



# 开源社区净室构建方案

openEuler/openGauss/MindSpore开源社区

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# 目录

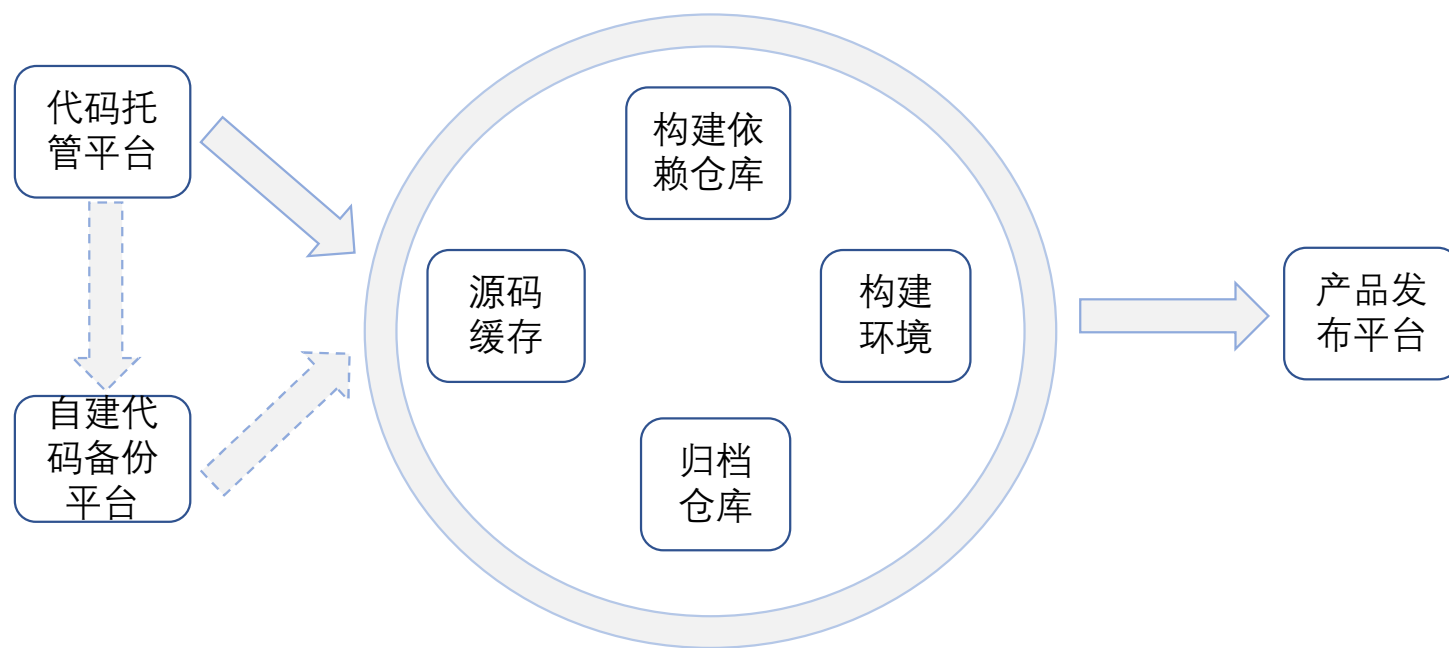


1. 社区构建目标与评价标准
2. openEuler社区构建流程
3. openEuler封闭构建方案
4. MindSpore openGauss封闭构建方案

