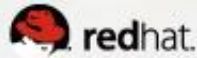


OpenStack

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联合主办:



协办单位:



OPENSTACK的持续集成

Tony Jin Tao Li

Red Hat

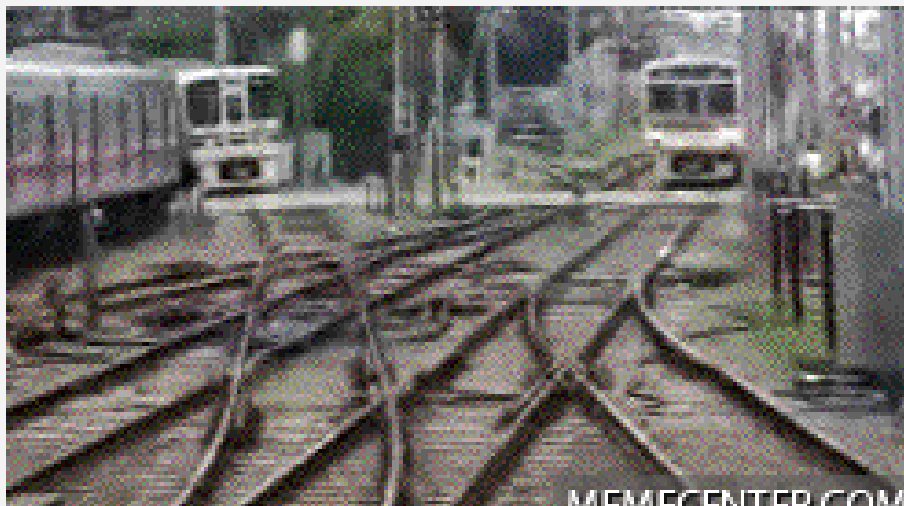
May 2015



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Testing



OpenStack

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用于管理业务不断变化的寓言



传统的补丁周期中
停机时间窗口



持续交付



CI/CD for OpenStack infrastructure?

If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes.

