The Nordic IT Law Conference 2010

Cloud Computing

Drafting cloud computing contracts: Pitfalls and challenges

Disposition

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3. **What does the service comprise legally?**
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6. **The need to adapt the IT contract to the new business model**
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1. What is cloud computing?

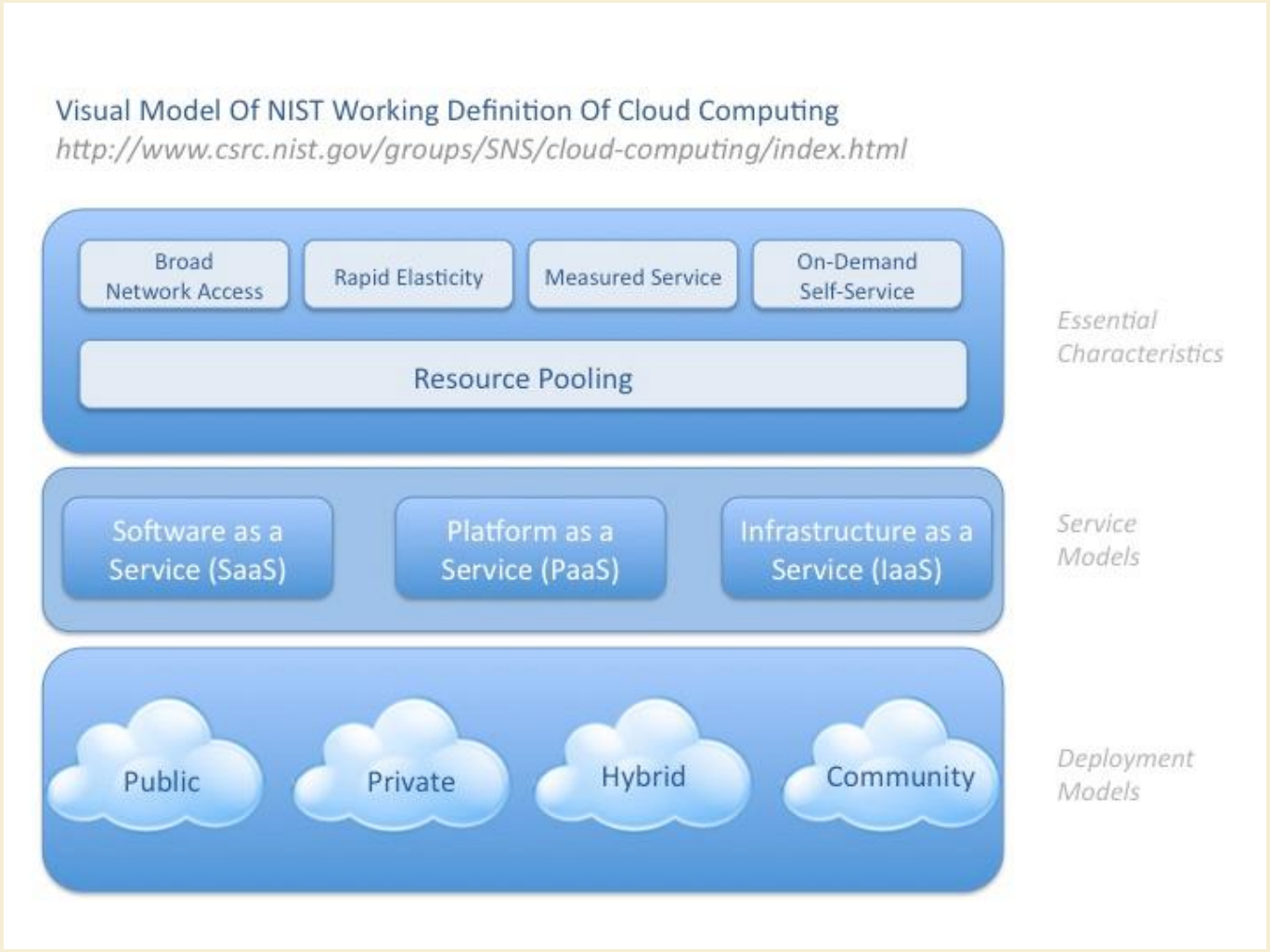
- Cloud computing can be regarded as a general term for an IT solution which is offered as a service over the internet instead of the customer owing and buying the solution.
- New method for delivery of IT resources – not a new technology.
- The characteristics of a cloud service is that it is normally:
  - accessed via the internet
  - paid by need and use
  - adjusted up and down as needed and
  - Delivered from a platform of pooled computer resources

1. What is cloud computing?

Main groups:

- ”Infrastructure as a Service” (IaaS): Network, computer power or storage, processing and other fundamental computing ressources, which the user can use for running software such as operating systems and applications.
- ”Platform as a Service” (PaaS): Webbased platform containing a number of basic services, and where the user can deploy its own applications.
- ”Software as a Service” (SaaS): Programmes wich can be reached by the internet without installation on the user’s own computer. Updates etc. are made centrally.
- Link: http://cloudsecurityalliance.org/csaguide.pdf

1. What is cloud computing?



1. What is cloud computing?

- IaaS is the basic layer: computer power, storage, network service enabling running of any software.
- PaaS is the middle layer: tools, API, integration and middleware enabling the customer to place software directly on the platform established in the service provider's or a third party's infrastructure.
- SaaS is the upper layer: applications placed by the service provider on the service provider's platform which in turn has been established on the service provider's or a third party's platform.
- *"Cloud computing is about gracefully losing control while maintaining accountability even if the operational responsibility falls upon one or more third parties"* (Source: CSA)

