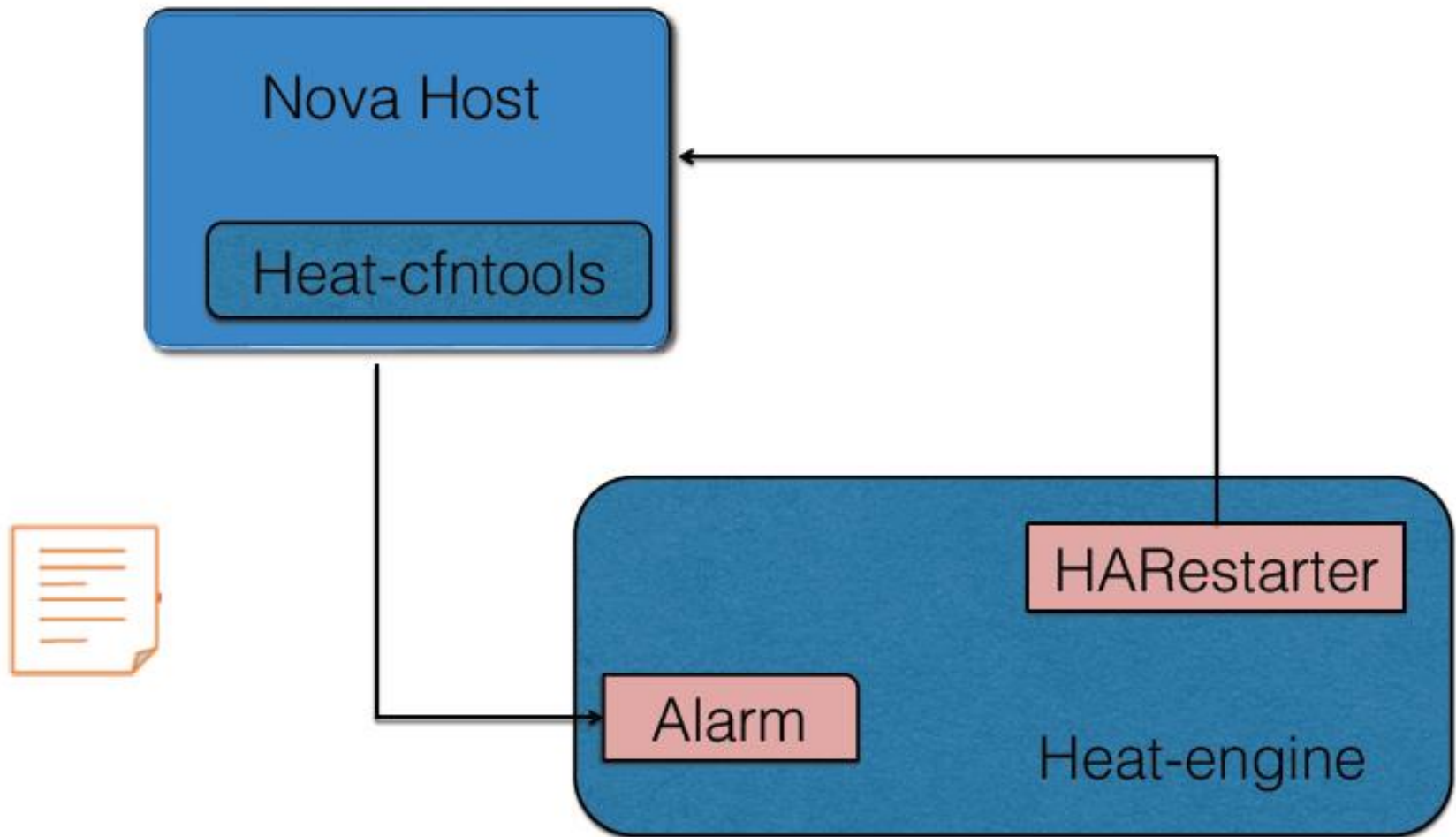
- 冗余
 - Nova
 - ◇ Server Groups
 - ◇ Virtual Clusters
 - Heat
 - ◇ ResourceGroup
- 检测
