

How to Yaw a Tanker

Swedish Tax Agency 2018-09-05



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Swedish Tax mission is to

- Contribute to financing the public sector in Sweden
- Contribute to a well functioning society for citizens, trade and industry
- Counteract on criminality





- Tax
- Population registry
- Marriage registry
- Estate inventory
- ID-card

SKV also delivers resources in development and operations for:



- 10 318 employees
- IT approx 800 empl

2014-2015



Stable production

SKV said great but slow, and expensive in putting out new features

Developers weren't pleased with there working environment 30% said OK

Traditional technique and architecture with custom frameworks making it difficult to change





Together with others we digitalize Sweden

) x 297,2 mm



Citizens, trade and industry experience simple, intuitive and personalized services

The opportunity that digitalization offers is used to prevent errors and to counteract on criminality





Startsida Räkna ut lön e	fter skatt	Dras rätt skatt	Vad blir min skatt	Juridisk			
Läs om du kan använda tjänste	en här			~			
Räkna ut lön efter	skatt						
1. Dina uppgifter 2. Dir	lön						
Full i dina una ciftor							
Fyll i dina uppgifter							
* Obligatoriska uppgifter				r och	ödsbon)		
Inkomstår		2018		ngar.	ekniska krav m.m.		
Födelseår *		Födelseår	ÅÅÅÅ		<u>ekniska krav m.m.</u> ärför fylla i <u>personliga uppgfter,</u> : me 19-01-01.		
Kommun *	?	Vālj en kommun 🗸			Avgift till trossamfund <u>Svenska kyrkan</u>	Övriga trossamfund	
					%	%	
			Sjukpenning, akassa, m.m.				
			Inkomstrelaterad sjuk- och aktivitets	ersättning			
			Lön m.m. (inte sjukpenning) <u>understi</u>	<u>iande 1 000 kr</u>			
			Kostnadsersättningar.	_			
			Almän pension och tjänstepension m Varav sjuk- och aktivitetsersättning				
			Privat pension och livränta				
			Andra inkomster som inte är pension Varav ersättningar från vinstandels	652524635567455555			
			Inkomster, t.ex. hobby, som du själv		Läs i hjälptexten.		
			Varav sjukpenning				
			Vissa inkomster från fåmansföretag 1 Andrag – Tigart				

Effects

- Faster value to customer through greater speed in development!
- Higher availability
- Attractive employer



G2- and Tjänsteutveckling projects

The two projects G2 – PaaS generation 2 and Tjänsteutvecklingsprojektet creates conditions for Skatteverket to meet the demands from our Agency and surrounding environment has on future digital services, both in accessibility and high development pace.

Partly through usage of new **technique and modern architecture** and a platform that incorporates standards, and partly through new ways of working – **DevOps**.

The projects has a MVP approach both when it comes to technology and features.

All the software are deployed On-premises.







Enterprise Kubernetes and more

Red Hat[®] OpenShift is a <u>container</u> application platform that brings <u>Docker</u> and <u>Kubernetes</u> to the enterprise. Regardless of your applications architecture, OpenShift lets you easily and quickly build, develop, and deploy in nearly any infrastructure, public or private.



Container Strategy

- We use containers to deploy stateless Micro services.
- We do not use containers as an virtualisation technique to deploy any software.
- All integrations to/from redhat OCP should go via the enterprise service bus (ESB).
- DevOps is used for Micro Services development.
- Traditional application server architecture are still in use side by side with OCP.



Software layers

• Responsibility is moving from **Operations** to **Development** and thereby closer to the end user.





Challenges OCP monitoring and operations

- How do you map pods, project and containers in OCP to a traditional definition of system/application.
- Mapping internal OCP monitoring to the existing operations centre.
- Responsibility for software deployment
- What to do when the out off business hours when you run DevOps.







Culture – when the organization is built upon experts but really needs people who is willing to learn new stuff like new ways of working, new areas

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Culture – we need to change the way we recruit

Culture – we need to appreciate that our coworkers now are really hot in the market

OCP creates massive opportunities for innovation through new techniques but... it still takes a large amount of time to put the new technique in a production stable state,

explain that to a developer!





understanding of Door





Proud announcement

We installed Open Shift Container Platform, developed and put the first application "born-in-the private cloud" in production in 6 months!

It would not have been possible if Dev and Ops hadn't greatly cooperated