# 社区构建目标与评价标准



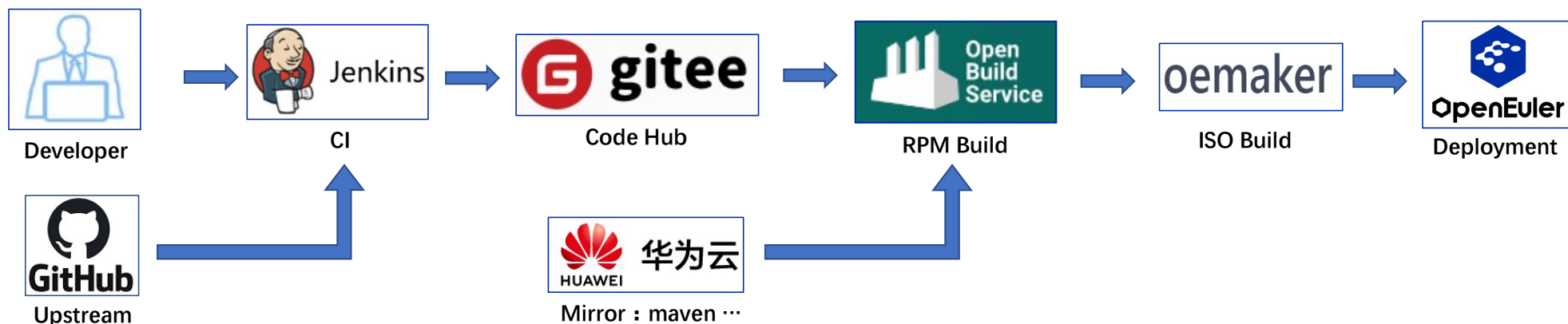
社区构建目标：依赖清晰，环境隔离，净室构建，自成一体



遗留：  
环境被攻击，被人为  
为登录篡改；  
不能登录；  
自动化不能人登录  
Devcloud-vpc服务

评价标准：不依赖外部网络环境可以完整构建产品包

# openEuler社区构建流程



## 1. RPM包构建：

基于openSUSE OBS系统，构建依赖可以主动配置可以被动隔离；  
( 外部断网、失败包整改，如何提供自动化工具解决自包含 )

## 2. ISO构建：

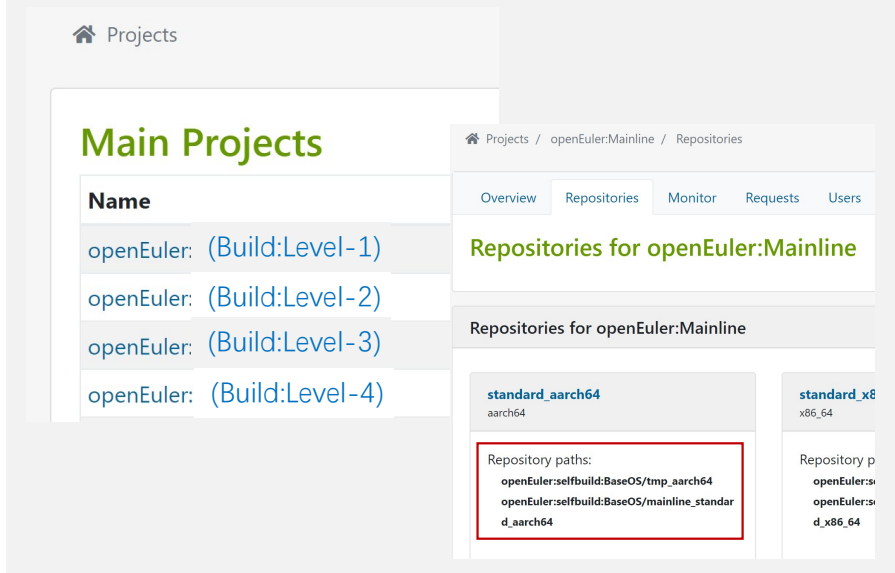
基于openEuler自建Oemaker工具，主要依靠被动隔离；( 已经容器中完成 )