 - RPC notification, oslo.messaging
 - Ceilometer
- 恢复
 - Fencing
 - VM reboot, rebuild, evacuation
 - OS::Heat::HARestarter



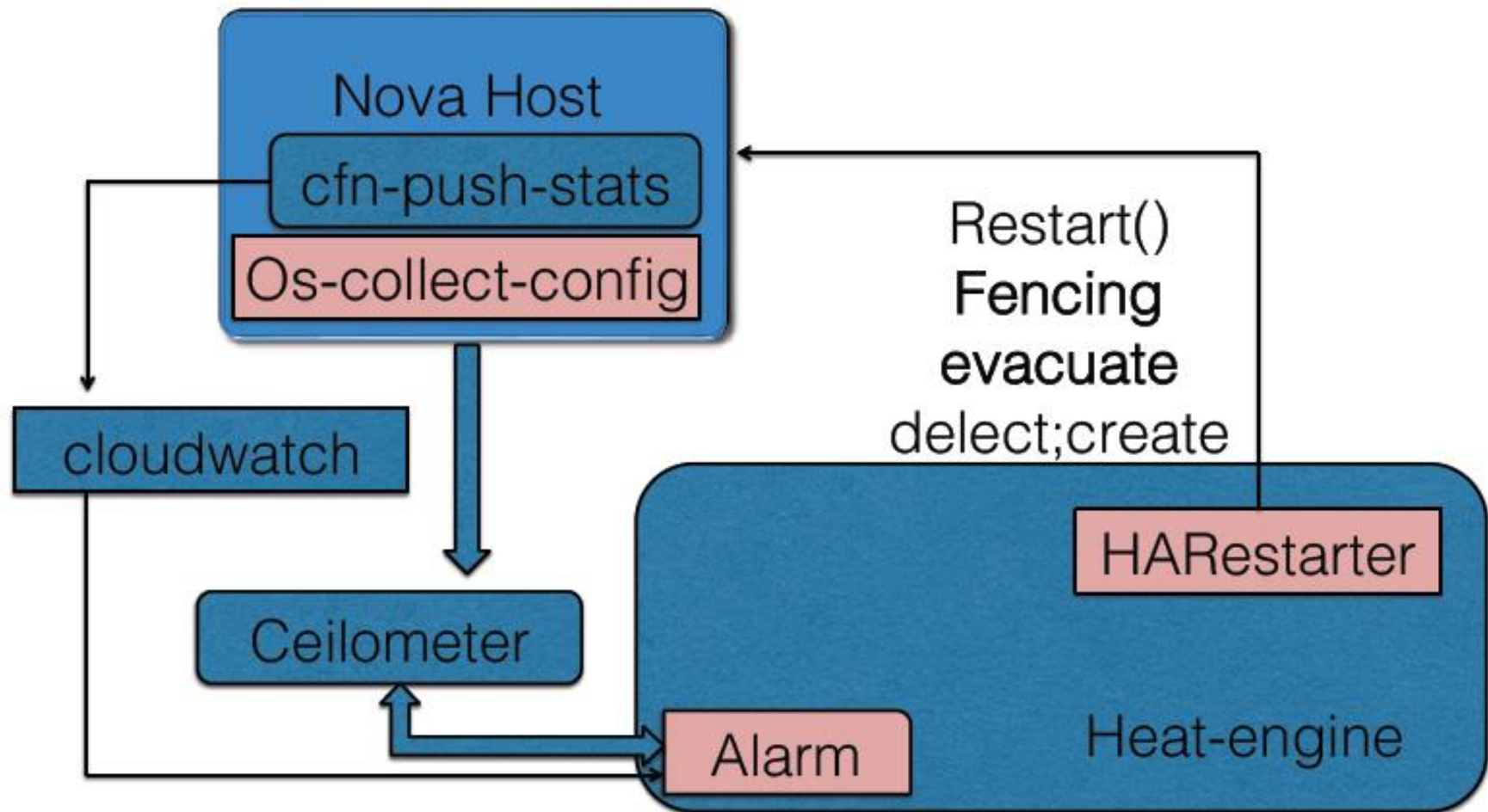
RHEL-OSP5 的架构



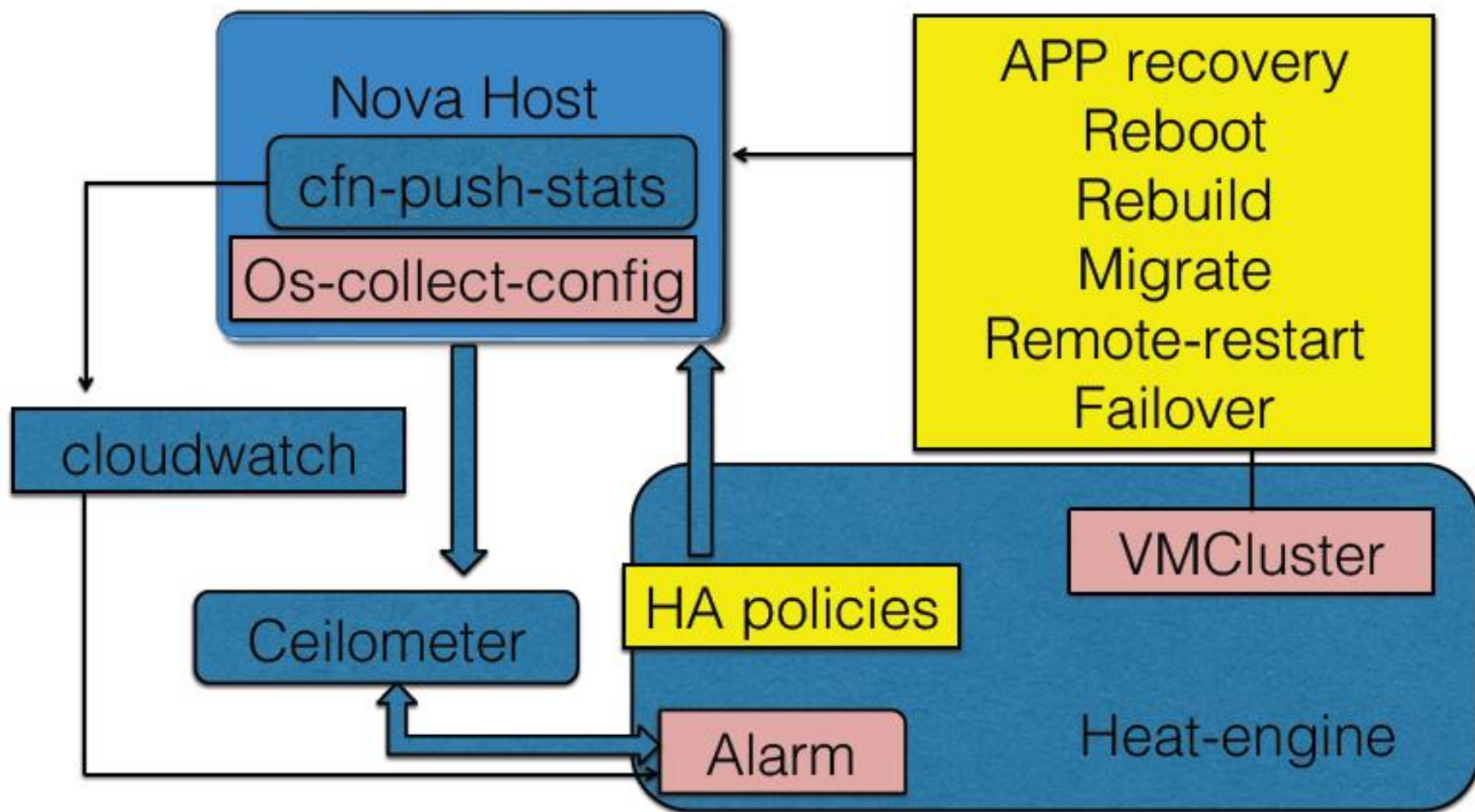
Heat Orchestrated HA



