

The logo for Red Hat Summit, featuring the words "RED HAT" in a smaller font above "SUMMIT" in a larger, bold font, all contained within a white speech bubble shape.

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GPL IN THE WORLD OF CONTAINERS

David Levine
Vice President and Assistant General Counsel

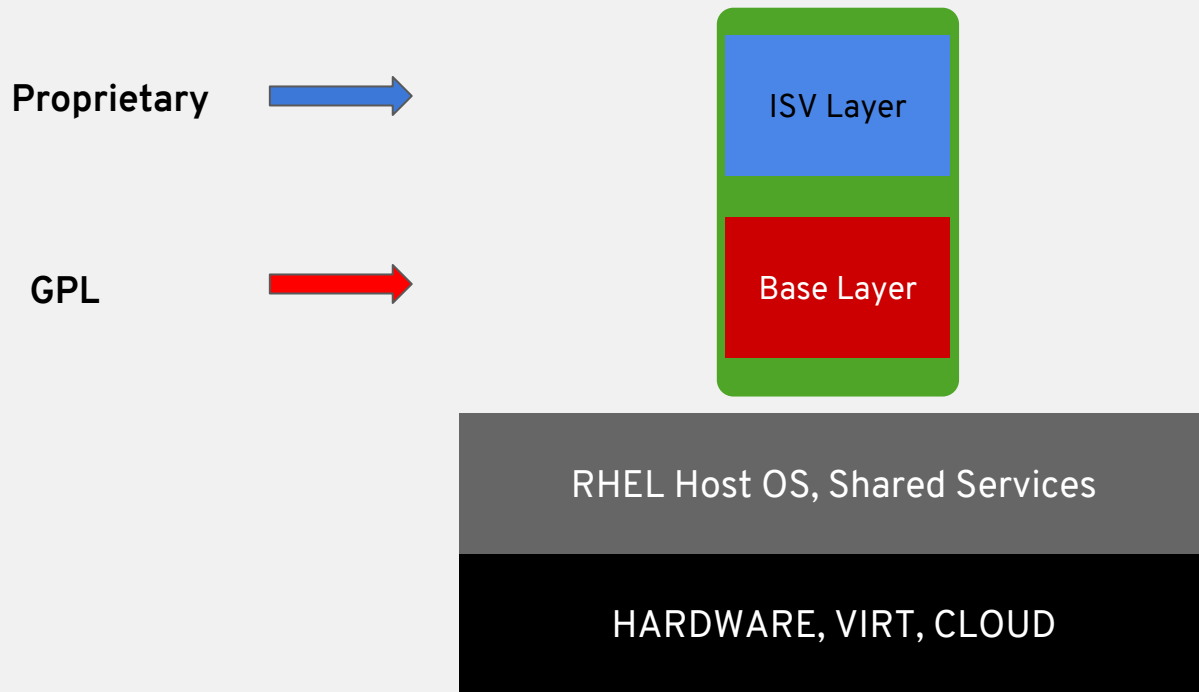
Richard Fontana
Senior Commercial Counsel
May 4, 2017

GPL and Copyleft Basics

Copyleft Scope: Single Container Image

Does the combination of GPL and non-GPL software in a single container image create a single program or a derivative work and, therefore, implicate GPL copyleft?

Copyright Scope: Single Container Image



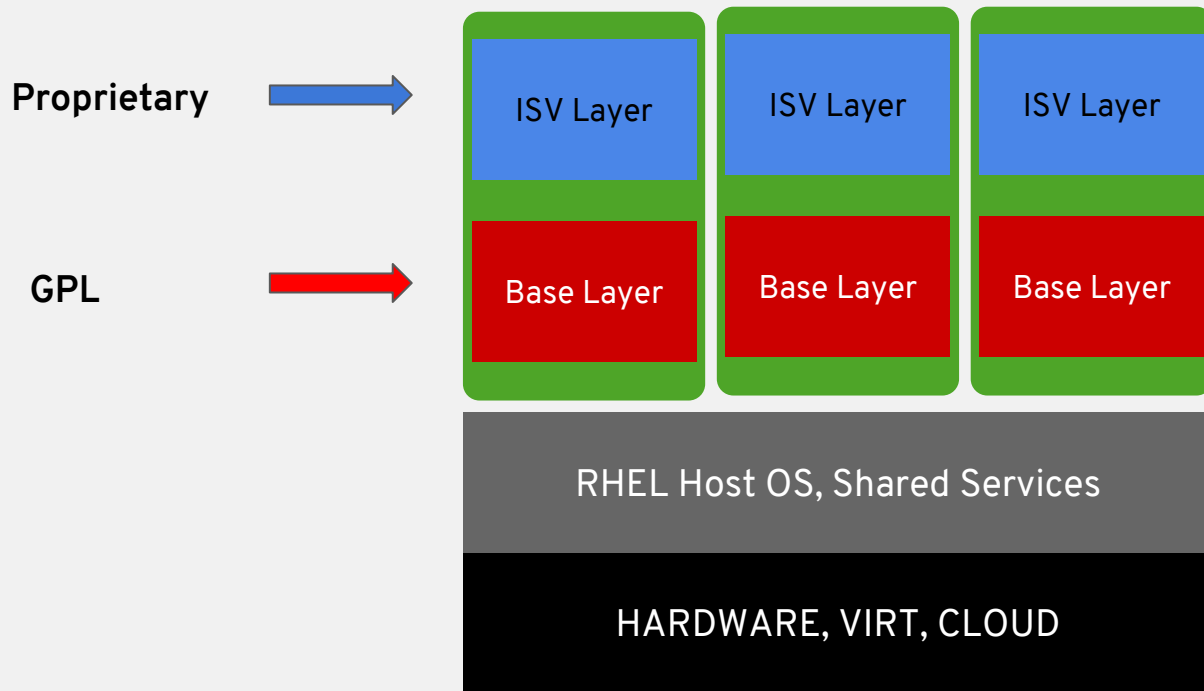
Copyleft Scope: Single Container Image

- Base layers of images contain GPL-licensed code
- Upper layers contain proprietary ISV app
- GPLv2: mere aggregation clause; GPLv3 "Aggregate"
- Assembly of software into container images does not raise any special GPL copyleft scope issue
 - Container image format uses established packaging (tar format)
 - Share characteristics with RPMs, VM images
 - No basis for analyzing container images differently from past Linux stack distribution media for purposes of GPL copyleft scope

Copyleft Scope: Multiple Containers

Can software in one container fall within GPL copyleft scope of software in another container?

Copyleft Scope: Multiple Containers



Copyleft Scope: Multiple Containers

- While decomposition into multiple containers is not itself a guarantee, containerization makes technical boundaries between components more apparent and provides a strong indication of 'separateness'.
 - Software in separate containers runs in separate processes, and a process boundary is an indicator of GPL copyleft scope.
 - FSF contrasts:
 - software linked and running in a shared address space (in same copyleft scope)
 - communicating over Unix pipes (separate from a copyleft perspective)
 - Multi-container applications: more like pipes - separate



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