OSADL: Safety Critical Linux Working Group
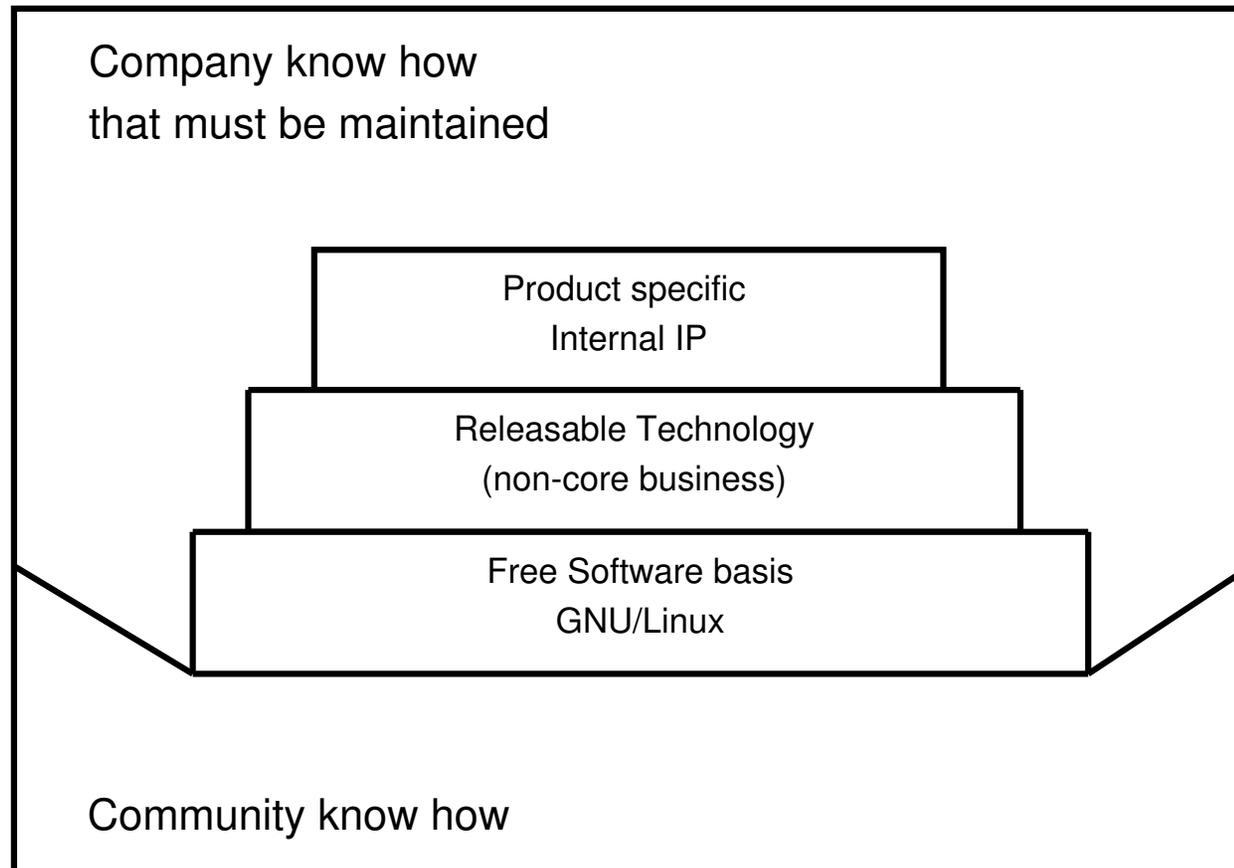