-- Albert Einstein

假如我有一个小时来解决一个决定我生存的问题，我会花第55分钟确定是什么问题的问题，因为一旦我知道正确的问题，我能在不到五分钟解决问题。

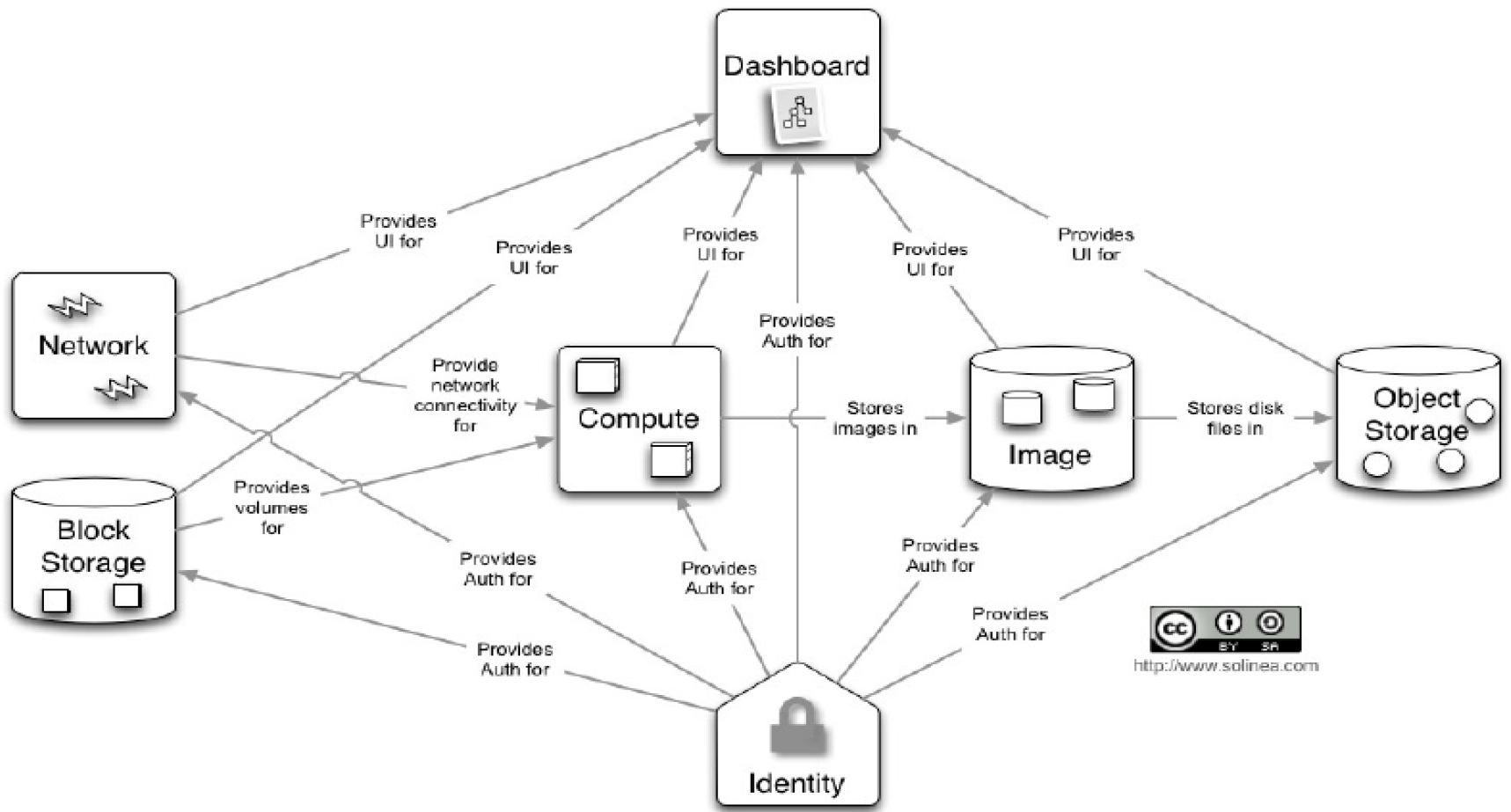
--爱因斯坦

挑战：你怎么能连续提供并集成了最新的Openstack基础设施和平台部署和维护应用程序？

解药：通过不断更新和部署的Openstack基础设施建设和测试应用程序，然后可以在一个单元部署到生产。

容器技术是这个解决方案的一种方式

OpenStack之美



OpenStack

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开发的生活不容易



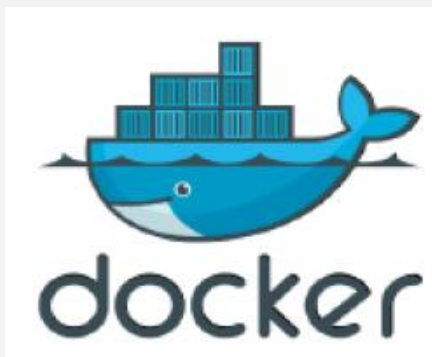
如果有...

- 隔离的，轻量的，可移动的
- 预集成的
- 轻松地描述运行时间的关系
- 轻盈运行并且容易升级



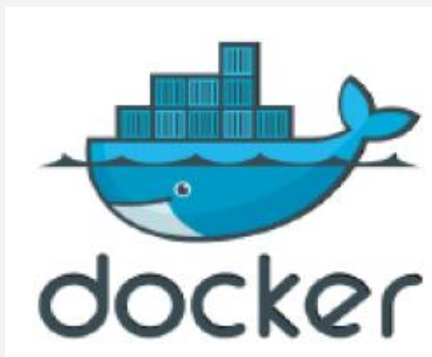
如果有...

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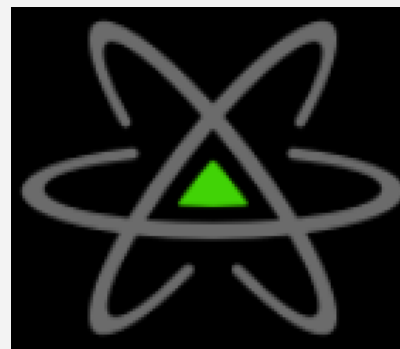
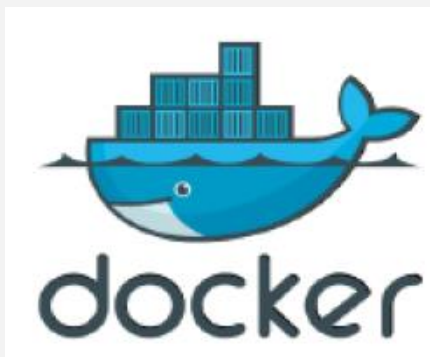
如果有...

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如果有...

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Atomic...

