

Deploying our MuleSoft integration platform on OpenShift

Misho Kmetovski, Infrastructure architect, section DevOps platform
Nadia Dadoun, Integration architect, section Integration
Lotta Råberg, Head of section DevOps platform

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"Sometimes it's good not to have too much money"



Presenters today



Misho Kmetovski
Infrastructure architect
Team DevOps



Nadia Dadoun
Integration architect
Team System Integration



Lotta Råberg
Head of section DevOps
platform

Agenda

Arbetsförmedlingen's IT business

Beginning of migration project

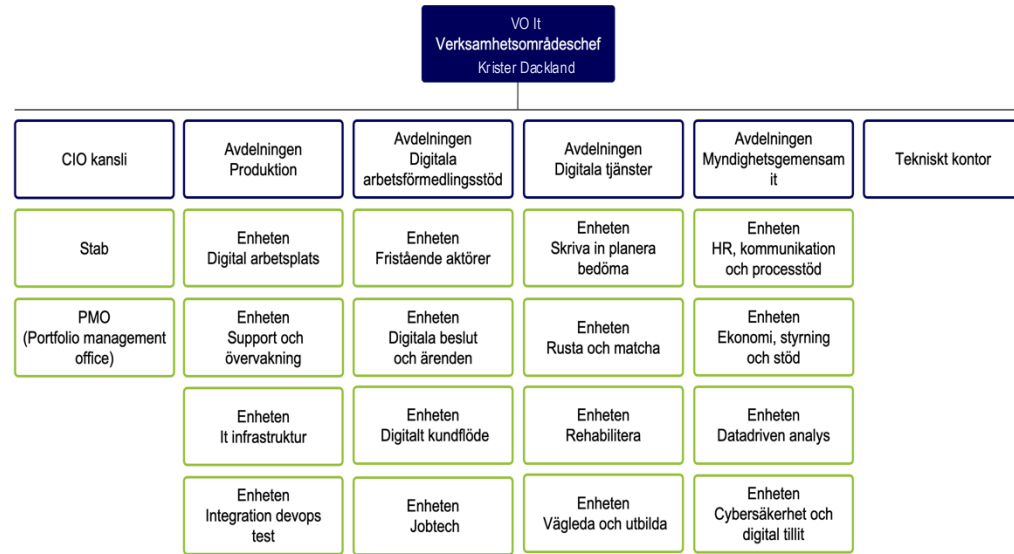
How to reach our goal?

Key takeaways

Q&A

Arbetsförmedlingen's IT business – in short

- 1 100 employees within IT
- 11 000 employees within AF
- 60 development teams
- 20 platform enablement teams
- 200 self-built apps on OpenShift On-Prem and 1 COTS platform
- Why AF? [Jobba med it på Arbetsförmedlingen](#)
- Digitalization of AF continues despite reduced funding



Beginning of migration project



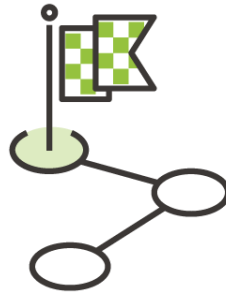
Integration platform at Arbetsförmedlingen

- Anypoint Runtime Fabric (RTF) as integration platform
 - ~ 350 API:s
 - Ongoing Mule migration project
- August 2022
 - MuleSoft informs Gravity support EOL in September 2024
- September 2022
 - MuleSoft supports RTF on OpenShift
 - Initiated dialog with the DevOps team

Container platform at Arbetsförmedlingen

- Red Hat OpenShift as container platform
- Hosting ~200 self-built applications
- Mature level of virtualization for better utilization of the hardware
- Licensing cost of ~4,7 million SEK / year based on the OpenShift Platform Plus license

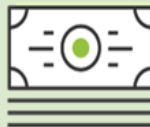
Goal: Migrate Anypoint RTF to OpenShift



How to reach our goal?



Which architecture is suitable for us?

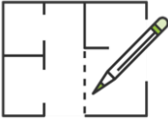


How to be cost-effective?