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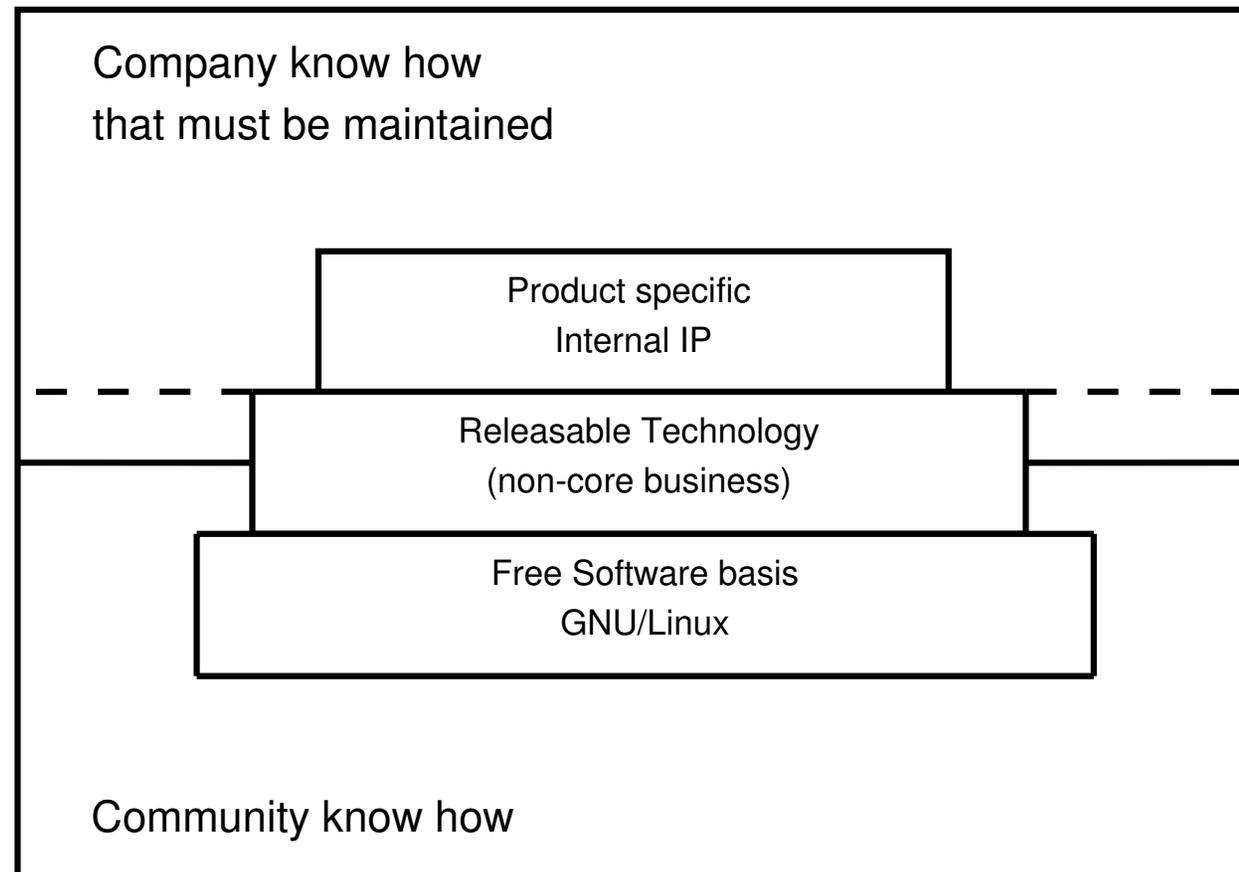
OSS in commercial environment