Application

Libraries

SELinux

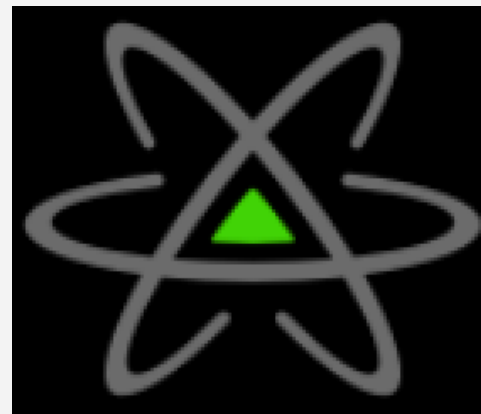
Logging

Network

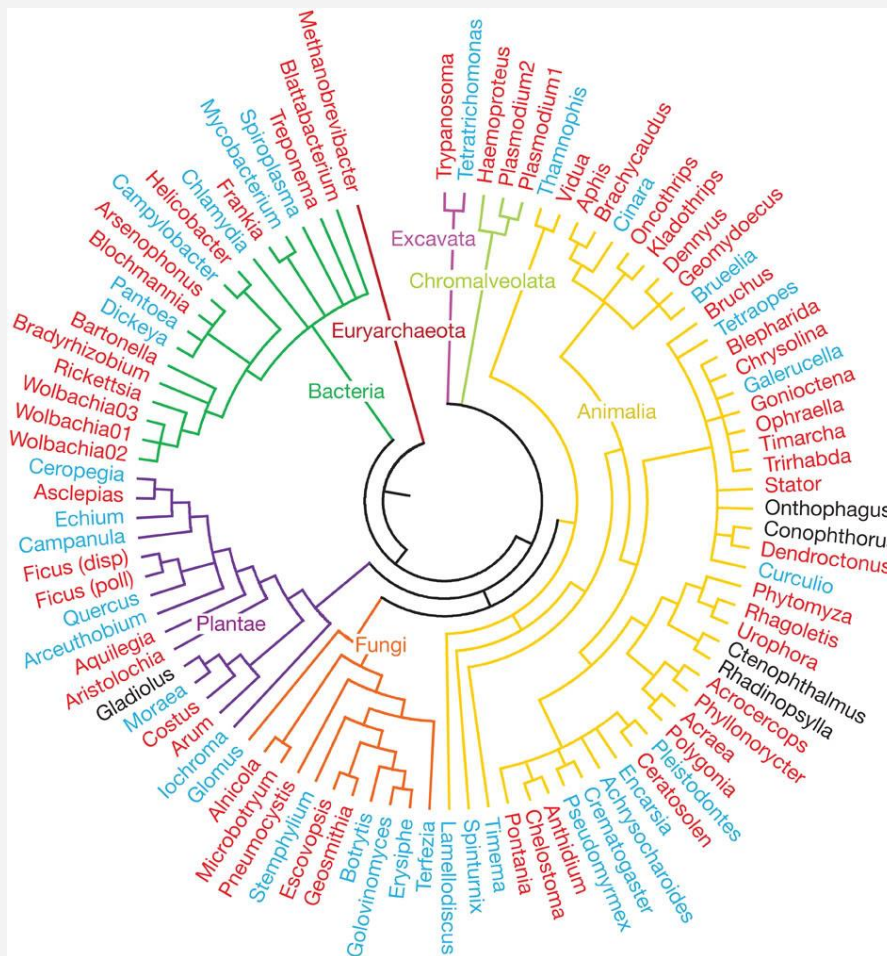
Docker + Host

`rpm-ostree upgrade`

