

Are you DevOps Ready?

The comprehensive guide



Model developed by Redpill Linpro to help customers adopt to DevOps.

Model intended to cover every aspect of a successful implementation of DevOps.

Redpill Linpro will be able to assist in every phase of implementation of a DevOps led strategy.

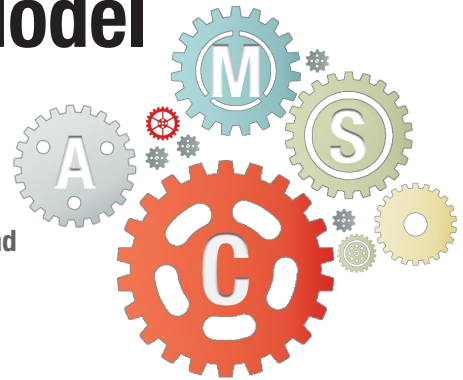
Redpill Linpro can provide cloud based tools and services to support your move to DevOps.

Redpill Linpro can also assume the full responsibility for the implementation of a DevOps led strategy.

Objective is to make organisations DevOps ready.

DevOps Ready Model

The digitalisation will require a decreased "Time-to-market" for new ideas. IT turnaround on deliveries will have to go from months to days and if IT can't adopt, business will look for other solutions.



How to make DevOps work?

- Focus is on process from "Idea to deploy"
- Remove silos and establish joint efficient process to meet the challenges
- Base it on the concepts of "release early – release often" and "fail fast"

Common issues with lacking a DevOps model

- Technical debt
 - Ops caught up in managing upgrades and maintenance
 - Dev focused on new functionalities/features
- "Silo thinking"
 - Separate budgets, responsibilities and targets
 - Long time for problem solving/incident management
- "Escape to the cloud" effect
 - Business turning to cloud solutions outside of IT to solve their problems.
- "Fire fighting"
 - Recent studies show that sysadmins use 50%*) less time remediating security issues

8 benefits from using a DevOps model

- Decrease time from idea to deploy!
- Self service capabilities for Developers and Business
- Remove silos – align objectives and establish efficient processes
- Decrease incident management time
- Capability to manage parallel dev and prod environments
- Release budget and capacity for innovation rather than maintenance!
- Portability across distribution environments
- Minimize down time through increased transparency, configuration management and compliance

*) 2016 State of DevOps report

DevOps CAMS Model



DevOps CAMS Model - Culture

To establish a DevOps style of work requires a new culture within the entire organisation.

20 steps to take to establish a DevOps Culture

- 1 Instead of optimising within their silos, they need to work together to establish joint targets
- 2 Teams need to be cross-function and embrace an agile methodology with joint cooperation on continuous improvement
- 3 They will require modern and efficient tooling to support agile cooperation
- 4 Management support/follow up will be vital
- 5 Establish joint target/strategy
- 6 Ensure management support and budget
- 7 "Think big – act small – scale fast"
- 8 Establish good examples!
- 9 Start with small joint team of Dev and Ops for a specific project.
- 10 Continuously evaluate and improve
- 11 Choose and test tooling to support agility and self service
- 12 Establish a methodology through the good example!
- 13 Market the good example!
- 14 Ensure continued management support
- 15 Establish "DevOps" teams and allocate them physically together if possible
- 16 Create incentives and targets for cooperation
- 17 Project Manager – Facilitator – Not leader/manager
- 18 Train on the established tooling
- 19 Establish KPIs on important processes
- 20 Establish culture of sharing (refer to Sharing for more input)



DevOps CAMS Model - Automation

To support DevOps – you will need the right tooling. Possibly you will have some of the tools already, but an inventory is a good start