Heat Orchestrated HA today



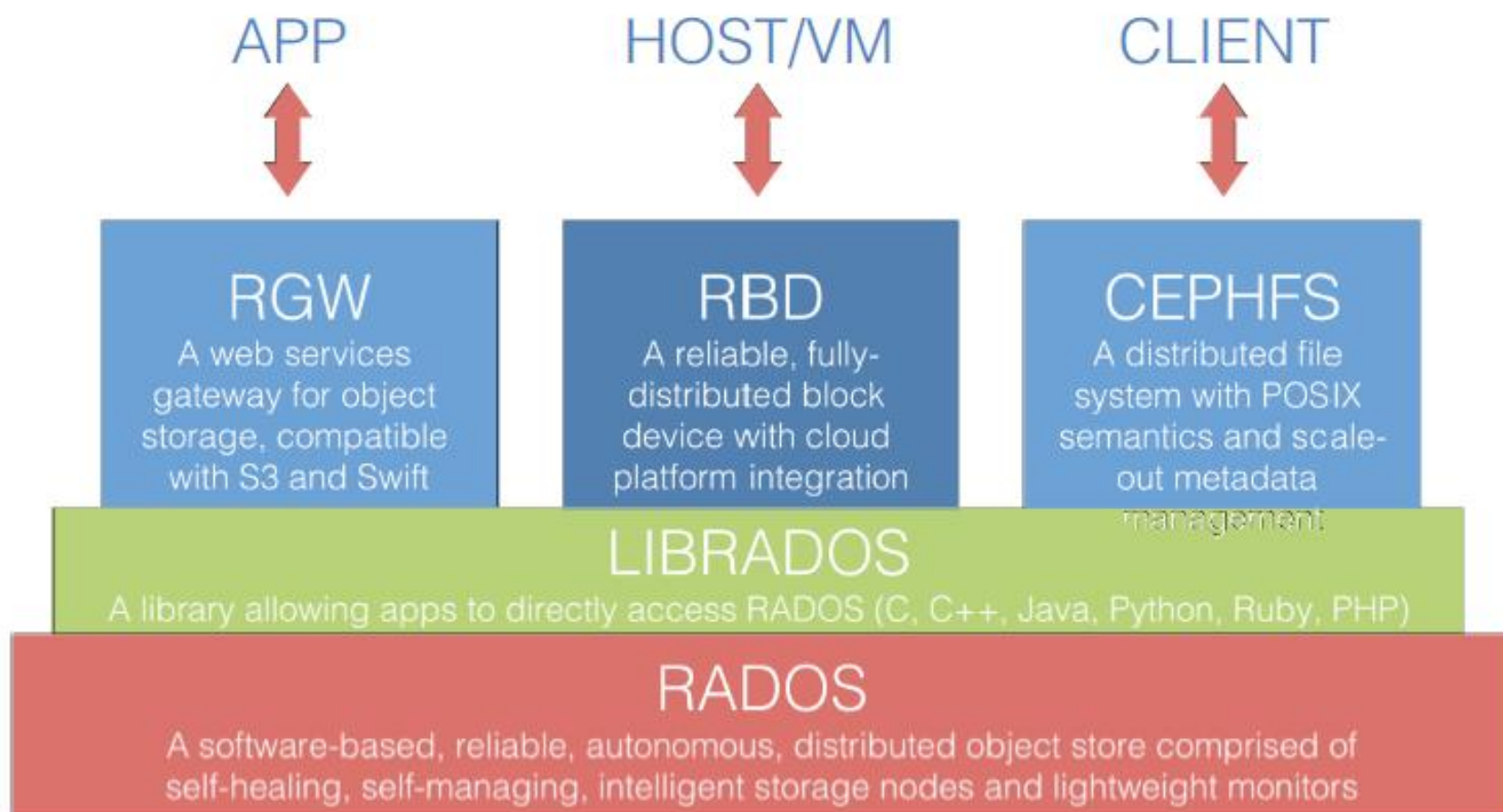
Future's RHEL-OSP Instance HA will be



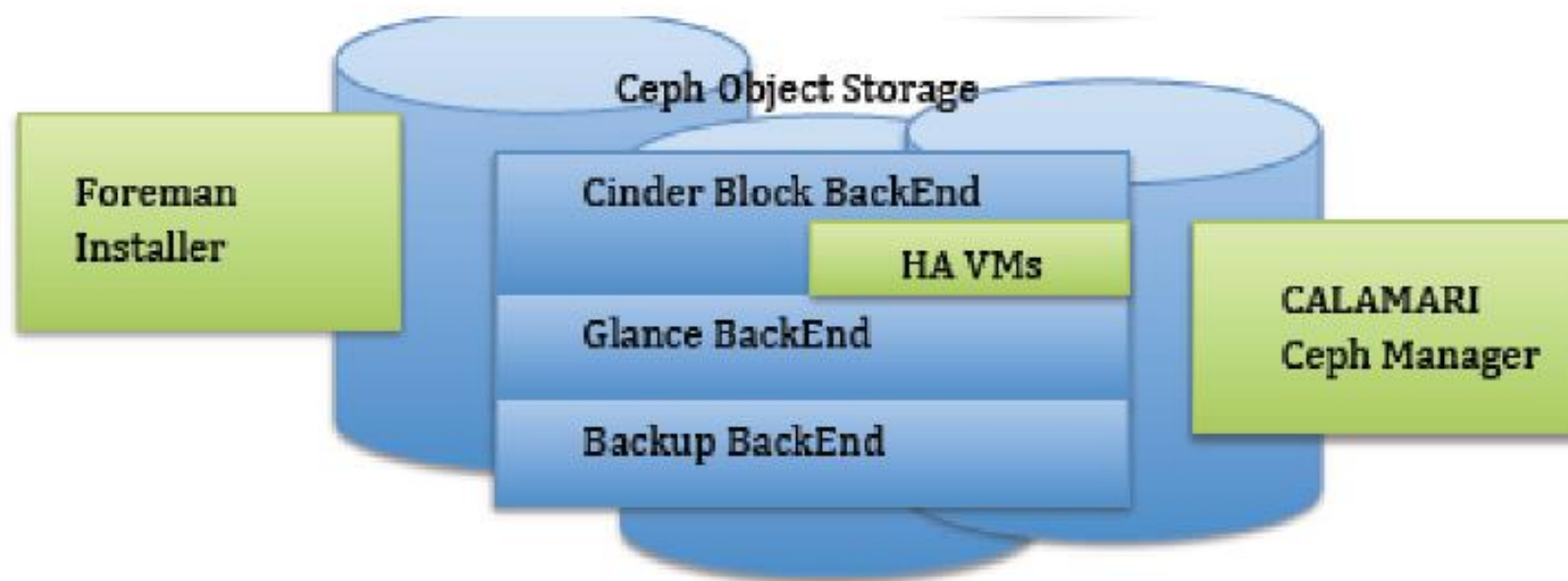