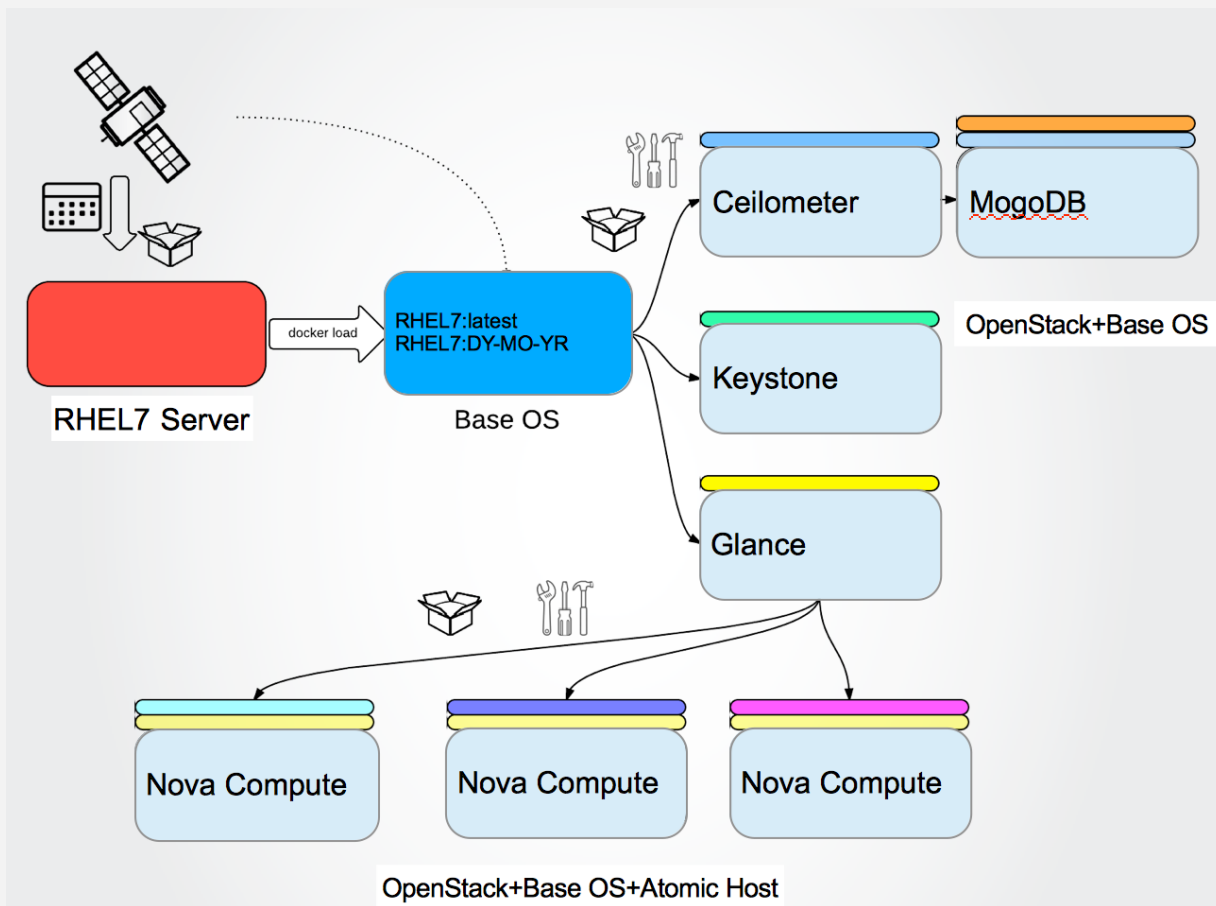
`rpm-ostree rollback`



家谱--Docker tags



Atomic 家谱



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Factory

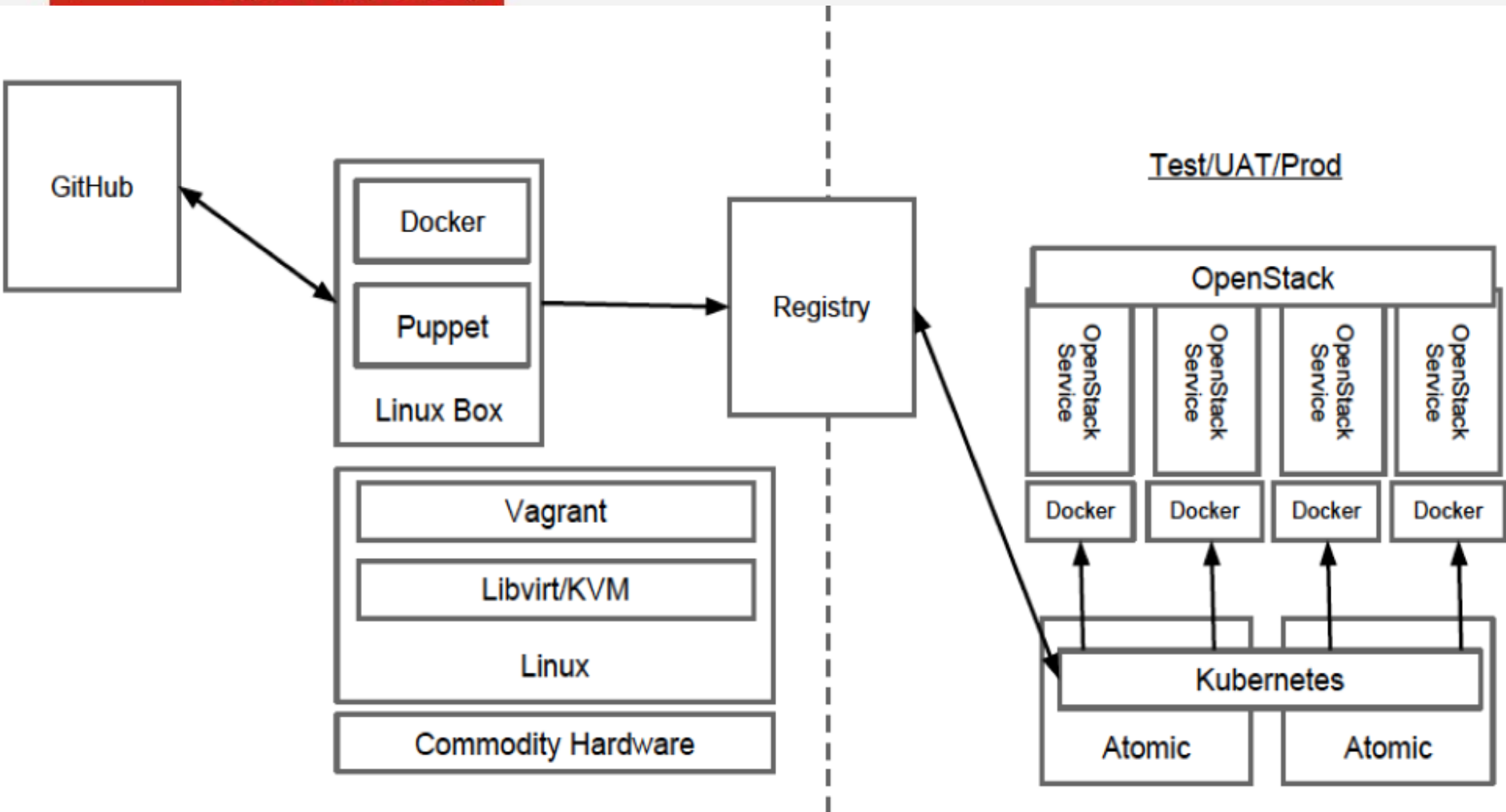