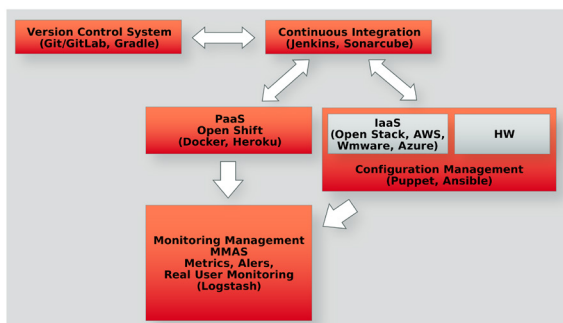
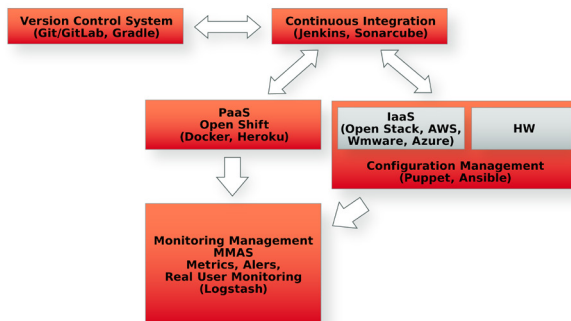
- Open Source tools are considered leaders
- We can provide reference architecture to speed up the process.
- The architecture (or parts of it) can be deployed on premise or hosted in a cloud solution (see below reference architecture)

Below you will find some of the leading tooling to support DevOps:

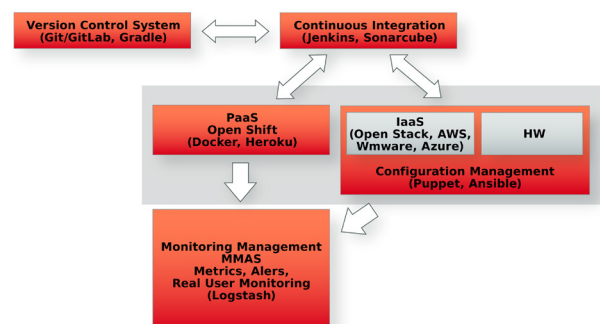
- Git/Gitlab – Version control
- Jenkins – Continuous integration
- Sonarcube – Code Quality check
- Puppet/Ansible – Configuration Management
- Openshift – Container Management
- Logstash – Metrics and log analysis
- Cloud platforms – OpenStack, AWS, Azure, VMware, Redpill Linpro Cloud



Reference architecture



Reference architecture - 100% "clouded" (Redpill Linpro Cloud offer)

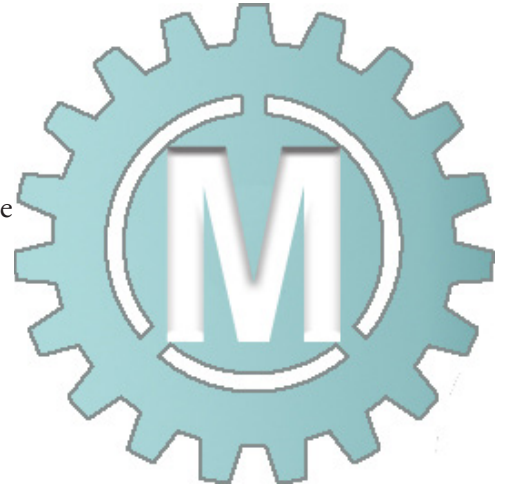


Reference architecture - "partly clouded"

DevOps CAMS Model - Measurement

To judge if your DevOps initiative is performing in accordance with the strategy you need metrics and KPIs. These should not only be used as one-point measures on status, but also as basis for continuous improvements.

The metrics should be open and transparent to everyone to enhance cooperation and the notion of a joint target. Ideal is to measure improvements in processes like "from idea to deploy" or "from incident to fix". A good start is measuring technical achievements or processes like "from commit to deploy". Tooling can be used to achieve this automatically.



4 measurement tips

- All metrics should be made available for everyone from CIO to DevOps staff.
- Targets should be well established with all involved parties
- Ideal would be to include Business in the metrics and measure overall targets including time from initial idea to deploy – which is the overall object to decrease
- Targets that are not fulfilled should be followed up.