# openEuler单包封闭构建方案



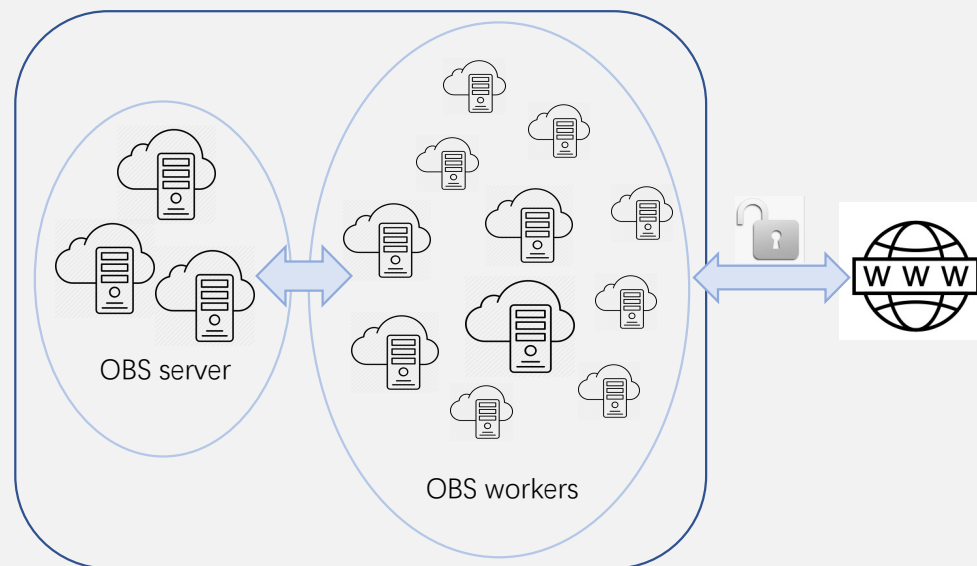
## 主动与被动结合：内分层，外隔离

1. OBS内部根据包依赖关系分层构建
2. 每一层逐级依赖，明确构建依赖关系
3. OBS工程配置依赖仓库源限制



确定分层规则：  
包依赖分层—网络管理  
分层对应

1. 构建资源网络统一管理
2. 网络安全组白名单控制

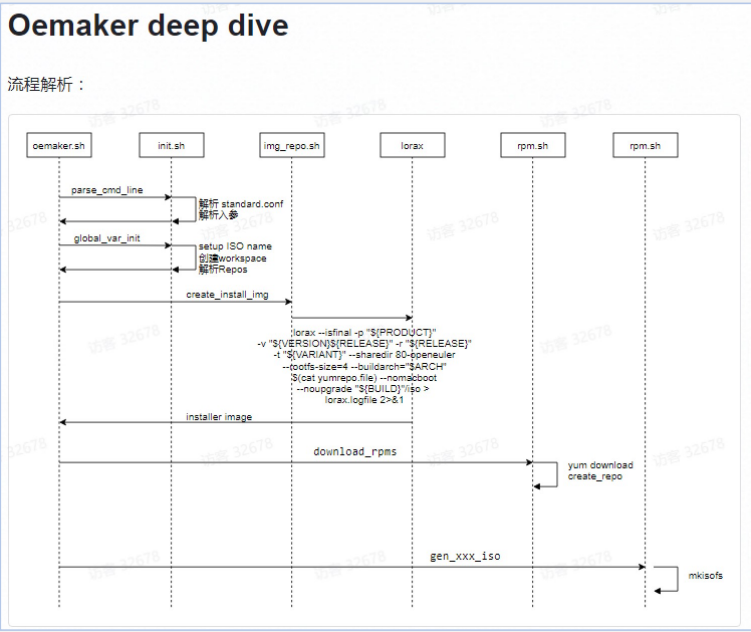


# openEuler打包ISO封闭构建方案



打包环境无污染，取包来源为封闭构建单包

- 1. 打包组件可控
- 2. 打包流程自定义



- 1. 取包来源控制输入，仅依赖封闭构建单包
- 2. Make ISO环境封闭(容器环境)

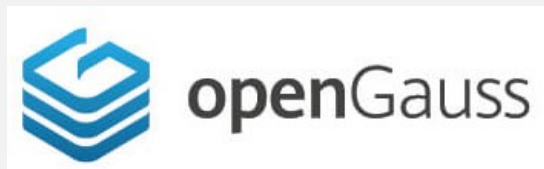
Stage Logs (make_version)
Building openEuler-OS-build » openEuler-build-aarch64-03-get_epol_rpms (self time 6min 53s)
Building openEuler-OS-build » openEuler-build-x86_64-03-get_epol_rpms (self time 2min 58s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_iso (self time 17min 4s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_iso (self time 14min 11s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_debug_everything (self time 26min 37s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_debug_everything (self time 19min 56s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_docker_image (self time 3min 32s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_docker_image (self time 2min 26s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_iso_everything (self time 29min 18s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_iso_everything (self time 13min 39s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_iso_everything (self time 27min 35s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_hmi (self time 7min 31s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_hmi (self time 6min 37s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_netinst_iso (self time 13min 1s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_netinst_iso (self time 10min 45s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_microvm_image (self time 14min 34s)
Building openEuler-OS-build » openEuler-build-x86_64-03-make_microvm_image (self time 9min 57s)
Building openEuler-OS-build » openEuler-build-aarch64-03-make_raspi_image (self time 9min 41s)

# MindSpore/openGauss封闭构建方案



## 缓存依赖包，控制构建依赖源

1. openGauss目前有对外依赖包
2. 构建环境中缓存依赖包
3. 构建依赖指向缓存地址
4. 隔离构建环境网络



长期方案：基于devcloud保证  
封闭方案，短期可以按照我们的  
方案落地

1. 构建环境Docker镜像存储
2. 本地编译缓存机制
3. 构建过程无依赖下载



openGauss推动容器构建