CI/CD for OpenStack Infrastructure -- Tony Li



Redhat

从开发到运维



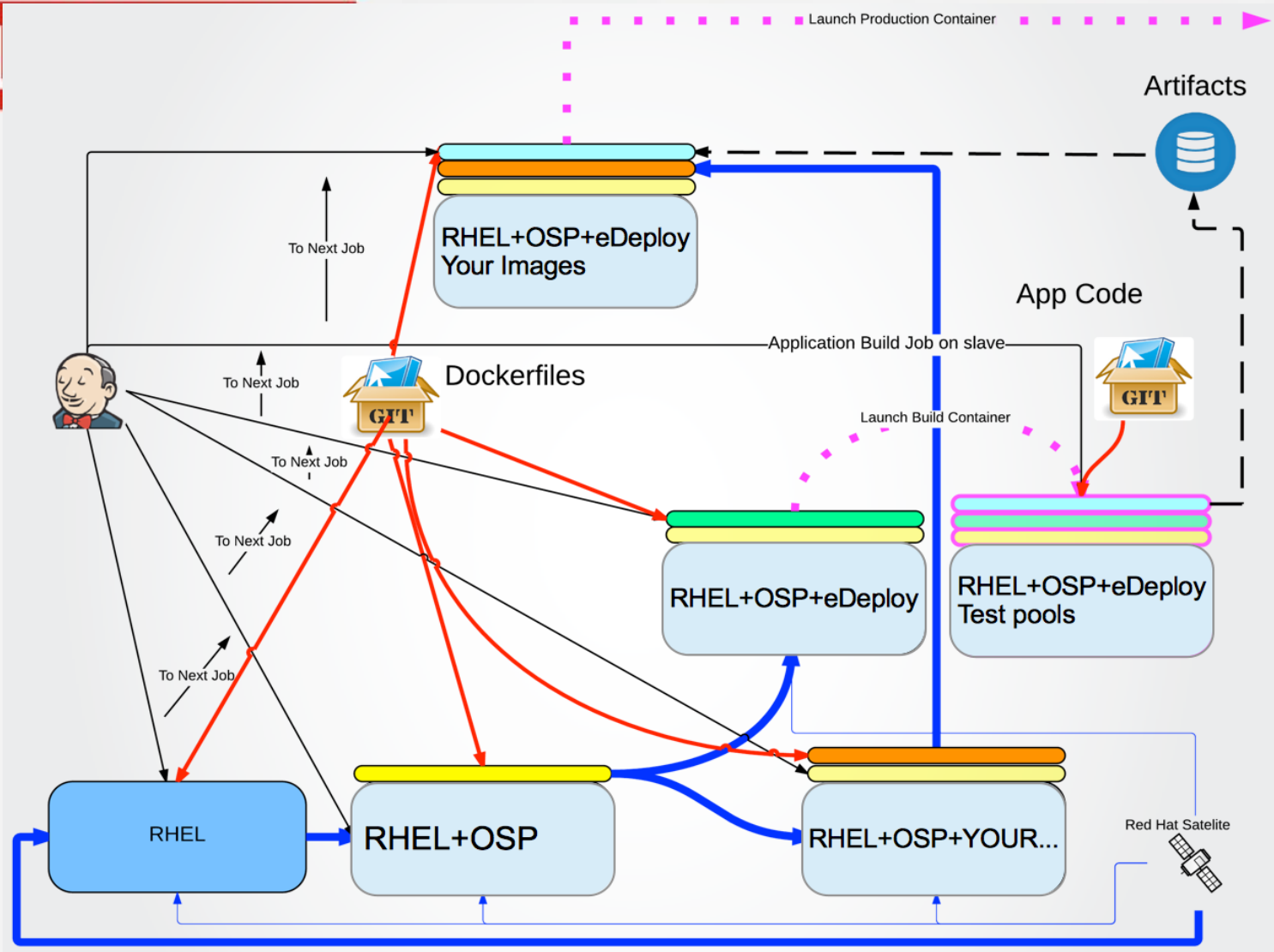
Test at multiple levels



Of course I “tested” the app before production!