2. Advantages and disadvantages of cloud computing

Advantages:

- Low – or no – start-up costs
- Payment according to need/use
- Great flexibility in relation to fast up- and downscaling of resource needs
- Short term of agreements
- Possibility of ”thin clients”
- Possibility of *full service* with maintenance and SLA in an overall service

2. Advantages and disadvantages of cloud computing

Advantages (continued):

- Possibility of access to supplier's economies of scale by use of server capacity
- Easier (and cheaper) access to new software versions
- Other common outsourcing advantages (security for uptime, availability, contingency arrangements, reduced costs of investment in own data centre)
- Environmental advantages – considerable CO2 reductions when servers are aggregated in large data centres, or when servers are grouped virtually to a joint server capacity (enables a far more efficient utilisation)

2. Advantages and disadvantages of cloud computing

Disadvantages:

- Financial trade-off is necessary –it might be more expensive over time than an in-house solution ("Opex vs Capex")
- Lack of control on operation and development
- Vulnerability in relation to the solution being delivered and operated by (normally) one supplier – Lock in
- Costs of data traffic to and from the solution
- Risks in connection with security in the communication with the solution (encryption of traffic and access/the "triple-A problem)
- Dependence on being online

2. Advantages and disadvantages of cloud computing

Disadvantages (continued):

- data security and return of data upon termination
- Limitations in relation to customisations to standard software
- integration with oter applications and systems
- Coordination of co-operation among the suppliers (e.g. maintenance (AM) and operation)
- Lack of standards can create problems at relocation of data to a new supplier or at the interaction between different ”clouds”
- Applicable law and compliance with statutory laws

3. What does the service comprise legally?

- Combined service consisting of:
  i. access to a solution with a given functionality,
  ii. a given availability of the solution, and
  iii. access to or treatment of data
- As a point of departure, it is the customer who bears the risk that the service can be received
- It is in principle not necessary that all services are delivered by the same supplier, but…
- too many different suppliers increase the complexity.

4. General legal risks

- How to ensure that the customer always has access to its data (availability)?
- How to ensure that nobody else than the customer and entitled third parties have access to the data (security)?
- In which country is the solution provided/where is the server placed (applicable law)?
- Compliance (meeting of legal requirements e.g. in terms of treatment of personnel data in accordance with the legislation on Processing of Personal Data etc.)
- Consequences upon termination (with cause and without cause) – how do I get my data back?

5. The software licence in a new context

- The licence was once typically a time limited right to use software by a specific number of users/servers (CPU's).
- In cloud computing (Software as a Service = SaaS), the licence is a kind of a "subscription", where the customer month by month rents a right to access the software for a specific cirle of users.
- The principle of speciality under section 53(3) of the Danish Consolidated Act on Copyright must be considered: The customer should be aware that he has no other rights than those explicitly agreed on.
- NB: The software licence should always be assessed in the light of the degree of integration of the solution (i.e. the customer has normally full control at IaaS, but perhaps no control at all at Saas).

5. The software licence in a new context

- The right of use of the software (SaaS) is provided only through the access to the solution (the licence becomes indirect)
- The parties should therefore agree whether the customer has or shall have rights to the software apart from the ”indirect” licence.
- Is especially relevant in connection with customisations and modifications, which the customer may then have no right to use after termination of the agreement, unless otherwise agreed.
- Challenge of the software supplier: Can the customer opt out of maintenance and ”abandon” the versions in between in order to subsequently get on an appropriate version by changing service provider?

6. The need to adapt the IT contract to the new business model

- Which type of ”standard contract”?
  - Hosting?
  - Outsourcing?
  - Licence?
  - Service Level Agreement (SLA)?
- A Little bit of everything is involved!
- ”Click and accept” terms rules!

6. The need to adapt the IT contract to the new business model

The use of SaaS demands considerable adjustments to known standards (e.g. Danish K01):

- No system as such is delivered; Instead access to a system (redefinition of subject matter)
- IP-rights to be clarified
- Tests – what do they comprise (DIY-concept?)
- Payment (payment schedule to be adapted)
- Need for integration of hosting terms, including increased focus on data protection
- Proof of security
- Audit (SAS 70)
- Service levels are the offering
- Extended terms and conditions governing consequences of termination

6. The need to adapt the IT contract to the new business model

Some issues are beyond the contract itself:

- If maintenance of the solution is not performed by the supplier, an inter-supplier agreement must be established or otherwise a right to maintain for the customer must be granted.

- The interaction with the tele supplier, e.g. in relation to guaranteed uptime.

- Interfaces to other applications.

- Who is liable if there has not been made a contract with a ”turnkey contractor”/main contractor?

6. The need to adapt the IT contract to the new business model

Breach of contract –non-availability:

- Non-availability shall be a breach allowing for a right to terminate the contract
- Compensation? Strict limitations normally apply - operational losses etc. will normally not be covered at all
- Supplier's insolvency/bankruptcy
  - Does the bankruptcy estate elect to assume the rights and duties
  - Access to pull back data by use of encryption key etc. (equivalent to escrow agreement concerning source codes)

6. The need to adapt the IT contract to the new business model

Business continuity upon termination:

- Migration of data
- Continued use of software, customisations and modifications
- Archiving of bookkeeping material
- Deletion of data with the supplier

7. How to secure the ”migrating data”

- Customer and supplier must have focus on data
- A market for applications or standards enabling and facilitating migration can be expected – there are no generally accepted standards at present.
- The same goes for security in connection with access to cloud services and protection of data.
- Only when a common understanding concerning establishment of interfaces and standards, it can be expected that the concerns on cloud computing will reduce.

For further information please contact

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