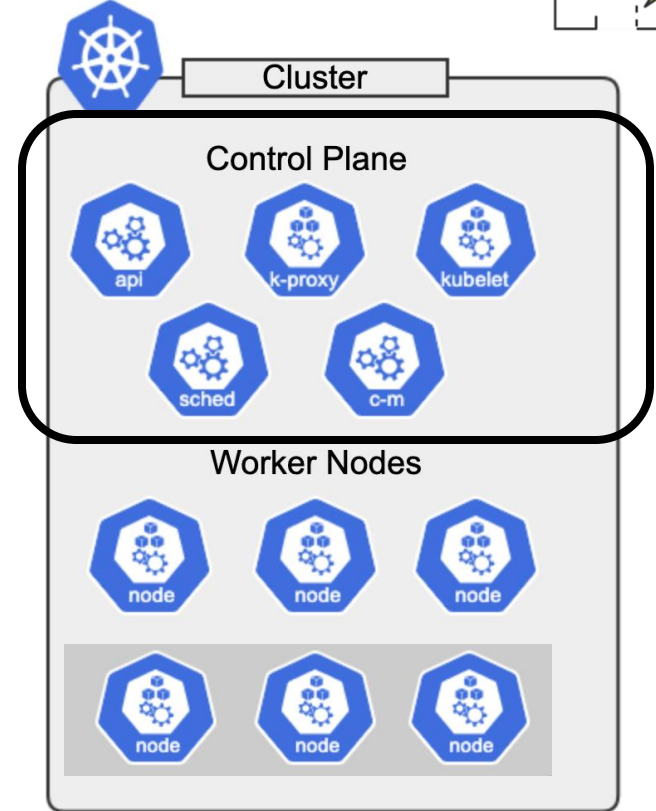


What changes in responsibilities between involved teams?

Use the same cluster

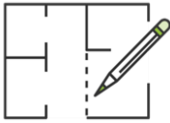


- Create dedicated worker nodes on the current clusters
- Utilize the same control plane
- Significantly increase the size of the cluster
- Good level of separation
- Administration overhead

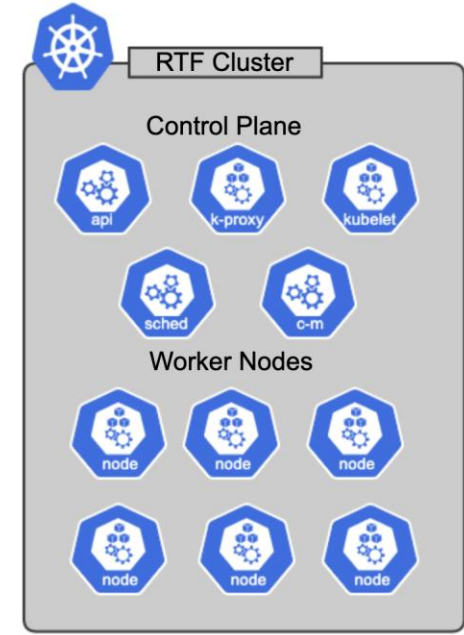
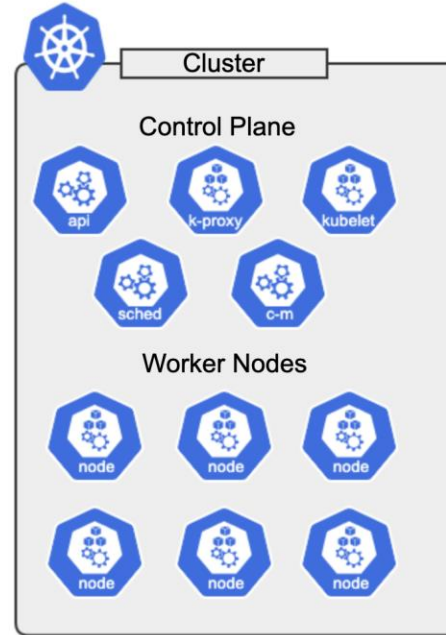


RTF's Worker Nodes

Create a new cluster



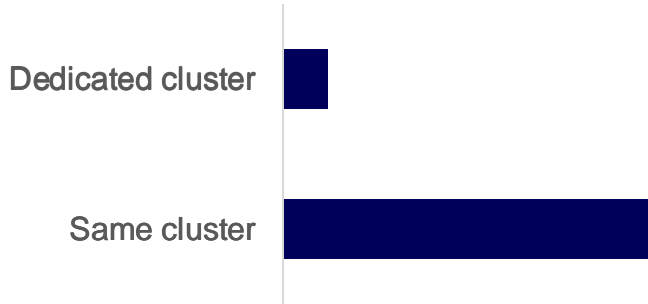
- Dedicated cluster
- No impact on the current infrastructure
- High level of separation
- Special configuration
- Administration overhead