- 在生成过程中单元测试您的应用程序
- 规划自动化集成测试：启动容器的整个应用程序堆栈和驱动容器运行测试
- 减少人为干预尽可能因为它会成为瓶颈

OpenStack



容器的订阅管理

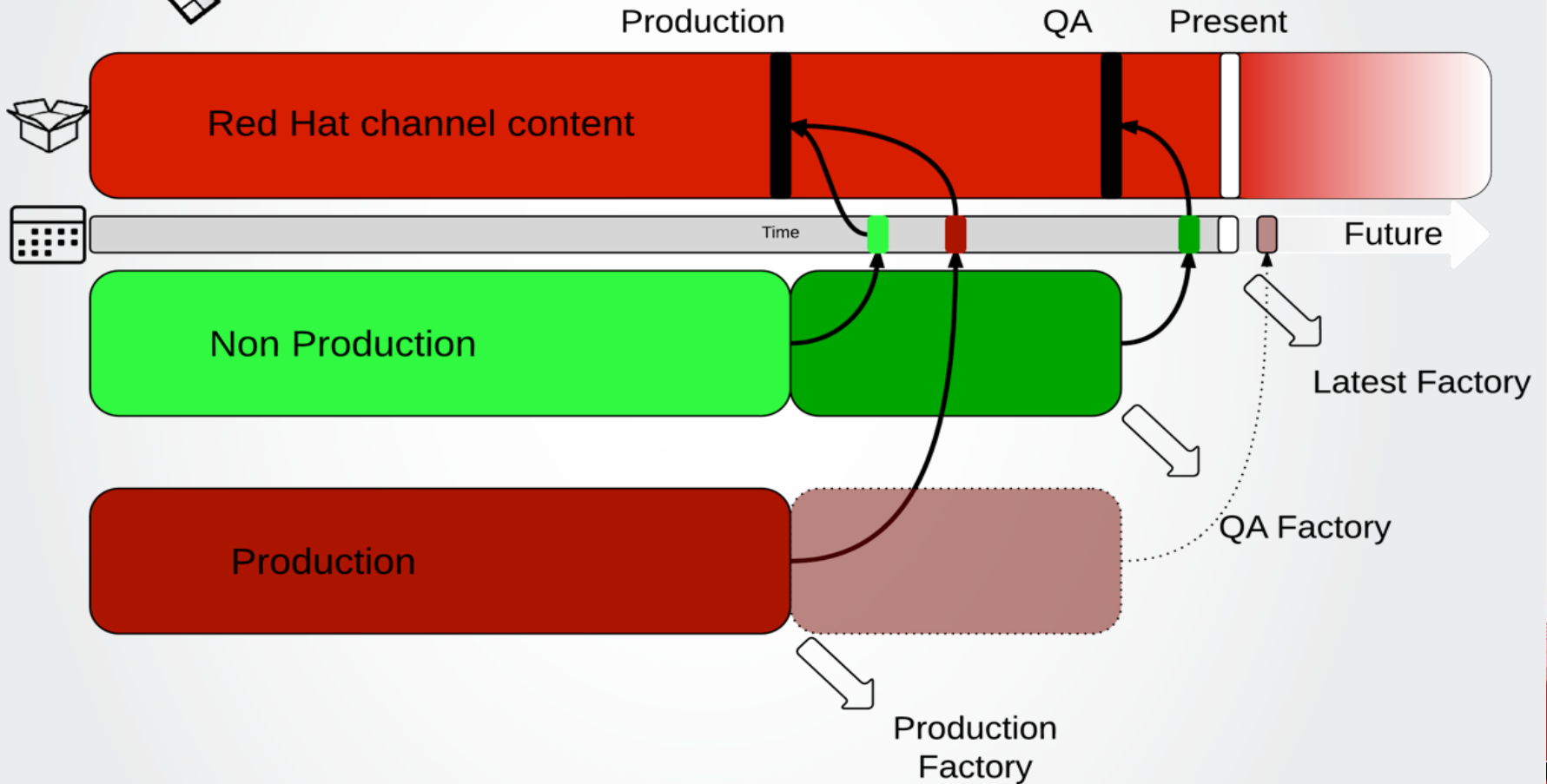
- 使用**RHEL7**订阅模式，如果你想创建**Docker**镜像或容器，必须合适的注册和资格在您构建它们的主机上。
- 如果您使用的**Red Hat registry.access.redhat.com****Docker**镜像，当您使用容器内**yum**来添加或升级包，容器会自动访问到**RHEL7**主机可用的存储库。
- 容器可以得到适当的库**RPM**包，以便**RHEL6**镜像和**RHEL7**镜像可以在同一**RHEL7**容器主机上共存。

Satellite 6 for containers

1. In Satellite 6 create a composite view that includes your:
 - RHEL6 content view
 - RHEL7 content view
2. Create an activation key that enables only the RHEL7 repos for the RHEL7 container host can be used for provisioning.
3. Containers can now access RHEL6 repos from your Satellite 6 server.
Take advantage of content management capabilities
4. Library matches latest content from Red Hat Network
5. Lifecycle environments can match your needs for managed changes
 - QA
 - Next
 - PRD