高可用需要共享

- Share storage
- Share network
- Copy on Write

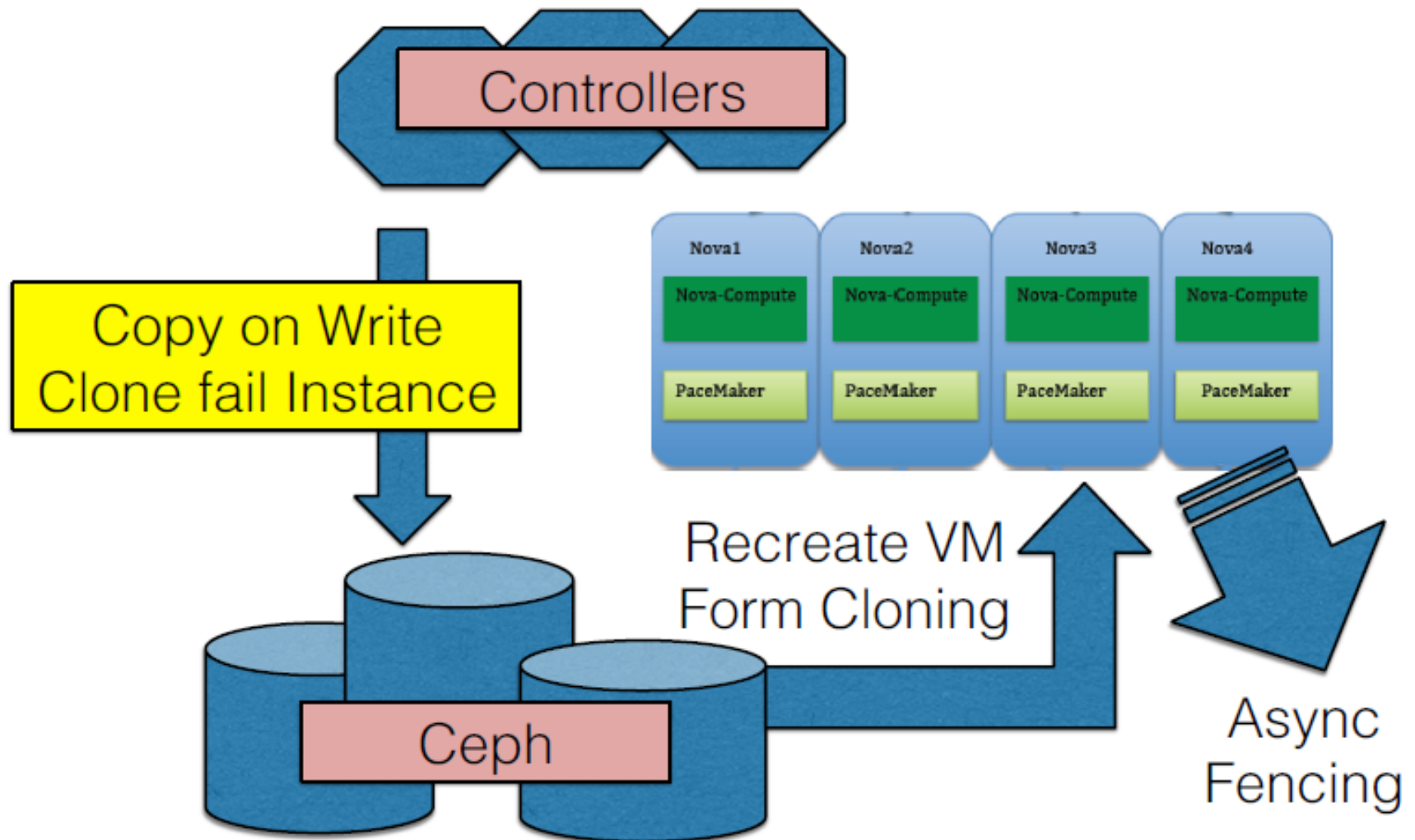
ARCHITECTURAL COMPONENTS



Share storage :Ceph



The RHEL-OSP Instance HA power by Ceph





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