License Cost

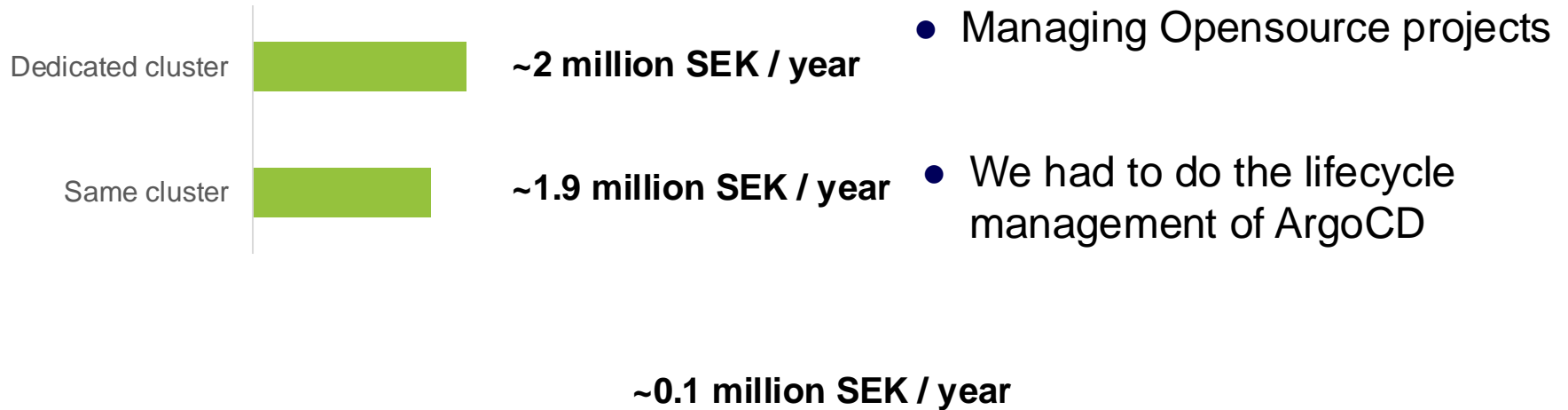


Minimum Viable Licensing



- OpenShift Platform Plus
 - ~3 million SEK / year
- OpenShift Platform
 - ~1.6 million SEK / year
- OpenShift Kubernetes Engine
 - ~0.38 million SEK / year

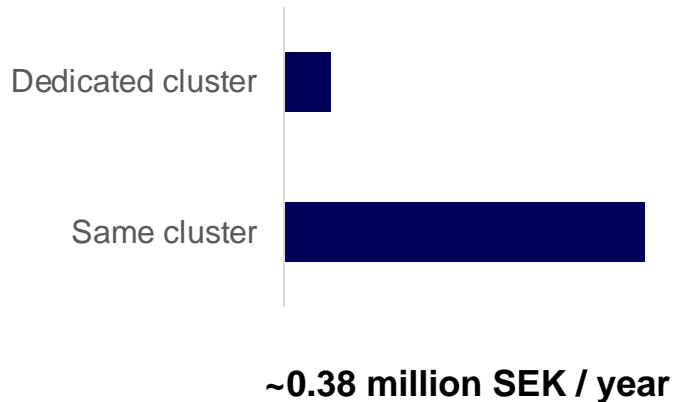
Operational Cost



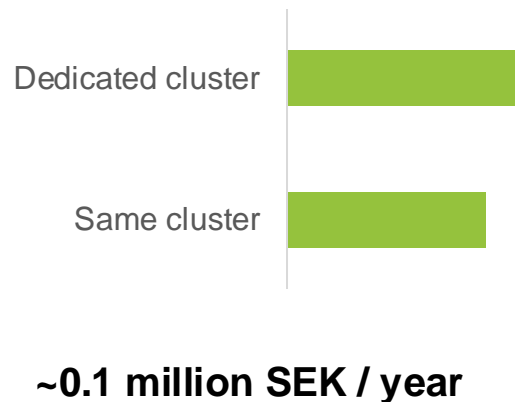
Total Cost of Ownership



License cost

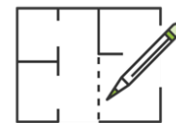


Operational cost



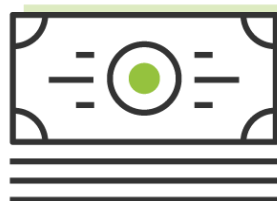
~0.48 million SEK / year

Chosen Solution

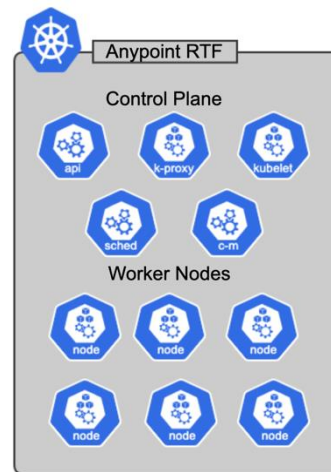


Architecture

TCO



Dedicated cluster



OpenShift OKE

Collaboration and shared responsibilities between teams



- Team System Integration managed and maintained old solution.
- Team DevOps wasn't involved.



- Team DevOps responsible for the lifecycle management of the cluster.
- Shared responsibilities between teams regarding the forecasting of resource requirements.

Key takeaways

Key takeaways



Begin as early as possible



Minimum Viable Licensing



Find the architecture that satisfies your needs



Collaboration between teams

Q&A