- Grab and Run

- Integrate the community

- Integrate into the community

The goal is to focus on your core business as a service based on generic FLOSS components
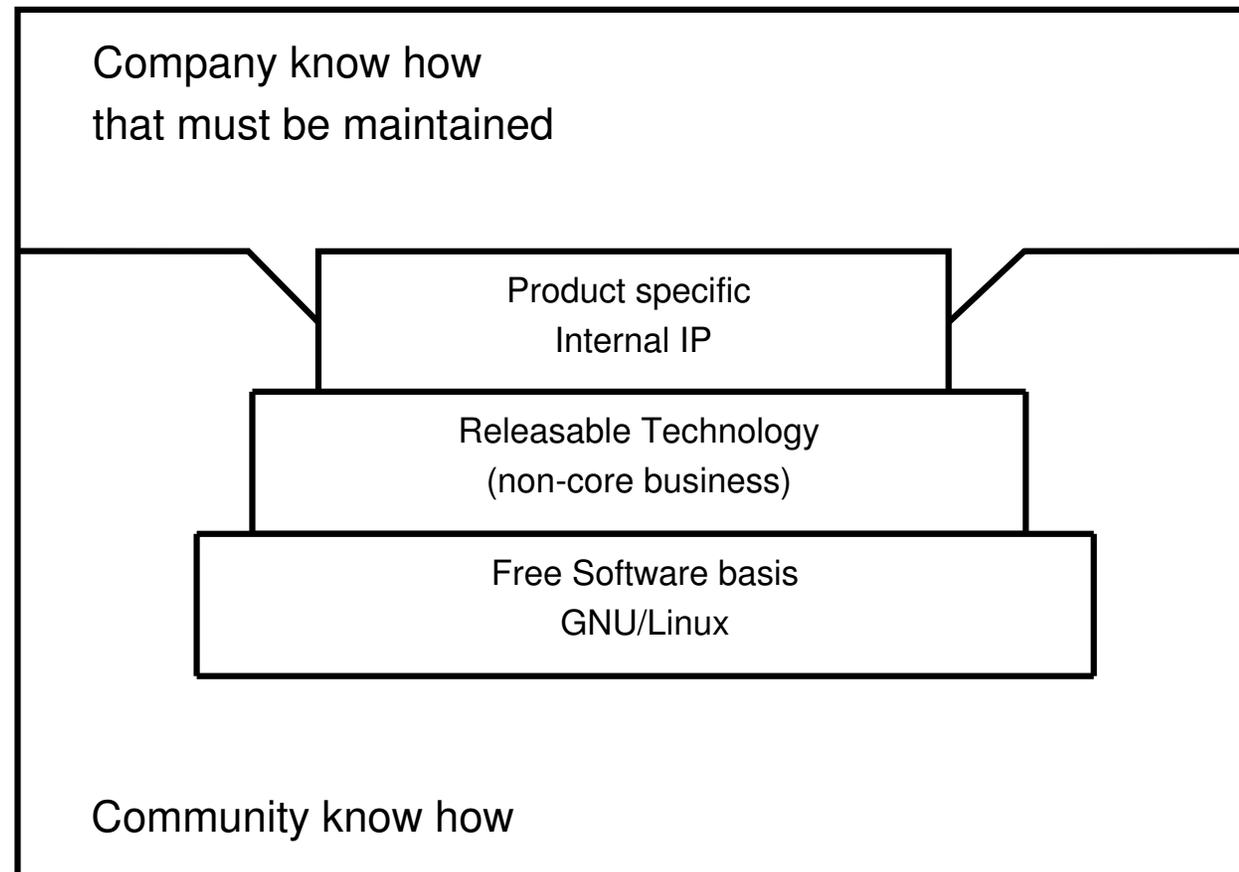
Grab and run

Company know how
that must be maintained

Product specific
Internal IP

Releasable Technology
(non-core business)

Free Software basis
GNU/Linux

Community know how

Integrate the community: product model

Company know how
that must be maintained

Product specific
Internal IP

Releasable Technology
(non-core business)

