

The background of the slide is a photograph of a bright blue sky filled with numerous white, fluffy clouds of varying sizes and shapes. The clouds are scattered across the frame, with some appearing more dense and others more wispy. The overall lighting is bright, suggesting a clear day.

# **Virtualized research architecture**

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# National strategy

- Cloud services should always be considered
- And chosen where they are cheapest and most expedient
- Information security must be catered for

**UNINETT**



# Cloud technology and services

- The Cloud Computing concept refers to physical components, software, services, business models and delivery models.
- It represents a paradigm shift for production, distribution and use of IT services



\* SaaS - Software as a Service, dvs. programvare som en tjeneste

- Example: Infrastructure as a Service (IaaS) - buy datacentre functionality over the Internet instead of investing locally.

# Why choose cloud services?

- Very fast to set up
- No cost to set up a small instance
- Easy scaling
- IaaS: Flexibility
- ...

You can  
***do it yourself !!!***

Now.

# Sector suppliers

UH-sky, <https://www.uninett.no/sky>

- Safespring
- UH-laaS



## Azure

IaaS / EU, Rammeavtale  
/ [Microsoft](#)



## Printix

IaaS / EU, Brukes i  
offentlig sektor /  
[Printix.net ApS](#)



## Safespring Compute

IaaS / EU,  
Databehandleravtale,  
Rammeavtale /  
[Safespring](#)



## UH-laaS

IaaS / Norge / [UiB](#)

# UH-sky: OpenStack IaaS

- Log in on web GUI
  - Get the API password
- Install and set up CLI
  - Make a machine
  - Log in on the machine
  - Attach storage
  - Make a new machine and move the storage to that machine
- Play around
  - E.g. install a graphical software package
  - Or install a web server
  - Or install your workflow tools

My lesson notes are at

<https://arnsteio.github.io/UH-IaaS-mini-workshop/>

# Why not use cloud services?

- Compliance issues. Data protection
- Legacy systems
- SaaS / PaaS: inflexibility
- Uncertain costs
- Skill set