DevOps CAMS Model - Sharing

To make your DevOps initiative successful it is important to establish a culture of sharing. Information needs to be made available to everyone involved and beyond. All targets should be cross organisational borders

Sharing creates foundation for continuous improvement

Knowledge is power, but in a DevOps setting it is important that information is made available – the point is process improvement. Information shared is fed back into processes and culture.



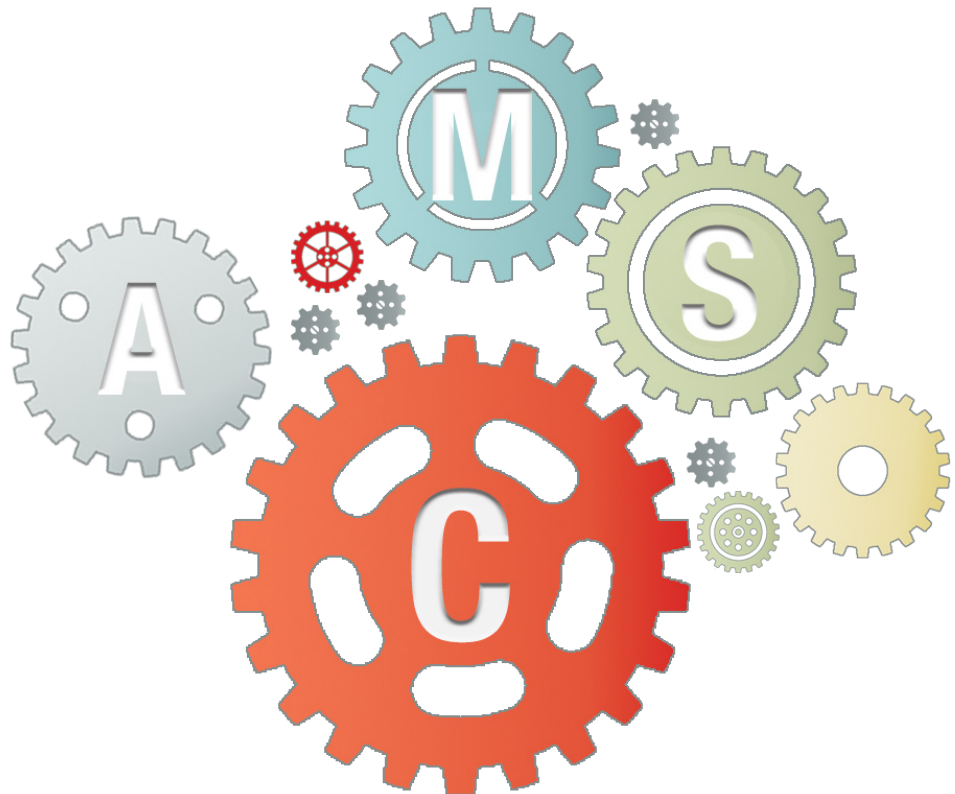
Summary

"DevOps CAMS" is our model to help organisations adapt to the DevOps model to improve lead time from "Idea to Deployment". We can take full responsibility for implementing your DevOps initiative through our "DevOps CAMS" model or just help out with specific steps in the process.

We provide

- IaaS and PaaS - DevOps ready
- Version control, CI tools, full automation and monitoring to support the customers DevOps
- And also the Ops part of DevOps with agile Operations

We can help out initially, but also do reviews if you have already started your project and guide you into DevOps!



7 reasons why you should choose Redpill Linpro as your DevOps guide:

- Long experience of agile operations
- Core competencies in infrastructure and development
- Experience from agile development methodologies
- Long experience from leading Open Source tooling to support agility, automation and self service
- Involved in several customer projects to establish DevOps processes, routines and methodology.
- Training delivery and workshops on DevOps cross Scandinavia
- Packaged experience and tooling into a model to support organisations that want to go DevOps!

For more information

Sales Denmark +47 77 99 32 12

Sales Norway +47 21 54 41 00

Sales Sweden +46 8 20 95 00