Free Software basis
GNU/Linux

Community know how

Integrate into the community: service model

Company know how
that must be maintained

Product specific
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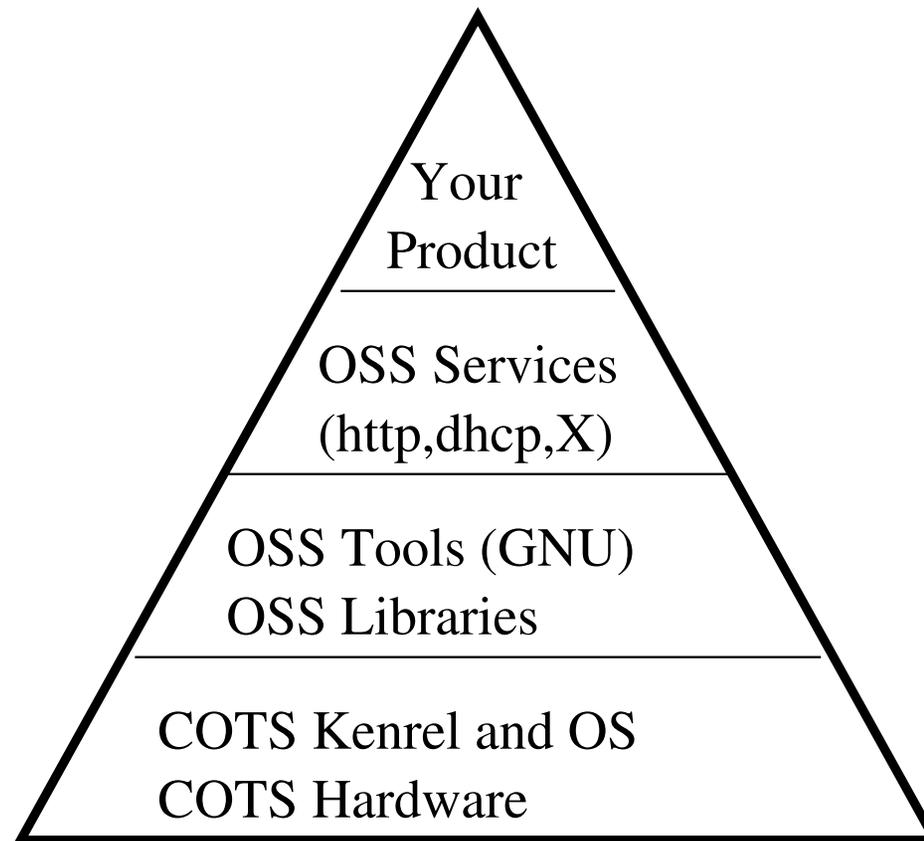
Free Software basis
GNU/Linux

Community know how

Safety related systems - product / component relation

- Closed systems are primarily a cost problem

- Little value in maintaining generic components

- Flexibility of closed systems too low

- What is your product ??

- FLOSS allows you to focus on your product

The system is not the product - its the specific functionality based on generic services and components only.

What is your product

Your
Product

OSS Services
(http,dhcp,X)

OSS Tools (GNU)
OSS Libraries

COTS Kenrel and OS
COTS Hardware

Safety on top of generic components

- Safety builds on common paradigms

- FLOSS in safety related systems is of a complexity too large for most companies as individual entities

- Joining forces in the safety-related industries is a requirement to make the FLOSS resources available

- Standards driven by industry need adaptation (61508 new release March 2008 ?)

OSADL is offering the "Safety Critical Linux Working Group" to join forces on FLOSS in safety.

Safety Critical Linux Working Group

- Kickoff meeting Nov 2, RTLWS9, Linz Austria

- Companies: Siemens, Thales, Wago, IBM

- Academic: Technical University Vienna, Lanzhou University

- http://www.osadl.org/Safety-Critical-Linux.safety-critical-linux.0.html

Goals of the Working Group

- set the context of deploying GNU/Linux in industrial safety critical systems

- provide answers to the critical questions

- give guidance to implementing GNU/Linux based solutions

- encourage building of a community around these efforts

- integrate into the environment provided by OSADL

Initial set of deliverables

- Core technology documentation

- Kernel Selection Guide

- OS Distribution assessment and selection guide)s=

- Tool assessment and selection guides along with usage guides

- Material for in-house and OSADL provided training on GNU/Linux
  in safety critical systems.

OSADL Safety Critical Linux Working Group

get involved ! $<$**safetyosadl.org**$>$