

In the Cloud

Risk Assessments in the Great Unknown

Agenda

- **Re-Define “Cloud”...again**
- **Define the Risk Assessment Process**
- **Table Stakes**
- **Table Stakes Backed in Writing**
- **The norm vs. The cutting edge**
- **Success!**
- **Questions**

Re-Defining the “Cloud”...again

- **What is a cloud?**
 - a visible mass of condensed water vapor floating in the atmosphere, typically high above the ground.
 - a state or cause of gloom, suspicion, trouble, or worry.

- **Cloud defined for business**
 - Not on premises (simple, inelegant, but it works)

- **Hybrid cloud**
 - Some on premises and some not on premise but the off premises is required for functionality.

- **Why re-define?**
 - Needs to be easy to understand, easy to risk assess and easy to define contractual obligations.
 - If your clients or business units can't easily describe and understand a cloud environment, how do you expect them to be aware of the protection required?

Risk Assessment – The Process

- **The good news!**
 - Your current methodology for assessing risk and performing audits will work!
 - You still have to ask all the same questions
 - You still have to have the stakeholders involved

- **The bad news!**
 - You will be limited to what you have access to (even less if you don't have a solid contract to work from).
 - Timeliness of information may be limited also by SLAs and contract terms

- **Where to begin?**
 - It begins when the client or company makes the commitment to allow information to be housed outside of it's data centers.
 - Even if you aren't in the loop, where do you start?
 - Eventually those services are going to require a PO and a contract.
 - Procurement is your best friend

Considerations in contract language

- **In order to facilitate the risk assessment discussion, Procurement is your first line of accurate information.**

- **Contract considerations from internal clients include:**
 - Will PII or PCI data be exchanged?
 - Will information be stored and for how long?
 - Where and How will information be stored?
 - Who will have access to information?
 - Use of Contractors
 - Use of Third Party Facilities

Table Stakes

What are the table stakes for cloud providers?

- **Secure Data Transport**
- **Encryption in storage**
- **Strong user authentication mechanisms**
- **Multi-factor authentication for administration**
- **Data Classification scheme**
 - understood
 - defined
 - enforceable

Table Stakes – Backed in writing

What are the table stakes for cloud provider contracts?

- **Location of Data Storage (US, Global)**
- **Background Checks on the Service Provider and their Consultants**
- **Appropriate Reps and Warranties**
 - The Service Provider knows the purpose of the engagement from the Customer point of view
 - The Service Provider has experienced people trained to perform the specific task
 - The Documentation adequately describes the Service
 - The data will be managed securely
 - Service Provider will be responsible for their subcontractors

Table Stakes – Backed in writing

- **Cyber and E&O Insurance**
- **Proper and Timely Notification of Data Breach**
- **Indemnification for Claims**
- **Injunctive Relief and Termination Rights**
- **Audit Rights**

The norm vs. the cutting edge

- **Some providers have extended their capabilities beyond the minimums.**
- **When evaluating these services in a risk assessment, the protection should always be commensurate to the value of the data.**

- **Advanced User Access**
 - IP based or Geolocation
 - Time based coupled with Geolocation
 - Dynamic user based authentication base on IP address, Geolocation and Time

- **Data usage**
 - Dynamic data store access and field level masking and encryption on the fly
 - Understanding what normal looks like, everything else is masked or encrypted until approved.

Success!

- **Beyond awarding the contract, what leverage do you have?**
- **There are several wins in driving negotiations for a cloud vendor from a risk perspective.**
- **Increased Business Opportunity**
- **Lower's their Risk**
- **What is Fair and Equitable**

Success?

- **You've assessed the risk, now what?**
- **If the assessment is performed prior to going live, during the contract period there is a great opportunity.**
- **If the assessment is performed on existing cloud services, there will be limitations to what can be achieved.**
 - Is there an opportunity for an addendum?
 - Is the contract coming up for renewal soon?
 - Risk acceptance sign off by executives with understanding and quantification of the potential impact.

Questions?

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