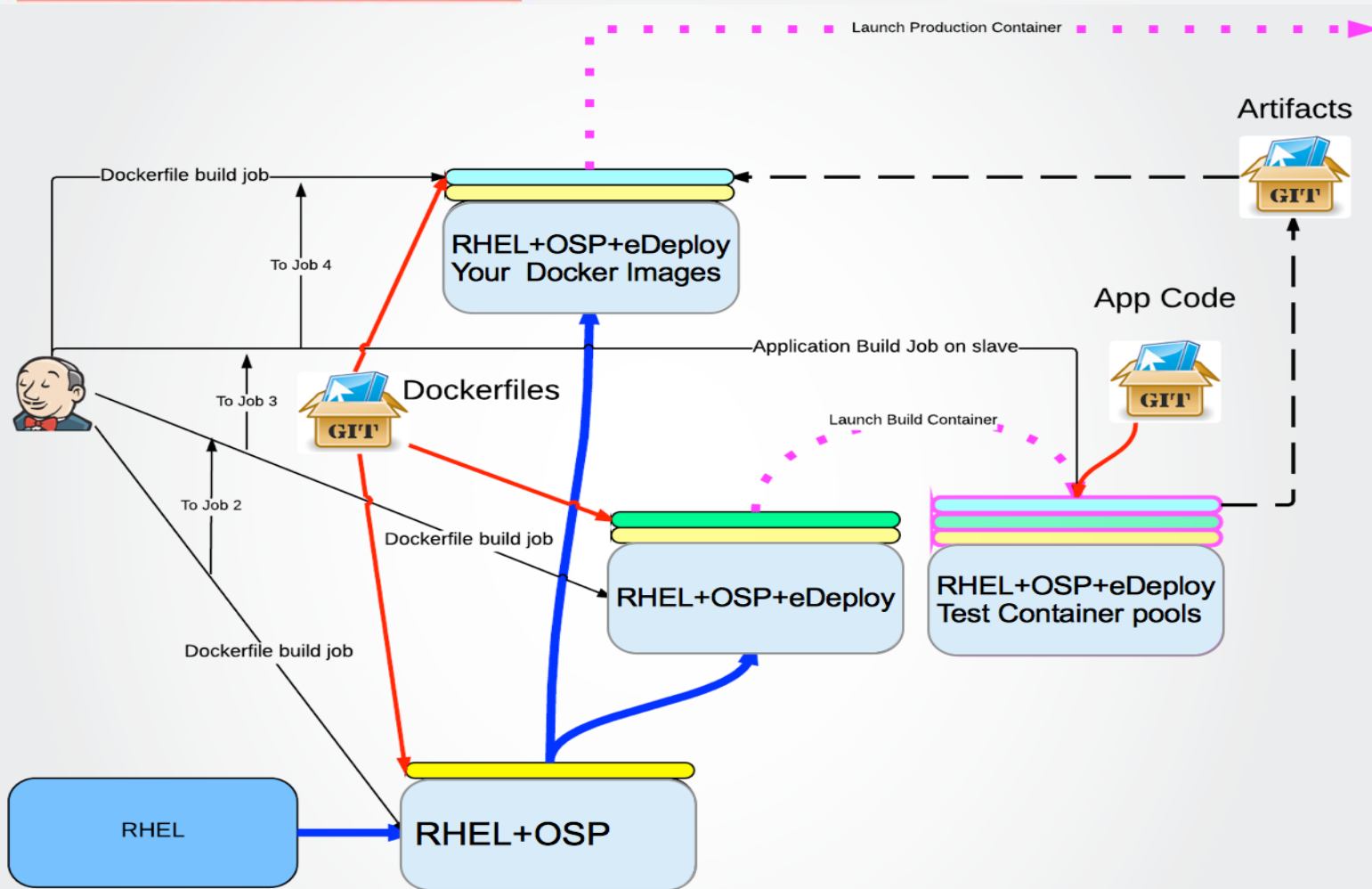


Red Hat Satellite - Manage input to factory lines

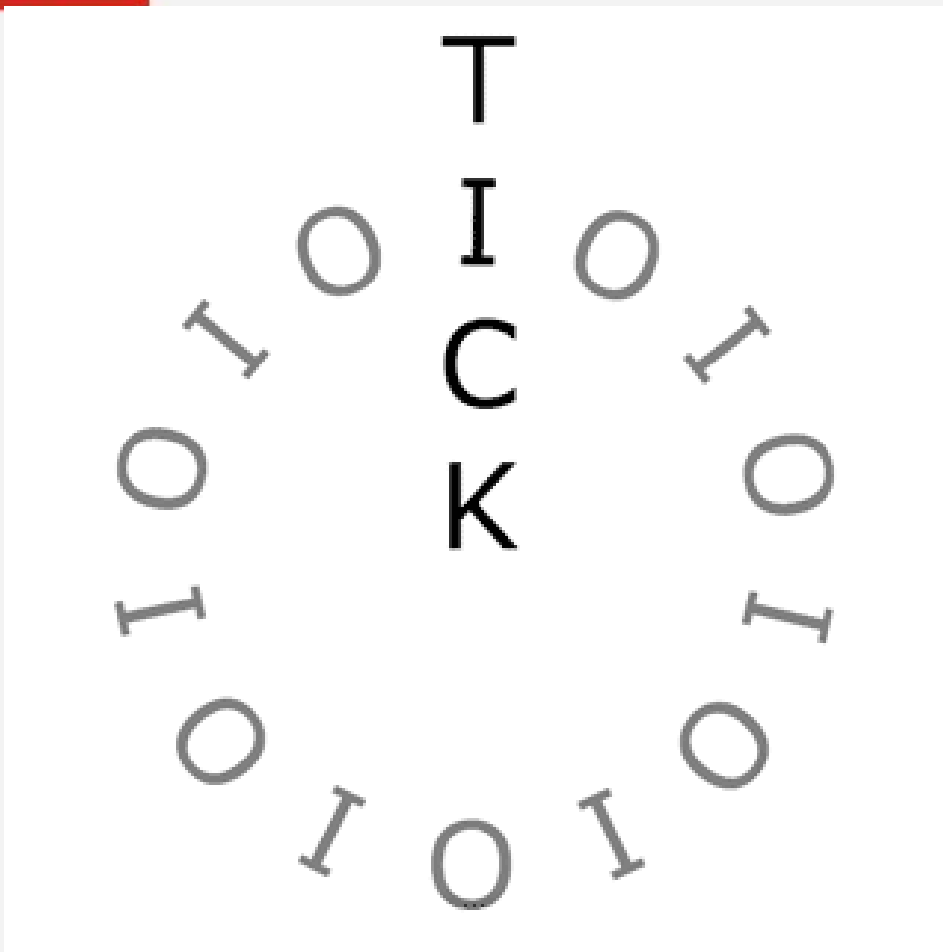


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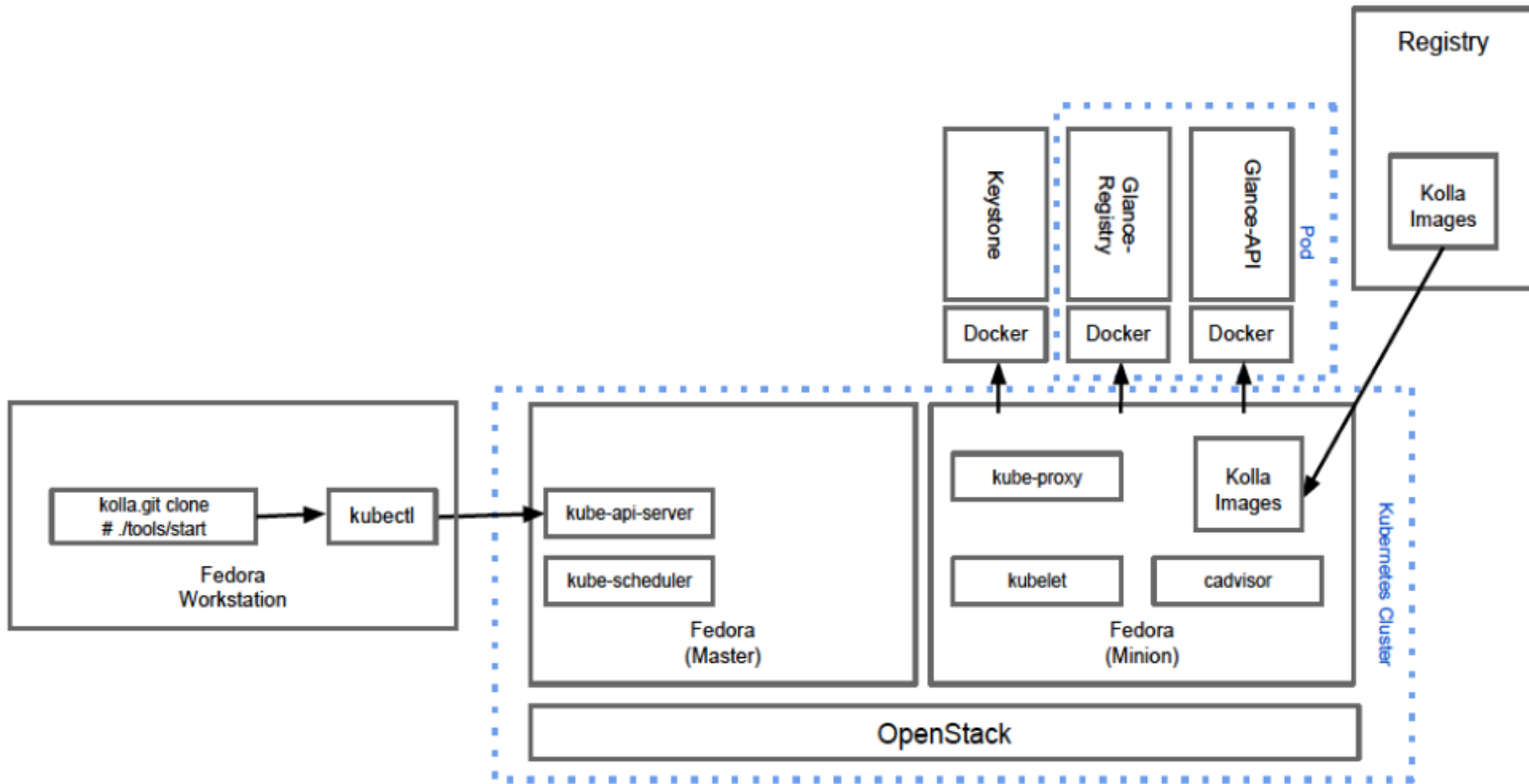
补丁周期变成了割接



其他好处

1. **Backup/Restore or DR ready**
 - Jenkins server
 - Satellite 6
 - Source code repositories
 - Databases and systems of record
2. **Rebuild instead of Restore reduces backup load and time to recovery**
 - Platform containers
 - Build containers
 - Application containers
3. **Rapid security response**
 - Cherry pick critical security patch and promote content in Satellite 6 for an emergency patch to rebuild the production line
4. **Always ready to deploy**
 - Latest builds available for OS, OpenStack Platform, Application changes
 - Take images anywhere to develop or deploy, developer laptop or cloud provider

Try it ...



Communities

<https://github.com/docker/docker>

<https://github.com/GoogleCloudPlatform/kubernetes>

<https://github.com/projectatomic/>

<https://github.com/openshift/origin-server>

<https://blueprints.launchpad.net/kolla/>

<https://github.com/larsks/heat-kubernetes>

https://access.redhat.com/downloads/content/271/ver=/rhel---7/7.1.0/x86_64/product-downloads

谢谢

